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Acculturation, Adaptation, and Mental Health among Ladakhi College Students: A Mixed Methods Study of an Indigenous Population

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Abstract

The Indian region of Ladakh has recently undergone comprehensive sociocultural change through the process of acculturation. The present study employs an acculturation psychological framework to assess how two groups of Ladakhi college students navigate through different degrees of exposure to acculturation and how this affects their mental health. Using mixed methods, 292 (age $M=20.89$, $SD=1$; 64.4% females) respondents were included in the quantitative assessment and 12 participated in semi-structured interviews. Analysis revealed that students with less acculturation exposure were more oriented towards ethnic culture and to a greater extent experienced impaired mental health when compared to the sample with more acculturation. Most prevalent among the students (34.2 %) was a bicultural orientation, integrating both ethnic and mainstream culture. In general, acculturation orientation was not associated with quantitative measures of depression or anxiety. The qualitative analysis revealed agency and cultural identity to be pivotal factors in the process of reproducing culture and negotiating cultural change.

Keywords: Acculturation, Youth, Ladakh, Adaptation, Mental health, Indigenous peoples

Acculturation, Adaptation, and Mental Health among Ladakhi College Students: A Mixed Methods Study of an Indigenous Population

Acculturation psychology is a growing field within social psychology. The increase in research has emerged from the contemporary sociocultural changes happening worldwide through cultural meetings. Acculturation psychology has primarily employed quantitative methods and a future inclusion of qualitative methodology has been recommended (Ozer, 2013b). Furthermore, most acculturation research has focused on immigration, leaving the study of acculturation among indigenous peoples in developing countries, such as India, to be a neglected—yet integral—field of research within acculturation psychology (Sam & Berry, 2010).

In line with these recommendations, this present study utilizes mixed methods research to examine how young Ladakhis adapt to the process of acculturation and how different orientations toward acculturation relate to mental health. The indigenous inhabitants of the sparsely populated Indian Himalayan region of Ladakh have experienced a wide range of sociocultural transformations through meetings with other cultures from India and the West. The case of Ladakh reveals some accelerated processes and thereby magnified perspectives and implications of a global phenomenon that is affecting many developing societies.

The present study surveys two samples of Ladakhi college students exposed to different degrees of acculturation in Leh and Delhi. Adaptation and adaptation outcomes were assessed with quantitative measures and analyzed statistically. The phenomenological perception of the acculturation process was assessed qualitatively to understand the process of negotiation of meaning through cultural transition and to understand possible associated factors. Conducting a multimethod approach, with the integration of historical ethnographic data, quantitative data, and qualitative data, provides a way to comprehend complex acculturation phenomena through both

general trends and subjective meaning and the culture specific influences as recommended in cross-cultural psychology (Roer-Strier & Kurman, 2009).

The Ladakhi Contexts

Ladakh entails what is popularly referred to as a distinct and traditional culture closely linked with Tibetan culture (Crook, 1980; Goering, 1990; Shakspo, 2010). However, a closer examination on a deeper level reveals a heterogeneous culture, highly diverse in individual interpretations and behavior. These variations are found synchronically within religious and regional differences and diachronically throughout miscellaneous pathways for cultural development.

Ladakh is located in the North Indian state of Jammu and Kashmir (Figure 1). This trans-Himalayan region holds two of India's disputed borders to Pakistan in the northwest and China (Tibet and Xinjiang) in the northeast. Historically influenced by their neighboring regions in the Kashmir valley and Tibet, half of the Ladakhi population is Muslim while the other half is Tibetan Buddhist (Bray, 2005). The total population of Ladakh is approximately 290,000 (Census India, 2011). The capital of the region is Leh, a town with approximately 30,000 inhabitants living at an altitude of 3500 meters.

History and cultures of Ladakh

Ladakh was established as an independent kingdom and ruled by Tibetan Buddhist monarchs from mid-10th century until the Dogra rulers of Jammu conquered them in 1834. In 1842 Ladakh was annexed into the princely state of Jammu and Kashmir (J&K). The external rulers shifted again when Ladakh became part of the J&K state in the Indian republic after its independence in 1947 (Bray, 2005). Even though Ladakh has been isolated in the Himalayan Mountains, external influences date back centuries because Ladakh has been a border area prone

to wars and trade as an offshoot of the Silk Route (Aggarwal, 2004; Sheikh, 2007). Today, Ladakh is integrating into a multicultural Indian nation that has constitutionally ensured conditions favorable to cultural pluralism (Mahajan, 1998).

Ladakhi cultural identity has been highly influenced and shaped by the recent struggle for regional autonomy. Ladakh has been granted Scheduled Tribes status, leading to political and economical benefits and a strong sense of identity based on its unique culture (van Beek, 1996).

The sociocultural changes

Even though Ladakh has been influenced by neighboring regions throughout its history, some recent changes have dramatically accelerated the process of extensive sociocultural changes. Two historical acculturative events are viewed as crucial catalysts for these changes.

First, the series of armed quarrels with Pakistan in 1947, 1965, and 1999, as well as with China in 1962, have led to the Indian government's greater awareness of Ladakh. The region has been militarized and the infrastructure greatly developed. The central government initiated a series of developmental interventions in the areas of distribution of subsidized food, education, health care, government jobs, etc. (van Beek & Pirie, 2008). These conditions have prompted a positive development in the local economy (Bertelsen, 1996). As a result, there has been a strong influence by and integration into the Indian nation.

Second, the Ladakhi region was opened to tourism by the Indian government in 1974. The number of tourists has escalated from the first 527 tourists visiting Ladakh in 1974 to the 79,087 tourists in 2009 (Pellicciardi, 2010). This extensive tourism has created economic growth, with a tourist industry in which the young Ladakhis especially have made careers. In addition, the tourists have brought cultural influences from their respective countries of origin. Tourists mainly travel to Ladakh to experience the Tibetan Buddhist culture and religion and to trek in the

Himalayas. This has also directed the Ladakhi self-identity toward a strong Buddhist awareness (Bertelsen, 1996). As a consequence of these economic developments, the Ladakhis have begun to travel outside of Ladakh. A large majority of young Ladakhis pursue higher education in other major cities in India such as Delhi, Chandigarh, and Jammu, where they meet a more mainstream, popular Indian culture. A great acknowledgement of the importance of higher education has arisen in Ladakh. It is regarded as the path to a good future career in the developing society. There is only one college in Leh that offers a non-specialized bachelor's degree in arts or science. Outside Ladakh the students can pursue a master's degree, and the education is perceived as better and more specialized than the current Ladakhi option.

The changes happening in Ladakh are often referred to as modernization or westernization. These changes have generated strong discourses concerning the positive and negative possibilities for the future direction of the Ladakhi society.

Discourses on sociocultural changes in Ladakh

The rapid societal changes in Ladakh have initiated an intense discourse among locals and foreigners concerning the preservation of the Ladakhi culture.

Based on observations from her prolonged stays in Ladakh since 1975, the linguist, NGO founder, and author, Helena Norberg-Hodge, has been the leading foreign voice to criticize the recent changes. She portrays the traditional Ladakh as healthy, without poverty and crime (Norberg-Hodge & Page, 1983). It is argued that the Ladakhis are now turning their backs on their traditional culture with a blind desire for modernity and western culture (Norberg-Hodge, 1999). Terming it the development hoax, Norberg-Hodge vividly describes the process of acculturation happening in Ladakh as a unidirectional shift from traditional Ladakhi culture to the globally spreading monoculture (modernity) (Norberg-Hodge, 1991). In this perspective, the

Ladakhis are unable to make informed judgments and the change is forced upon them from the outside (Norberg-Hodge & Page, 1983). This development is further said to entail the great loss of an extended and inclusive sense of self, the healthy feeling of interdependence, intimacy, and belonging to a people and culture (Norberg-Hodge, 2012), as well as the sense of security and identity (Norberg-Hodge, 1999). Additionally, the changes are said to induce unemployment, health hazards, lower quality of life, family breakups, drug addiction, and psychological stress (Norberg-Hodge, 1997), along with feelings of inferiority, greediness, inhibition, and self-consciousness leading to lower self-esteem (Norberg-Hodge, 1991).

Critics of this anti-development discourse have pointed at the lack of nuance in this essentialist misapprehension of traditional Ladakhi culture and modernity. First, modernity takes a variety of forms and in Ladakh politicians and activists have sought a culture-specific path of development using selectivity when choosing to maintain or adopt cultural elements through societal reforms (van Beek, 2008). Second, for the culture-specific case of Ladakh, changes have been happening for a long period of time as a consequence of wars and trade with the neighboring regions and from the influence of other Himalayan countries. So the understanding of a pure traditional Ladakhi culture preceding contact with Western culture is a simplistic view (Aggarwal, 1997). Third, the Ladakhis themselves balance the dynamics of tradition and modernity; change is not the result of a merely exogenous, imposed process (van Beek, 2008). Fourth, traditional Ladakh in the past is portrayed as a utopian Shangri-la, ignoring the harshness of the earlier days that is often reported by the elder generation (van Beek, 2000). Fifth, the negative presentation of development and technology is not shared by the majority of Ladakhis who have been yearning for more development throughout most of the last century (van Beek, 2000).

Hence, the discourse on sociocultural change in Ladakh has been permeated with a romanticized and essentialist understanding of traditional culture. Even though the anti-development discourse holds truthful perspectives, they have been presented at the expense of a more nuanced and dynamic understanding of the cultural variations found among the Ladakhis who are agents in this process of cultural transition.

The conceptualization of acculturation in Ladakh

Acculturation psychology has developed within cross-cultural psychology and defines acculturation as the processes that follow continuous intercultural meeting on an individual level. This branch of social psychology examines how intercultural contact results in psychological change (Sam & Berry, 2010).

Recent research has found validation for the understanding of the acculturation process as happening along two independent dimensions (Ryder, Alden, & Paulhus, 2000). This bidimensionality encompasses how individuals relate to both the heritage culture and to the culture they are meeting outside their group. Crossing these two dimensions produces four quadrants reflecting four different ways of relating to the two cultures. These are usually referred to as acculturation strategies or orientations and are categorized as follows: 1) assimilation occurs when the individual does not maintain the heritage culture but adopts the new culture, 2) integration reflects an interest in relating to and participating in both heritage culture and the new culture, 3) separation describes a preference for the heritage culture and avoidance of participation in the new culture and 4) marginalization is defined as both a lack of interest in maintaining heritage culture and not participating in the new culture. Adding a third dimension, the orientation of the individual is understood in a dynamic interaction with the attitudes of the larger society. Research has to a great extent found integration strategy to be the most preferred

orientation and the most adaptive, associated with better psychological well-being (Sam & Berry, 2010).

The unidimensionality found in the anti-development discourse concerning Ladakh can be differentiated and gain more useful information with a bidimensional analysis. The culture-specific case of acculturation in Ladakh is very complex as it takes place on multiple levels. Ladakh as a region has been integrated into the Indian nation; tourists and other sojourners are entering Ladakh annually in numbers almost equal to a third of the total population; and Ladakhis have started traveling and pursuing education outside of Ladakh due to the improvement in their economy and their desire for better education. Clearly, the Ladakhi acculturation process is a mixture of imposed and voluntary actions.

The goals of this study were to investigate cultural orientation and the association between acculturation orientation and mental health in two samples of students in Leh and Delhi. Based on the anti-development discourse, it was hypothesized that orientation towards a new culture would be associated with more psychological distress than orientation towards ethnic Ladakhi culture favoring the separation acculturation orientation. Likewise, a comparison of the two samples from Leh and Delhi could be used to examine the hypothesis presented by Norberg-Hodge, stating that strong exposure to new culture is psychologically harmful for Ladakhi youth. These hypotheses will be examined through statistical analysis. Furthermore, this study used qualitative methods to provide a more detailed picture both of how the acculturation process was experienced and of which positive and negative factors were associated with psychological acculturation.

Methods

The gathering of data took place during spring and summer 2012 in both Leh (Ladakh) and Delhi. The data were obtained through self-report questionnaires and qualitative semi-structured interviews. A concurrent triangulation research design (Creswell & Clark, 2007) was used enhancing and expanding the quantitative results with qualitative data through a convergence model. The different, but complementary, data will be merged during the interpreting discussion.

Participants

A total of 292 young Ladakhis studying for a bachelor's degree participated in the survey. The students were geographically divided between 155 studying in Leh and 137 living and studying in Delhi (see Table 1 for descriptive statistics). Six respondents were excluded, as they did not meet the inclusion criteria of being a Ladakhi college student in either Leh or Delhi. The two samples were selected because of their different degree of exposure to cultures other than Ladakhi. Both groups had Ladakhi as their mother tongue and had courses in English from first grade. The Delhi group had high proficiency English skills and the Leh group generally had moderate proficiency English skills.

Quantitative method and procedure

The measures in the quantitative questionnaire consisted of four parts: 1) background variables, 2) Ladakh Acculturation Scale, 3) Beck Depression Inventory II, and 4) Beck Anxiety Inventory.

The background variables entailed age, gender, religion, origin, education, SES, and future living plans. An item was included assessing perceived cultural difference in relation to

Indian mainstream culture, using a Likert scale ranging from 1:“not different” to 5:“completely different. The item read: “How different do you feel from the Indians/gyagarpa (from the plains)?” Another two items assessed the use of social media such as Facebook with both ethnic and other peers using a Likert scale ranging from 1:”never” to 5:”very often”. The questions were: “How often do you communicate with other Ladakhis through social media such as Facebook etc.” and “How often do you communicate with other non-Ladakhi Indians or westerners through social media such as Facebook etc.” These items were included as a measure of remote acculturation (Ferguson & Bornstein, 2012)

The Ladakh Acculturation Scale (LAS) was developed in English language for culture-specific use in Ladakh following recommendations by Arends-Tóth and van de Vijver (2006), and Zane and Mak (2002). LAS consists of 20 self-report statements accompanied by a 5-point Likert scale ranging from 1: “strongly disagree” to 5: “strongly agree.” The 20 items were divided in two subscales assessing the relation to Ladakhi culture and to new culture. In LAS acculturation was operationally defined as the meeting of Ladakhi culture and a mix of mainstream Indian and Western culture. LAS is comprised of ten domains concerning clothing, food, language, education, friendship, government, entertainment, celebrations, identity and child rearing. These domains were included based on literature review and fieldwork. The LAS complied with the two-statement measurement method in which two items are formulated per domain. Research has found this method to be the best practice for assessing acculturation orientations (Arends-Tóth & van de Vijver, 2007; Rudmin & Ahmadzadeh, 2001). Means for each item (Table 2) and for each subscale (Table 3) were calculated for each group of Leh and Delhi students. The two subscales had both statements concerning the private sphere (value-related) and relating to the public (functional). Additionally, the statements asked about

behavior, attitudes, and values. However, the behavior questions concerned preferences because actual executed behavior would be biased by the pronounced structural differences found in Ladakh and Delhi. For example, at the universities in Delhi, English is often used while in Leh they preferably speak Ladakhi. Cronbach's alpha was .73 for the ethnic subscale and .70 for the new culture subscale in this study, which is acceptable. Factorial validity was established by means of principal component analysis with Promax rotation ($Kappa = 4$). The result of factor analysis showed fair construct validity. The value of the KMO test was .729. The structure of the two dimensions of adaptation to ethnic and new culture was clear and the loadings of the 10 items for ethnic culture were .35-.68, while the loadings of the 10 items for new culture were .43-.65. Categorization of the scores into acculturation orientations was implemented through a median split in the LAS subscale scores, placing high scores on both ethnic and new cultural orientation in the integration quadrant, high scores only in ethnic cultural orientation in the separation quadrant, high scores only in new cultural orientation in the assimilation quadrant and low scores on both ethnic and new cultural orientation in the marginalization quadrant.

The Beck Depression Inventory II (BDI-II) (Beck, Steer, & Brown, 1996) is a 21-item self-report measure assessing the severity of depressive symptoms during the last two weeks. BDI-II has strong reliability and validity in screening for depression. The scale has been confirmed to be useful as a measure of depression among college students in non-western Turkish and Iranian cultures as well as in a nonclinical population (Canel-Çınarbaşı, 2011; Tashakkori, Barefoot, & Mehryar, 1989). Cronbach's alpha was .77 for this present study.

The Beck Anxiety Inventory (BAI) (Beck, Epstein, Brown, & Steer, 1988) is a 21-item self-report questionnaire measuring frequency and severity of anxiety-related symptoms experienced by an individual through the last week. Items were rated on a 4-point Likert scale

ranging from “not bothered at all” to “severely bothered.” The scale has shown high internal consistency with Cronbach’s alpha of .92 (Beck et al., 1988). Cronbach’s alpha was .87 for the present study.

The questionnaires were filled out in English by students at Eliezer Joldan Memorial College in Leh. In Delhi the questionnaires were distributed among Ladakhi college students by the Ladakh Student Welfare Society Delhi. The Delhi participants generally had good English skills, while a Ladakhi assistant professor in psychology helped with clarifying and understanding the questionnaire for the Leh students who were gathered in lecture rooms, 30 at a time.

Qualitative method and procedure

The qualitative data was collected through semi-structured, in-depth, individual interviews conducted by the author, who is a Danish psychological researcher with research experience in Ladakh consisting of one year’s fieldwork. The interviews were conducted in English in informal settings, such as a hotel room or a café and with an average duration of 49 minutes. The interviewees were informed that the interview would contribute to an understanding of how sociocultural change and mental health were related, elaborating on findings in the quantitative phase. Fifteen main questions were asked, in accordance with an interview script including the following topics: a) The experience of acculturation: 1) Can you describe to me how you experienced moving to Leh/Delhi?, 2) How did you feel about going to Leh/Delhi in the beginning?, 3) How does it feel to live in Leh/Delhi now?, 4) What has been difficult/good about living in Leh/Delhi?, 5) How do you experience the tourists coming during the summer, and 6) Was living in Leh/Delhi as you imagined it would be?, b) Preference of cultural elements: 7) What part of Ladakhi culture is important to preserve?, 8) Do you feel

inspired by the culture of the tourists/Delhi?, 9) How does culture in Leh/Delhi differ from culture in the village/Ladakh?, c) Factors associated with acculturation: 10) Has your education helped you get used to living in Leh/Delhi, 11) Have you ever felt psychological distress (loneliness, stress, sad, anxious etc.) in relation to living in Leh/Delhi?, 12) Has religion or your family helped you when suffering from difficult feelings?, 13) Can you tell me about friends who have experienced psychological distress and tension in relation to living in Leh/Delhi?, and d) Future acculturation 14) How do you like the new way of living (modern) in Ladakh?, 15) How do you think it will be to move back to Ladakh/where do you think you will be living in the future? These topics were chosen to examine the phenomenological experience of the acculturation experience and how this is related to possible psychological distress as well as possible coping strategies.

Twelve students (mean age 21.17, ranging from 19 to 24), recruited through personal contacts were interviewed. These students were selected based on their willingness to participate and to present their reflections on the topic, as well as their representation of the studied group. Six of them were living in Delhi (four Buddhist/two Muslims and four males/two females) and six in Leh (four Buddhist/two Muslims and four males/two females). Some of these participants were involved in actively handling the acculturation process through student organizations and the group does not adequately represent the less resourceful students in the quantitative assessment. Most of the interviewees participated anonymously in the quantitative study.

Qualitative analysis

The interviews were tape-recorded and fully transcribed. Subsequently, they were analyzed through a phenomenologically based meaning condensation in which longer statements were abridged and organized according to different themes. The statements were thematized

according to the subject's viewpoint as understood by the researcher in order to extract the essence of the phenomenological descriptions (Kvale, 2007). The transcript was read and re-read before it was coded and categorized into themes to understand the pattern within the data investigating the similarities and differences in the extracts. The themes from each interview were integrated into summary tables with shared superordinate themes and then tied together into descriptive statements. Causation coding was employed in the analysis to discern the motives, worldviews and important factors experienced within the acculturation process. Causation was based on the interviewee's description of the relationship between variables.

Quantitative Results

The quantitative results are presented in two sections. The first investigates both differences in cultural orientation and the relationship between confounding factors and mental health scores across the two samples. The second explores the relationship between acculturation orientation and mental health.

Intergroup comparisons

Comparing the two groups of Ladakhi students yielded differences between acculturation orientation, mental health, and use of social media, as well as background information.

As shown in Table 3, the Leh student group was, on the average, more oriented towards the ethnic culture (LAS_{ethnic}) compared to the Delhi student group, which was more oriented towards the new culture (LAS_{new}). These differences were statistically significant. The mental health of the Leh group was significantly poorer than the Delhi group, when measured both in relation to depression and anxiety. The two groups did not differ significantly in their perception of cultural difference from mainstream Indian culture. A significant difference in the use of

social media was found in relation to both ethnic and new culture. The Delhi sample was more active, enclosing a greater exposure to remote acculturation through social media.

The significant differences in the two mental health measures of depression and anxiety could be associated with other variables such as religion, place of birth, etc. Therefore, the background information was explored to identify any significant differences across the two groups. Females scored significantly higher than males in relation to both depression $t(283) = -3.81, p < .001, d = 0.47$ and anxiety $t(238.27^1) = -4.26, p < .001, d = 0.52$ and there were significantly more females in the Leh group compared to the Delhi group, $\chi^2(1) = 44.38, p < .001$, Cramer's $v = .39$. No statistically significant differences on depression $t(280) = 1.01, p = .32, d = 0.13$ and anxiety $t(277) = 1.95, p = .053, d = 0.28$ measures were found between Buddhist and Muslims and there was no significant difference in the number of Buddhist and Muslims in the two student groups, $\chi^2(1) = 2.00, p = .172$, Cramer's $v = .08$. There was a significant difference between household income (SES) in relation to anxiety, $F(2,249) = 5.49, p = .005, \eta^2 = .04$. Post hoc Bonferroni tests revealed that the mean difference in BAI score between the low income group and the high income group was significant, but that the difference between the low income and the medium income groups and between the medium income and the high income groups were not significant when controlling for a family-wise error rate of $p < .05$. There was no significant difference between SES in relation to depression, $F(2,253) = 2.62, p = .074, \eta^2 = .02$. Significantly more students in Leh came from lower-income households compared to the Delhi group, $\chi^2(2) = 69.39, p < .001$, Cramer's $v = .52$. Across the two student groups, the birthplace of the students yielded significant differences in relation to depression scores, $F(3,281) = 3.69, p = .012, \eta^2 = .04$. Post hoc Bonferroni tests revealed a significant

¹ Equal variances not assumed.

difference between students born in a village and students born in a city (Leh/Kargil) in relation to depression, whereas students from villages had higher scores on BDI-II. This pattern was not found in relation to anxiety, $F(3,281) = 1.29, p = .280, \eta^2 = .01$. Significantly more students in the Leh group were born in a village and fewer in a town compared to the Delhi group, $\chi^2(3) = 84.72, p < .001$, Cramer's $v = .54$.

Acculturation and mental health

The distribution of acculturation orientation using a mean split procedure and associating the orientations with mental health scores did not reveal any statistically significant difference between the four acculturation orientations regarding depression and anxiety symptoms (Table 4). The mean score of BDI-II and BAI reveals no consistency in favoring one acculturation orientation over another. A 2 x 4 factorial between subjects MANOVA was conducted on BDI-II and BAI, with student group (Delhi, Leh) and acculturation orientation (integration, assimilation, separation, marginalization) as the independent variables. A significant main effect of student group on BDI-II and BAI was found, Pillai's trace = 0.08, $F(2, 271) = 11.85, p < .001, \eta^2 = .08$. The BDI-II and BAI score was higher for Leh sample than for the Delhi sample (see Table 3). The main effect of acculturation orientation on BDI-II and BAI was not statistically significant, Pillai's trace = 0.03, $F(6, 544) = 1.19, p = .31, \eta^2 = .01$. The student group x acculturation orientation interaction was also not significant, Pillai's trace = 0.02, $F(6, 544) = 0.82, p = .55, \eta^2 = .01$. This suggests that the difference in adjustment score (depression and anxiety) between the two samples was not moderated by acculturation orientation. Without any statistical significance it can be concluded that no acculturation orientation was superior in relation to mental health neither in the Leh nor the Delhi sample. Correlation analysis could further explore the relations between acculturation and mental health.

The correlation analysis in Table 5 revealed a significant correlation between the two mental health scales illustrating comorbidity between depressive and anxious symptoms. There was no statistical significant relationship between orientation towards either Ladakhi or new culture and the measures of psychological distress in both of the Ladakhi samples.

Qualitative findings

The complex phenomenon of acculturation is best assessed through a multimethodological approach in which ethnographic, quantitative, and qualitative data complement each other. Considering individual differences, the qualitative inquiries provide a phenomenological perspective on how acculturation is experienced and negotiated. They accentuate the mechanisms relating acculturation to mental health.

The experience of acculturation

The experiences of acculturation, through the migration from a village to Leh or from Ladakh to Delhi outside Ladakh, were initially accompanied by a naive excitement for the new and unknown adventures and great possibilities. Arriving in Delhi, all six students reported temporary disappointment, fear, depressive feelings and longing for their family and home while finding it difficult to navigate in the new culture. Exposure to foreign culture was generally perceived as both positive and negative. Meeting other cultures was, by six students in Delhi and four students in Leh, said to be an instructive experience broadening the minds of the Ladakhi people. The high degree of competition they experienced in relation to the cultural changes was, by three students, referred to as positive, resulting in advancement. Six students viewed competition as strenuous and a cause of stress.

The Indian culture prevalent in Delhi was, by a 21 year old Buddhist, perceived as “a mix [of cultures], there is no previous set of culture”, causing unpredictability in contrast to the traditional culture in Ladakh. The dense population in Delhi was described variously as career minded, active, modern, hectic, very busy, selfish, work oriented, clever, and using unfair means. Four of the students in Delhi stated that it was necessary to adapt to the new culture in order to live happily there.

Preference of cultural elements

There was a strong agreement in both groups concerning the advantage of the education system outside of Ladakh. The students who were sent to boarding schools outside Ladakh often complained that it was too early to leave home and that it alienated them from their own Ladakhi culture. “Some culture is lost in this metropolitan city” as a 20-year-old male in Delhi explained. Some Ladakhi students in Delhi who have been away from Ladakh since their childhood were observed to engage solely in “modern culture”, forgetting the Ladakhi language and culture. One student reported adhering to mostly Indian friends and regretting that she had forgotten the Ladakhi language. Still, she commended the meeting with and learning from different cultures that developed when free from Ladakhi cultural restraints. She found it difficult to be in Ladakh because of its simplicity and conservatism, being restricted regarding clothing, and upholding a close-knit society with parental oversight and limited possibilities. Nonetheless, she felt attached to Ladakhi culture and expressed great interest in both Ladakhi culture and language.

Both student samples perceived tourism in Ladakh as positive, especially regarding economical growth, generating opportunities and mind-broadening experiences. However, tourism was also viewed as a hindrance for other development paths in Ladakh. Three students in Leh felt inspired by the tourist’s clothing, the new food, the environmental consciousness and the

customs of reading books and learning. The negative aspects of tourism were widely understood to be the loss of traditional culture and customs and the introduction of detrimental behavior such as smoking, drinking alcohol and more profit orientation. Still, the touristic focus on Ladakhi tradition and culture were acknowledged by many in both groups of students as entailing a commitment to preserving traditional Ladakh, causing greater awareness of culture and identity.

Factors associated with acculturation

Delhi was described by students living there as a psychologically healthier environment than Ladakh. Feelings of frustration and insecurity were ascribed to the experience of living in Delhi concerning an inability to predict what would happen, unpredictable rules and norms, and a mistrust of people regarding honesty, corruption, stealing, and violence. A female student in Delhi experienced the city as dangerous, with high rates of rape and homicide. Students in both groups reported that some of the students in Delhi adopted a hedonist lifestyle and lost their balance in life, forgetting their studies, and obligations; leading to psychological distress.

A male student in Delhi reported that an increase in psychopathology, such as depression and anxiety, was a natural result of drastic societal changes and developments leading, through the process of westernization, to a more systematic and mechanical way of living in which a cultural and social orientation was superseded by a materialistic orientation. Adopting the mindset and norms prevalent in Delhi was perceived as inevitably causing stress.

Among the commonly mentioned causes of psychological distress that can lead to a feeling of depression among the youth in both populations are the growing pressures from exams, expectations from family, and relationship problems. A 22 year old female student in Delhi explained:

“When I first came here I was feeling depressed and sad and despair in relation to weather I would be able to cope with my studies and accomplish the expectations from my family. So there were a lot of tension, pressure and sometimes depression and sometimes I would feel lonely...still sometimes, I would not say depression, but tension that I am not doing good in terms of my practices and my studies”.

Relationships outside Ladakh can cause difficulties as the young people act more freely in this environment without parental supervision. In Ladakh there are said to be “many conditions to instruct the particular psyche.”

Friendship was recognized as a crucial support during acculturation. Most of the students outside Ladakh adhered to Ladakhi friends and partners. This was said to provide a homelike feeling, discouraging the feeling of loneliness. The experiences of acculturation created cohesiveness among the students in Delhi, gave rise to a longing for Ladakhi culture, and initiated the idea of preserving it.

Three of the students in Delhi related that parents gave them considerable support, financially as well as psychologically. Financial support from parents provided an independence that could lead to improper and dangerous behavior as it provided great opportunities without parents watching and guiding the students in Delhi. A 20-year-old male described: “whatever we want to do, we do without thinking.” In Ladakh, the close-knit society restricts “problematic” behavior such as smoking and drinking alcohol. However, five students agreed that cultural elements related to enjoyment are being brought back to Ladakh with the students from outside Ladakh, and two students in Leh reported smoking and drinking alcohol clandestinely. Parents are also said to facilitate an easy adjustment of the youth returning to Ladakh. However, parents

were often said to be unaware of their children's vulnerability in being exposed to negative cultural elements in Delhi.

Two students in Delhi and four students from the Leh sample perceived the teacher-student interaction as dissimilar in Delhi and Leh. In Delhi, the students felt they were on their own and no support or help was provided besides lecturing. Four of the students found healthier relationships and interaction between students and teachers in Ladakh, where the teachers were said to be friendlier, unpretentious and solicitous, and supporting instead of punishing, which was observed in places outside of Ladakh.

Three students in Leh and four in Delhi viewed good education as an aid in navigating in foreign cultures and adjusting to an appropriate behavior. Especially language skills were acknowledged for empowering adaptation in the process of acculturation and ensuring better treatment in Delhi. A Buddhist religious reflection was said to help psychological distress by controlling and altering the thought patterns through a metacognitive perspective. The ethical values ascribed to Ladakh were also understood to generate determination, hope, and optimism when facing challenges.

Future acculturation

Three of the students in Leh preferred to move back to the village after graduation. When asked about his preference for future occupation one 22-year-old male answered: "Farmer. I'm a farmer's son," acknowledging his inherited identity. The villages were positively perceived as being peaceful, cleaner, greener, and the villagers were said to be simple, more social, traditional, superstitious, and narrow-minded. A widespread preference for residing in Leh as compared to the villages was based on the availability of better facilities, more possibilities and the prospect of more personal development.

The students described profound changes happening in Ladakh that were often referred to as modernization or westernization. These changes include desires for the new and fashionable and a growing interest in money and profit. Three of the students in Leh were offended by the disrespectful fashionable clothing worn by the students returning to Ladakh. One student advocated a resurgence of the traditional dress, the *gunja*, which today is worn at ceremonies and by elders. A 20-year-old male studying in Leh explains his opinion of female clothing: “When they come back they should wear long-sleeved clothes and they should not wear pants...they should look like Ladakhi people.” Some of the students in Leh wanted to return to their village bringing modernity and development, helping their birthplace. A 20-year-old girl explained: “Modern times are good compared to early times...[The] village is a backward area, I’ll work hard to introduce everything of the modern.”

Four students in Delhi and three in Leh perceived sociocultural change to be inevitable and stressed the importance of controlling the changes by utilizing positive elements, and discarding the negative. This was accomplished by balancing a respect and preservation of Ladakhi culture, such as wearing the traditional dress occasionally and participating in traditional ceremonies, while integrating the useful aspects of modernity such as advanced education and technology. Navigation through the process of acculturation was largely said to be dependent on the individual’s ability to distinguish the positive from the negative. For example, a 19-year-old female studying in Leh explains that the “use [of] science and technology to improve Ladakh...is true modernization. I don’t think that becoming very fashionable, drinking, smoking is modernization...to sit here at the internet and chat with friends is not modernization”.

Discussion

Through understanding the challenges perceived within the process of acculturation among Ladakhi youth, important variances and great complexity was disclosed. Surely, a simple perspective of modernity superseding tradition is untenable. An understanding of these variances and complexities will be explored in a discussion integrating and merging the quantitative and qualitative data.

The importance of cultural identity during acculturation

The qualitative findings emphasize the importance of Ladakhi identity and culture. The strong orientation towards a Ladakhi identity and the related guilt feelings of not being sufficiently Ladakhi might be a result of the strong discourse on development targeting youth from Ladakh. Even though the interviewees from Delhi were more engaged in the debate on saving Ladakhi culture and experiencing cultural cohesiveness as a reaction to the exposure to acculturation and discrimination, they quantitatively reported less ethnic cultural orientation compared with the Leh sample. The Delhi group's appreciation of western education, individual possibilities, and enjoyment is reflected in their stronger orientation towards the new culture as compared to the Leh students.

The experience of acculturation seems to be reviving ethnic cultural orientation and identity as students undergo difficulties related to the experienced cultural differences which have been found to make acculturation more stressful (Berry & Sam, 1997). The students in Delhi effectuate an ethnic cohesiveness with ethnic cultural organizing and celebrations. Meanwhile, the influence of tourism in Ladakh creates a strong awareness of what culture and behavior is requested and perceived by the tourists as Ladakhi, shaping the understanding of Ladakhi culture. This perspective is consistent with Gillespie (2006), analyzing the touristic interaction as a dynamic site of identity construction for both the Ladakhis and the tourists. Here,

the Ladakhis' behavior and self-reflection is formed by the tourists' expectation and understanding of Ladakhis and Ladakhi culture.

Most prevalent among the students in Leh and Delhi was a bicultural orientation with a preference for ethnic culture. The Ladakhi anti-development discourse was clearly reproduced among the majority of the youth and eventually referred to during interviews. This corresponds with the global revival of indigenous culture (Kvernmo, 2006) fuelled by tourism, foreign well-wishers, and awareness of rights and empowerment. Hence, both the discourses opposing cultural changes and the changes themselves were largely generating a stronger sense of Ladakhi identity.

Psychological distress among Ladakhi youth and the exposure to acculturation

In the present survey, the Leh group reported significantly higher psychological distress compared to the Delhi group. Both student groups scored high on depressive and anxious symptoms. However, the students did not appear depressed or anxious and many of the interviewees explained the feelings of stress, anxiety, and depression to be transient symptoms related to specific life events. However, they would not classify it as psychopathology. These symptoms could be ascribed to common experiences in youth.

The discrepancy between quantitative and qualitative findings could arise because the young Ladakhis reproduce the anti-development discourse in the interviews, even if this discourse does not incorporate the general situation for a heterogeneous group. The discrepancy could furthermore be produced by the mutual bias of a foreign interviewer and resourceful interviewees investigating a discourse on psychological distress targeting a group that was not appropriately included in the qualitative study and perhaps only exists as a prejudiced imagery. Still, five interviewees in Delhi experienced Delhi as a distressful environment, which might be,

mitigated by their resourceful backgrounds. Another explanation for this discrepancy could relate to the quantitative measures aiming at a universal conceptualization of anxiety and depression. These measures are developed in a western context and are therefore possibly invalid for cross-cultural studies with indigenous groups. The cultural factor and indigenous understandings of distress could misrepresent the self-reported measures of BDI-II and BAI (Tanaka-Matsumi, 2001).

The notable differences in mental health conditions in the two student groups contradict the widespread assumption that a higher degree of acculturation is psychologically more distressful among indigenous peoples (Kvernmo, 2006). These differences are surely related to the background variables, disclosing the Delhi students as much more resourceful with higher SES. Also, the Leh group was comprised primarily of female students and in the Delhi group most were males. There might be a bias in prioritizing the investment in male's education, discouraging the females with more limited life opportunities. At the same time, exposure to a high degree of acculturation in Delhi might be an empowering experience and developmental resource, followed by qualified education making it easier to navigate during acculturation. Western education outside of Ladakh has been portrayed as forced assimilation and detrimental to both mental health and cultural identity (Schooling the World, 2010). However, Berry, Kim, Minde, and Mok (1987) described how educated indigenous youth often experience acculturation as providing new opportunities rather than being a stressor.

Are some acculturation orientations detrimental to mental health?

The sample exposed to most new cultural influences in Delhi had the lowest scores in the measures of psychopathology, contradicting Norberg-Hode's assumption that exposure to new

cultural influence were causing psychological distress among Ladakhis. Norberg-Hodge's assumption might be employable to describe some cases of Ladakhi acculturation, but is not representative of the youth in general. Additionally, combining the cultural orientations and mental health conditions from the two student groups through a correlation analysis yields the intriguing impression that cultural orientations are not related to mental health, thereby rejecting the hypothesis presented in Norberg-Hodge's work.

In the case of Ladakh, the results suggest that there is no acculturation orientation found to be the most adaptable way of engaging in the process of acculturation. This finding does not concur with the general acculturation psychological findings favoring the integration orientation or separation strategy among indigenous peoples (Kvernmo, 2006). Neither a strong separation nor integration orientation appears advantageous in coping with anxiety and depression in Ladakh. However, the relationship between acculturation and mental health could be mediated by a third variable such as agency (Chirkov, 2009) and personal identity formation (Schwartz, Montgomery, & Briones, 2006).

Possible mediators between acculturation and mental health

The feeling of autonomy and agency is said to be pivotal to life-satisfaction, happiness, and psychological well-being (Chirkov, Sheldon, & Ryan, 2011). Agency can be described as “people's ability to reflect on the meanings that guide their actions and, through the reinterpretation of these meanings, to exercise their agentic power to be masters of their social actions and their lives (Chirkov, 2009, p. 179)”. The acculturation process in Ladakh was largely perceived as inevitable by some interviewees, and many interviewees perceived themselves as active agents in this process of change. Awareness of the acculturation process combined with agency promotes great possibilities for the direction of future change and civic participation

(Jensen & Arnett, 2012). Acculturation experiences can cultivate agency through identifying with people from other cultures. Taking the perspective of others and reflecting on it free of the immediate situation enables agency (Gillespie, 2012).

The strong discourses about cultural preservation have led to a widespread essentialist understanding of culture. This understanding excludes the innovative dynamics within culture and deprives the youth of recognizing their negotiation of culture as being culture itself. Ladakhi youth exhibited great reflection and strong commitment to finding a proper negotiation of future cultural development. The sense of empowerment and agency appear to be an important salutogenic factor in adaptation to sociocultural changes.

Besides agency, identity has been found to be an important factor in the acculturation process (Schwartz, Montgomery, & Briones, 2006). Some phases in cultural transition leave the youth with no cultural framework to support their identity and demand a strong sense of navigation when faced with immense possibilities. This could result in personal and cultural identity confusion (Jensen, 2011). Negotiating a bicultural identity could be hellacious and cause psychological distress if the cultural elements are perceived as incompatible. A clear cultural identity with low inconsistency has been associated with processes necessary for constructing a clear personal identity leading to psychological well-being (Usborne & Taylor, 2009). Future research could investigate agency and identity formation as possible mediating variables in the relationship between acculturation and mental health in Ladakh (Ozer, 2013a).

Limitations

There are several potential limitations to this study. First, the use of convenient sampling can lead to sampling bias and is not representational of all Ladakhi youth or students. Second, students reported high on the mental health scales in regard to the standardized cut-of points. This could be a result of a cultural bias in the standardized tests from western cultures (van de Vijver & Leung, 2011) or a tendency in the way of filling out self-report inventories. Further cross cultural validation of these scales is required. However, the study was conducted within one cultural sphere and did not make comparisons across different cultures. Third, the interviewer from another cultural background could influence the responses towards a reproduction of the image of Ladakh that is usually presented to foreigners. Also, the interviewees were not adequately representative. Lastly, the interviews conducted in English could restrain some respondents, especially in the Leh group.

Conclusion

Acculturation psychology has provided a useful theoretical foundation for the study of youth adapting to sociocultural changes in Ladakh. Moreover, the multimethod approach was pivotal in understanding this complex, ambiguous and multifaceted process containing various perceptions.

When comparing the two student groups, the Leh group was more oriented towards ethnic culture, and the Delhi group, towards new culture. Opposing related research, these cultural orientations were not significantly correlated with measures of mental health. The Leh sample, exposed to less acculturation, reported significantly more severe symptoms of depression and anxiety than the Delhi sample. This finding was associated to confounding variables such as SES, birthplace and gender and possibly also related to the experience of constraints in control and agency during acculturation. The insignificant relationship between

acculturation and mental health found in the quantitative phase was contradicted in the qualitative data, which portrayed high degrees of acculturation as impairing. The outcome of the acculturation process was described as depending on agency and the possibility of influencing cultural change during the influx of new cultural elements. The Ladakhi youth were highly engaged in the integration of useful cultural elements and dismissal of the negative. However, future intervention could target the factors of uncontrollable change—both empowering the youth in their adaptation and mitigating the structural difficulties experienced during acculturation.

This survey reported bidimensionally, differentiating and broadening the perspectives found in the unidimensional anti-development discourse. This has revealed a great diversity of means for negotiating and reproducing cultural changes. Ladakhi youth will create heterogeneous developmental paths in the future through the vastly complex process of acculturation by reproducing and negotiating different cultural elements and bicultural identities.

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Table 1
Descriptive statistics for the Leh and Delhi group

	Leh group	Delhi group
Gender		
Male	18.1%	55.5%
Religion		
Buddhist	71.6%	78.1%
Muslim	20.4%	27.7%
Christian	1.5%	0.6%
Grade		
1. year	46.1%	36.0%
2. year	31.2%	36.8%
3. year	22.7%	27.2%
SES		
Low	96.1%	50.0%
Medium	2.4%	37.3%
High	1.6%	12.3%
Age	Range: 18-26 years, $M = 21.12$, $SD = 1.71$	Range: 18-26 years, $M = 20.62$, $SD = 1.57$

Table 2

Mean scores and standard deviation on LAS (Ladakh Acculturation Scale) for each group of Leh and Delhi students

Item in LAS	Delhi		Leh	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Clothing _{ethnic}	4.29	(0.74)	4.44	(0.66)
Clothing _{new}	4.12	(0.57)	3.12	(1.04)
Food _{ethnic}	4.60	(0.62)	4.60	(0.74)
Food _{new}	4.14	(0.68)	3.98	(0.74)
Prefered language _{ethnic}	4.67	(0.63)	4.61	(0.71)
Prefered language _{new}	4.25	(0.71)	4.31	(0.66)
Education _{ethnic}	4.18	(0.69)	4.18	(0.92)
Education _{new}	4.37	(0.91)	4.27	(0.83)
Friends _{ethnic}	4.53	(0.73)	4.56	(0.75)
Friends _{new}	3.82	(0.72)	3.97	(0.74)
Government _{ethnic}	4.51	(0.90)	4.65	(0.71)
Government _{new}	4.48	(0.77)	4.71	(0.75)
Entertainment _{ethnic}	3.97	(0.85)	4.21	(0.96)
Entertainment _{new}	4.37	(0.59)	4.03	(0.99)
Celebrations _{ethnic}	4.28	(0.89)	4.34	(0.86)
Celebrations _{new}	3.61	(1.04)	3.38	(1.05)
Identity _{ethnic}	4.28	(0.76)	4.47	(0.69)
Identity _{new}	3.61	(0.95)	3.92	(0.81)
Child rearing _{ethnic}	4.47	(0.70)	4.62	(0.64)
Child rearing _{new}	3.85	(0.75)	3.36	(1.12)

Table 3

Total means for items in scales and subscales compared between the two groups

Measures	Means and SDs		Statistical comparison
	Delhi (n = 137)	Leh (n = 155)	
LAS _{ethnic}	3.38 (0.41)	3.48 (0.42)	$t(290) = 2.03, p = .043, d = 0.22$
LAS _{new}	3.05 (0.40)	2.92 (0.47)	$t(290) = -2.67, p = .008, d = 0.30$
BDI-II	14.09 (7.57)	18.54 (7.49)	$t(283) = 4.98, p < .001, d = 0.59$
BAI	14.13 (8.92)	18.94 (9.83)	$t(280) = -4.27, p < .001, d = 0.51$
Cultural difference	3.09 (1.12)	2.95 (1.31)	$t(289) = 0.92, p = .358, d = 0.11$
Social media (ethnic)	3.23 (1.06)	1.88 (1.13)	$t(290) = 10.49, p < .001, d = 1.23$
Social media (new)	2.99 (1.03)	1.55 (0.99)	$t(288) = 12.17, p < .001, d = 1.43$

Note. LAS_{ethnic} = ethnic cultural subscale in the Ladakh acculturation Scale; LAS_{new} = new cultural subscale in the Ladakh Acculturation Scale; BDI-II = Beck Depression Inventory – II; BAI = Beck Anxiety Inventory.

Table 4

Distribution of acculturation orientations and attached mental health scores

Acculturation orientation	Delhi (n = 137)			Leh (n = 155)		
	n	BDI-II means (SD)	BAI means (SD)	n	BDI-II means (SD)	BAI means (SD)
Integration	44	13.68 (7.03)	15.60 (10.04)	56	18.94 (6.62)	20.52 (9.35)
Separation	21	14.05 (9.10)	12.82 (8.69)	41	19.35 (8.02)	19.36 (9.07)
Assimilation	46	14.00 (7.09)	13.27(8.42)	26	16.05 (6.43)	18.33 (11.67)
Marginalization	26	14.97 (8.29)	14.24 (8.01)	32	18.90 (8.91)	16.16 (9.73)

Note. BDI-II = Beck Depression Inventory – II; BAI = Beck Anxiety Inventory.

Table 5

Summary of the intercorrelations between acculturation orientation and mental health

			Delhi (n =137)			
			LAS (ethnic)	LAS (new)	BDI-II	BAI
Leh (n = 155)	LAS (ethnic)	Pearson's $r=$		-.05	-.07	.14
	LAS (new)	Pearson's $r=$.26*		.06	.13
	BDI-II	Pearson's $r=$.10	-.04		.50**
	BAI	Pearson's $r=$.10	.10	.45**	

Note. *marking statistical significance with $p < .05$ and ** with $p < .001$. The correlations for the Delhi sample is found over the diagonal and the correlations for the Leh sample below the diagonal.