Factors predicting Self-Esteem of Baloch ESL students: Insights from Model of Acculturation using Bootstrapping Multiple Regression Analysis

Sadia Malik[1], Munaza Javed[2], Fatima Ghauri[3] and Nasir Saleem[4]

Abstract

Linguistic adaptation frequently goes hand in hand with cultural immersion in the dynamic terrain of acculturation, influencing learners' language learning process. The study explores the complex relationships among acculturation, linguistic variables, and self-esteem in the ESL learning environment among Baloch students (N=285) studying at different universities in Punjab. Data was collected through an adapted questionnaire from Lopez and Bui and Rosenberg's Self-Esteem Scale. It was analyzed through multiple regression analysis bootstrapping to see the impact of predictor variables on criterion variables. Based on Schumann's acculturation model (1986), research indicates that students' self-esteem as ESL learners is significantly impacted by teachers' motivational techniques (P-value=0.000), assimilation into the host culture (P-value=0.030), and the quantity and quality of their contact with the target language (P-value=0.001). However, self-esteem levels are not considerably impacted by the integration of the mother tongue (P-value=0.938). However, the negative coefficient for teacher motivation (-0.381) and assimilation (-0.070) suggests an inverse relationship, which may be attributed to the scale direction or contextual factors, such as students perceiving motivation as pressure rather than encouragement and considering assimilation as a difficult phenomenon rather than a comfortable factor to influence self-esteem of Baloch ESL learners. The study ensures the accuracy of interpretation by verifying the coding of variables. These findings have important relevance for educators and legislators, highlighting how crucial it is to promote inclusive learning settings and aid in the process of acculturation to improve the academic performance and general well-being of ESL students.

Keywords: acculturation, self-esteem, linguistic variables, Baloch students, ESL learners, Pakistani Universities, bootstrapping regression analysis

---

[1,3,4] Department of English, Bahauddin Zakariya University, Multan – Pakistan
[2] Department of English, The Women University, Multan – Pakistan

Introduction

The concept of "Acculturation" has roots in antiquity. Powell (1883) termed psychological alterations brought about by cross-cultural interactions as "acculturation." Berry and Sam (1997), defined it as the cultural shifts that take place when people migrate, are colonized, or engage in other intercultural interactions and adjust to a new environment. Redfield et al. (1936) defined acculturation as the phenomena that arise from constant first-hand interaction between groups of people from different cultures, with either or both groups' initial cultural patterns changing as a result. According to this concept, a minority group undergoes a complex process of changing its social norms, attitudes, values, and actions as a result of ongoing exposure to a cultural system that is very different from its own. In essence, culture is about behavior, values, and language; on the other hand, acculturation is most frequently the result of exposure to a majority culture by a member of a minority group.

Berry and Sam (1997) also opine that acculturation might involve changes that are both ecological and cultural, and the process can take longer. It indicates that extraneous emotional display, attire, and language all have an impact on the process (Padilla & Perez, 2003; Organista et al., 2013). Acculturation typically takes the form of a minority group becoming integrated into the dominant or host society through language and habit adoption.

One characteristic that stands out about acculturation is that it happens at the sociocultural and psychological levels when people from different cultures interact and mix. The essential characteristics of the groups, the nature of their contact relationships, and the ensuing cultural changes in the groups during the process are all covered by acculturation at the sociocultural level. The psychological level focuses primarily on concerns related to the psychological transformations that members of cultural groups go through and the results of their eventual adaption to a new environment (Berry, 1997, 2008).

Another crucial viewpoint on the process of acculturation is dimensionality (Berry, 1997, 2008). According to Berry, acculturation may occur along a single dimension, or it may occur along a unilinear path. In this instance, groups and people gradually shift away from one pole, that is, away from their customary way of life, into another. As an alternative, acculturation is also a multidimensional, multi-linear process that involves multiple directions of change in both persons and groups. Preserving one's

original cultural identity and maintaining connections with other cultural groups are necessary for this (Ward & Rana-Deuba, 1999; Berry, 2008). Dimensionality is significant because it establishes not only the course of acculturation but also the acculturation tactics that people or groups may take to modify their cultural and behavioral patterns and adapt to new environments.

Berry (2003) identified four techniques (or modalities) for acculturation: marginalization, integration, separation, and assimilation. Assimilation refers to the extent to which Baloch ESL learners adopt the cultural and linguistic practices of the host (Punjabi) society, reducing engagement with their native culture. It was measured using an 8-item Likert scale adapted from Masgoret and Gardner (1999), assessing behaviour such as preference for socializing with host-culture peers, use of the target language in daily communication, and acceptance of cultural norms. People who employ the assimilation strategy seek out relationships with various cultural groups and do not desire to preserve their cultural identity. On the other hand, those who use the separation approach wish to preserve their culture and stay apart from other groups. The integration strategy aims to strike a balance between people's desire to participate with society at large and preserve their cultural identity. Finally, the marginalization method limits the individual's interactions with members of the host culture and shows little interest in preserving one's own culture. According to Berry, assimilation failures can result in marginalization, which can cause cultural loss and low social engagement.

Integration of the Mother Tongue refers to the extent to which students maintain their native language while engaging with the host language. It was assessed using a 7-item Likert scale, also adapted from Masgoret and Gardner (1999), which included items measuring the frequency of native language use, emotional attachment to the mother tongue, and the perception of bilingual identity.

People's self-esteem can be significantly impacted by cultural adaptation. Their sense of identity and competence may shift as a result of psychological transformations, impacted by acceptance or rejection in the new cultural setting. The dynamic process of acculturation has a tremendous impact on how people view themselves.

Global assessment of oneself is known as self-esteem, and it is commonly determined by how much a person agrees with different self-evaluative statements

(Zuckerman, 1989, p. 450). One of the main things that is affected by a multicultural setting is self-esteem. In language learning classrooms, students' self-esteem has a significant influence on their ability to acquire a second language. Students' self-esteem in a multicultural environment is influenced by their language confidence, acculturation strategy, and the quality of their interactions with the host culture (Masgoret & Gardner, 1999). Higher self-esteem is predicted by integration and assimilation techniques (Berry, 2003), and acculturative stress is lessened by active engagement in the host culture (Heggins & Jackson, 2003; Poyrazli et al., 2004). Longer stays in the host nation promote more linguistic confidence, which in turn fosters higher self-esteem (Lay & Nguyen, 1998). In general, students' ability to successfully integrate culturally and acquire a language in a diverse setting is closely related to their sense of self-worth.

Schumann (1986) developed one of the most important models of acculturation, which looks at the relationship between the process of acculturation and the acquisition of a second language. The degree of target language learning may be correlated with the degree of acculturation of the learner to the target language group. The progressive adjustment of a second language learner's cultural system to the target language culture is referred to as acculturation, and the degree of acculturation level affects the degree of second language acquisition, according to Schumann's acculturation approach.

When it comes to language, acculturation refers to two factors: the extent to which an individual learns the language of the new nation or region and the extent to which he maintains his native tongue. Acculturation, however, can also happen in circumstances when language changes occur mutually, but one culture does not dominate the other (Ahamefule, 2019). The blending of the two cultures can occasionally result in the creation of a third language. In multilingual and multicultural societies like Pakistan, these acculturative elements can be challenging for ESL learners. Rafique et al. (2018) probed into the implementation of English language teaching policies in rural Punjab, Pakistan. Their study highlights the role of teachers in promoting language acquisition and cultural integration, which reflects a facet of students' acculturation that involves adjusting to the dominant language and its associated cultural context.

Despite extensive research on acculturation and self-esteem among international students, limited attention has been given to indigenous minority groups navigating

multilingual societies like Pakistan. Baloch students studying in Punjab universities face unique linguistic and cultural challenges that impact their self-esteem and English language acquisition. Existing studies predominantly focus on immigrant or expatriate students, leaving a gap in understanding how acculturation affects linguistic confidence and psychological well-being in marginalized Indigenous communities. This study aims to bridge this gap by examining the interplay of acculturation, linguistic factors, and self-esteem among Baloch ESL learners in Punjab's academic institutions.

In Punjab's "national cohesion" initiatives plan, the Punjab government allocated reserved seats for Baloch students in each public sector university of Punjab to help them get free of cost education. However, this quota has waned since 2018, either Higher Education Institutions (HEI) stopped accepting Baloch students or reduced the number of seats. Punjab University reduced the number of reserved seats for Baloch or Baloch students from 100 to 53 in 2018. This number was then increased to 70 in 2019, albeit only when female applicants met certain requirements. The situation is more or less similar in every HEI in Punjab (Gabol, 2019). These Baloch students are sometimes considered outsiders in Punjab's host culture due to their L1 differences, cultural dissimilarities, and behaviour. To dissect how students who relocate from one culture to another while retaining their native language feel about learning the target language in a multicultural environment, the researchers have developed a few hypotheses in this study.

In this study, teacher motivation is conceptualized as an acculturative facilitator, reducing social distance and fostering students' engagement with the target language. Similarly, assimilation—the adoption of host culture norms—enhances self-esteem by strengthening cultural belonging, while the quantity and quality of contact with the target language accelerates adaptation. In contrast, the integration of the mother tongue, which involves maintaining one's native language alongside the new language, may influence self-esteem differently depending on sociocultural dynamics. By examining these variables within the framework of Schumann's and Berry's acculturation models, this study seeks to provide insights into how linguistic and cultural adaptation impacts the self-esteem of Baloch ESL learners in Punjab.

The significance of the research lies in its examination of the cultural change Baloch students studying in different universities of Punjab encounter in language classes and the variables affecting their self-esteem as ESL learners. Through an analysis of

the interactions among acculturation, self-esteem, and linguistic variables, the study guides instructional strategies that are customized to meet the needs of a wide range of students. It also fills a vacuum in the literature by focusing on the experiences of Baloch students in multilingual environments and offering recommendations for educational practices and policies in multilingual nations like Pakistan. Overall, the study assists in enhancing the educational experiences and results of Baloch students and other similar demographic groups.

The delimitation of the study includes its exclusive focus on Baloch learners in language classes, which may restrict the generalizability of its findings to other linguistic or cultural groups. Furthermore, in this research, as the researchers selected limited factors, i.e., only focusing on self-esteem and acculturation and how they relate to the ESL context, it may not fully account for all relevant factors mentioned in Schumann's acculturation model. This leaves out other potential influences on Baloch students' experiences in language learning environments. The choice to employ an adapted questionnaire also delimits the study.

Review of the Literature

Acculturation plays a crucial role in second-language acquisition, as it encompasses both social and psychological adaptation to a new linguistic and cultural environment (Schumann, 1986; Berry, 1997). Schumann's Acculturation Model emphasizes that second-language learners' success is directly influenced by their level of integration into the target culture. Key social factors—such as the learner's perceived social distance, motivation, and quality of interaction with native speakers—determine how effectively they acquire the language (Schumann, 1986). Psychological factors, including self-esteem and cultural identity, further mediate the acculturation process, influencing both linguistic confidence and emotional well-being (Gatbonton et al., 2005; Poyrazli et al., 2004).

Berry's Acculturation Framework (1997) expands on this by identifying four acculturation strategies: assimilation, integration, separation, and marginalization. While assimilation involves fully adopting the host culture, integration allows individuals to maintain their native identity while engaging with the new culture. Studies suggest that assimilation and integration are linked to higher self-esteem and better language outcomes (Masgoret & Gardner, 1999; Sam & Virta, 2003).

However, research also indicates that forced assimilation can lead to identity conflict, affecting psychological well-being (Lay & Nguyen, 1998).

Within educational contexts, teacher motivation serves as an acculturative facilitator, helping students navigate cultural adaptation while building confidence in language acquisition (Klassen et al., 2013). Socially engaged teachers can reduce students' perceived social distance, reinforcing Schumann's claim that positive interactions with target language speakers enhance second-language acquisition (Pianta et al., 2012). Additionally, the quantity and quality of contact with the target language plays a critical role, with greater exposure fostering both fluency and self-esteem (Jia et al., 2014).

The role of mother tongue integration remains more complex. Some research suggests that maintaining the native language supports cognitive development and identity formation (Cummins, 2000). However, other studies argue that reliance on the mother tongue may hinder full engagement with the target language and culture, potentially limiting self-esteem gains in ESL settings (Gholamrezaei, 1995; Muftah, 2013). Given these mixed findings, further investigation is needed to understand how linguistic integration affects acculturation outcomes in multilingual societies like Pakistan.

This study builds on these frameworks by examining how assimilation, integration of the mother tongue, teacher motivation, and language contact interact to influence the self-esteem of Baloch ESL learners in Punjab. Unlike existing research, which primarily focuses on immigrant students in Western contexts, this study highlights the acculturation experiences of a regional linguistic minority in a multilingual educational setting.

❖ **Social variables in Schumann's Acculturation Model**

According to Schumann, the social variable of the Acculturation Model has a significant impact on language acquisition. According to Palfreyman's (2006) research, social characteristics that have a substantial impact on L2 language learning include social dominance, integration patterns, enclosure, and cultural congruence. The study, which examined 131 female university students in the United Arab Emirates, found that 70% of them had become accustomed to speaking English outside of the classroom and had become native speakers. This implies that social contacts are essential to developing fluency in the language outside of the

classroom. In a similar vein, Gatbonton et al. (2005) investigated how social distance affected Chinese and French speakers learning English in Canada's ability to pronounce their second language accurately. The study used behavioural scales and ethnic group affiliation questionnaire responses to find that Chinese learners were more motivated to reduce their accents and improve English pronunciation accuracy because they felt socially equal with the English-speaking community, while French learners felt more threatened by intense nationalism and felt their ethnic group identity was at risk.

Furthermore, Lybeck (2002) looked into how social networks affected learning how to pronounce a second language. The results showed that students who developed strong relationships with Norwegian native speakers spoke the language more naturally. The cultural gap was effectively reduced by those participating in supportive exchange networks within the target culture, which gave them access to linguistically and culturally appropriate behaviors.

❖ **Psychological factors in Schumann's Acculturation Model**

The acculturation model also implies that learners' varying psychological states impact language acquisition. Graham and Brown (1996) looked into how affective factors affected the acquisition of native-like competency in their study. In interviews done in both Spanish and English, participants displayed acculturation factors and self-assessed their English proficiency. The results showed that learners' competence levels were higher when they had positive attitudes about the English-speaking community and developed close ties with native English speakers. Affective variables were thus found to be driving forces behind increasing English competence.

Sam and Virta (2003) investigated this construct in three immigrant groups in Norway and Sweden: Vietnamese, Turks, and Chileans. They found that a bicultural or integrated mindset was associated with higher self-esteem. Sustaining a positive sense of self-worth requires ongoing effort when living abroad, and this is crucial since it increases the likelihood that one will go above and beyond to adjust.

To better understand how ESL teachers and learners' attitudes affect secondary school pupils in Lahore, Pakistan, who are trying to improve their reading skills, Younas et al. (2019) conducted a study. Their analysis of the data shows that English language instructors in secondary public schools in Lahore are highly qualified, have

access to training resources, and inspire their pupils to use instructional strategies to improve their reading comprehension.

Furthermore, Muftah (2013) investigated the connection between acculturation and learning a second language among Australian teenage Libyan students. The study looked into how participants' communicative ability and pronunciation in English were affected by sociopsychological factors. It was discovered that there was a relationship between acculturation and communicative competence but not native-like pronunciation through semi-structured interviews and oral proficiency tests. The study also revealed that students' assimilation into the host society and their learning of the target language culture were influenced by their second language acquisition process.

In a 2005 study, Gatbonton et al. compared French and Chinese learners of English in Canada, looking at how social distance affected the accuracy of second-language pronunciation. Participants filled out Surveys measuring behavioural scales and membership in ethnic groups. The study found that, in contrast to French learners, who showed negative attitudes toward English because of strong nationalism and a threat to ethnic identity, Chinese learners were more motivated to improve pronunciation accuracy because they felt socially equal with the English language group. This demonstrates how the attitudes of learners affect the accuracy of their pronunciation when learning a target language.

A further study by Young and Gardner (1990) shows that among native Cantonese speakers from Hong Kong who studied English as a second language in Canada, there is a positive link between ethnic identification and second language (L2) proficiency. Similarly, among Hispanic-English bilinguals, Gambino (2001) found a substantial correlation between acculturation measured by the Children's Hispanic Background Scale—and English language proficiency measured by the Language Assessment Battery. Similarly, Lalleman (1987) discovered a positive, statistically significant, but weak connection between language competency and degree of acculturation in a study of Turkish immigrant children born in the Netherlands.

The majority of the research is conducted on immigrant and foreign/international students. However, by exploring the distinctive experiences of Baloch students in BZU, this research fills a gap in the body of literature by studying acculturation in a multilingual and multicultural society like Pakistan. In contrast to earlier research

that did not examine this particular demographic group, the goal of this study is to offer insights into the factors that impede language acquisition in this particular setting. The study's identification of these variables helps shape new paradigms in the field of ESL research, which in turn informs instructional tactics and other support measures designed to meet the requirements of Baloch students and other linguistic minorities in multilingual societies.

Methodology

This research uses a mixed-methods approach, combining quantitative and qualitative techniques. The research, which is centered on Baloch students enrolled at six different universities in Punjab, attempts to thoroughly examine the effects of acculturation on the self-esteem of English language learners. It is based on Schumann's (1986) acculturation model for second language learning.

❖ **Participants**

Baloch students enrolled in different degree programs at Bahauddin Zakariya University (BZU) Multan, Islamia University Bahawalpur (IUB), Punjab University (PU) Lahore, Government College University (GCU) Lahore, Government College University (GCU) Faisalabad and University of Gujrat (UG) make up the target population. To gain access to students, the researchers got in touch with the advisers and executive committee members of the Baloch Students Organization at different universities. After taking all ethical factors into account, a Google-form-based questionnaire was shared with three hundred Baloch students; two hundred and eighty-five (N=285) of them responded, making up the study's sample. The participants were selected from six major universities in Punjab, ensuring diverse institutional representation. While the sample is limited to Baloch students, it captures a broad range of academic disciplines, age groups, and linguistic backgrounds. Future research could expand the sample to include Baloch students from additional provinces or international contexts to enhance generalizability. Participants' demographic profiles show a variety of traits. The demographic profile reveals a primarily youthful participant base, with ages centered around 18 to 25. The most common qualification is BA/BSC, with most graduates scoring between 121 and 140 in English courses. The highest enrollment occurs in the second semester. The arts, social sciences, and biological sciences are evenly divided among the disciplines. Participants split evenly between degree programs lasting two and four years. Hostel accommodation is strongly preferred over personal arrangements.

CGPAs typically fall between 3.1 and 3.5, especially for English. The two most common mother tongues, Pashto and Hindko, are represented in different ways among other languages. The student demographic profile is shown in Table 1.

Table. 1 - *Frequencies of Demographic Information of Participants*

	Characteristics	N	Percentage (%)
University	BZU Multan,	72	25.263
	IU Bahawalpur,	65	22.807
	PU Lahore,	44	15.438
	GCU Lahore,	22	7.7192
	GCU Faisalabad	55	19.298
	University of Gujrat	14	4.9122
Age	18-21	114	40.000
	22-25	117	41.053
	26-29	54	18.947
Terminal Qualification	FA/FSC	115	40.351
	BA/BSC	84	29.474
	MA/MSC	15	5.263
	BS	71	24.912
Marks in English subject in the terminal qualification	100-120	44	15.439
	121-140	51	17.895
	141-160	17	5.965
	161-180	13	4.561
	181-200	160	56.140
Currently enrolled in the semester	1	45	15.789
	2	29	10.175
	3	12	4.211
	4	15	5.263
	6	15	5.263

❖ **Schumann's Model of Acculturation**

The conceptual framework illustrates the interactions between several independent variables by integrating the Schumann model of Acculturation with self-esteem and confidence in one's ability to speak English. This framework uses the term "self-esteem" (dependent/criterion/and/response variable) to describe how people feel about themselves. It takes into account factors such as motivation, assimilation (which is based on Berrys' acculturation model), integration of the mother tongue, and the amount and quality of contact (independent/predictor variable) with the target language.

Based on the results of his case study of Alberto, a 33-year-old Costa Rican who was unable to advance beyond basic pidginized English in Boston, Schumann proposed the Acculturation Model (the Pidginization Hypothesis) regarding language learners being acculturated into a new culture. He predicted that acculturation was the most important factor in successful language learning and asserted that the degree and quality of interaction with the target language and culture determines the success of second language acquisition. He discussed the degree of psychological and social separation that exists between the learner and the target culture.

According to Schumann's (1986) explanation of the social psychology-based acculturation model of second language acquisition, social and psychological interaction with members of the target language group is a crucial part of acculturation that is relevant to language learning. One facet of acculturation is the development of English language confidence, and the extent to which learners adapt to the target language group will determine the extent to which they pick up the second language.

Figure 1
Social and Psychological Factors in Schumann's Acculturation Model
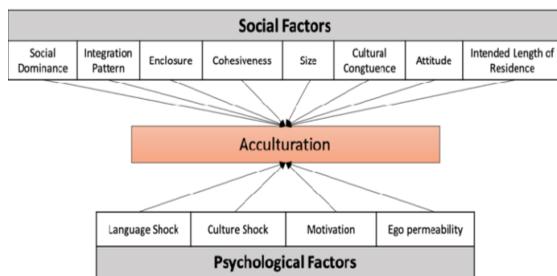
❖ **Research Instrument/ Variables/Conceptual Framework**

A structured questionnaire is the main tool used for data gathering, and it is given to Baloch students in English learning classrooms at different universities in Punjab. The questionnaire includes questions about demographics, experiences with acculturation, English language competence, motivation, self-esteem, assimilation, integration of mother tongue, and quantity and quality of contact. In the present study, we worked with two different kinds of variables. Self-esteem is the first criterion/response variable, and the predictor factors are assimilation, integration of mother tongue, motivation (from the teacher), and quantity and quality of contact. The selection of variables in this study is grounded in Schumann's (1986) Acculturation Model and Berry's (1997) framework on acculturation strategies. Self-esteem was chosen as the dependent variable because psychological well-being is a key indicator of successful language acquisition and cultural adaptation (Masgoret & Gardner, 1999). Motivation, particularly teacher encouragement, was included as a predictor variable based on Klassen et al. (2013), who found that teacher engagement significantly influences students' confidence and academic performance. The integration of the mother tongue was considered due to Cummins' (2000) findings that bilingual identity can shape language learning experiences. Assimilation and the quantity and quality of contact with the target language were included based on studies (Berry, 2003; Schumann, 1986) demonstrating that greater cultural and linguistic immersion enhances self-esteem and language proficiency. These theoretical foundations justify the inclusion of these specific variables in the study's model.

We adapted the questionnaire from the study by Lopez and Bui (2014) who also employed the adapted version of the questionnaire to analyze various variables using various scales. Two items modified from Rosenberg's Self-Esteem Scale (SES), which is scored on a 5-point Likert scale, are used to measure self-esteem (Rosenberg, 1965). The alpha value for self-esteem is $\alpha = 0.82$, and ten items belong to self-esteem. Eleven Likert-scaled items that were modified from Klassen et al. (2013) Engaged Teachers Scale (ETS) are used to measure motivation to analyze teachers' social engagement with students and how it affects students' acculturation. The motivation by the teacher is shown through the two items, and the motivational alpha value is $\alpha = 0.85$. Integration and assimilation scales (Masgoret & Gardner, 1999) are used to analyze the acculturation mode. Likert scales are used to measure respondents' attitudes about cultural integration and

assimilation. Seven of the items relate to mother language integration, while eight items relate to assimilation. The alpha values of assimilation and mother tongue integration are $\alpha = 0.74$ and $\alpha = 0.75$, respectively. A scale derived from Gaudet and Clément (2005) is used to measure the quantity and quality of contact with the target language. Likert scales are used to rate the quantity and quality of the contact. The study's seven items are related to the quantity and quality of contact, and their respective alpha values are $\alpha = 0.70$.

A pilot study was conducted with a small subset of Baloch students (N=30) before full-scale data collection to ensure the reliability and clarity of the questionnaire. Participants provided feedback on item comprehension, and minor revisions were made to improve question-wording and eliminate ambiguity. The pilot study also helped assess the internal consistency of the questionnaire items, ensuring that they effectively captured the intended constructs.

Furthermore, as the questionnaire was adapted, reliability analysis was conducted using SPSS on the data collected to ensure internal consistency. The detailed findings of reliability analysis for each construct are given in Table 2. These findings suggest that the questionnaire has internal consistency and, therefore, it fulfils reliability criteria.

Table 2 - *Reliability analysis*

Variables	Number of Items	Cronbach Alpha
Self-Esteem (Y)	2	0.812
Motivation (X_1)	2	0.809
Integration of mother tongue (X_2)	4	0.898
Assimilation (X_3)	4	0.844
Quantity and Quality of contact (X_4)	3	0.828

A multiple regression analysis bootstrapping is chosen to analyze the data, as it is used when we want to predict the value of a variable based on the value of two or more other variables. The variable we want to predict is called the dependent variable (or sometimes, the outcome, target or criterion variable). In the present study, self-esteem is the criterion variable, whereas motivation, integration of mother tongue, assimilation and quantity and quality of contact are predictor variables.

❖ **Findings**

This study investigates the relationship between predictor variables and criterion/response variables. To determine how many variables, affect one variable, a multiple regression analysis bootstrapping is performed, as can be seen in Table 3 below:

Table 3 - *Means (M) and Standard Deviations (SD) for Variables in the Study (Descriptive Statistics)*

	Variables	M	SD
Criterion variable	Self-Esteem (Y)	3.7500	1.76505
Predictor variables	Motivation (X₁)	6.9000	2.62922
	Integration of mother tongue (X₂)	7.3250	1.11832
	Assimilation (X₃)	10.9000	1.86465
	Quantity and Quality of contact (X₄)	5.5500	1.66333

The findings demonstrate the complex interplay among Baloch students in English language learning classes between acculturation, self-esteem, and TL processing. In contrast, integration of the mother tongue does not appear to be a significant factor in determining students' levels of self-esteem, while motivation, assimilation, and the quantity and quality of interaction with the target language did.

Table 4 - *Multiple Regression Analysis Bootstrapping for variables predicting Self-Esteem*

Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B

	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	4.719	2.033		2.322	.026	.593	8.845
Motivation (X1)	-.381	.080	-.567	-4.758	.000	-.543	-.218
Integration of mother tongue (X2)	-.013	.171	-.009	-.079	.938	-.361	.334
Assimilation (X3)	-.066	.104	-.070	-2.634	.030	-.278	.146
Quantity and Quality of contact (X4)	.447	.122	.421	3.657	.001	.199	.695

P< α

If the p-value is less than the level of significance, the results are significant when H_o is rejected. Otherwise, H_o is accepted.

(X1, Significant result, 5% = 0.05), **(X2, Not-Significant result, 5% = 0.05)**, (X3, Significant result, 5% = 0.05), (X4, Significant result, 5% = 0.05)

The descriptive statistics of the study variables are displayed in Table 2. While motivation (X1), integration of mother language (X2), assimilation (X3), quantity and quality of contact (X4), and assimilation (X3) are predictor variables, self-esteem (Y) is a dependent variable. The results and summary of the multiple linear regression analysis bootstrapping coefficients are shown in Table 4, which shows that self-esteem is significantly predicted by all the independent variables except integration of mother tongue. It can be inferred that the result of multiple linear regression analysis bootstrapping has a considerable impact on the response variable and a positive intercept value of 4.719. Motivation (X1), an independent variable, has a low standard error value of 0.080 and a coefficient value of -0.381. Motivation has a P-value of 0.000, which is below the significance level of 0.05,

suggesting that teacher motivation has a significant and negative impact on students' self-esteem (Y) among Baloch learners. Likewise, the hypothesis of correlation between higher self-esteem and lower integration of mother tongue is tested using the same approach. Integration of mother tongue (X2) has a coefficient of -0.013 and a standard error of 0.171. The integration of the mother tongue is linked to a P-value of 0.938, above the significance level of 0.05. Consequently, in this model, self-esteem is not significantly predicted by the integration of the mother tongue, demonstrating that the Baloch students' incorporation of their mother tongue into their English language-learning environment does not affect self-esteem.

The hypothesis that greater assimilation mode scores will predict greater self-esteem among Baloch students is also tested using multiple linear regression analysis bootstrapping. Assimilation (X3) has a coefficient of -0.066 and a standard error of 0.104. Less than the significance level of 0.05 is the assimilation-related P-value of 0.030. Therefore, among Baloch students, assimilation has a significant and negative impact on self-esteem, showing that Baloch students' assimilation into their host culture reflects their desire to belong and adapt to the host culture.

Similarly, multiple linear regression bootstrapping analysis is carried out for the hypothesis that the higher the quantity and quality of contact with the target language, the higher self-esteem among students will be. With a standard error of 0.122, the coefficient for the quantity and quality of contact (X4) is 0.447. Less than the significance level of 0.05 and 0.001 is the P-value linked to the quantity and quality of contact. Thus, in this model, self-esteem is significantly predicted by both the quantity and quality of contact. Students who engage with the target language more frequently and of greater quality have higher self-esteem.

Table 5 - *Model Goodness of fit. (Self-esteem)*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.809[a]	.655	.615	1.09467	.655	16.598	4	35	.000

Table 5 presents R-squared and Adjusted R-squared for the goodness of fit of multiple linear regression analysis bootstrapping. As we know, the range of R-squared and Adjusted R-squared lies between ($0 < R^2 < 1$). R-Squared = 0.655, Adjusted R-Squared = 0.615, these results show a good fit of MLRM. The overall change in our response variable (Y) is 0.655 due to independent variables (X1, X2, X3, X4) respectively. Moreover, we also applied an analysis of variance (ANOVA) to check whether the results of all means were equal or not. F (4,35) = 16.598, so here is the degree of freedom (df=v) v1=4 and v2=35, and the F-test statistic value is 16.598 with (P-value = 0000 < α =0.05). These results show that all means are not equal, and the results are highly significant. Hence, three hypotheses are proved and one is rejected in the study.

Discussion

The findings of this study do not provide empirical support for Schumann's Acculturation Model (1986) and Berry's Acculturation Framework (1997), but they also highlight nuances specific to the context of Baloch ESL learners in Punjab. Schumann's model emphasizes that social and psychological distance from the target culture influences second-language acquisition. Berry's acculturation framework suggests that integration—the ability to maintain one's cultural identity while engaging with the host culture—is the most adaptive strategy. However, our study found no significant relationship between mother tongue integration and self-esteem, suggesting that bilingual identity maintenance does not necessarily contribute to self-confidence in this specific context. This finding contrasts with studies emphasizing the cognitive and identity benefits of bilingualism (Cummins, 2000) but supports research indicating that linguistic assimilation may sometimes be more beneficial for minority students in host-dominant environments (Gholamrezaei, 1995). This divergence suggests that the role of integration may depend on sociocultural and institutional factors, requiring further investigation in multilingual societies.

Schumann's model also highlights the role of social interactions in second-language acquisition, positing that frequent and meaningful contact with the target language community enhances linguistic and psychological adaptation. Our results strongly support this claim, as greater quantity and quality of contact with the target language was a significant predictor of higher self-esteem. It aligns with previous research indicating that increased exposure to native speakers facilitates both linguistic proficiency and a sense of belonging (Jia et al., 2014).

Another key finding relates to the role of teacher motivation as an acculturative facilitator. Our study found that teacher engagement significantly influenced students' self-esteem, supporting Schumann's argument that positive social interactions with members of the target language group enhance acculturation. This finding also extends Berry's framework by emphasizing the role of institutional agents—such as teachers—in shaping acculturation experiences. Teachers not only provide linguistic instruction but also create an environment that either facilitates or hinders students' cultural adaptation (Klassen et al., 2013).

In contrast to expectations, the negative coefficient for teacher motivation suggests that higher perceived teacher motivation was linked to lower self-esteem. This unexpected result may indicate that while teacher motivation enhances engagement, it may also create unintended academic pressure, particularly in an environment where students struggle with linguistic and cultural adjustment. This finding highlights a potential limitation in Schumann's model, which assumes that increased social engagement always leads to positive outcomes. Future research should explore how different aspects of teacher motivation—such as encouragement versus corrective feedback—affect students' self-perception.

The assimilation mode of acculturation indicates that students prefer to adapt by spending more time with the host culture, which helps them adjust more rapidly and boost self-esteem. As a result, students feel more positive about themselves and their abilities. However, our statistical analysis reveals a negative correlation between assimilation and self-esteem among learners, indicating that as assimilation increases, self-esteem tends to decrease. This finding contradicts some previous research suggesting that greater assimilation might lead to higher confidence and social acceptance (Berry, 1997; Phinney, 1990). However, a negative correlation can be understood through several inferential perspectives.

First, increased assimilation may lead to a dilution of cultural identity, which is crucial for self-worth and psychological stability. Learners who attempt to assimilate fully into a new culture might feel a sense of detachment from their native cultural roots, leading to identity confusion and emotional distress (Schwartz, Montgomery, & Briones, 2006). This detachment can undermine self-esteem as individuals struggle to reconcile their original cultural values with those of the dominant society.

Second, the process of assimilation often involves pressure to conform and adopt new social norms, sometimes at the expense of personal or familial traditions. It can create an internal conflict where individuals feel neither fully integrated into the new culture nor entirely connected to their native heritage (Portes & Rumbaut, 2001). This marginalization effect can contribute to feelings of low self-worth and social alienation, ultimately decreasing self-esteem.

Additionally, assimilation may expose learners to discrimination or microaggressions, particularly when they are perceived as different despite their efforts to integrate (Gee et al., 2007). Such experiences can reinforce feelings of inadequacy and further erode self-esteem.

Given these insights, the negative correlation between assimilation and self-esteem highlights the complexity of cultural adaptation. It suggests that rather than striving for complete assimilation, a balanced approach—where individuals maintain connections to their native culture while engaging with the new cultural environment—may be more beneficial for self-esteem and overall psychological well-being (Berry, 2005).

A student's ability to acquire a language and the results of that contact are indicated by the quantity and quality of their contact. The extent to which an individual has acquired knowledge from the targeted language is determined by the level of language interaction. Schumann (1986) emphasized the degree and quality of contact with the target language and culture. The current study indicates that Pashtoon students' enthusiasm for learning English is reflected in the quantity and quality of their engagement with the language. Effective language engagement gives students the confidence to navigate various linguistic and cultural contexts and express themselves effectively, which in turn fosters a positive mindset about their potential and ability. Similarly, Poyrazli et al. (2004) discovered that international students who socialized primarily with Americans reported lower levels of acculturative stress. In contrast, those who socialized primarily with other international students and equally with Americans and non-Americans reported higher levels of acculturative stress. These findings suggest that high-quality interactions with members of the host culture have a positive impact on self-esteem. These findings refine existing acculturation theories by emphasizing the contextual nature of adaptation strategies. While Schumann's and Berry's models generally predict positive effects of assimilation and integration, our study suggests that in

some cases, full linguistic and cultural assimilation may be a stronger predictor of self-esteem than bilingual integration. It challenges the assumption that integration is always the most adaptive strategy and underscores the need to examine how institutional and sociocultural factors shape acculturation outcomes.

❖ Limitations

While this study provides valuable insights into the relationship between acculturation, linguistic factors, and self-esteem among Baloch ESL learners, several limitations must be acknowledged. First, the sample consists exclusively of male students, which limits the generalizability of findings to female learners or broader populations. Future studies should aim for a more diverse sample to explore potential gender differences.

Second, the reliance on self-reported data introduces the possibility of response bias, as students may overestimate or underestimate their self-esteem or experiences with acculturation. Incorporating qualitative interviews or observational methods in future research could provide deeper insights into these processes.

Additionally, the study does not account for potential confounding factors such as socioeconomic status, family support, or prior exposure to English, all of which may influence self-esteem and language acquisition. Future studies should include these variables to develop a more comprehensive understanding of the interplay between personal, social, and linguistic factors in second-language learning.

Lastly, while this study examines teacher motivation, further research should differentiate between various types of teacher support—such as emotional encouragement versus academic rigor—to determine their distinct effects on student self-esteem.

Conclusion

The study highlights the complex relationships that exist between L1 and L2, as well as self-esteem and acculturation among Baloch students enrolled at different universities in Punjab, Pakistan. The findings of this study indicate a negative correlation between acculturation and self-esteem, suggesting that higher levels of

acculturation may be associated with lower self-esteem. Similarly, linguistic factors, particularly language proficiency and language anxiety, exhibit a negative relationship with self-esteem, highlighting the challenges individuals face in adapting to a new linguistic and cultural environment. These results underscore the complex interplay between cultural adaptation and psychological well-being, emphasizing the need for support systems that mitigate the adverse effects of acculturation and linguistic barriers on self-esteem.

A quantitative strategy is used in the study as this method offers a broad comprehension of the research topic by enabling a thorough analysis of the effects of acculturation on language learners' self-esteem. By highlighting the significance of cultural integration and adaptation in forming language learners' feelings of self-worth and belonging, the study clarifies the cultural ramifications of acculturation processes. This emphasizes how crucial it is to design inclusive learning environments that take into account students' varied linguistic and cultural backgrounds. The study also has policy implications, advising educational institution policymakers to take into account treatments that facilitate English language learners' assimilation process and raise their self-esteem. Educators should implement structured mentorship programs and peer support initiatives to aid Baloch ESL students in their acculturation process. Policymakers should consider reinstating and expanding reserved seats for Baloch students in Punjab universities to promote inclusivity.

Additionally, training programs for teachers on culturally responsive pedagogy can enhance students' self-esteem and integration. Future research should explore whether similar patterns exist in other linguistic minority groups in Pakistan and other multilingual societies. Additionally, studies should differentiate between voluntary and involuntary assimilation to better understand its psychological effects on students' well-being.

References

Ahamefule, L. (2019). The acculturation model in second language learning: A cross-linguistic study of a group of English-speaking Nigerian immigrants learning German as a second language in Germany (Doctoral dissertation, University of East London).

Almusharraf, N. (2018). English as a foreign language learner autonomy in vocabulary development: Variation in student autonomy levels and teacher support. Journal of Research in Innovative Teaching & Learning, 11(2), 159-177. https://doi.org/xxxx

Berry, J. W. (2003). Conceptual approaches to acculturation. American Psychological Association.

Berry, J. W. (1997). Immigration, acculturation, and adaptation. Applied Psychology, 46(1), 5–34.

Berry, J. W. (2005). Acculturation: Living successfully in two cultures. International Journal of Intercultural Relations, 29(6), 697–712.

Berry, J. W. (2008). Globalization and acculturation. International Journal of Intercultural Relations, 32(4), 328-336.

Berry, J. W., & Sam, D. L. (1997). Acculturation and adaptation. Handbook of Cross-Cultural Psychology, 3(2), 291-326.

Cohen, A. D. (1982). Researching the linguistic outcomes of bilingual programs. Bilingual Review/La Revista Bilingüe, 9(2), 97-108.

Cummins, J. (2000). Language, power, and pedagogy: Bilingual children in the crossfire (Vol. 23). Multilingual Matters.

Cummins, J., & Swain, M. (1986). Bilingualism in education: Aspects of theory, research and practice. Routledge.

Edelsky, C., & Hudelson, S. (1981). Acquiring a second language when you're not the underdog. Research in Second Language Acquisition, 36-42.

Gabol, I. (2019, July 12). PU raises quota for Balochistan students. Dawn.com. https://www.dawn.com/news/1493504

Gambino, S. A. (2001). Towards the development of exit criteria for a Newcomer Center: Investigating the relationship between affective variables and the acquisition of English as a second language (Doctoral dissertation, Pace University).

Gatbonton, E., Trofimovich, P., & Magid, M. (2005). Learners' ethnic group affiliation and L2 pronunciation accuracy: A sociolinguistic investigation. TESOL Quarterly, 39(3), 489-511. https://doi.org/xxxx

Gaudet, S., & Clément, R. (2005). Identity maintenance and loss: Concurrent processes among the Fransaskois. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 37(2), 110.

Gee, G. C., Spencer, M. S., Chen, J., Yip, T., & Takeuchi, D. T. (2007). The association between self-reported discrimination and 12-month DSM-IV mental disorders among Asian Americans nationwide. Social Science & Medicine, 64(10), 1984–1996.

Genesee, F. (1987). Learning through two languages: Studies of immersion and bilingual education.

Gholamrezaei, A. (1995). Acculturation and self-esteem as predictors of acculturative stress among international students at the University of Wollongong (Doctoral dissertation, University of Wollongong). https://ro.uow.edu.au/theses/2153

Graham, C. R., & Brown, C. (1996). The effects of acculturation on second language proficiency in a community with a two-way bilingual program. Bilingual Research Journal, 20(2), 235-260. https://doi.org/xxxx

Heggins, W. J., & Jackson, J. F. (2003). Understanding the collegiate experience for Asian international students at a Midwestern research university. College Student Journal, 37(3), 379-392.

Jia, F., Gottardo, A., Koh, P. W., Chen, X., & Pasquarella, A. (2014). The role of acculturation in reading a second language: Its relation to English literacy skills in immigrant Chinese adolescents. Reading Research Quarterly, 49(2), 251-261. https://doi.org/xxxx

Jiang, M., Green, R. J., Henley, T. B., & Masten, W. G. (2009). Acculturation about the acquisition of a second language. Journal of Multilingual and Multicultural Development, 30(6), 481-492. https://doi.org/xxxx

Khan, T. J., & Khan, N. (2016). Obstacles in learning English as a second language among intermediate students of districts Mianwali and Bhakkar, Pakistan. Open Journal of Social Sciences, 4(2), 154-162. https://doi.org/xxxx

Klassen, R. M., Yerdelen, S., & Durksen, T. L. (2013). Measuring teacher engagement: Development of the engaged teacher's scale (ETS). Frontline Learning Research, 1(2), 33-52. https://doi.org/xxxx

Lalleman, J. (1987). A relation between acculturation and second-language acquisition in the classroom: A study of Turkish immigrant children born in the Netherlands. Journal of Multilingual & Multicultural Development, 8(5), 409-431. https://doi.org/xxxx

Lay, C., & Nguyen, T. (1998). The role of acculturation-related and acculturation non-specific daily hassles: Vietnamese-Canadian students and psychological distress. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportment, 30(3), 172.

Lopez, I. Y., & Bui, N. H. (2014). Acculturation and linguistic factors on international students' self-esteem and language confidence. Journal of International Students, 4(4), 314-329.

Lybeck, K. E. (2002). The role of acculturation and social networks in the acquisition of second language pronunciation (Doctoral dissertation, University of Minnesota).

Ma, Q. (2022, January). The role of the Schumann Acculturation Model in Generation Z English acquisition context. In 2021 International Conference on Social Development and Media Communication (SDMC 2021) (pp. 1282-1285). Atlantis Press. https://doi.org/xxxx

Marxist balochistan. (2020, September 24). We can't afford you: Punjab shuts doors to Baloch students. Balochistan Marxist Review. https://marxistbalochistan.wordpress.com/2020/09/06/we-cant-afford-you-punjab-shuts-doors-to-baloch-students/

Masgoret, A. M., & Gardner, R. C. (1999). A causal model of Spanish immigrant adaptation in Canada. Journal of Multilingual and Multicultural Development, 20(3), 216-236.

Muftah, H. M. (2013). The investigation of the possible connections between acculturation and the acquisition of a second language in Libyan teenage students. International Journal of Cognitive and Language Sciences, 7(10), 2805-2821.

Organista, K. C., Worby, P. A., Quesada, J., Arreola, S. G., Kral, A. H., & Khoury, S. (2013). Sexual health of Latino migrant day laborers under conditions of structural vulnerability. Culture, Health & Sexuality, 15(1), 58-72.

Padilla, A. M., & Perez, W. (2003). Acculturation, social identity, and social cognition: A new perspective. Hispanic journal of behavioral sciences, 25(1), 35-55.

Palfreyman, D. (2006). Social context and resources for language learning. System, 34(3), 352-370.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. Psychological Bulletin, 108(3), 499–514.

Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In Handbook of research on student engagement (pp. 365-386). Boston, MA: Springer US.

Portes, A., & Rumbaut, R. G. (2001). Legacies: The story of the immigrant second generation. University of California Press.

Powell, J. W. (1882). Human evolution. Annual address of the president, JW Powell, delivered November 6, 1883. Transactions of the Anthropological Society of Washington, 2, 176-208.

Poyrazli, S., Kavanaugh, P. R., Baker, A., & Al-Timimi, N. (2004). Social support and demographic correlates of acculturative stress in international students. Journal of College Counseling, 7(1), 73-82.

Rafique, N., Sultan, B., Ahmad, S., & Imran, M. (2018). Teachers' Role in Implementation of English Language Teaching Policies in Public Primary Schools of Rural Areas in Punjab, Pakistan. Language in India, 18(4), 252-260.

Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. American Anthropologist, 38(1), 149-152.

Rosenberg, M. (2015). Society and the adolescent self-image. Princeton University Press.

Sam, D. L. & Virta, E. (2003). Social group identity and its effect on the self-esteem of adolescents with immigrant background. In R. G. Craven, H. W. Marsh & D. M. McInerney (eds.), International advances in self-research (pp. 347– 373) Sydney: Information Age Publishers.

Sam, D. L., & Berry, J. W. (Eds.). (2006). The Cambridge handbook of acculturation psychology. Cambridge University Press.

Schumann, J. H. (1986). Research on the acculturation model for second language acquisition. Journal of multilingual & multicultural development, 7(5), 379-392.

Schwartz, S. J., Montgomery, M. J., & Briones, E. (2006). The role of identity in acculturation among immigrant people: Theoretical propositions, empirical questions, and applied recommendations. Human Development, 49(1), 1–30.

Tarone, E., & Swain, M. (1995). A sociolinguistic perspective on second language use in immersion classrooms. The Modern Language Journal, 79(2), 166-178.

Ward, C., & Rana-Deuba, A. (1999). Acculturation and adaptation revisited. Journal of cross-cultural psychology, 30(4), 422-442.

Younas, M., Imran, M., Noor, U., & Khaled, S. (2019). Role of ESL instructors and learners' attitude to use pedagogical techniques in developing reading skills at the secondary level: a case study of Lahore, Pakistan. Al-Qalam, 24(1), 411-425.

Young, M. Y., & Gardner, R. C. (1990). Modes of acculturation and second language proficiency. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 22(1), 59.

Zaker, A. (2016). The acculturation model of second language acquisition: Inspecting weaknesses and strengths. Indonesian EFL Journal, 2(2), 80-87.

Zuckerman, D. M. (1989). Stress, self-esteem, and mental health: How does gender make a difference? Sex Roles, 20(7), 429-444.

Article Information:

Declarations:

Authors' Contribution:

- **All authors Conceptualization, and intellectual revisions. Data collection, interpretation, and drafting of manuscript**

- The authors agree to take responsibility for every facet of the work, making sure that any concerns about its integrity or veracity are thoroughly examined and addressed

- **Conflict of Interest**: NIL

- **Funding Sources**: NIL

Correspondence:

Sadia Malik

sadiamalik@bzu.edu.pk