

Ethnic Organizations and Adaptation: A Case Study of Indian Immigrant Engineers in the US

Meghna Sabharwal | ORCID: 0000-0003-1294-559X

Professor, Public and Nonprofit Management, University of Texas at Dallas,
Richardson, TX, USA

meghna.sabharwal@utdallas.edu

Roli Varma | ORCID: 0000-0002-4084-0448

Carl Hatch Endowed Professor, School of Public Administration,
University of New Mexico, Albuquerque, NM, USA

varma@unm.edu

Zeeshan Noor | ORCID: 0000-0001-7996-984X

Ph.D., Postdoc Research Associate, Indiana University Lilly Family School of
Philanthropy, Indiana University – Purdue University, Indianapolis, IN, USA

mznoor@iu.edu

Abstract

The United States has witnessed waves of immigration throughout its history, with the current immigration policies regulated by the reforms enacted under President Lyndon Johnson in 1965. Immigrants now come from all over the world, with China and India supplying the largest numbers in science and engineering (S&E) fields. Although the US is seen as coping rather successfully with immigration from Europe, that is not the case with Asian immigration. Assimilation theorists have long argued that Asian immigrants face problems in adapting to the American culture and lifestyles; in contrast, multicultural theorists have hailed cultural diversity brought by Asian immigrants. Ethnic organizations can play an integral role in Asian immigrants' adaptation and integration in the United States. Utilizing 40 in-depth interviews of Indian immigrant engineers working in the US technology companies, the present study examines if they belong to ethnic associations. If yes, why do they feel a need to belong to these associations? If no, why not? It further sheds light on their need to belong to such associations. The findings show that the need to belong to Indian associations varied with the stage of their lives, which can be depicted as a U-shaped curve.

Keywords

Asian immigrants – community assimilation – Ethnic Identity Theory – ethnic organization – multiculturalism – Social Network Theory

1 Introduction

The United States has been viewed as a land of immigrants. It experienced major waves of immigration during the early nineteenth century. Since the 1880s, several laws were passed restricting immigration mostly from Asian countries (Hirschman 2014). The Immigration and Nationality Act of 1965, also known as the Hart-Celler Act, repealed the national origin quotas. This legislation can be considered part and parcel of the reforms of the Civil Rights era. The 1965 Act was undertaken mostly to reunite families that were divided by the immigration restrictions (Reimers 1992), but also to supply labor where shortage was perceived. The 1990 Immigration Act, passed under President George H.W. Bush, has been one of the significant pieces of immigration legislation since the 1965 Act. The 1990 Act sought to recruit a highly skilled and trained workforce from abroad to meet the needs of the US economy. This Act and the resulting H-1B visa system permitted the admission of 65,000 “temporary specialty occupation” workers per year (Sabharwal and Varma 2017). Under President William Clinton in 1997 and 1998, the quota for H-1B visas was increased to 115,000 for fiscal years 1999 and 2000. In 2000, the quota for H-1B visas was further expanded to 195,000 for the next three years.

The heavy immigration from Asia (and elsewhere) has unintended consequences, which were not anticipated in 1965. For one thing, Asian immigration waves have substantially changed the demographics of the US and its S&E workforce and continue to do so to this day. According to the Pew Research Center, there are approximately 20 million Asian Americans living in the United States, accounting for almost six percent of the nation's population (Budiman and Ruiz 2017). Though the Asian American population is comprised of 19 sub-groups, Chinese, Indian, Filipino, Vietnamese, Korean, and Japanese constitute the largest groups, accounting for almost 85 percent of all Asian Americans. Foreign-born Asian Americans are increasingly present in the S&E workforce. The National Science Board (2019) noted that in 2017, more than half of the foreign-born individuals in the US with an S&E highest degree were from Asia, with India (23 percent) and China (10 percent) as the leading countries of origin.

The large-scale immigration from Asian countries has been a hot topic. Political debate has centered on whether Asian immigrants take S&E jobs

from qualified US-born workers. Social debate, on the other hand, has focused on whether these immigrants will assimilate in American society. The classic theory of assimilation outlined by Milton Gordon (1964) suggests that various immigrant groups ought to abandon their cultures in which they were born and “melt together” to become fully assimilated into the American society. However, the proponents of cultural diversity have criticized such an Anglo-conformist perspective. They see American society as multicultural with people belonging to different races, ethnicities, and nationalities living together (Rex 1996). Multiculturalism is seen to promote immigrants retaining, passing down, celebrating, and sharing their unique cultural ways of life including religions and languages.

Proponents of multiculturalism believe that preserving and encouraging cultural diversity enriches society. However, one does not know how immigrants retain at least some elements of their cultures in the US. As first-generation immigrants, are they maintaining their culture without any additional effort? Or, are they participating in the life of their communities by joining ethnic organizations? Thus, there is a need to examine whether participation in ethnic organizations helps immigrants’ adaptation and integration within their own community and in the new society. According to Shirley Jenkins (1981), an ethnic organization (i) serves ethnic service users; (ii) has staff that has the same ethnicity as of service users; (iii) includes an ethnic majority on its board; (iv) enjoys ethnic community support; (v) incorporates ethnic content in its programs and services; (vi) promotes family well-being; and (vii) fosters ethnic identity.

This article examines Indian immigrants’ participation in ethnic organizations that emerged from Indian aggregation in their surrounding geographical areas. It focuses on Indian immigrants because their population has increased in the last two decades. Since 2000, the Indian population has increased from 1,900,000 to 4,402,362 in 2017 (US Census Bureau 2018). Currently, Indians are the second-largest Asian group in the US after the Chinese. However, there are very few American multicultural studies that have focused on Indian immigrants. While some scholars have studied Indians’ adaptation and integration (Das 2002; Inman et al. 2007; Sahoo 2006; Srinivasan 2000), there are few that have focused on Indians in S&E fields (Saxenian 2002; Varma and Sabharwal 2018). This study focuses on Indian immigrant engineers because they are increasingly present in the US technology sector, as pointed out earlier. Specifically, we seek to answer the following questions: Do Indian immigrant engineers benefit from joining Indian cultural, religious, social, or any other associations? Why (or why not) do Indian engineer immigrants affiliate with such associations in the US? The article is based on primary data collected from Indian immigrant engineers working in US

technology companies. Details on the methodology employed are outlined later in the article.

1.1 *Theoretical Frameworks*

To understand the participation of Indian immigrant engineers in ethnic organizations, the article draws from two theories: Social Network Theory and the Ethnic Identity Theory. Social Network Theory is the study of how people, organizations, or groups interact with others within their network (Liu et al. 2017). It primarily focuses on the role of social relationships in transmitting information, channeling personal or media influence, and enabling attitudinal or behavioral changes. To understand ethnic organizations, it views social relationships in terms of nodes and ties. Nodes are the individual actors within the networks, and ties are the relationships between actors. The theory offers an explanation for how random people are connected. It is particularly useful in studying large groups as it shows how the members relate to others in the group. In this article, Indian organizations represent social networks, which are the largest element. The article examines how Indian immigrant engineers interact with others within these organizations. They act as nodes or actors, which are the smallest element.

Ethnic Identity Theory, on the other hand, argues that an individual's identity is multidimensional with several components, including race, religion, and national origin. It also recognizes phases or stages in ethnic identity development (Marcia 1993). At least three stages of ethnic identity development have been identified (Phinney et al. 2001). The first stage is where immigrants have not explored their own identities, and instead have accepted values of the dominant culture. The second stage consists of immigrants who come to a turning point where they begin to explore their own ethnic identity. In the third stage, immigrants come to terms with cultural differences between their own ethnic identity and the majority group's norms and values. With these three stages, immigrants feel strongly about their original ethnic identity, but also come to accept the majority group's identity. In this article, Indian immigrant engineers' identity is not seen solely dependent on their common national origin; instead, there are various aspects of ethnic identities such as native language, religious ceremonies, and social events that ethnic organizations can provide.

2 Asian Immigrants and Ethnic Organizations: Scholarly View

As immigration of Asians increased in the US, their assimilation became the desired goal where they adopt the behaviors, characteristics, norms, and

values of the American society. It was caricatured that with assimilation “ethnic minorities shed themselves of all that makes them distinctive and become carbon copies of the ethnic majority” (Alba 1999:7). In other words, Asian immigrants should eventually “melt” by getting rid of the culture of their country of birth and their mother tongue and adopt the American culture and English language. In contrast, multiculturalism stands for “the factual existence of plural cultures, each associated with a distinctive ethnic origin and all contained within a single societal frame” (Ibid:8). The emergence of multiculturalism against assimilation shows the importance of immigrants keeping their own cultural norms in the US.

Assimilation, however, is not a “one size fits all” process. Different ethnic groups adapt to new cultures in different ways. Furthermore, the period of adaptation varies significantly (Brown and Bean 2016). There are a number of factors involved in various stages of assimilation, including education, native culture, financial status, and social standing (Sassler 2006). Several studies have focused on the role of language and social skills in furthering Asian immigrants’ assimilation in the US (Bleakley and Chin 2010; Cho 2000). Kerstin Lueck and Machel Wilson (2010) found that English language proficiency, native language proficiency, discrimination, and family cohesion are the predictors of acculturative stress among Asian immigrants. Additionally, social group membership has a significant impact on self-perception (Smith 1991). Tae-Sik Kim (2016) indicated that “transnational communication” significantly helps Korean students as they continue their pursuit of education and cultural competence.

However, Asian immigrants have faced numerous hardships in terms of linguistic, cultural, and social assimilation (Moya 2005). A study of immigrants from South Asia showed that their cultural identities are developed with multi-elements including educational level, social class, identification with own ethnicity and culture, and experiences with racism, sexism, and exclusion (Ibrahim et al. 1997). Similarly, many of them are forced to self-employment as they struggle with finding a stable job (Rahman 2018).

Considering the challenges Asian immigrants face while achieving their goals in the US, ethnic associations can play an important role in their lives (Jenkins 1988). Cultural, religious and social associations can make Asian immigrants feel at home and help them adapt to the American way of life. These associations can also help the next generation maintain ties with their religion and culture. Studies have shown that few immigrant groups utilize mainstream institutions, while most immigrant groups better themselves by utilizing ethnic enclave resources for greater acculturation (Majka and Mullen 2002; Martinez-Callaghan and Gil-Lacruz 2017). Similarly, these associations

could be helpful for new immigrants with temporary visas as they pursue their part to permanent residency for a better future (Joseph 2016). There are several motives behind the formation and objectives of ethnic associations.

Jenkins, Sauber, and Friedlander (1985) examined the potential of ethnic associations for the delivery of social services to new immigrants. They found that ethnic associations made important contributions by providing access to new immigrants and help point towards ethnic-sensitive practices to social service providers. These practices required a serious consideration towards the cultures and cultural differences of populations served. It was a way of addressing serious issues such as dominance, oppression, racism, identity, difference, and justice (Longres 1990; Schlesinger and Devore 1995).

Religious ethnic institutions such as church, gurdwara,¹ mosque, and temple have always been significant to immigrants' adaptation in the US. Typically, immigrants look forward to joining religious institutions belonging to their faith. Immigrant parents view religious institutions as an opportunity to keep their children connected to their religious and cultural values. This relationship with religious institutions then becomes a part of their lives and eventually affects the process of community assimilation (Portes and Rumbaut 2001). Religious institutions are seen as performing important roles in immigrants' lives by strengthening community bonds, helping the needy, and strengthening morality.

Similarly, ethnic associations are also known for encouraging immigrants in political activism in the US. Many national ethnic associations such as the National Council of Asian Pacific Americans, Asian Pacific American Advocates, and Japanese American Citizens League have been working to mobilize immigrants politically for a long time. They tend to focus on promoting immigrants' civil and economic rights including getting them to vote and participate in legislative and legal arenas (Wong 2006). Post-9/11 attacks and security issues are tied to immigration in the US (Roy 2018). During his presidency, Donald Trump constantly categorized immigrants as criminals, security risks, and an economic burden (Elmoudden 2019; Kerwin and Nicholson 2019). These constant attacks created anxiety among people of color and minorities (Harris 2019). The rising hate crimes against immigrant minorities, specifically Muslims, are attributed to Trump's political campaigns and blunt narratives against Muslims (Hobbs and Lajevardi 2019). Several faith-based organizations have played an important role in advocating for these marginalized groups (Kocher 2017).

1 A gurdwara is a place of assembly and worship for Sikhs.

The presence of social, cultural, and religious associations in the US is not new, but associations focused around business activities of immigrants are a new phenomenon. Recently, some ethnic associations such as the Asian Business Association, The Indus Entrepreneurs (TiE), and US China Business Association have emerged to assist immigrants in succeeding in entrepreneurship. These associations provide a platform for entrepreneurial immigrants to meet, exchange ideas, share experiences, discuss solutions, mentor, and help each other in succeeding as leaders in technology companies. Some of them also provide resources to help immigrants succeed in the US. AnnaLee Saxenian (2006) noted that such business associations are now playing a key role in the emergence of a new entrepreneurial culture among Asian immigrants. Through such ethnic associations, immigrant entrepreneurs can find angel investors and acquire resources that otherwise are not available to them. In addition, there are business associations specifically for providing enhancing and enriching leadership skills for Asian immigrant women such as Asian Women in Business (Ibid).

Finally, an important component of understanding community assimilation for the immigrant population is 'gendered ethnicity' (Kurien 1999). The assimilation of Asian immigrant women in the US is a matter of significance. Women face bias from their families for dating, marriage outside their ethnicity and religion, and career decisions (Srinivasan 2000). Increasingly, there have been cases of harassment and sexual violence against Asian immigrant women from their husbands and partners (Tummala-Narra et al. 2015). Several Asian women associations such as the National Asian Pacific American Women's Forum and Manavi South Asian Women Organization are working for women empowerment and helping the victims of domestic violence as they believe that immigrant women are limited in seeking help from local authorities and mainstream organizations due to cultural, lingual, and immigration issues. These associations also act as a social change agent within their community.

To sum up, ethnic associations are concerned with the needs of their community. Asian immigrants coming to the US may have special needs related to their culture and separation from their family members. Ethnic associations are seen as an important resource for Asian immigrants' social participation in the US. Though there are some studies on various Asian immigrants' engagements with ethnic associations, to the authors' knowledge none have focused on Asian Indian immigrants in the high-technology sector. It is partially because it is assumed that this group of people will belong to a professional association in their technical field of expertise. Such associations are helpful for Asian immigrants seeking to advance their professional careers; however, they do not

address social and cultural aspects, which ethnic associations do. This article studies the importance of ethnic associations among Asian immigrants who have come to the US with educational degrees and technical skills.

3 Methodology: A Qualitative Approach

The data for this article comes from a large National Science Foundation (NSF)-funded study on the return migration of engineers from the US to India that was conducted from 2017 to 2019. Given that there is little information on the subject, we adapted qualitative methodology, which focuses on why and how a certain phenomenon occurs by understanding attitudes, behaviors, beliefs, characteristics, concepts, definitions, experiences, meanings, metaphors, and symbols. We interviewed 50 Indian engineers who returned to India after work and study in the US; for a comparative group, we interviewed 40 Indian engineers, who work in technology companies in the US. The latter group is the foundation of this article.

Participants were recruited from major cities in four states, California, New York, New Jersey, and Texas, which have the concentration of both technology companies and the Indian population. They came from two industries – information communication technology and biotechnology – since these industries employ the largest number of Indian engineers in the US. Participants were selected through the snowball sampling method as a list of Indian engineers and unrestricted access to companies were not available. The main criterion to select participants was that they must have been working in US technology companies for a minimum of three years.

A semi-structured interview guide was used to conduct in-depth interviews with them, which averaged about an hour. Most interviews were conducted face-to-face, while only a few were via telephone. All interviews were audio-recorded and later transcribed verbatim. The transcriptions were processed in NVivo software for data analysis. To ensure the trustworthiness of the data, two coders coded the data. The codes were categorized by themes that allowed us to identify patterns within the entire text. A phenomenological approach – the lived experiences of a concept or a phenomenon for several individuals – was employed to understand the given topic. In addition to the demographic questions, the following two out of 35 questions asked formed the basis for this article:

- Do you belong to any Indian association in the United States?
- If yes, why do you feel a need to belong to these associations? If no, why not?

Findings are reported with interview excerpts to highlight the complexity of concepts and by frequency to show their strength. Responses to the first question were coded in two categories: “yes” and “no;” some participants, who formerly belonged to an Indian association but let their membership lapse, were coded in the “yes” category. Responses to the second question depended on the initial response to the question of affiliation with an Indian association. Their responses were coded only once in the relevant primary category. To protect the privacy and to comply with the Institutional Review Board (IRB) requirements involving human subjects in research, names of the participants, locations, and information about their employers is not disclosed.

The 40 participants comprised of 28 males (70 percent) and 12 females (30 percent). The age group of the participants varied; the majority were between the ages of 30 and 39 (67.5 percent). A little over 15 percent of the participants were between the ages of 20 and 29 and about ten percent ranged between the ages of 40 and 49. In addition, there was one participant each belonging to age groups 50 to 59 and above 60. Most of these participants (83 percent) were married with almost half of them having at least one child ($n = 21$). About 40 percent of the participants who were married had a working spouse at the time of their interview. The majority of the participants (83 percent) held a graduate degree with the remaining (17 percent) holding an undergraduate degree; out of graduate degrees, 63 percent held a master's degree and 20 percent a doctorate. A majority of them (65 percent) completed their terminal degrees in the US and the remaining (35 percent) completed in India. These degrees were in engineering and related fields (66 percent) and in science (34 percent). The majority (67 percent) of these participants have held their current employment for less than five years, while 23 percent had been employed at their current position for five to 10 years, and 10 percent had been employed for over 10 years. Based on their employment, they are considered engineers.

4 Empirical Analysis

All 40 participants were asked if they belong to any Indian association/s. More than half of them responded positively ($n = 21$, 52.5 percent) and slightly less than half responded in the negative ($n = 19$, 47.5 percent). Out of those who responded positively, the majority (12 out of 21, 57 percent) were members of Indian associations at the time of the interview, whereas the remaining (9 out of 21, 43 percent) belonged to one or more associations, but had let their memberships lapse.

Most of the Indian associations were either cultural that derived from the festivals, customs and observances of India, or were religious centering on temples for worship. Based on their goals, activities, membership, and staff composition, they were considered ethnic organizations. Of the participants who indicated membership in an Indian organization, the majority (64 percent) were members of cultural associations, whereas the remaining (36 percent) were members of religious associations. It should be noted that both groups, affiliated and non-affiliated, converged to maintain Indian culture; they only diverged whether to maintain through associations or without associations.

4.1 *The Need to Belong to an Ethnic Association*

There was an overall agreement among affiliated participants on their need to belong to Indian associations. A large majority of them indicated a desire to maintain a connection to the Indian culture, pay respect to Indian heritage, and to connect with people who share a common social and cultural background. As one participant declared, "I belong to such activities because I want to be a part of Indian heritage." Another said, "I think it gives a forum by which you can kind of volunteer into the community that you grew up with and you want to be part of." Interestingly, participants who belonged to religious associations also cited their participation to connect to both their Indian culture and the community. For them, the Hindu religion was the main source of Indian culture.

For these participants, it was very important for their children to remain in touch with Indian culture and speak in their mother tongue. As first-generation Indians who were born and raised in India, they were exposed to Indian culture and values. However, their children were either born in the US or came to the US when they were babies. Thus, they were not exposed to Indian culture as their parents. Because children were using English in schools, they did not speak in their parents' mother tongue. Therefore, it was important for the participants to promote biculturalism and bilingualism among their second-generation children. As one participant said, "I feel like we should go to the events to at least teach our kids' Indian values and cultures otherwise they will not know our roots." Another participant echoed, "For me, it is all about trying to make the best of both worlds ... I feel by going to all these events is you get the kid exposed to our cultural side which you know they do not get a whole lot."

Nine out of 21 (43 percent) participants belonged to one or more associations upon initial migration to the US, but let their membership lapse when connections had been established in the US. They joined Indian associations

upon arriving in the US or while attending university, indicating that was the norm or a routine for newcomers. As one participant mentioned, "I used to be a part of a student association in my grad school ... because every Indian who came was automatically enrolled pretty much."

These participants let their formal membership in Indian associations end with the process of assimilation in the US society. For them, Indian associations provided a basis for participants to build self-esteem and establish professional or social networks during the initial period of living in the US. Once they were somewhat socialized into a new culture, participation in these associations dwindled. As one participant indicated, "the need to belong was stronger in the first five to 10 years. Later on, I was basically Americanized, I was doing all the things that I liked and I did not necessarily belong to any culture per se."

4.2 *No Need to Belong to an Ethnic Association*

Non-affiliated participants gave multiple reasons for not belonging to Indian associations, which were categorized into three groups. The most common reason (9 out of 19, 47 percent) was the presence of a large Indian community where they lived as well as the place where they worked. Since these participants were full-time employees, they did not have time to engage with Indian associations. Lack of time commitment was the second reason (6 out of 19, 31.5 percent) for being non-affiliated. Finally, a few participants (4 out of 19, 21 percent) had a negative perception of such associations.

The largest group of non-affiliated participants responded that they did not consider membership necessary or important in their current lives. It was mostly because their social circle and working environment were composed of primarily Indians. Most of their friends, as well as some neighbors, were Indians; thus, a need to establish such a social environment through associations was not necessary. As one participant said, "I do not think we have felt the need to, we live within a community that has a lot of Indians and a lot of close-knit ... our town is taken over by Indians and Asians." Another generalized, "I have never been in a place where there were no Indians around." Most importantly, non-affiliated participants worked in technology companies, which had a large presence of Indians. Their work environment consisted of people who were rather similar to them socially/culturally, educationally, and technically. As one participant said, "Everybody who did engineering came to Silicon Valley area ... so we have enough [Indians] here." Another echoed, "Being in the tech industry, you will find Indians around." Thus, similar backgrounds, cultural practices, food, and work habits replaced the need for active participation in formal Indian associations.

Some participants indicated that they did not have enough time to participate in associations given their work schedule and family obligations, a concern expressed especially by the female interviewees. Rather than participating and volunteering their time at an association, they chose to spend time with their family. As one participant said, "I am more involved in my work." This female participant explained, "Whenever you join a group, it comes with a lot of additional responsibilities, some duties ... I cannot bound myself with that over the weekend." Similarly, another female respondent said, "I do not think that every Saturday and Sunday I could go to do the [association-related] work."

The remaining participants did not participate in any Indian association because of their suspicion or opposition towards such associations. Some cited Indian associations as unnecessarily stereotyping them as Indians, whereas few cited intergroup politics and regionalism as a source of distrust. As one participant responded, "I do not feel as Indian as those associations seem to want you to be." Another said, "they have not helped anyone I know of because of politicking." It was interesting to note that one of the female participants believed that patriarchal societal norms stifled women's abilities to speak their minds and was antithetical to liberal social practice. She noted, "they judge me for speaking up against things that I do not like ... you know the whole patriarchy."

4.3 *The Curve of Need*

This study shows that the need for Indian immigrant engineers to belong to any Indian association changes with time and the stage of their lives. This article, therefore, generalizes that affiliation with ethnic associations for Indian immigrant engineers follows a 'U'-shaped curve as depicted in Figure 1.

Most of the participants who came as international students to pursue graduate studies in the US indicated a need to belong to association primarily for two reasons. Firstly, they missed their friends and family, celebrations, and overall cultural milieu. This was the first time when they were away from their homes in a foreign land. A second reason was their view that membership in an Indian student and/or cultural organization was a way of giving back to their community or country. Equally important is the fact that most American universities promote international cultural diversity. They bring together the diverse international community at their campuses to support international causes at academic, cultural, and social levels. So various international student associations supported by administration exist on American campuses. These associations engage in various cultural and educational activities with the hope that the local student body will enrich inter-cultural exchanges. After

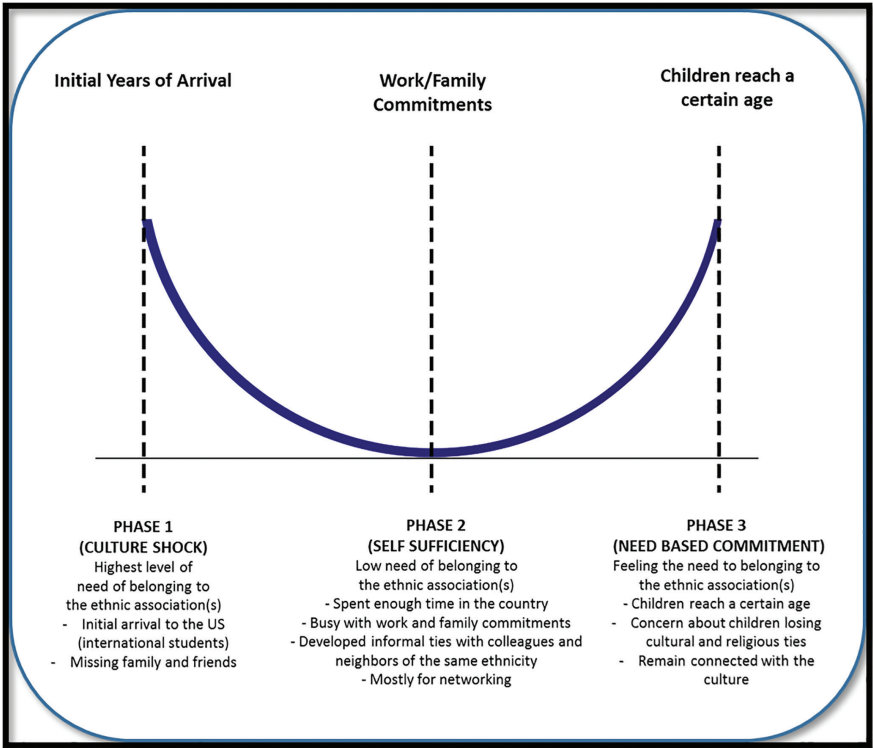


FIGURE 1 Affiliation with ethnic associations of high-skilled migrants

these participants graduated and started a career, they did not feel the need for getting involved with Indian associations. For one thing, such associations were not present where they worked, so affiliation was not automatic, which was the case when they were students.

Not all participants in this study came to the US as students; some came directly from India to work in the technology sector. Like students, they also missed families, homes, and overall cultural atmosphere. Yet, they did not have much time outside the work to participate in Indian associations. This was also the case with students who found jobs after graduation. Lack of time was the second main reason for not belonging to Indian associations. This was supplemented by the fact that these participants were living and working in regions that had large numbers of the Indian population and workers. Indian associations were often seen as providers of some form of service – while this was the case when an immigrant was new to the US, the need was not high once they were in the workforce for some time. Our study found that Indian immigrant engineers who have lived in the country longer do not belong to

Indian associations. Thus, the need to belong to Indian associations differed with the participants' stage of life and their needs.

We also found that affiliation to Indian associations is inversely proportional to the number of Indians in a geographic location. For example, the more the number of Indians concentrated in a region the less was the need to belong. Having a social circle with other Indian immigrants in places of work, neighborhoods, schools, and other institutions lowered the need for this group to connect with members of their ethnic background. Such networks were loose and informal, but they did replace a need for formal participation. Participants who wanted to belong to Indian associations did so to remain close to their community and culture. Participants who did not belong to Indian associations were getting the same exposure as they were surrounded by their own people, culture, food, and so forth.

The study also finds that some of these participants viewed any involvement in Indian associations as antithetical to establishing oneself in their new country. These participants believed Indian associations isolated individuals in Indian culture and held back inevitable acculturation to the US culture and, thus, should be avoided entirely. Female participants believed that Indian associations stifled their identity, as they experienced the patriarchy that existed in the Indian culture. Furthermore, some of them simply did not have the time to volunteer at these associations. They viewed membership in Indian associations as a substantial commitment. For this group of participants, it was not just about participating at an occasional event or making the occasional donation, to them joining any Indian association came with a lot more responsibilities. These participants were unable to commit their time and effort to affiliate with Indian associations because of their involvement in their personal and professional lives.

4.4 *Ethnic Identity and Social Network Theories*

The findings did not comport well with the ethnic identity theory, which suggests that the immigrants may initially go through rejections of one's own identity, thereafter developing a strong association with the majority group around them, and eventually feel strongly about their original identity while accepting the majority group's identity. The results did suggest a strong negative relationship with increasing levels of education and skills. For skilled and educated immigrants, group affiliation with similar background appears to be far more critical and necessary at an early stage than at a later stage of one's ethnic identity formation. This first stage of encountering a different culture engenders a "culture shock" phase. The majority of people in India live in a close-knit family; parents, siblings, relatives and even friends have a

deep influence on people's lives and decisions. When Indian immigrants first come to the US, they miss that connection and try to build relationships and bonds with people of the same background through these ethnic associations. This need gradually lessens for them after spending time in the US and getting acclimatized to the new culture (it is possible that training, education, and skills provide a level of adaptability that may not otherwise be found, but this is beyond the scope of this article). In this next phase, the networks/associations these groups belong are triggered by the need to protect one's own ethnic identity, especially when they have children. Since the study did not ask about the age of the children, it is hard to know precisely at what age people feel a need to reconnect with these associations, but based on the age of the participants' (mostly between 30–39 years) we can estimate that their children were school age.

The need to connect and strengthen social ties when immigrants have children is further explained by the social network theory, which analyzes how individuals, groups, or organizations interact with each other. The theory views these relationships in terms of nodes (individual actors) and ties (the relationship between actors). While employing the concept of nodes and ties among Indian immigrant engineers and their relationship with the community, particularly with those participating in ethnic associations has shown some interesting results. The ties between the actors (majority participants) and the Indian community were very strong in the beginning when they first arrived in the US. After some years of living and working in the US, there was barely any urge to maintain those ties. The ties in some instances may be revived with family needs; that is, the desire for their children to connect with parents' cultural roots. However, it is hard to predict how the curve will change as these individuals age and their children graduate from school. Will the need to belong to these associations diminish or become stronger is an area that deserves future attention? Overall, we find that Indian immigrant engineers' need to belong to ethnic associations follows a U-shaped curve (Figure 1).

4.5 *Limitations of the Study*

The data for this study came from a larger study on the return migration of Indian engineers. Thus, specific questions pertaining to ethnic associations were not asked and the staff of Indian associations was not interviewed. This study did not sample by geographic regions – participants of this study, therefore, primarily resided in big cities and worked in organizations that usually had a high percentage of Indians. Finally, this study did not include low-skilled and less-educated immigrants from India, who usually enter the US through family immigration, asylum, and so forth. Their reasons for belonging to Indian

associations are likely to differ significantly from the group represented in this study.

5 Conclusion

This study has shown that it is important for Indian immigrant engineers working in high technology companies to maintain a connection with Indian culture. A little over half of them chose to do so by participating in Indian associations, whereas for the remaining it was by living and working in an environment in which others shared the same cultural background. Both affiliated and non-affiliated Indian immigrant engineers' motivation was with a perspective of maintaining a multicultural position so they and their children can have a broader cultural foundation. The non-affiliated group's reasoning for not participating in Indian associations was that their social and work environment was similar to their own. The affiliated group's participation in the Indian associations enabled them to adapt to American society. In this way, Indian immigrant engineers developed multiculturalism and were able to maintain their cultural roots. The need for Indian immigrant engineers to belong to any Indian association changes with time and the stage of their lives and follows a 'U'-shaped curve as depicted in Figure 1.

References

- Alba, Richard. 1999. "Immigration and the American Realities of Assimilation and Multiculturalism." *Sociological Forum* 14(1):3–25.
- Bleakley, Hoyt and Aimee Chin. 2010. "Age at Arrival, English Proficiency, and Social Assimilation among US Immigrants." *American Economic Journal: Applied Economics* 2(1):165–192.
- Brown, Susan K. and Frank D. Bean. 2016. "Assimilation Models, Old and New: Explaining a Long-Term Process." Migration Policy Institute. (<https://www.migrationpolicy.org/article/assimilation-models-old-and-new-explaining-long-term-process>).
- Budiman, Abby and Neil G. Ruiz. 2017. "Key facts about Asian Americans, a diverse and growing population." Pew Research Center. (<https://www.pewresearch.org/fact-tank/2017/09/08/key-facts-about-asian-americans/>).
- Cho, Grace. 2000. "The Role of Heritage Language in Social Interactions and Relationships: Reflections from a Language Minority Group." *Bilingual Research Journal* 24(4):369–384.

- Das, Sudipta. 2002. "Loss or Gain? A Saga of Asian Indian Immigration and Experiences in America's Multi-Ethnic Mosaic." *Race, Gender & Class* 9(2):131-155.
- Elmoudden, Sanae. 2019. "How Moroccan Muslim Women Negotiate their Identity in Today's America." *Perspectives on Global Development and Technology* 18(1-2): 134-150.
- Gordon, Milton M. 1964. *Assimilation in American Life: The Role of Race, Religion, and National Origins*. New York: Oxford University Press.
- Harris, Jerry. 2019. "Race, Class, and Labor: White Skin Privilege and Oppression." *Perspectives on Global Development and Technology* 18(1-2):47-58.
- Hirschman, Charles. 2014. "Immigration to the United States: Recent Trends and Future Prospects." *Malaysian Journal of Economic Studies* 51(1):69-85.
- Hobbs, William and Nazita Lajevardi. 2019. "Effects of Divisive Political Campaigns on the Day-to-Day Segregation of Arab and Muslim Americans." *American Political Science Review* 113(1):270-276.
- Ibrahim, Farah, Hifumi Ohnishi, and Daya Singh Sandhu. 1997. "Asian American identity development: A culture specific model for South Asian Americans." *Journal of Multicultural Counseling and Development* 25(1):34-50.
- Inman, A.G., Erin E. Howard, R.L. Beaumont, and Jessica A. Walker. 2007. "Cultural transmission: Influence of contextual factors in Asian Indian immigrant parents' experiences." *Journal of Counseling Psychology* 54:93-100.
- Jenkins, Shirley. 1981. *The Ethnic Dilemma In Social Services*. Free Press.
- Jenkins, Shirley. 1988. *Ethnic Associations and the Welfare State: Services to Immigrants in Five Countries*. New York: Columbia University Press.
- Jenkins, Shirley, M. Sauber, and E. Friedlander. 1985. *Ethnic Associations and Services to New Immigrants in New York City*. New York: Community Council of Greater New York.
- Joseph, Mary G.C. 2016. "From students to permanent residents: The role of social networks in the immigration transition of Indians in New Zealand." *Asian and Pacific Migration Journal* 25(2):168-190.
- Kerwin, Donald and Mike Nicholson. 2019. "The Effects of Immigration Enforcement on Faith-Based Organizations: An Analysis of the FEER Survey." *Journal on Migration and Human Security* 7(2):42-51.
- Kim, Tae-Sik. 2016. "Transnational communication practices of unaccompanied young Korean students in the United States." *Asian and Pacific Migration Journal* 25(2):148-167.
- Kocher, Austin. 2017. "The New Resistance: Immigrant Rights Mobilization in an Era of Trump." *Journal of Latin American Geography* 16(2):165-171.
- Kurien, Prema. 1999. "Gendered ethnicity: Creating a Hindu Indian Identity in the United States." *American Behavioral Scientist* 42(4):648-670.

- Liu, Wenlin, Anupreet Sidhu, Amanda M. Beacom, and Thomas W. Valente. 2017. "Social Network Theory." Pp. 764–812 in *The International Encyclopedia of Media Effects*. (<https://doi.org/10.1002/9781118783764.wbieme0092>).
- Longres, John F. 1990. "Toward a Status Model of Ethnic Sensitive Practice." *Journal of Multicultural Social Work* 1(1):41–56.
- Lueck, Kerstin and Machel Wilson. 2010. "Acculturative stress in Asian immigrants: The impact of social and linguistic factors." *International Journal of Intercultural Relations* 34(1):47–57.
- Majka, Lorraine and Brendan Mullan. 2002. "Ethnic Communities and Ethnic Organizations Reconsidered: South-East Asians and Eastern Europeans in Chicago." *International Migration* 40(2):71–92.
- Marcia, James E. 1993. "The Ego Identity Status Approach to Ego Identity." Pp. 3–21 in *Ego Identity: A Handbook for Psychosocial Research*. Edited by James E. Marcia, Alan S. Waterman, David R. Matteson, Sally L. Archer, and Jacob L. Orlofsky. New York: Springer.
- Martinez-Callaghan, John and Marta Gil-Lacruz. 2017. "Developing identity, sense of belonging and social networks among Japanese immigrants in Scotland and Spain." *Asian and Pacific Migration Journal* 26(2):241–261.
- Moya, Jose C. 2005. "Immigrants and Associations: A Global and Historical Perspective." *Journal of Ethnic and Migration Studies* 31(5):833–864.
- National Science Board. 2019. *Science and Engineering Indicators 2020*. Alexandria, VA: National Science Foundation. (<https://ncses.nsf.gov/pubs/nsb20198/>).
- Phinney, Jean S., Gabriel Horenczyk, Karmela Liebkind, and Paul Vedder. 2001. "Ethnic identity, immigration, and well-being: An interactional perspective." *Journal of Social Issues* 57:493–510.
- Portes, Alejandro and Rubén G. Rumbaut. 2001. *Legacies: The Story of the Immigrant Second Generation*. Berkeley: University of California Press.
- Rahman, Md Mizanur. 2018. "Development of Bangladeshi immigrant entrepreneurship in Canada." *Asian and Pacific Migration Journal* 27(4):404–430.
- Reimers, David M. 1992. *Still the Golden Door: The Third World Comes to America*. New York: Columbia University Press.
- Rex, John. 1996. *Ethnic Minorities in the Modern State*. New York: St. Martin's Press.
- Roy, Nalanda. 2018. "Immigration and Security – Post 9/11 United States." *Perspectives on Global Development and Technology* 17(4):451–472.
- Sabharwal, Meghna and Roli Varma. 2017. "Grass Is Greener on the Other Side: Return Migration of Indian Engineers and Scientists in Academia." *Bulletin of Science, Technology & Society* 37(1):34–44.
- Sahoo, Ajaya Kumar. 2006. "Issues of Identity in the Indian Diaspora: A Transnational Perspective." *Perspectives on Global Development and Technology* 5(1–2):81–98.

- Sassler, Sharon L. 2006. "School Participation among Immigrant Youths: The Case of Segmented Assimilation in the Early 20th Century." *Sociology of Education* 79:1–24.
- Saxenian, AnnaLee. 2002. "Silicon Valley's New Immigrant High-Growth Entrepreneurs." *Economic Development Quarterly* 16(1):20–31.
- Saxenian, AnnaLee. 2006. *The New Argonauts: Regional Advantage in a Global Economy*. Cambridge: Harvard University Press.
- Schlesinger, Elfriede G. and Wynetta Devore. 2007. "Ethnic Sensitive Social Work Practice: Back to the Future." *Journal of Ethnic and Cultural Diversity in Social Work* 16(3–4):3–29.
- Smith, Elsie J. 1991. "Ethnic identity development: Toward the development of a theory within the context of majority/minority status." *Journal of Counseling & Development* 70(1):181–188.
- Srinivasan, S. 2000. "'Being Indian,' 'being American': A balancing act or a creative blend?" *Journal of Human Behavior in the Social Environment* 3(3–4):135–158.
- Tummala-Narra, Pratyusha, Anmol Satiani, and Neha Patel. 2015. "Sexual Violence in an Immigrant Context: South Asian Women in the United States." Pp. 167–189 in *Gendered Journeys: Women, Migration and Feminist Psychology*. Edited by Olive M. Espin and Andrea L. Dottolo.
- US Census Bureau. 2018. "ACS Demographic and Housing Estimates: 2013–2017 American Community Survey 5-Year Estimates." (<https://data.census.gov/cedsci/table?q=ACS%20Demographic%20and%20Housing20Estimates&tid=ACSDP1Y2019.DP05&hidePreview=true>).
- Varma, Roli and Meghna Sabharwal. 2018. "International Collaboration: Experiences of Indian Scientists and Engineers after Returning from the United States." *Perspectives on Global Development and Technology* 17(5–6):593–613.
- Wong, Janelle. 2006. "The role of community organizations in immigrant political mobilization." Pp. 89–118 in *Democracy's Promise: Immigrants and American Civic Institutions*. Edited by Janelle Wong. Ann Arbor: University of Michigan Press.