

## **Psychosocial Aspects of Adaptation of International Students in Pakistan**

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This study examined the psychosocial aspects (acculturation stress, ethnic discrimination, nostalgia, and sentimentality) of socio-cultural and psychological adaptation of international students in Pakistan. Sample of 143 international students was taken from different government and private universities of Pakistan. Measures of Acculturative Stress Scale for International Students (Sandhu & Asarbadi, 1994), Brief Perceived Ethnic Discrimination Questionnaire-Community Version (Brondolo et al., 2005), Index of Nostalgia Proneness (Holak, Havlena, & Matveev, 2006), Emotionality Subscale of the HEXACO Personality Inventory (Lee & Ashton, 2009), Brief Psychological Adaptation Scale (Demes & Geeraert, 2014), and Brief Socio-Cultural Adaptation Scale (Demes & Geeraert, 2014) were used. Results showed that ethnic discrimination, acculturation stress, nostalgia, and sentimentality were negatively correlated with psychological and socio-cultural adaptation. Sentimentality moderated the relationship of ethnic discrimination with socio-cultural and psychological adaptation. Moreover, sentimentality also moderated the relationship between nostalgia and psychological adaptation.

*Keywords.* Acculturation stress, ethnic discrimination, nostalgia sentimentality, adaptation, international students

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One of the most important trends in present era is the internationalization of higher education and the approach of studying abroad (Amy, Gregory, & Yu-Nan, 2012). Populace living in a foreign country may encounter problems of adaptation and international students are not absolved from this process. They may face very different and unexpected problems and may need to adjust to the new educational system totally different from their native country (Zhang, 2012). The reputed institutions of Higher Education Commission in Pakistan accommodate not merely national students but students from many different countries globally. The scholars feel encumbered in a new culture, from dealing with new circumstances and people to learning to be independent. Adapting to new academic situations, they must encounter surroundings that may be very diverse from the one they belong to (Nasir & Rehman, 2017). So, in the present study, ethnic discrimination, acculturation stress, nostalgia, and sentimentality were studied as the possible aspects that may influence the international students' psychosocial adaptation in Pakistan. The prime aim of the study was to examine the moderating role of sentimentality with acculturation stress, nostalgia, and sentimentality for psychological and socio-cultural adaptation.

Adaptation is the process of adjustment to the existing circumstances in the surroundings and the development of ethnic and societal skills, sensibility to the beliefs, values, and norms of the new culture and the acquisition of adequate communication skills for interacting efficiently with the host-culture (Castro, 2003). Numerous studies on adapting to new cultures among international students diagnosed primary adjustment issues (e.g., Ruble & Zhang, 2013). These issues include problem in communication, accommodation, adjustment to different food and weather, and social relationships (Nasir, 2011). In order to complete their study tenure successfully, international students need to be adapted to the host environment effectively.

On the substructure of past research, two distinctive aspects of intercultural adaptation have been acknowledged (Ward, Bochner, & Furnham, 2001) that is, socio-cultural adaptation and psychological adaptation. Socio-cultural adaptation is established on the cultural based learning attitude reflecting the capacity to involve in productive or valuable relations with a unlike culture. Socio-cultural adaptation concerns are referred to as culture shock, culture fatigue, perceived discrimination, new social/cultural customs, norms, regulations, and position (Tseng, 2002). International students' social adaptive skills can have a profound effect on how they inaugurate their social networks (Amy et al., 2012) and experience more problems in socio-

cultural adaptation as compared to the national students (Hechanova-Alampay, Beehr, Christiansen, & Van Horn, 2002). While going through the socio-cultural adaptation, one of the main issues faced by international students is being subjected to unconstructive influence of ethnic discrimination and racism. Prejudice between group of international students or distancing from the dominant group of the host culture are the foremost influences on the adaptation of international students (Arthur, 2004). While on the other hand, psychological adaptation facilitates the person's sense of wellbeing, general satisfaction with living and positive evaluation of circumstances, and general satisfaction with living. Psychological adaptation predicted on Lazarus and Folkman's (1984) stress and coping framework, has been considered a paramount issue for international students' health and well-being. Empirical evidence has demonstrated that international students experience more emotional anguish and poor mental health than the host populace. Further, Lower levels of adaptation among international students associated with elevated anxiety, depression, poor self-esteem, and many other psychological troubles (Pernice, Trlin, Henderson, & North, 2000; Ward et al., 2001).

Ethnic discrimination, one of the factors that influence socio-cultural and psychological adaptation, is an unequal treatment because of one's ethnicity. Ethnic discrimination or racism encompasses segregation, unfriendliness, stigmatization, bullying, viciousness and other detrimental acts (Contrade et al., 2001). As far as ethnic discrimination in Pakistan is concerned it is present as a form of bigotry that has been part of India and Pakistan's sociology even when they were living together in the subcontinent. In Pakistan such conduct is meted out by Muslims to underestimate Hindus and Christians or other minority groups. It is an understood rule that they will not be sanctioned to apportion cutlery utilized by their Muslim counterparts and neither will they be sanctioned to prepare and accommodate tea or pabulum to their Muslim co-workers. They will think of it as something to do with patriotism or the supremacy of their particular convictions and morals. It is a case of victims of racism not only becoming racist themselves, but becoming something even worse by shrewdly embellishing this framework of racial or ethnic judgment with vague religious affirmations, quite like the white colonialists of yore (Paracha, 2014). Such unkind and prejudiced treatments lead to poor adaptation (Poyrazli, Thukral, & Duru, 2010).

Acculturation refers to the cause of change (both psychological and cultural) in which one needs to be trained in coping up in a different social and cultural environment after being habituated to

some other environment before (Berry, 2001). Acculturative stress occurs as an outcome of stressing life events which are ingrained in experiences of acculturation (Berry, 2005). According to Smart and Smart (1995), it is due to the psychological barriers and complications in becoming accustomed to a new culture. College students tackle with stress from educational life and issues stemming from mundane development, such as psychological autonomy, economic independence, and identity formation (Toyokawa & Toyokawa, 2002). Besides ordinary developmental concerns, international students face supplemental stress due to the requirements of cultural adjustment (Mori, 2000). Yeh and Inose (2003) found that international students undergo a lack of sufficient social connectedness and social support in the host country, which integrates to acculturation distress.

Nostalgia is defined with numerous labels such as an immigrant psychosis (Frost, 1938), a mentally repressive compulsive disorder (Fodor, 1950). Ortony, Clore, and Collins (1988) viewed nostalgia as part of the negative subset of well-being. Specifically, they categorized nostalgia under the distress, loss emotions, and bereavement about the past. Nostalgia engrosses the wounding realization that some attractive portion of one's past is eternally gone and plays a major role in the way immigrants acculturate to the host culture (Lindridge, 2012). One of the most influential theories in nostalgia literature is the discontinuity hypothesis developed by Davis (1979). Simplified, it verbalizes that nostalgia sanctions people to maintain their identity after major transitions in their lives. The symptoms of nostalgia include sadness, hopelessness, fear, lack of appetite, muscle weakness, and sleeping problems in predominant experiences (Scanlan, 2008).

When sojourner students acculturate to a new country, they experience more warm emotions in relation to a specific object or their original culture and are less adapted to the novel country. This experience is known as sentimentality which is identified as nothing more or less than the tender feelings (Solomon, 2004). It is argued that sentimentality is a tender feelings, often misdirected or unwarranted. Prime focus of sentimentality is the emotional value. Emotional value originates from relationship with significant others that is, members of family and dear friends (Andersen & Chen, 2002); and links with emotionally significant events (Zauberman, Ratner, & Kim, 2009). Sentimentality is related to yet different from nostalgia for demonstrating the agony experienced by an individual far away from his native land and longs for returning home and who doubts to never see it yet again (Scanlan, 2008). Sentimentality can occur without nostalgia and explained by elements, such as links with a significant

other and its capacity to which it memorialize a significant occasion. Furthermore, sentimentality is comparatively stable, nostalgia, however, can be simply influenced by situational factors, such as negative mood and the discrete affective state of loneliness (Wildschut, Sedikides, Arndt, & Routledge, 2006). That is, nostalgia waxes and wanes as circumstances change within a day, but sentimental value, short of a major life change, remains relatively constant. It occurs in all cultures and among all age groups, especially among first year boarding students, immigrants, and in old age, elderly adults are especially vulnerable to social isolation (Association for Psychological Science, 2008) leading to poor psychological adaptation (Seehusan, Cardaro, & Wildschut, 2013).

Research insinuated that foreign students encounter more negative emotional responses (Ladum & Burkholder, 2019) and higher levels of homesickness. Moreover, levels of homesickness were also predicted by levels of discrimination (Poyrazli & Lopez, 2007) leading to poor adaptation compared to domestic students. According to U-curve adaptation, Wang, Li, Noltemeyer, Wang, and Shaw (2018) confirmed that psychological and socio cultural adaptation to a new environment changes over time in which it is ample in the beginning followed by culture shock and then slowly proliferates again.

Owing to the difference of culture and belief systems, according to indigenous research, interaction problems between international students and host society are rampantly seen. These factors impair their adaptation resulting in low academic achievement (Nasir, 2012). A case study conducted by Janua, Malik, and Rahman (2011) elucidated that most respondents faced difficulty in adjusting to the Pakistani community. The issues while adapting were result of their prior learning experiences and the variations in their host institutions' experiences. A qualitative study (Irum, Ajmal, & Sabah, 2012) investigated the adaptation patterns of non-Punjabi students at a public university of Lahore, discovered that non-local students were being inferiorized by local students. Incessantly facing satirical and ethnic remarks, they were forced to conform to indigenous setup, leading to cultural tension and difficulty in adapting cultural and social values of the new place.

### **Rationale**

Students crossing seas to study abroad face major changes in their lives, due to relocating to a different culture and leaving their family and friends behind. International students also experience

discrimination based on their ethnicity (Ward et al., 2001). Moreover, they may feel sentimental association with their family and culture as well as feelings of longing for their home country (Andersen & Chen, 2002; Lindridge, 2012) which may influence their psychosocial adjustment to the new culture (Ryder, Alden, & Paulhus, 2000). Although multiple studies supplied evidence for various facets impacting intercultural adaptation, yet many of them have scrutinized these facets separately. In the current study, this concern was addressed by studying various aspects of poor adaptation like ethnic discrimination, acculturation stress, sentimentality and nostalgia under an umbrella term called psychosocial adaptation. Despite having substantial research on intercultural adaptation, nostalgia has been out shadowed from young sojourners' perspective (Gergov & Stoyanova, 2013; Stoyanova, Giannouli, & Gregov, 2017) while sentimentality has been entirely neglected in the immigrants' literature. The understudy has; therefore, probed into the relationship of sentimentality with psychosocial adaptation and its aspects and also investigated its moderating effect, so that a comprehensive understanding of minimal psychosocial adaptation can be built.

Most of the research studies conducted on international students mainly focused on the Asian Americans, Koreans, Latinos, North Americans, Hispanics, Chinese, and Taiwanese studying in Hong Kong (Chan, 2001); United States (Hwang & Ting, 2008); Korea (Suh, Flores, & Wang, 2019); and China (An & Chiang, 2015). However, a limited number of studies have been carried out with international students studying in Pakistani universities. The studies carried out in Pakistan primarily focused on acculturation stress and adaptation (Butt, 2014), cultural adjustment (Dilshad & Malik, 2019), social adjustment and self-esteem (Mehboob & Shahzad, 2019) but the understudy has not only studied psychosocial adaptation as an umbrella term but explored sentimentality as an exploratory variable. Therefore, the present research was carried out to examine the ethnic discrimination, acculturation stress, nostalgia, and sentimentality as factors of psychosocial adaptation of international students studying in Pakistan. Despite a number of studies, moderating role of sentimentality has been ignored. So, current study also aimed to investigate the moderating role of sentimentality in the relationship of ethnic discrimination, acculturation stress, and nostalgia with psychological and socio cultural adaptation in international students.

## Hypotheses

Based on the literature, following hypotheses were formulated:

1. Ethnic discrimination, acculturation stress, sentimentality and nostalgia are likely to have negative relationship with psychological and socio-cultural adaptation among international students of Pakistan.
2. Sentimentality is likely to moderate the relationship between ethnic discrimination, acculturation stress, nostalgia, and psychosocial (psychological and socio cultural) adaptation among international students of Pakistan.

## Method

### Research Design

Present research inquiry employed a cross-sectional/ correlational research design.

### Sample

The sample was recruited by using purposive and snowball sampling techniques because of stringent criteria to select the sample. Moreover, it was difficult to reach international students without benefitting from contacts of the participants. The sample consisted of 143 (103 men & 40 women) international students living in Pakistan since last one and half year at maximum. The mean age of the participants was 21.57 ( $SD = 1.45$ ). Both undergraduate ( $n = 107$ ) and graduate students ( $n = 36$ ) were recruited from government ( $n = 71$ ) and private universities ( $n = 72$ ). The mean Cumulative Grade Point Average (CGPA) of the participants was 3.04 ( $SD = 0.47$ ) out of 4. The participating students were residing in university hostels who were the natives of Africa ( $n = 32$ ), Asia ( $n = 83$ ), Europe ( $n = 24$ ), Australia ( $n = 3$ ), and North America ( $n = 1$ ) having different religious affiliations like Muslims ( $n = 82$ ), Buddhists ( $n = 17$ ), Christians ( $n = 27$ ), Catholics ( $n = 8$ ), Hindus ( $n = 7$ ), and Lutheranism ( $n = 2$ ).

### Measures

Following assessment measures were used in the present study:

**Brief Perceived Ethnic Discrimination Questionnaire-Community Version (Brief PEDQ-CV).** Ethnic discrimination was measured by using the Brief PEDQ-CV (Brondolo et al., 2005). It comprised of 17 items to be rated on 5-point Likert scales ranging from 1 = *never* to 5 = *very often*. The total score ranged from 17 to 85. The scale consisted of four subscales, that is, exclusion, stigmatization, workplace discrimination, and threat and harassment. The internal consistency of the overall Brief PEDQ was high ( $\alpha = .88$ ). For the subscales the internal consistencies were given as exclusion ( $\alpha = .69$ ), stigmatization ( $\alpha = .78$ ), workplace discrimination ( $\alpha = .65$ ) and threat and harassment ( $\alpha = .88$ ) and high scores indicated high levels of ethnic discrimination.

**Acculturative Stress Scale for International Students (ASSIS).** The scale was developed by Sandhu and Asarbadi (1994). It consisted of 36 items to be rated on a 5-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. The total score on the scales ranged from 36-180. The scales had seven subscales, that is, perceived discrimination, homesickness, perceived hate, fear, stress due to change or culture shock, guilt, and miscellaneous. It has strong internal consistency ( $\alpha = .94$ ). The alpha levels of subscales acquired for perceived discrimination ( $\alpha = .90$ ), homesickness ( $\alpha = .89$ ), perceived hate ( $\alpha = .90$ ), stress due to change or culture shock ( $\alpha = .79$ ), guilt ( $\alpha = .44$ ), and miscellaneous ( $\alpha = .84$ ) were adequately satisfactory. Higher score on acculturative stress scale was indicative of greater perceived acculturation stress.

**Emotionality Subscale of HEXACO Personality Inventory Revised.** For measuring sentimentality, Emotionality Subscale of HEXACO Personality Inventory (Lee & Ashton, 2009) was used. The 10 items were rated on a 5-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. It has a satisfactory reliability ( $\alpha = .74$ ). The score ranged from 10 to 50 with higher score exhibiting greater sentimentality.

**Index of Nostalgia Proneness.** The scale of Index of Nostalgia Proneness (Holak et al., 2006) was used to assess nostalgia which consisted of 31 items to be responded on a 9-point Likert scale ranging from 1 = *strongly disagree* to 9 = *strongly agree*. The total score ranged from 31 to 279. The scale had four subscales, that is, personal nostalgia, interpersonal nostalgia, cultural nostalgia, and virtual nostalgia. Its reliability coefficient was found to be satisfactory ( $\alpha = .87$ ); while seven of the items were reverse coded, and higher scores exhibited greater nostalgia proneness.



**Brief Socio-Cultural Adaptation Scale.** This 12-item measure assesses respondents' effectiveness in navigating the new culture on a 7-point Likert scale ranging from 1 = *very difficult* to 9 = *very easy*. The scale has a good internal consistency ( $\alpha = .87$ ; Demes & Geeraert, 2014). The total score on the scale ranged from 12 to 84. Higher scores on the scale indicated good sociocultural adaptation.

**Brief Psychological Adaptation Scale.** This 8-item measure assesses respondents' level of comfort and happiness concerning being in a new culture. Responses were recorded on a 7-point Likert scale ranging from 1 = *never* to 7 = *always*. The scale has a good internal consistency ( $\alpha = .90$ ; Demes & Geeraert, 2014). Six of the items were reverse coded. The total score on the scale ranged from 8 to 56; where higher scores on the scale indicated good psychological adaptation.

**Demographic information sheet.** It gathered data about the participants' age, gender, education native language, native country, race, monthly income, family system, and reason for studying in Pakistan.

## Procedure

Formal permission was obtained from the scale authors and from concerned authorities of the universities. The data was collected from the international students from different government and private universities of Lahore, Pakistan. All participants were briefed about the nature and purpose of the research. Each questionnaire consisted of a consent form which was given to every student for the participation in research and was signed by them. Participants were assured of anonymity and confidentiality of their provided information. Printed set of questionnaires with the same sequence of scales in it, were provided to research participants and all the queries of participants were also welcomed. All questionnaires were filled out by the participants in the presence of the researcher. The educational institutions and participants were humbly thanked for their cooperation.

## Results

Reliability and descriptive analyses were conducted to assess the internal consistency of scales and to get a picture of sample

characteristic (mentioned in sample description), respectively (see Table 1).

Table 1

*Alpha Reliabilities, Descriptives, and Normality of Assessment Measures (N = 143)*

Variables	<i>k</i>	$\alpha$	<i>M</i>	<i>SD</i>	Min	Max	Skew	Kurt
Ethnic discrimination	17	.86	3.20	.65	1.29	4.53	-.41	-.02
Acculturation stress	36	.94	3.86	.55	2.00	4.61	-.13	1.23
Nostalgia	10	.81	6.48	.72	4.06	8.65	-.58	1.44
Sentimentality	31	.79	3.63	.61	1.90	4.80	-.60	-.28
Psychological adaptation	8	.80	2.90	.97	1.00	5.88	.93	.78
Socio-cultural adaptation	12	.81	2.25	.93	1.08	6.25	1.23	1.61

*Note.* *k* = No. of items. *a* = Cronbach Alpha.

Table 1 shows that all study variables had good to excellent alpha reliability values. Furthermore, skewness and kurtosis values indicated the normal distribution of scores (Gravetter & Wallnau, 2014). After the descriptive analysis, zero order correlation was performed to investigate the first hypothesis of study (see Table 2).

Table 2

*Correlation Matrix for Study Variables (N = 143)*

Variables	1	2	3	4	5	6
1. Ethnic discrimination	-	.58*	.30*	.47*	-.42*	-.48*
2. Acculturation stress		-	.45*	.50*	-.60*	-.60*
3. Nostalgia			-	.58*	-.48*	-.56*
4. Sentimentality				-	-.41*	-.48*
5. Psychological adaptation					-	.57*
6. Socio-cultural adaptation						-

\*  $p < .001$ .

Table 2 showed that ethnic discrimination, acculturation stress, nostalgia, and sentimentality had significant negative relationship with psychological and socio-cultural adaptation. Negative association in study variables yielded that international students facing ethnic discrimination and having high acculturation stress, nostalgia, and sentimentality exhibit poor psychosocial adjustment. Therefore, first hypothesis that ethnic discrimination, acculturation stress, sentimentality and nostalgia are likely to have negative relationship

with psychological and socio-cultural adaptation among international students is fully supported by research findings.

### Moderating Role of Sentimentality

Moderating role of sentimentality between ethnic discrimination, acculturation stress, nostalgia, and psychosocial adaptation was assessed using hierarchical regression. For that purpose, initially demographics (age, gender, sector, educational program and monthly income) were entered in block I as control variables (Dawson, 2014), moderator (sentimentality) in Block II, centralized independent variables (ethnic discrimination, acculturation stress and nostalgia) in Block III, and product of independent variables and moderator in Block IV. Regression analysis was run twice for two distinct types of adaptation that is, socio-cultural adaptation and psychological adaptation (see Table 3).

Table 3

*Moderating Effect of Sentimentality Between Ethnic discrimination, Acculturation stress, Nostalgia and Psychosocial (Psychological and Socio Cultural) Adaptation of International Students in Pakistan*

Variables	Socio-cultural Adaptation		Psychological Adaptation	
	$\Delta R^2$	B	$\Delta R^2$	B
Step 1	.11		.07	
Age		.04		-.10
Gender		-.05		.08
Sector		-.10		.01
Educational program		-.10		.16**
Monthly income		-.18**		.03
Step2	.17		.10	
Sentimentality		-.03		.08
Step 3	.26		.27	
Ethnic discrimination		-.17*		-.09
Acculturation stress		-.30**		-.47***
Nostalgia		-.34***		-.27**
Step 4	.03		.08	
Sentimentality x Ethnic discrimination		-.19*		-.28**
Sentimentality x Acculturation stress		.00		-.15
Sentimentality x Nostalgia		.13		.23**
$R^2$	.57		.52	
F	14.54***		11.56***	
$\Delta F$	3.11		7.30	

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

In Table 3, first analysis using socio-cultural adaptation as dependent variable indicated that final model came out to be highly significant  $F(3, 130) = 3.11, p < .001$ , with a total explained variance of 57%. Monthly income, ethnic discrimination, acculturation stress and nostalgia were the significant predictors of socio-cultural adaptation. The results also revealed that the interactions effects of sentimentality along ethnic discrimination were significant for socio-cultural adaptation. Second regression analysis using psychological adaptation as dependent variable indicated that final model came out to be highly significant  $F(3, 130) = 7.30, p < .001$ , with a total variance of 52% explained (see Table 3). Educational program, acculturation stress and nostalgia significantly predicted psychological adaptation. The results also revealed that the interactions effects of sentimentality along ethnic discrimination and nostalgia were significant for psychological adaptation

The graphical representations of significant interactions are given below. All the figures represent the interaction effect via two-way interaction effects using standardized variables recommended by Dawson and Ritche (2006).

The Figure 1 indicated that interaction of ethnic discrimination along sentimentality predicted socio-cultural adaptation. When international students experienced high discrimination and high sentimentality, they had lower sociocultural adaptation and vice versa.

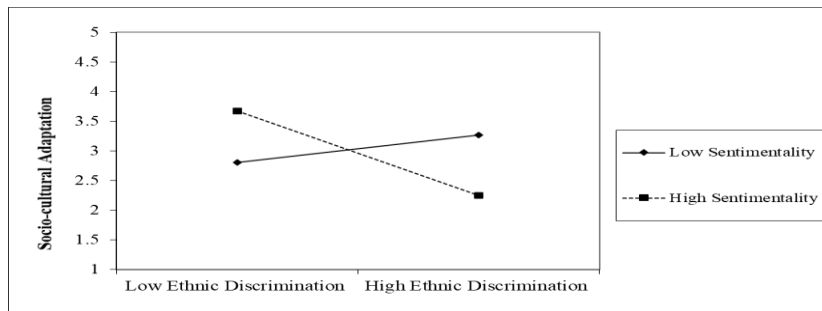


Figure 1. Interaction between ethnic discrimination and sentimentality with socio-cultural adaptation.

The Figure 2 (given below) indicated that decrease in ethnic discrimination along low sentimentality leads to better psychological adaptation among international students and vice versa. This is a clear indication of interaction effect.

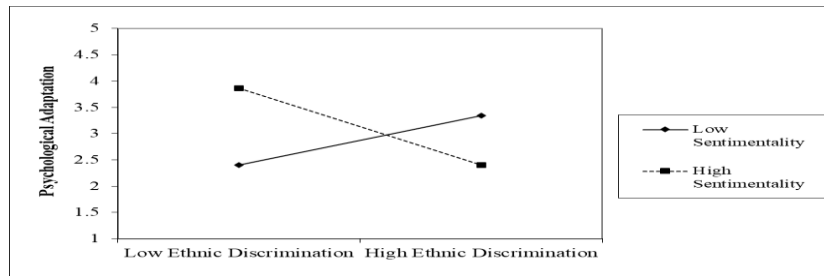


Figure 2. Interaction between ethnic discrimination and sentimentality with psychological adaptation.

The Figure 3 (given below) indicated that nostalgia and sentimentality predicted psychological adaptation. Psychological adaptation among international students increases when nostalgia and sentimentality are low.

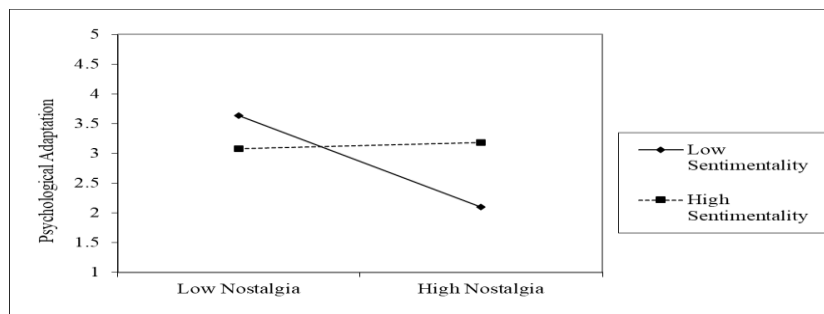


Figure 3. Interaction between nostalgia and sentimentality with psychological adaptation.

### Discussion

The prime aim of the present study was to find out the moderating effect of sentimentality on international students' psychosocial (psychological and socio-cultural) adaptation in Pakistan. To explore this aim, descriptive statistics, zero order correlation and regression analyses were conducted. The moderation analysis was conducted twice because of two separate measuring tools i.e. for psychological adaptation and sociocultural adaptation preceded by correlational analysis. The results from correlation analysis revealed that ethnic discrimination, acculturation stress, nostalgia and sentimentality have a negative relationship with psychological and socio-cultural adaptations. Moreover, sentimentality moderated the

relations of ethnic discrimination and nostalgia with psychological and socio-cultural adaptations.

The results from correlational analysis revealed that psychological and socio-cultural adaptations had a positive relationship with each other. These findings are supported by Demes and Geeraert (2014) who argued that psychological and sociocultural adaptation are associated yet different constructs and are therefore expected to be correlated with each other. The current study indicated that both types of adaptation complemented each other. International students who were socio-culturally well adapted to Pakistan have a sound psychological adaptation as well.

Furthermore, the current study, exhibited a negative relationship between psychosocial adaptation and ethnic discrimination. The result is consistent with Du, Li, and Lin (2015) who indicated that migrants who reported high perceived discrimination showed inadequate adaptation. Another study indicated that the lonelier the immigrant children were, the more nostalgic they felt (Zhou, Sedikides, Wildschut, & Gao, 2008). In Pakistan non-local students repeatedly face satirical and ethnic comments (Irum et al., 2012) consequently students who are subjected to such prejudiced attitudes and behaviors tend to perceive profound cultural distance with the host country exhibiting poor adaptation.

Zhang (2012) reported that students with less acculturative stress experienced a better adjustment outcome. The present study adds to these findings by showing negative association between acculturation stress and psychosocial adaptation. While acculturating to a new culture which is Pakistan in the present case, international students have to face not only the adjustment issues (communication and food etc.) but in addition they experience an alteration in studying schedules and learning styles which contribute to alleviating stress, anxiety or depression among them steering to reduced psychosocial adaptation.

In addition, the correlational analysis revealed a negative relationship between sentimentality and psychosocial adaptation. Cross-cultural adaptations may provoke numerous emotions. For example, unacquainted customs may induce anxiety; communication problems may lead to frustration; and prejudices may lead to fear, anger, or contempt (Trejo, Richard, Driel, & Macdonald, 2015) thus these students use behaviors that help them encounter their challenges, including coping behaviors, such as using memories of home culture, communicating with peers, and employing humor along with observing and replicating behavior (Gebhard, 2012). In the

understudy, such defense mechanisms might have led to minimal psychosocial adaptation as exhibited by negative association between sentimentality and adaptation (both social and psychological). The capability to down-regulate such affective states like sentimentality is vital in the progress of cross-cultural adaptation (Reid, 2010; Yoo, Matsumoto, & LeRoux, 2006). Yoo et al. (2006) also offered indirect support for this idea, demonstrating a link between emotions and intercultural adjustment in international students. The better sojourners regulate their sentiments the more adjusted they are to a host country (Gullekson & Tucker, 2012; Li & Wong, 2008).

The conducted study also revealed negative relationship between nostalgia and psychosocial adaptation. The results are built on the evidence base for the immigrants' nostalgia; the lonelier the immigrants were, the more nostalgic they felt (Zhou et al., 2008) subsequently affecting the adaptation (Hack-Polay, 2012). So, when the international students fell into the pits of nostalgia, reflecting back to their native countries, experienced homesickness which led to poor adaptation to Pakistan.

Findings from hierarchical regression indicated that ethnic discrimination, acculturation stress and nostalgia were the significant predictors of socio-cultural adaptation. The findings were consistent with previous studies (Gillette, 2005; Shi & Wang, 2013) which highlighted that the more distant the international students are from the host culture in language, climate, interaction with host nationals and religion the poorer the socio-cultural adaptation. If the sample of the present study is taken into consideration, it was observed that the participating students were from not only from Asia but Africa, Europe, Australia and America as well with religious affiliations like not just Muslims but Christians, Buddhists, Catholics and Lutheranism. Such diverse nationalities and religions effected international students' sociocultural adaptation to Pakistan.

On the other hand, acculturation stress and nostalgia were the significant predictors of psychological adaptation. Yeh and Inose (2003) argued that contact with a different society and culture may give rise to culture shock for many international students, which has paramount consequences for their wellbeing (Ward et al., 2001) leading to reduced psychological adaptation in Pakistan. While the results are inconsistent with (Batcho, 2013) who argued that nostalgia is a support in difficult times and serves as coping mechanism but in the present case nostalgia served as a retreat leading to poor psychological adaptation to Pakistan.

The moderating effect of sentimentality on psychological and socio-cultural adaptation was investigated as an exploratory analysis in the present study. The results revealed that the interactions of sentimentality with ethnic discrimination was the significant predictors of socio-cultural adaptation while the interaction terms of sentimentality with ethnic discrimination and nostalgia were the significant predictors of psychological adaptation. Hence it was substantiated that sentimentality moderated the relationship between ethnic discrimination and psychosocial adaptation. The results are consistent with the studies (Contrade et al., 2001; Krieger, 1999) stating that racism or ethnic discrimination can involve stigmatization, exclusion, social distancing, threat or harassment, violence and other acts and different forms of ethnicity-related interpersonal mistreatment may function as variants of stressors. Sentimentality also moderated the relationship between nostalgia and psychosocial adaptation. These findings are consistent with Hwang and Hyun (2013) and Yang and Galak (2014) who found that emotional responses provoke both negative and positive feelings and hedonic adaptation is also slowed down by sentimental values. In the current case sentimentality diminished the psychosocial adaptation of international students inhabiting Pakistan. Students unveiling higher sentimentality towards their native country showed infinitesimal adaptation to Pakistani culture rather than students with diminutive sentimental thoughts. Considering these students have undergone a major shift in their lives, that is, they are departed from their families and friends in their homeland and travelled across rivers to accomplish their educational needs; they are nonetheless emotionally bounded to culture of inception. Henceforth such affective states negatively influenced the international students' adaptation.

### **Limitations and Suggestions**

The study had certain limitations which are stated here along with the suggestions for future research. The sample was confined to the students only. It can be further investigated between foreigners from different domains. Further research can be done to explore the causal factors of the current findings and different interventions can be used to improve the adaptation of international students. Furthermore a longitudinal study could make available distinctive understandings on requirements and aptitudes of international students over the long run. Moreover, students could be studied annually (i.e., via successive independent sampling) in order to grasp any trends and inclinations. By studying first-year students consistently we might be able to assess



University endeavors to improve the primary year international student experiences.

### **Implications**

The current study can serve as a platform to deal with the problems of international students' psychosocial adaptation and its importance in affecting different domains of their wellbeing. Since it was observed that ethnic discrimination and nostalgia were the significant predictors of psychosocial adaptation, it can help counselors to design counseling programs for students experiencing homesickness and who are stigmatized because of their color or ethnicity. It can help determining the appropriate ways to deal with the stressors in a foreign country so that the personal wellbeing of the international students may not be jeopardized. The results can play an important role for counselors and educational psychologists dealing with the international students. The findings can be applied for better psychosocial adaptation of international students in different educational institute.

### **Conclusion**

It was observed that sentimentality significantly moderated the relationship between ethnic discrimination and psychosocial (socio-cultural & psychological) adaptation while its interaction effects with nostalgia were significant for psychological adaptation. Overall findings suggested that international students with higher sentimentality exhibited poor psychosocial adaptation in Pakistan.

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