

Length of Stay, Acculturative Stress, and Health among Kashmiri Students in Central India

Mohammad Ayoob and Tara Singh
Barkatuallah University, Bhopal

Maryam Jan
University of Kashmir

The present study explored the difference in acculturative stress and health with varying length of stay and examined length of stay as a significant predictor of acculturative stress and health. Sample consisted of 219 Kashmiri college students (men = 52.10%, women = 47.90%; $M = 23.30$, $SD = 1.70$) who migrated to Bhopal, Central India for receiving education. Participants completed self-report measures of acculturative stress and health. Findings of the study revealed significant differences in acculturative stress and different domains of general health with varying length of stay. Students with short length of stay reported higher acculturative stress and poor health. Length of stay was found as a significant predictor of acculturative stress and health. Relevance of present findings for students' health has been implicated.

Keywords: length of stay, acculturative stress, general health, Kashmiri students

Migration has become a common trend and an expected fact of life among majority of underdeveloped and developing nations. The massive wave of migration of Kashmiri students to central India occurred predominantly after the turmoil in Kashmir in the last two decades. From past 4 to 5 years a large number of students from Kashmir have migrated to Bhopal, Central India to receive higher education. There are approximately 5000 Kashmiri students studying in Bhopal, Central India. As far as the culture is concerned, Kashmiri students in Bhopal experience a new culture in terms of language, religion, dress material, food habits as well as attitudes, beliefs and values, in addition to physical and geographical features. As a result, this wave of migration of Kashmiri students has been identified to be very prone to developing psychosocial stress and psychological symptoms. These factors are assumed to interfere with their integration into Bhopal society by alienating them from their surroundings. A common theme emerging from the existing literature on immigration and ethnic populations points to acculturation as an important variable in successful adjustment in the adopted culture.

Acculturation

The geographical displacement has exposed migrating Kashmiri students to a new experience: acculturation. The process of acculturation involves cultural and psychological changes that result from the contact between people belonging to different cultures and exhibiting different behaviors (Berry, Poortinga, Segall, & Dasen, 1992). Kashmiri students like other immigrants experience acculturation when they enter into a new culture. For the acculturation process to be truly experienced there must be continuous first hand contact between the cultures and some change in the psychological or cultural phenomena (Berry, 1990). This is

what happens when immigrants leave their homeland and enter a new society. Moreover, acculturation is not always a successful process. Berry et al. (1992) suggest the concept of acculturative stress. This term refers to one kind of stress in which the stressors have sources in the process of acculturation.

Length of stay, Acculturative stress and Health

The length of students' stay in a host culture has been linked to acculturation outcomes (Berry, 1989; Oberg, 1960). Oberg (1960) argues that sojourners who stay longer in the host country are potentially adjusting well because they are likely to have passed through different stages of adjustment as compared to those who are new to the environment. Researchers have found that the longer the student resides in the host culture, lower are the cultural concerns (Wilton & Constantine, 2003) and acculturation stress levels (Msengi, 2003). Many other studies have found a relationship between the period of time that an individual stays in the host culture, contact, and acculturation among different groups of immigrants (Berry, 1980; 1997; Castro, 2003). Zheng and Berry (1991) reported that physical and psychological problems related to acculturative stress increased till four months after migration in Chinese sojourners. These physical and psychological symptoms relative to acculturative stress then gradually began to decline five months after migration and declined slowly for several years thereafter to the departure baseline, forming an inverted U-shaped function.

The present study examined the relationship of length of stay, acculturative stress and health among Kashmiri college students in Central India, as there is presently dearth of psychological research in this area, especially on Kashmiri migrant students.

Hypotheses

1. Acculturative stress and health would be significantly different among participants with different length of stay.
2. Length of stay would significantly predict acculturative stress and health of the participants.

Mohammad Ayoob, and Tara Singh, Department of Psychology, Barkatuallah University, Bhopal; Maryam Jan, Department of Distance Education, University of Kashmir.

Correspondence concerning this article should be addressed to Mohammad Ayoob Lone, Department of Psychology, Govt. Degree College Boys, Baramulla, Jammu and Kashmir. Email: ayoolone08@gmail.com

Method

Participants

Participants of the present study were 219 Kashmiri students (114 men and 105 women) studying in different universities and colleges located in Bhopal city, Central India. Age of these participants ranged from 20 to 30 years ($M = 23.30$, $SD = 1.70$). Majority of the participants (49.30%) had less than one year of living experience in Bhopal, 35.60% were living from 1 to 2 years and 15.10% were living from the past 2 to 3 years. As participants of the present study were students who migrated from Kashmir to Bhopal for study purpose, the majority (81.30%) were doing postgraduate studies. Some were research students (6.40%) at different departments of the universities.

Measures

1. *Social, Attitudinal, Familial, and Environmental Scale (SAFE-SF; Mena, Padilla, & Maldonado, 1987)*. Acculturative stress was measured by using Social, Attitudinal, Familial, and Environmental Scale-Short Form which assesses acculturative stress in social, attitudinal, familial, and environmental contexts. Respondents are asked to rate the extent to which they perceive 24 items to be stressful in their lives on a 5-point Likert scale ranging from "0" (strongly disagree) to "4" (strongly agree). The overall score of an individual on this measure may range from 0 to 120; high score indicating high acculturative stress while low scores indicating low acculturative stress. Mena et al. (1987) have reported internal consistency reliability for sample of adolescent ethnic minority youth ($\alpha = 0.89$). In the present study the internal consistency reliability (Cronbach's alpha) was 0.88.

2. *General Health Questionnaire (Goldberg & Hillier, 1979)*. It's a self administered screening instrument which focuses on the psychological components of ill health. This measure was developed to detect psychiatric disorders among people in community and non psychiatric clinical settings. This 28-item scale has four factors, i.e., Somatic Symptoms, Anxiety and Insomnia, Social Dysfunction and Severe Depression, which provide a state measure of psychological distress. Responses are obtained on a 4-point Likert scale ranging from 0 (better than usual) to 3 (worse than usual). Total score is produced by adding each subscale score together that ranges from 0 to 28. High score indicates greater psychological distress. Goldberg and Williams (1988) have reported split-half reliability for the total scale to be 0.95. Internal consistency reliability (Cronbach's alpha) of this measure in the present study was found to be 0.93.

Procedure

Initial meeting with the participants was made at different departments of colleges and universities in Bhopal. They were informed about the purpose of the study. Upon initial meeting, each participant was also explained the nature of the study and participants were informed about the confidentiality regarding information collected from them. A time for data collection was set up that was conducive for the participants. A good rapport was built to get correct responses and some necessary instructions and

guidelines were provided to them for properly filling the questionnaire. They were requested to fill the questionnaire as per the instructions and after completion they returned the questionnaire and were thanked for their participation and cooperation.

Data Analysis

Descriptive statistics, One Way Analysis of Variance (ANOVA) to examine the difference in acculturative stress and health of participants with different length of stay and simple linear regression analysis to examine the amount of variance explained by length of stay in the scores on acculturative stress and various measures of health were used to analyze data.

Results

Participants of the present study were Kashmiri students studying in different colleges and universities of Bhopal. These participants had 1 to 3 years experience of living and studying in Bhopal, Central India. The lengths of stay of participants in Bhopal were categorized into three groups, i.e., < 1 year ($n = 108$), 1 to 2 years ($n = 78$), and 2 to 3 years ($n = 33$).

Acculturative stress and health

Table 1 presents mean scores and standard deviation of three groups of participants with varying length of stay for the measures of acculturative stress and general health along with ANOVA. Results show significant difference between mean acculturative stress scores of three groups of participants. Mean scores show acculturative stress to be higher among participants with less than 1 year of stay in comparison to participants with 1 to 2 years and 2 to 3 years of stay.

For the measure of general health, results reveal significant differences between mean scores of three groups of participants for the measures of Somatic Symptom, Anxiety and Insomnia, Social Dysfunction, and Severe Depression. Overall, mean General Health scores of the three groups of participants also differed significantly. Mean scores clearly revealed that participants with short length of stay, i.e., < 1 year had greater health problems in terms of Somatic Symptom, Anxiety and Insomnia, Social Dysfunction, Severe Depression, as well as overall General Health in comparison to the participants who had 1-2 years or 2-3 years of stay.

Length of Stay as a predictor of acculturative stress and health

In order to examine whether length of stay predicted acculturative stress and health of participants, simple regression analysis was applied separately for each of the dependent measures. In this method, length of stay was used as an independent variable whereas acculturative stress and health were used as dependent variables. Results presented in Table 2 reveal length of stay as significant predictor of acculturative stress ($r^2 = .03$, $B = -3.32$, $t = 2.61$, $p < .01$) explaining 3% variance in the dependent measure.

The results supported that with increasing length of stay,

Table 1

Means, Standard Deviations and Analysis of Variance of Acculturative Stress and General Health for Length of Stay (N = 219)

Variables	<1 year		Length of Stay 1-2 years		2-3 years		F
	M	SD	M	SD	M	SD	
Acculturative stress	70.37	13.95	67.15	13.23	63.67	13.84	3.40*
General Health							
Somatic symptom	9.46	4.42	6.68	4.81	5.94	4.33	11.30**
Anxiety and Insomnia	10.14	4.71	6.95	4.17	6.61	3.84	15.37**
Social dysfunction	9.41	3.71	7.22	3.37	6.85	3.51	11.52**
Severe depression	7.55	5.02	4.68	4.03	4.36	5.08	10.90**
Overall General Health	9.14	3.72	6.43	3.03	5.94	3.51	18.89**

df=2, 216. *p < .05. **p < .01.

Table 2

Simple Regression Analysis predicting Acculturative Stress and General Health from Length of Stay (N= 219)

Criterion Variables	R ²	F(1, 217)	B	SE-B	t	95% CI
Acculturative stress	.03	6.83*	-3.32	1.27	2.61*	-5.33 – -0.83
General health						
Somatic symptom	.09	21.14*	-1.95	.42	4.60*	-2.79 – -1.11
Anxiety and Insomnia	.11	25.70*	-2.10	.41	5.07*	-2.91 – -1.28
Social dysfunction	.08	19.99*	-1.49	.33	4.47*	-2.15 – -0.83
Severe depression	.08	18.37*	-1.89	.44	4.29*	-2.75 – -1.02
Overall General health	.13	32.73*	-1.86	.32	5.72*	-2.50 – -1.22

*p < .01.

acculturative stress experienced by the participants decreases significantly.

Length of stay was also observed as a significant predictor of Somatic Symptoms ($R^2 = .09$, $B = -1.95$, $t = 4.60$, $p < .01$), Anxiety and Insomnia ($R^2 = .11$, $B = -2.10$, $t = 5.07$, $p < .01$), Social Dysfunction ($R^2 = .08$, $B = -1.49$, $t = 4.47$, $p < .01$), Severe Depression ($R^2 = .08$, $B = -1.89$, $t = 4.29$, $p < .01$), as well as Overall Psychological Well-being ($R^2 = .13$, $B = -1.86$, $t = 5.72$, $p < .01$) explaining 9%, 11%, 8%, 8% and 13% variance in the dependent measures respectively. Negative relation of length of stay with the dimensions of general health clearly indicated that with increasing length of stay, the problems of general health as reported by the participants decrease significantly.

Discussion

Present study examined the relationship between length of stay, acculturative stress and health of Kashmiri students who migrated to Bhopal for receiving higher education. There are many reasons for recent surge of interest among Kashmiri students to join higher education institutions of Bhopal and some other cities of Central India. In Kashmir, there are very few institutions of higher education with limited number of courses. Also, because of limited number of seats and strict admission criteria, a large number of Kashmiri students migrate to other parts of the country for seeking higher education. However, most of these students have very little or no familiarity with the culture of India. In recent years a large number of Kashmiri students have migrated to Bhopal, Central India because of its central location in the country, availability of variety of courses, and easy admission rules.

It was expected that students with short length of stay will show higher acculturative stress. Findings of ANOVA revealed that acculturative stress was higher among students with short length of

stay in comparison to those students who had longer duration of stay. Results of simple regression analysis showed length of stay as a significant predictor of acculturative stress. These findings supported the hypothesis regarding relationship of length of stay and acculturative stress.

A number of cross-cultural studies of acculturative stress (Amer, 2005; Jingyun, 1999; Oberg, 1960; Wilton & Constantine, 2003) have shown length of stay to be significantly related to acculturative stress. A number of other studies have shown that with increasing duration of stay people experience less acculturative stress (Guan & Dodder, 2001; Zhang & Rentz, 1996).

Like other studies carried out in different cross-cultural settings, findings of the present study carried out on Kashmiri students' migration and length of stay supported the relationship of length of stay and acculturative stress. The reason for students with short length of stay reporting higher levels of acculturative stress may be that these students did not pass through different stages of adjustment in host culture as compared to the students with long duration of stay. During the initial stages of migration, students experience more acculturative stress when they are confronted with people that have different culture. These interactions among cultures might result in stress when people perceive the new social environment as a threat to their original cultural practices. New ways of behavior, thinking, language, food, activities and belief systems might change the original cultural environment and increase stress. In addition, there are other factors responsible for acculturative stress among students such as minority status, religious membership and climate change. Many studies have reported that greater the difference between the host culture and original culture more is the acculturative stress (Berry, Kim, Minde, & Mok, 1987; Leavel, 2001; Yeh & Inose, 2003).

Further, with regard to health of the students, present study hypothesized that students with short length of stay would experience greater health problems in comparison to the students

with long duration of stay. ANOVA revealed significant difference between mean scores of three groups of students for Somatic Symptoms, Anxiety and Insomnia, Social Dysfunction, Severe Depression and Overall General Health. Students with short length of stay reported significantly greater health problems in comparison to the students with long duration of stay. Results of simple regression analysis revealed negative and significant relationship between length of stay and health of the students. Present findings are consistent with previous studies which have shown relationship of shorter period of stay in host culture with greater mental health problems (Abraido-Lanza, Chao, & Florez, 2005; De la Cruz, Padilla, & Agustin, 2000; Edwards, 2006; Van der Wurffa et al., 2004; Zheng & Berry, 1991) and effect of acculturation experience on health of acculturating groups (Mehta, 1998; Tsoi-Pullar, 1995). This shows that individuals who spent more time in host culture show better health. Present findings indicate that during initial stage of migration, physical and psychological problems among Kashmiri students were higher due to acculturative stress. However, with the passage of time the problems related to health were reduced substantially as the students were passing through the stages of cultural adjustment.

Limitations

Present findings demonstrated the relationship of length of stay, acculturative stress and health of Kashmiri college students. In the present study, participants with short length of stay reported greater acculturative stress and poor health in comparison to the participants with long duration of stay. Length of stay was found to be significantly related to acculturative stress and health of the participants. Although the relation of length of stay and health of students is clearly reflected in the present study, there are certain limitations of this study such as relatively limited sample size and the use of predominantly self-report measures. In addition, the homogeneity of the sample in terms of age and area sampled suggests that findings should not be generalized to samples with other characteristics.

Implications

Despite the above limitations, these findings have important implications for professionals in research, health care practice and education. In a large and culturally diverse country like India, it is surprising that no attention has been directed to migration of students and their acculturation. The present study has taken an important step in attempting to examine the relationship of length of stay, acculturative stress and health among Kashmiri students in Central India who belong to a different eco-cultural background. It is important that further research be conducted with students who migrate to study in other parts of the country. From an intervention point of view, current findings suggest that professionals who work with migrant students should be culturally competent and sensitive to students' cultural expectations and experiences. By doing so, professionals can be able to develop and implement culturally sensitive programs that not only identify students at risk but also offer a positive academic and social environment that facilitates cross-cultural skills.

Furthermore, professionals can design programs that address acculturation issues from a more vigorous, preventive and

educational approach by incorporating the social context that is a reflection of the migrant students' lived experiences. Assessment of support system of the students should be helpful before designing and implementing the intervention programs. The role of friends and significant others in the student's acculturation process should be determined and emphasized. In addition, programs that offer support for faculty to help students can also be beneficial in the students' acculturation process. Knowledge gained through this research may increase the cultural competence of health care professionals responsible for managing stress, particularly for migrant students, enabling host culture to develop an appropriate, effective health promotion and mental distress prevention strategy.

Findings of the present study could also be utilized by the educators. As the number of migrant students in higher education classes increases, professors and host students face the need to examine their assumptions about the teaching and learning processes. It has been found that holding collectivistic values can impact students' length of stay. The experiences that emerge from this kind of cultural value difference can have implications for teaching and learning. Therefore, it is important for the faculty as well as host students to be aware of the cross-cultural differences surrounding migrant students' academic adjustments. The cultural diversity that migrant students bring into the academic arena should be used as an opportunity to facilitate teaching and learning.

This study provides a useful direction for future research on student acculturation and health and also warrants a continued examination of acculturation influences on health of students belonging to different cultures. Longitudinal studies may be another recommended research direction to study acculturation, health and psychological well-being of acculturating students over time as they can provide a broader picture of adaptation process. Migrant students' experiences can be explored more realistically from the beginning of their arrival. Characteristics of each phase of acculturation also need to be examined in detail which can only be possible through well designed longitudinal studies.

References

- Abraido-Lanza, A. F., Chao, M. T., & Florez, K. R. (2005). Do healthy behaviors decline with greater acculturation? Implications for the Latino mortality paradox. *Social Science and Medicine*, 61, 1243-1255.
- Amer, M. M. (2005). Arab American mental health in the post September 11 Era: Acculturation, stress and coping. *Dissertation Abstract International*, 66(4-B), 1974.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. Padilla (Eds.), *Acculturation: Theory, model, and new findings* (pp. 9-26). Boulder: Westview.
- Berry, J. W. (1989). Acculturation and psychological adaptation. In J. P. Forgas & J. M. Innes, (Eds.), *Recent Advances in Social Psychology: An International Perspective* (pp. 511-520). Amsterdam: Elsevier.
- Berry, J. W. (1990). Acculturation and adaptation: A general framework. In W. H. Holtzman & T. H. Bornemann (Eds.), *Mental Health of Immigrants and Refugees* (pp. 90-102). Austin: Hogg Foundation for Mental Health.
- Berry, J. W. (1997). Immigration, acculturation and adaptation. *Applied Psychology: An International Review*, 46, 5-68.
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review*, 21(3), 491-511.

- Berry, J. W., Poortinga, Y. H., Segall, M. H., & Dasen, P. R. (1992). *Cross-cultural psychology: Research and applications*. New York: Cambridge University Press.
- Castro, V. S. (2003). *Acculturation and psychological adaptation*. Westport, CN: Greenwood Press.
- De la Cruz, F. A., Padilla, G. V., & Agustin, E. O. (2000). Adapting a measure of acculturation for cross-cultural research. *Journal of Transcultural Nursing, 11*, 191-198.
- Edwards, L. M. (2006). Perceived family support, acculturation, and life satisfaction in Mexican American youth: A mixed-methods exploration. *Journal of Counseling Psychology, 53*, 279-287.
- Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine, 9*, 139-145.
- Goldberg, D., & Williams, P. (1988). *A user's guide to the General Health Questionnaire*. Windsor, Berkshire, UK: NFER-Nelson.
- Guan, J., & Dodder, R. (2001). The impact of cross-cultural contact on value and identity: A comparative study of Chinese students in China and in the U.S.A. *Mankind Quarterly, 41*, 271-289.
- Jingyun, L. (1999). Cross-cultural contact: A study of factors that contribute to culture shock on ESL students' adjustment in the English Language Institute at the University of Tennessee, Knoxville. *Dissertation Abstract International, 61*(02-A), 599.
- Leavel, J. P. (2001). Coping skills patterns of international college students'. *Dissertation Abstracts International, 62*(09-B), 4275.
- Mehta, S. (1998). Relations between acculturation and mental health for Asian Indian immigrants in the United States. *Genetic, Social, and General Psychology Monographs, 124*, 61-78.
- Mena, F. J., Padilla, A. M., & Maldonado, M. (1987). Acculturative stress and specific coping strategies among immigrant and later generation college students. *Hispanic Journal of Behavioral Sciences, 9*(2), 207-225.
- Msengi, I. G. (2003). Sources of stress and its impact on health behaviors and academic performance of international students at a comprehensive Midwestern University. *International Journal of Global Health and Health Disparities, 5*(1), 55-69.
- Oberg, K. (1960). Culture shock: Adjustment to new cultural environments. *Practical Anthropology, 7*, 177-182.
- Tsoi-Pullar, M. (1995). Acculturation and psychological well-being among Chinese American college students. *Dissertation Abstracts International, 56*(02-A), 237.
- Van der Wurffa, F. B., Beekmana, A. T., Dijkshoornb, H., Spijkerb, J. A., Smitsc, C. H., Steka, M. L., et al. (2004). Prevalence and risk-factors for depression in elderly Turkish and Moroccan migrants in the Netherlands. *Journal of Affective Disorders, 83*, 33-41.
- Wilton, L., & Constantine, M. G. (2003). Length of residence, cultural adjustment difficulties and psychological distress symptoms in Asian and Latin American international college students. *Journal of College Counseling, 6*, 177-186.
- Yeh, C. J., & Inose, M. (2003). International students' reported English fluency, social support satisfaction and social connectedness as predictors of acculturative stress. *Counseling Psychology Quarterly, 16*, 15-28.
- Zhang, N., & Rentz, A. (1996). Intercultural adaptation among graduate students from the People's Republic of China. *College Students Journal, 30*, 321-329.
- Zheng, X., & Berry, J. W. (1991). Psychological adaptation of Chinese sojourners in Canada. *International Journal of Psychology, 26*, 451-470.

Received January, 2011

Accepted July, 2011