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A Study of Permanent Residency Intentions and Behaviors by Highly Skilled Temporary Chinese Migrants in the United States

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Chloe Shay

A Study of Permanent Residency Intentions and Behaviors by Highly Skilled

Temporary Chinese Migrants in the United States

by

Chloe Shay

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree

Of

Executive Doctorate in Business

In the Robinson College of Business

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ACCEPTANCE

This dissertation was prepared under the direction of the *CHLOE SHAY* Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Business Administration in the J. Mack Robinson College of Business of Georgia State University.

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ACKNOWLEDGEMENTS

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ABSTRACT

A Study of Permanent Residency Intentions and Behaviors by Highly Skilled Temporary

Chinese Migrants in the United States

by

Chloe Shay

May 2019

Chair: Todd Maurer

Major Academic Unit: Executive Doctorate in Business

In 2017, according to data from United States (U.S.) Department of Homeland Security, Chinese immigrants ranked as the third largest foreign-born group in the country. On average, Chinese immigrants are significantly better educated than the overall foreign- and native-born populations. Furthermore, they have had positive effects on social and economic outcomes; however, not much research has focused on the factors related to highly skilled temporary Chinese migrants' decision-making about becoming permanent residents. In the present study, using the theory of planned behavior (TPB), I focused on the following research question: "Why and how do highly skilled temporary Chinese migrants become permanent residents in the United States?" This study offered several possible contributions. First, it was the first to apply the TPB to understand such migrants' decision-making on emigrating from a developing country (China) to a developed one (the U.S.). Furthermore, the present study adds to research on the TPB and contributes to the literature by focusing on Chinese migrants. Second, under rapidly evolving international relations and immigration landscapes, empirically assessing perceptions and beliefs of highly-educated Chinese immigrants related to immigration is critical, including central concepts within the TPB such as their beliefs about whether they have control over migration

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decisions, what their families and friends in the U.S. and China think about whether they should migrate, and their beliefs about the outcomes of a decision to apply for permanent status. Therefore, I applied and elaborated the TPB through exploring the dimensions of individual attitudes and normative beliefs to determine which dimension and which social groups have the most influence on the intention to migrate. Third, this study contributed to understanding the factors associated with transitioning from temporary to permanent migration among highly skilled Chinese migrants. Fourth, new measures and tools were developed to be applied within this context. The study outcomes and developed measurement tools assist prospective immigrants in becoming better informed of the various potential influences on their decision-making. This will help them consider and make such decisions themselves. Furthermore, the outcomes and tools will enhance the understanding of researchers, policy-makers, and educators regarding highly skilled Chinese immigrants. Finally, it can provide a basis for applying these new measures and tools to cross-cultural immigrants.

INDEX WORDS: theory of planned behavior, highly skilled, Chinese migrants, permanent residents

I INTRODUCTION

I.1 Research Problem

Since 1960, according to statistics of the Migration Policy Institute, the United States (U.S.) has been the top destination worldwide for migrants, and it is currently home to approximately one-fifth of all global migrants. In 2017, approximately 77 million immigrants were living in the U.S., accounting for 13.5% of its population (www.migrationpolicy.org). According to data from the Department of Homeland Security's Yearbook of Immigration Statistics, in 2017, Chinese immigrants ranked as the third largest foreign-born group in the country. Based on the history of Chinese immigration to the U.S., two arrival waves have been identified: the first was in the mid-1800s, and the second was from the late 1970s to the present. Data show that the population of Chinese immigrants has continuously increased since 2008 for a five-fold increase overall; in 2017, the total number was approaching 2.8 million or 3.6% of the roughly 77 million population of global immigrants. Notably, on average, Chinese immigrants are significantly better educated than the overall foreign- and native-born populations in the U.S. (Zong and Batalova, 2017).

Some research and data have shown that Chinese immigrants have had positive effects on social and economic outcomes in the U.S. (Duignan, 1998; Said, 2006; Jacoby, 2008); however, not much research has examined the factors related to highly skilled temporary Chinese migrants' decision-making on whether to become permanent residents. In addition, the reasons for their decisions are not particularly clear. Although growing research interest has arisen in how and why highly skilled foreign-born temporary workers come to the U.S. labor market (Rosenzweig, 2006; 2007; Bound, Demirci, Khanna, and Turner, 2015), a need exists to elucidate the motivations and influences on the migration decisions of highly skilled temporary Chinese migrants.

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Therefore, the purpose of this study was to explore the international migration decision-making among highly skilled temporary Chinese migrants through addressing the following research:

Why and how do highly skilled temporary Chinese migrants become permanent residents in the United States?

I.2 Research Structure and Expected Contributions

In a study on style composition (Mathiassen, Chiasson, and Germonprez, 2012), five elements were developed to structure the research composition: problem setting (P), areas of concerns (A), framing or theory (F), methods (M), and contributions (C). Table 1 presents these five composition elements, and they are discussed in detail in subsequent sections.

Table 1: Composition elements of research study

P (Problem Setting)	During the migration process, many Chinese immigrants encounter a lot of difficulties, such as high cost of finances, career barriers, family problems and cultural differences. Also, not much research has focused on examining the factors related to highly skilled temporary Chinese migrants' decision-making on becoming permanent residents or not. In addition, the reasons for their decisions are not clear. Although a growing research interest arises by concentrating on how and why highly skilled foreign-born temporary workers mainly come to the United States labor market, there is a need to better understand motivations and influences on decisions by highly skilled temporary Chinese migrants.
A (Area of Concern)	Migration decision making from temporary migrants to permanent residents in the United States Among Highly Skilled Chinese Migrants
F (Conceptual Framework)	Theory of Planned Behavior (TPB) and Migration Decision
FA (Key Constructs)	Migration Intention (MI), Migration Behavior (MB), Attitude Towards Migration (ATM), Social Norms for Migration (SNM), and Perceived Behavioral Control over Migration (PBCM)
M (Research Method)	Quantitative survey completed by highly skilled temporary Chinese migrants
RQ (Research Questions)	Why and how do highly skilled temporary Chinese migrants become permanent residents in the United States?
CP (Contribution to Practice)	1) This research will contribute to understanding of the factors associated with the transition from temporary to permanent migration among highly skilled Chinese migrants. 2) This study will help the highly skilled Chinese immigrants empower themselves in the destination country. 3) New measures/tools will be developed to apply within this context as part of the study. 4) Career counseling/ Life coaching
CA (Contribution to Area of Concern)	1) This study will provide additional empirical research on the application of the TBP to support better understanding of migration decision-making for highly skilled temporary Chinese migrants. 2) Within rapidly evolving international relations and immigration landscapes, it is important to empirically assess perceptions and beliefs by highly skilled Chinese migrants related to migration. 3) The present study will add to research on the TBP and makes connection from this literature to topics of migration from developing countries.

Such research can not only enhance social and economic understanding but also provide academic evidence to U.S. migration policy-makers that could inform their efforts as they continue to create effective policies toward highly skilled immigrants and international students. Furthermore, such research could help to empower skilled Chinese immigrants to effectively reach their potential in their destination country via informed decision-making. Through the present study, I offer several possible contributions. First, the need exists for additional empirical research on the validity of the theory of planned behavior (TBP) to enhance the understanding of international immigrants' decision-making. The present study adds a research focus on highly skilled Chinese immigrants to the TBP, as well as makes connections from this strand of literature to migration topics regarding developing countries by focusing on such immigrants. Second, under rapidly evolving international relations and immigration landscapes, empirically assessing the perceptions and beliefs of highly skilled Chinese immigrants related to immigration is critical, including central concepts within the TPB such as their beliefs about their control over migration decisions, what their families and friends in the U.S. and China think about whether they should migrate, and their beliefs about the positive and negative outcomes of the decision to apply for permanent status. Therefore, I apply and elaborate the TPB by exploring the dimensions of individual attitudes and normative beliefs to determine which dimension and which social groups influence people's intention to migrate the most. Third, this research should enhance the understanding of factors associated with transitioning from temporary to permanent migration among highly skilled Chinese immigrants. De Jong (2000) indicated that one approach to address gaps in migration literature is to make temporary and permanent migration into competing alternative decisions. Finally, this research developed new measures and tools to apply within this context. The study outcomes and developed measurement tools will be valuable

to researchers, policy-makers, educators, and possibly prospective immigrants via improving their understanding of the various potential influences on decision-making.

In the sections that follow, the components of this theoretical framework are elaborated within the aforementioned context as well as details of the present study. The remainder of this dissertation is organized as follows. Chapter 2 presents the literature review; Chapter 3 describes the theoretical framework; Chapter 4 explains the design and methodology; Chapter 5 presents the results; Chapter 6 concludes the discussion and future studies.

II LITERATURE REVIEW

II.1 History of Chinese Migration

The history of Chinese migration can be traced back to the mid-19th century when the first wave of Chinese immigrants arrived in the U.S.. They were primarily male manual laborers who landed on the West Coast to take low-skilled jobs (e.g., agricultural, mining, and railroad construction). In 1882, the Chinese Exclusion Act came into effect because of pressures from labor unions and venomous anti-Chinese public attitudes. The Act was extremely harmful to the future immigration of Chinese workers, which consequently blocked them from applying for permanent residency or U.S. citizenship.

According to the Migration Policy Institute (Zong and Batalova, 2017), the migration environment improved in the mid-1960s because of significant policy changes in China and the U.S., which opened a new chapter of Chinese migration. These changes included the implementation of the 1965 Immigration Act in the U.S., which created temporary worker programs for skilled workers; China's loosening of its emigration controls in 1978; and the stabilization of U.S.–China relations in 1979. Now, unlike in the 19th century, Chinese immigrants are predominantly skilled. Based on data from the fiscal year (FY) 2015 (Zong and Batalova, 2017), China ranks highly among sources of foreign students enrolled in U.S. higher education, and furthermore, Chinese nationals receive the second largest number of employer-sponsored H-1B temporary visas after Indian nationals. Research on the overall foreign- and native-born populations in the U.S. showed that on average, Chinese immigrants are significantly better educated and more likely to be employed in management positions (Zong and Batalova, 2017).

Several routes exist for foreign-born individuals to obtain an H-1B temporary visa or permanent residency. A common one is for an individual to enter the U.S with a student (F1) visa, thereby gaining an undergraduate or graduate degree there (Kato and Sparber, 2013; Salzman, Kuehn, and Lowell, 2013). During the individual's study period, he or she can connect with U.S. employers who would sponsor their H-1B temporary visas, eventually helping them to obtain permanent residency (Bound, Demirci, Khanna, and Turner, 2015); furthermore, this increases the chances for these individuals to meet U.S. residents, which might ultimately lead to them earning a green card through marriage (Jasso, Massey, Rosenzweig, and Smith, 2000).

Earlier, Freeman (2005) indicated that the U.S. was capable of meeting the need for a more technologically sophisticated labor force either by growing its own talent through educating and training native workers or importing talent from other countries. Based on 2015 data from the Institute of International Education (Hanson and Liu, 2018), Asian countries have developed into leading sources of foreign students for U.S. universities because of their quickly growing supply of college students. In the academic year 2013–14, six Asian countries were among the top 10 source countries for foreign students in the U.S., and 57.4% of the 886,052 foreign students studying at U.S. institutions came from these countries. Among them, China and India are the top two countries for foreign students, as is evidenced by their growth in percentage among the U.S. foreign-student population. This grew from 8.7% and 6.9%, respectively, in 1989–90 to 31.2% and 13.6%, respectively, in 2013–14 (Hanson and Liu, 2018).

How and why highly skilled foreign-born workers transition to the U.S. labor market is an ongoing topic. As previously mentioned, a critical route of entry is through U.S. higher education. Research (Jones, 2002) showed that highly skilled immigrants positively impact U.S. economic development and contribute to helping create new jobs and opportunities for economic

growth. According to modern growth theory, the share of these highly skilled workers

specialized in research and development has a great impact on setting the pace of long-term

growth. Studies have suggested that highly skilled immigrants have created jobs and wealth in

the U.S. and built transnational business networks, which have granted American companies

access to foreign labor and markets (Duignan, 1998; Said, 2006; Jacoby, 2008). Research also

suggests that an increase in H-1B visas could create an estimated 1.3 million new jobs and add

approximately US$158 billion to the gross domestic product by 2045 (American Immigration

Council, The H-1B Visa Program: A Primer on the Program and Its Impact on Jobs, Wages, and

the Economy [April 6, 2018], https://www.americanimmigrationcouncil.org/research/h1b-visa-

program-fact-sheet). In addition, research indicates that most highly skilled immigrants from the

science, technology, engineering, and mathematics (STEM) fields, and therefore, they are likely

to contribute to innovation. In particular, Batalova (2006) focused on how Chinese immigration

has affected U.S. economics, politics, and culture in a mostly positive way.

 According to the well-known specialty worker H-1B visa program, highly skilled

immigrants should at least hold a bachelor's degree (https://www.uscis.gov/working-united-

states/temporary-workers/h-1b-specialty-occupations-dod-cooperative-research-and-

development-project-workers-and-fashion-models). Highly skilled people move around globally

for multiple reasons including political factors, such as governments' instant commitments to

solving domestic labor shortages and gaining workers through dedicated immigration programs

and international recruitment routes. In classical sociological literature on migration,

international highly skilled workers were categorized as a small population, which presented

both possibilities for human capital transfer between states and, more awkwardly, a reflective

"brain drain" from source countries (Hanson and Liu, 2018). However, transnational migration

currently makes the realities more complicated (Lee, 2009). A truly global migration market has

been raised by the European Union expanding and other types of regional collaboration.

Furthermore, it requires a policy context for much contemporary research (Hanson and Liu,

2018). Therefore, more studies are required to address issues associated with temporary highly

skilled migration, including the drivers of highly skilled migrants' permanent migration decision-

making. In this study, I targeted a population of Chinese highly skilled temporary immigrants to

provide behind-the-scenes insight to help explain the whys and hows of their migration decision-

making.

II.2 Migration Decisions and the Theory of Planned Behavior

In 1985, Ajzen conceptualized the TPB, which has been broadly applied to predict and

explain human behaviors through sociocognitive scenarios (Ajzen, 1985, 1991). To date, it has

been widely used among health topics, such as smoking, drinking, and HIV prevention

behaviors. Furthermore, it has been shown to play a critical role in migration decision-making

(Lu, 1999; Yazdanpanah and Zobeidi, 2016; Willekens, 2017). Lu (1999) applied the TPB to

internal migration decision-making based on data drawn from the 1985–1989 waves of the

American Housing Survey. Lu's findings created a theoretical framework for better

understanding the complicated relationships among structural variables, residential satisfaction,

mobility intentions, and behavior. The research data suggested why individuals are inconsistent

in migration and verified that the theory of reasoned action (TRA) and the TBP are a useful

framework for explaining such inconsistencies. However, the TPB's application to international

decision-making still requires further confirmation. In 2008, Khoo, Hugo, and McDonald applied

the TPB to skilled immigrants in Australia to determine which would become permanent

residents. The research data showed that migrants with qualifications were less likely to want to

become permanent residents compared with migrants with no qualifications. Moreover, migrants without qualifications were not as quick as those with them to submit an application even though more of them had greater intention to become permanent residents. Notably, their research findings showed that migrants from South Africa and other regions were six times more likely than those from the United Kingdom and Ireland to intend to apply for permanent residency; by contrast, Americans, Japanese, and Europeans were respectively 74, 67, and 52% less likely than British and Irish citizens to intend to become permanent residents (Khoo, Hugo, and McDonald, 2008). However, a Chinese population was not included in their paper. A recent study (Yazdanpanah & Zobeidi, 2016) focused on attitude, perceived behavior control (particularly related to job opportunity), and satisfaction with the living situation in a destination, which are variables that impact migration intentions. However, the study targeted an Iranian population. Another study (Willekens, 2017) applied the TPB to migration decision-making by extending it to a process theory, in which the author specified a "*micro-simulation model of emigration decision-making.*" This model was validated by assessing to what extent the model appropriately predicted migrants' intentions and behaviors regarding international migration.

According to original TPB-constructs (Ajzen & Fishbein, 1980; Figure 1), intention is driven by the effects of three sociocognitive determinants: attitude (as personal in nature), subjective norm (reflecting social influence), and perceived behavioral control (PBC; dealing with issues of control). The three determinants are influenced by beliefs about the consequences of a behavior, normative expectations of other people, and the presence of factors that either facilitate or impede performance of the behavior (Ajzen and Fishbein, 2005). These relevant studies have suggested that intentions are effective predictors of future behavior, and have also invited deeper exploration as well as questions about whether intentions to move abroad lead to

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actual behaviors toward permanent migration. Prospective migrants not only require the resources to finance their move abroad but also must overcome formal barriers, such as obtaining visas, residence permits, and/or work permits—all legal documents that are increasingly difficult to obtain.

II.3 Attitude Toward Migration

Ajzen (1991, 188) stated that attitude toward a behavior raises the degree to which people have a favorable or unfavorable estimation of that behavior. Overall, more positive beliefs lead to positive attitudes and more negative beliefs lead to negative attitudes. Positive behavioral beliefs about migration would likely reflect benefits to one's future wellbeing, whereas negative behavioral beliefs would likely reflect detriments to it. Holding more positive beliefs basically drives the attitude toward migration in a positive way. This may be an outcome of a thorough assessment of possible outcomes of a behavior, but could also be tunnel vision because of others' biases. In the end, however, the beliefs that one holds will determine the attitude one possesses.

Although migration is definitely not easy, many are willing to deal with the obstacles and difficulties involved driven by a strong positive attitude that migration is beneficial to their future wellbeing. In other words, they believe migration is definitely a worthwhile behavior to pursue. Others may hold a negative attitude toward staying in the U.S. because of negative beliefs about their future there. Examining the specific behavioral beliefs of a particular group of immigrants at a specific timepoint provides insights into the critical driving beliefs that influence that group's behavioral intentions, which can be highly valuable and interesting. In the present study, examining these beliefs is one major goal.

A crucial belief known to be a driver in migration decisions is expectations surrounding potential financial wealth. According to the basic theory of migration, immigrants can be

assumed to make migration decisions driven by a belief in how much of a difference in utility can be gained from individual consumption sponsored by individual lifetime wealth. Notably, Van Dalen and Henkens (2013) indicated that the expectation of improved satisfaction with private goods is not the only driver for international migration, and furthermore, the quality of public goods or amenities play a critical role as well. By definition, public goods typically have two characteristics: (1) they are nonexcludable, which means that nobody should be excluded from using them; and (2) they are nonrivalrous, which means that an individual's use of the goods does not eliminate other people's ability to benefit from them.

Here, I adapted Van Dalen and Henkens' (2013) four dimensions of the public domain. In the U.S., I divided the quality of the public domain into four dimensions: (i) personal living conditions, a dimension driven by people's assessments of their homes, incomes, working environments, and relationships with social contacts; (ii) welfare systems, a dimension driven by people's expectations on the U.S.' social benefits, health care system, justice system, and retirement and pension system; (iii) the quality of environments, a dimension driven by people's assessments of the amount of green space and natural resources, level of pollution, and population density; and (iv) society issues, a dimension driven by people' of crime, noise pollution, and ethnic diversity levels. These dimensions provide a strong and rankings a priori categorization scheme for behavioral beliefs surrounding migration (i.e., What beliefs do people possess about outcomes in these areas as a function of migrating to the U.S.?). Conceivably, when people hold greater beliefs that outcomes in these categories will be more positive as a result of immigrating, they should have more positive attitudes toward immigration.

II.4 Social Norms for Migration

Social norms for migration are affected by individual normative beliefs that closest relatives approve of the migration. Research (Mincer, 1978; Stark and Bloom, 1985) has shown that migration decision-making is definitely impacted by immigrants' social networks, including family, friends, and colleagues; furthermore, it cannot be simply considered an individual process. Thoits (2011) stated that individuals who have strong ties among relatives in their home country have increased social and psychological confidence and would be less likely to migrate. In addition, Krieger (2005) revealed that strong ties to spouses and children were treated as an critical restrictions on migration decision-making; indeed, people without a spouse or family are more likely to migrate. Migrant networks have been well documented by some researchers (Massey, 1999; Epstein and Gang, 2006). The social network in an individual's home country might discourage migration. However, if an immigrant has a social network in the destination country, there would mostly likely be a greater possibility of migration because it makes him or her aware of the choice to migrate, and furthermore, that social network eventually provides helpful information to influence their migration decision-making.

Because of international immigrants' lack of social networks in the U.S. through strong ties, Leong and Tang (2016) discovered that they experienced a great deal of stress, including because of the immigration process itself, relocation, and settling in a strange community. In reality, it is very difficult for Chinese immigrants to find a job that is similar to their former occupations in China.

Generally, migration decision-making relies on immigrants' social networks both at home and in their destination countries. Most current research has focused on the effect of strong ties to the destination country because it has been shown to facilitate migration through offering

access to employment resources and necessary support upon the immigrant arriving (Munshi, 2003, 2014; Borjas, 1991). Not much research has been conducted on the effect of social networks in home countries. Morten (2015) indicated the impact of risk-sharing networks in home countries on temporary migrants' decisions toward permanent migration. Basically, strong risk-sharing networks can help them share the risk of temporary migration, which increases people's intention to leave their home country. By contrast, strong source networks in the destination country will not drive permanent migration if the migrant's family members (including spouses, significant others, children, and parents) are not included in the risk-sharing networks in the home country.

A recent study (Blumenstock, 2012) showed that migration rates have a positive relationship with the number of contacts a person has in a destination country, as well as with the frequency of interaction with those contacts. Similarly, the author's research model predicted that stronger networks in the home country will make a temporary migrant less likely to stay in the destination country, which is consistent with the findings of Munshi and Rosenzweig (2016). Their findings specified a consistently decreasing and almost linear relationship between migration rates and the strength of social networks in the home country. However, the impact of social networks on the immigration decisions of highly skilled Chinese immigrants is unclear, and further research is required to determine the degree to which various social groups (e.g., those with strong ties in the home community vs. strong or weak ties in the U.S.) have the most influence on an immigrant's intention toward permanent migration. In addition, discovering what those networks believe about migration decisions is critical. Theoretically, it is possible for a potential migrant to have a large network in China and no network in the U.S., but also to have all or nearly all of his or her social contacts believe that, based on that person's personal

circumstances known to those in the network, he or she should migrate to the U.S. because of a brighter future there. Conversely, a different potential immigrant may have a large network in the host country but, based upon the potential immigrant's personal circumstances known to those in the network, they may believe that he or she should not pursue immigration to the U.S. because the circumstances would not be more favorable compared to those in China.

II.5 Perceived Behavioral Control (PBC) over Migration

PBC was initially developed for the TRA as a primary factor in behaviors that are not completely under volitional control (Ajzen, 1985). Ajzen and Madden (1986) explained that PBC refers to a person's belief as to what extent he or she can control and perceive a given behavior.

Data from meta-analyses have implied that predictions of behaviors and intentions have improved when PBC was introduced to the TRA, contributing an increment of 5–13% of the difference in intentions (Armitrage and Conner, 2001; Godin and Kok, 1996; Munoz-Silva, Sanchez-Garcia, Nunes, and Martins, 2007; Sheeran and Taylor, 1999). Despite the increase in predictive power, several researchers have suggested that PBC is not well understood. Even though it seems like a unidimensional construct, items that are used to measure the PBC seem to be a mixture of different items (e.g., ease/difficulty, confidence, perceived controllability, and locus of control). This has led to several investigations into the dimensionality of this construct, whereby several researchers have presented evidence supporting that two distinct underlying components exist within this construct (Tavousi, Montzaru, Hidarnia, Hajizadeh, Taremain, and Haerimehrizi, 2014; Terry and O'Leary, 1995; White, Terry, and Hogg, 1994). This led Ajzen (2002) to reconceive PBC as an extensive construct with two different but relevant components: controllability and self-efficacy. Controllability refers to the perceived control and locus of control items, contemplating the extent to which a person recognizes the level of control over his

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or her behavior, whereas self-efficacy refers to perceived ease/difficulty and confidence levels. It often refers to the confidence and beliefs individuals hold about their capabilities to perform a particular behavior, including the confidence to overcome barriers to achieving a behavior (Bandura, 2001).

A review of several empirical studies suggested that controllability and self-efficacy can be clearly recognized among several behaviors, and evidently, self-efficacy has greater potential to controllability as a predictor of intentions and behaviors (Trafimow, Sheeran, Conner, and Finlay, 2002). Studies examining the distinction between the two have noted that they may have different impacts depending on the particular behavior to which they are applied (Pertl, Hevey, Thomas, Craig, Ni Chuinneagain, and Maher, 2010). In general, researchers have typically found evidence for a positive association between PBC and an individual's behavioral intentions.

Among international migrants, uncertainty about control over a migration decision may be high because they are most likely to start over from the beginning regardless of their skills, knowledge, and past work experience. When migrants moved to their destination country, they are required to adapt quickly to a new environment and establish a new social network. In this study, I tested how PBC, controllability, and self-efficacy among highly skilled Chinese immigrants influence their intention toward permanent migration. In addition, according to the updated migration policy of the U.S. (https://www.migrationpolicy.org/programs/us-immigration-policy-program),

> "*the current presidential administration has been working to reduce family-based*
> *immigration to the United States and limit legal immigrants' use of public benefits.*
> *The administration may be on the cusp of issuing a proposed rule that could do both*
> *at once, by dramatically expanding the list of public benefits that could lead to an*

immigrant being considered a 'public charge'. The proposed policy could disqualify

immigrants from obtaining legal permanent residence or seeking or renewing a

temporary visa if they or their legal dependents, including U.S. citizens, received one

or more of a broad range of public benefits."

Therefore, for the various abovementioned reasons, investigating whether highly skilled Chinese immigrants believe that they have better or worse control over migration is fascinating and crucial, as is investigating the extent to which these control beliefs are related to the intention to immigrate.

III THEORETICAL FRAMEWORK

Generally, human capital refers to the quantification of personal skillsets in economic value. Becker (1975) discovered that the most critical of these skillsets are driven by health, education, and training. Economic migration studies have raised the question of "*whether migration flows occur disproportionately among the skilled workforce of a source country.*" The theory of labor migration (Simarasl, 2016) indicated that highly skilled workers have higher intention to migrate than do unskilled workers. It is possible that this is a type of positive self-selection process. However, whether this self-selection occurs is not clear because it is subject to the income level in both the home and destination country, as well as all costs related to migration. According to the Organisation for Economic Co-operation and Development (OECD),

> "*Although other things being equal, those who have a high income more likely to be motivated to move from a country with a compressed income distribution to one that has a more unequal distribution. Given that the country with the compressed income distribution 'taxes' high-income workers and 'insures' low-income workers, high-income workers can escape high taxes by moving and benefit from the relatively low taxes in the destination country. Given that the inequality of income in the developing countries (e.g. China, India) is relatively low, positive selectivity would be expected in relation to moving to developed countries such as the USA, where income inequality is relatively high.*" (OECD, 2011, pp. 667).

Further research (Chiswick, 1999) discovered that compared with low-skilled workers, higher-skilled individuals are in a better position to regain the costs associated with migration quicker as well as to adapt to the new culture in the destination country (such as its language, norms, and rules).

I. HYPOTHESES & RESEARCH MODEL

The purpose of this study was to investigate highly skilled temporary Chinese immigrants' decision-making intentions and behaviors regarding becoming permanent residents of the U.S., which resulted in the following research question:

RQ: Why and how do highly skilled temporary Chinese migrants become permanent residents in the United States?

The theoretical framework was adopted from relevant research (Ajzen, 1991), and Figure 1 presents my research model.
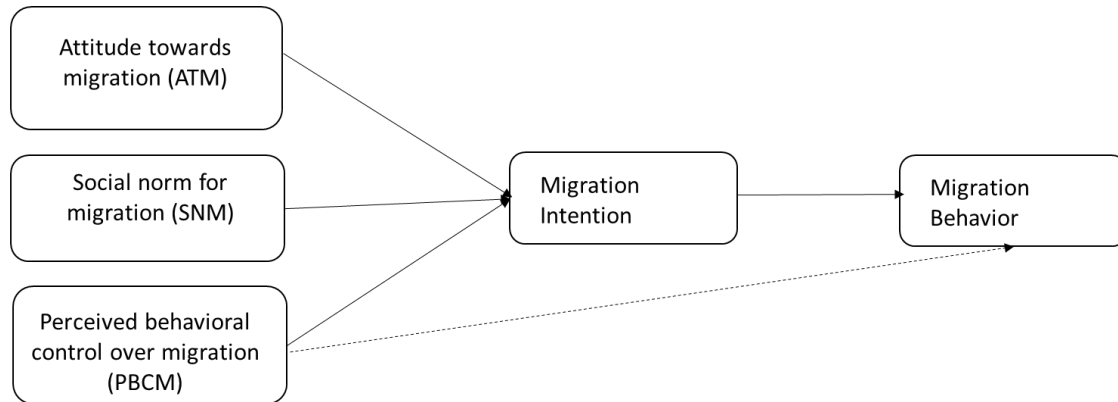
Figure 1: Research model (adapted from Ajzen, 1991)

Drawing on the aforementioned literature, this study proposed five hypotheses to be tested, which are introduced as follows.

Hypotheses 1: Attitude toward migration and migration intention

Supported by the TPB, this study hypothesized that positive behavioral beliefs about migration would likely reflect benefits to one's future wellbeing, whereas negative behavioral beliefs would likely reflect detriments to one's future wellbeing. Holding more positive beliefs basically drives attitudes toward migration positively. Thus, when people hold greater beliefs that the outcomes of becoming permanent residents in the United States will be more positive as

a result of completing an application for permanent residence, they should have more positive attitudes toward migration. Accordingly, this study proposed the following hypothesis:

1. Highly skilled temporary Chinese migrants' attitude toward becoming permanent residents in the United States has a positive relationship with their intention to complete an application for permanent residence (green card).

Hypothesis 2: Social norms for migration and migration intention

According to Ajzen (1991), people's social norms can be a predictor of their intentions and behaviors. Social norms for migration are affected by individuals' normative beliefs that their closest relatives approve of their migration. Generally, migration decision-making relies on migrants' social network in both their home and destination countries. Accordingly, this study proposed the following hypothesis:

2. Highly skilled temporary Chinese migrants' social norms have a positive relationship with their intention to complete an application for permanent residence (green card).

Hypothesis 3: PBC over migration and migration intention

PBC refers to people's belief over to what extent they can control and perceive a given behavior. If migrants believe that they have higher control over migration, they will most likely have a greater intention to migrate. If migrants believe that becoming permanent residents in the United States is easy for them to achieve, they will have a higher intention to complete the application in the United States. Therefore, this study proposed the following hypothesis:

3. Highly skilled temporary Chinese migrants' PBC has a positive

relationship with their intention to complete an application for permanent residence (green card).

Hypothesis 4: Migration intention and migration behavior

Supported by TPB theory, this study hypothesized that migrants with higher migration intention would be more likely to take behavioral actions toward migration. Therefore, the highly skilled Chinese migrants with higher migration intention in this study will take more actions toward completing an application for permanent residency. Accordingly, this study proposed the following hypothesis:

4. Highly skilled temporary Chinese migrants' intention to complete an application for permanent residency (green card) has a positive relationship with their behavioral actions toward completing an application for permanent residency.

Hypothesis 5: Perceived behavioral control over migration (PBCM) and migration behavior

Based on the TPB, one could hypothesize that migrants with higher PBCM would take greater behavioral actions toward migration. Therefore, in the context of this study, highly skilled temporary Chinese migrants with higher PBCM will be more likely to take actions toward completing an application for permanent residency. Accordingly, this study proposed the following hypothesis:

5. Highly skilled temporary Chinese migrants' PBCM has a positive relationship with their behavioral action taken toward completing an application for permanent residency

IV DESIGN AND METHODOLOGY

IV.1 Research Model Design

I employed a correlational quantitative design in seeking to test for a statistically significant relationship between the attitude toward migration, social norms for migration, PBCM, migration intention, and migration behavior. A correlational research design was appropriate for this study because there was to be no manipulation of variables or use of a controlled experimental research setting. Numerical data were collected through an online survey to test the hypotheses of the relationships of predetermined variables based on sound theory that applied well to a practical question.

IV.2 Study Participants

Participants were recruited by an online research panel managed by Qualtrics, a leading research and experience software company. Qualtrics did not have any existing panels of survey participants who might be suitable for my online survey, and thus, they recruited participants by utilizing panel vendors. Qualtrics sent an invite to each prequalified participant's email address, which was provided upon confirmation of becoming a panelist. Qualtrics recruited a broad, national sample and verified the validity of the panelists' information.

A power analysis was conducted using the G*Power software package, which is a statistical power analysis program designed to analyze types of power and compute sample sizes for different statistical analyses. The sample size was computed based on the different factors of Cohen's effect size, alpha level, and power of the study. As shown in Appendix A, an a priori correlation power analysis was selected with a power of .95, an alpha level of 0.05, and a medium effect size of .25; the total sample size computed was 197.

The study population included individuals who are: (1) Chinese citizens; (2) have at least a

bachelor's degree; and (3) were/are holding a temporary F1 student visa in the U.S.. The

respondents were required to complete three qualifying questions at the beginning of the survey

to verify that they met the inclusion requirements. If they did not, then they were excluded from

the study and could not continue with the survey.

Qualtrics compensated each participant with US$1.50, which was paid to Qualtrics by the

researcher. Participants were compensated upon successful completion of the survey and failure

to complete the survey resulted in no compensation.

IV.3 Instruments and Variables

Qualifying questions for pre-screening

As previously mentioned, whether participants met the inclusion criteria was

determined using three qualifying questions at the start of the survey. Survey participants were

asked the following three questions:

Q1 Are you a Chinese citizen?

○ Yes (1)

○ No (2)

Q2 Do you at least have a bachelor's degree?

○ Yes (1)

○ No (2)

Q3 Are/were you holding an F1 visa?

○ Yes (1)

○ No (2)

If participants selected "Yes" for Qualifying Question 1, they were directed to Qualifying

Question 2 to inquire about their degree to ensure the definition of highly skilled. If participants

selected "No" for Qualifying Question 1, they were directed to the end of the survey. If

participants selected "Yes" for Qualifying Question 2, the participants were directed to Question

3; if they selected "No," they were directed to the end of the survey. For Question 3, if

participants selected "Yes," they were directed to the actual sections of survey questions;

otherwise, they were directed to the end of the survey. However, the disqualified participants

were removed from the respondent sample and were not included in the analysis of this study.

Dependent variables

1. Migration Intention (MI) - Intention to Apply for Permanent Residence

I examined the highly skilled Chinese temporary migrants' intention to apply for permanent

residence using their response to the following survey question: "Do you intend to complete an

application for permanent residence in the United States?" Migrants' responses were recorded as

one of the following options (scale of 1 to 5): (1) No, I am absolutely certain that I will not

complete an application; (2) No, I am reasonably certain that I will not complete an application;

(3) I haven't made a decision yet; (4) Yes, I am reasonably certain that I will complete an

application; and (5) Yes, I am absolutely certain that I will complete an application.

2. Migration Behavior (MB) - Behavioral Steps toward Completing an Application

I investigated the highly skilled Chinese temporary migrants' step-by-step behavior driven

by their intention by asking them the following serial survey questions (based on the general

application process for permanent residence application https://www.uscis.gov/greencard): (1)

Have you found an employer who can sponsor your application for permanent residence in the

United States? (2) Have you completed the immigration medical exam? (3) Have you filed Form

I-140 (Immigrant Petition for Alien Worker) or Form I-130 (Petition for Alien Relative)? (4)

Have you filed your Form I-485 (Application to Register Permanent Residence or Adjust

Status)? (5) Have you filed Form I-765 (Application for Employment Authorization)? (6) Have

you been notified about biometrics services appointment at a local Application Support Center to

provide your fingerprints, photograph, and/or signature? (7) Has an interview been scheduled for

you at a USCIS office? (8) Are you still waiting on the status of your Form I-485?" The last

question recorded a final decision about their application through asking them: (9) Has a decision

been made about your application for permanent residence in the United States?

Independent variables

1. Attitude Towards Migration (ATM)

This was measured by the following survey questions regarding respondents' beliefs toward

migration concerning improved satisfaction with private and public goods or public amenities in

the U.S.. There were 28 survey questions to cover the four dimensions (including 14 indicators):

(i) "If I migrate to the United States, I believe that my satisfaction with my personal living

conditions will be improved (four indicators), which include home, income, working

environment, and relationships with social contacts." (ii) "If I migrate to the United States, I

believe that my satisfaction with the welfare system will be improved (four indicators), which

includes social benefits, the health care system, justice system, and retirement and pension

system." (iii) "If I migrate to the United States, I believe that my satisfaction with the quality of

the environment will be improved (three indicators), which includes the amount of green space

and natural resources, the level of pollution, and population density." (iv) "If I migrate to the

United States, I believe that my satisfaction with society issues will be improved (three

indicators), which includes the levels of crime, noise pollution, and ethnic diversity."

A seven-point scale was used to score migrants' responses to each indicator regarding their beliefs about migrating permanently to the U.S.: 1 = Very strongly disagree, 2 = Strongly disagree, 3 = Disagree, 4 = Neither agree nor disagree, 5 = Agree, 6 = Strongly agree, and 7 = Very strongly agree. Then, another seven-point scale was used to score how favorable each indicator was to the migrants: 1 = Not favorable, 2 = Minimally favorable, 3 = Somewhat favorable, 4 = Favorable, 5 = Very favorable, 6 = Highly favorable, and 7 = Extremely favorable. At the end, the following ranking question was asked to score migrants' responses to the importance of each dimension: "Please rank in order the following in terms of the importance of each category of outcome to you, where 1 is the most important outcome to you on the list and 4 is the least important. You must assign each rank (1, 2, 3, or 4) only once in the list below. Assign 1 as your most important outcome, 2 as your second most important outcome, and so on."

2. Social Norms for Migration (SNM)

This was measured by household composition and social networks (including family/relatives, friends, and professional contacts) in the U.S.. Two measurements were assessed for household composition: (1) marital status and (2) number of children, which were measured by the response to the question "How many children are in your household?" Furthermore, the social networks were measured by using the following questions: (i) "Do you have any immediate family members who have migrated to the United States? If so, how many?" (ii) "Do you know any friends who have migrated to the United States? If so, how many?" (iii) "Do you have any professional contacts who can help your career development in the future and are living in the United States? If so, how many?" A seven-point scale was used to assist the respondents in clarifying how strong their social networks' opinions are. "To what extent do you agree with the following statements? (i) Your immediate family members think it is better for

you to migrate permanently to the United States. (ii) Your friends think it is better for you to migrate permanently to the United States. (iii) Your professional contacts think it is better for you to migrate permanently to the United States. 1 = Very strongly disagree, 2 = Strongly disagree, 3 = Disagree, 4 = Neither agree nor disagree, 5 = Agree, 6 = Strongly agree, and 7 = Very strongly agree. Furthermore, another seven-point scale was used to assess how important their social networks' opinions are to them. The questions were as follows: (i) "Regarding your decision-making about migrating permanently to the United States, please rate the importance of the opinions of your immediate family members." (ii) "Regarding your decision-making about migrating permanently to the United States, please rate the importance of the opinions of your friends." (iii) "Regarding your decision-making about migrating permanently to the United States, please rate the importance of the opinions of your professional contacts in the United States." 1 = Extremely unimportant, 2 = Highly unimportant, 3 = Unimportant, 4 = Neither important nor unimportant, 5 = Important, 6 = Highly important, and 7 = Extremely important.

3. Perceived Behavioral Control over Migration (PBCM)

I used six items with a seven-point scale to measure two indicators of PBCM: controllability and self-efficacy (SE). These items were modified from Manstead and Van Eekelen (1998). The first three were designed to measure controllability: (i) "Migrating permanently to the United States is easy for me." [from "very strongly disagree" (1) to "very strongly agree" (7)]; (ii) "Whether or not I migrate permanently to the United States is completely up to me" [from "very strongly disagree" (1) to "very strongly agree" (7)]; and (iii) "How much control do you have over your migration permanently to the United States?" [from "none" (1) to "complete" (7)]." Next, another set of three items were designed to measure SE: (i) "I am certain that I can migrate permanently to the United States." [from "very strongly disagree" (1) to "very strongly agree"

(7)]; (ii) "How confident are you that you will migrate permanently to the United States?" [from "not at all" (1) to "a great deal2 (7)]; and (iii) "There is a lot that I can do to be sure of migrating permanently to the United States." [from "very strongly disagree" (1) to "very strongly agree" (7)].

Demographics Questionnaire

A general questionnaire was utilized to collect demographics variables such as age, sex, years of living in the U.S., major, and marital status. Also, education and health were measured. Here, education referred to the highest attained level of degree. The category options were college degree/bachelor's degree, master's degree, and PhD, MD, or advanced college degree beyond masters. Health status was assessed by responses to the question "How do you rate your health status in general?": (1) very bad, (2) reasonably bad, (3) not good/not bad, (4) reasonably good, and (5) very good. Health was treated as an ordinal variable. A copy of the survey can be found in Appendix D.

IV.4 Data Collection

Informed Consent. Before starting the survey, respondents were provided with an informed consent form that provided notification that (a) participation could be terminated at any time; however, early termination would result in not receiving payment; (b) no compensation was being provided to the researcher; (c) no deception would be used in the study; and (d) their information would remain confidential within the limits of the online Qualtrics system. Subjects provided their informed consent by continuing with the survey and were given the option to print a copy of the form for record-keeping purposes. If subjects did not agree to provide their informed consent, the survey session terminated, and the subjects could not continue. A copy of the informed consent form can be found in Appendix C.

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Allotted Completion Time. Respondents were provided unlimited time to complete the survey; however, it was estimated that the survey would take approximately 10–15 minutes to complete.

Data Collection and Storage. The survey responses were collected via the Qualtrics online survey platform and respondents were not personally linked to any identifying information. The collected data were downloaded by a Qualtrics project manager and were sent electronically to the researcher as an Excel file that was stored in an online Qualtrics account.

IV.5 Data Analysis

A set of steps were completed prior to conducting the statistical analysis (Figure 2).
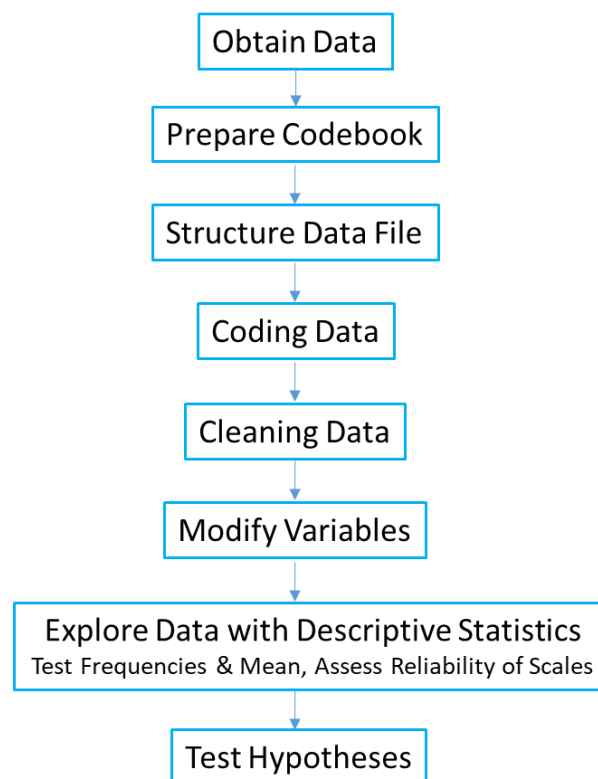
Figure 2: Process of data preparation and analysis

Coding Data. A codebook was prepared to provide a summary of the instructions utilized to convert the raw data obtained from each participant into a format that could be understood by the SPSS statistical software package. Preparing the codebook required defining and labeling

each variable and assigning numbers to each possible response. Each survey question had a unique variable name and each participant was assigned a unique identifying number. Thus, if an error was found in the dataset, the identification numbers would assist the researcher in locating and correcting the data error. Upon completion of the codebook, the researcher assigned the proper coding to each survey question and prepared the data in Microsoft Excel in preparation for importing into SPSS.

Cleaning Data. After importing the data into SPSS, the data were reviewed for errors, which were subsequently corrected. Minimum and maximum values were reviewed for categorical and continuous data, and mean scores were reviewed for continuous data. Invalid or missing cases were removed based on the impact of the missing data. For example, if respondents' friends' opinions about their migration to the U.S. were missing, the case was removed because statistical analysis related to social norms would not be possible without them.

V RESULTS

V.1 Statistical Analysis of Research Model

Qualified Respondents. In total, the survey received 312 responses. However, 82 (27%) were disqualified because of respondents not consenting, not completely meeting the qualification criteria, and submitting partial responses, leaving N = 230. The number was determined to have adequate power to test the hypotheses. Table 2 presents frequency scores for the qualified respondents.

Table 2: Frequency scores for the qualified respondents

Total Survey Respondents Received	312
Distribution Channel_Pre-reviewed	8
Non-Consented	21
Non-Chinese Citizens	19
Non-BS Degree	14
Non-F1 Visa	4
Non-Completed	16
Total Qualified Respondents (N)	**230**

Demographic Data. Their most popular age range was 25-34 years (50%), and 51% were male. In terms of marital status, 52% themselves classified as married and 42% as never married (with the remainder being classified as "divorced" or "separated" or "widowed"). Among the married participants, 84% of their spouse was U.S. citizen. Regarding the highest degree, 40% were college graduates, 38% have graduate degrees, and 22% have PhD, MD or advanced college degree beyond masters. 46% themselves claimed as "very good" health condition, 36% claimed as "reasonably good" health condition, and others were either "not good/not bad" (10%), "reasonably bad" (4%) or "very bad" (4%). Regardless of their marital status, 119 (52%) out of 230 have children. Tables 3 below show the demographic characteristics of highly skilled Chinese temporary migrants and their migration behavior per intention to migrate.

Table 3: The demographic characteristics of highly skilled Chinese temporary migrants with their migration intention (MI) and migration behavior (MB %completed)

Demograhic Variables		MI					MB (%Completed)								
		No, I am absolutely certain that I will not complete an application.	No, I am reasonably certain that I will not complete an application.	I don't have a decision yet.	Yes, I am reasonably certain that I will complete an application.	Yes, I am absolutely certain that I will complete an application.	0.00%	12.50%	25.00%	37.50%	50.00%	62.50%	75.00%	87.50%	100.00%
Sex	Female	2%	11%	22%	39%	27%	5%	4%	4%	6%	7%	18%	14%	14%	28%
	Male	9%	7%	20%	37%	27%	5%	3%	3%	5%	6%	9%	11%	19%	38%
How long have you been in the United States?	1-2 years	3%	14%	24%	38%	22%	8%	0%	5%	5%	11%	22%	5%	16%	27%
	3-4 years	5%	7%	18%	46%	23%	2%	2%	2%	5%	5%	21%	13%	18%	32%
	4-6 years	4%	12%	27%	31%	27%	8%	4%	6%	8%	12%	4%	14%	14%	29%
	6-8 years	9%	3%	13%	50%	25%	3%	0%	6%	0%	0%	9%	22%	16%	44%
	8-10 years	3%	10%	28%	31%	28%	7%	10%	0%	10%	3%	14%	3%	14%	38%
	more than 10 years	7%	4%	15%	26%	48%	4%	7%	0%	4%	4%	7%	19%	22%	33%
What's your marital status?	Divorced	0%	25%	0%	25%	50%	0%	0%	0%	0%	0%	0%	25%	25%	50%
	Married	4%	7%	18%	38%	34%	3%	4%	4%	8%	3%	8%	13%	21%	35%
	Never married	4%	9%	25%	40%	22%	9%	3%	3%	4%	10%	18%	12%	10%	30%
	Separated	25%	25%	38%	13%	0%	0%	0%	0%	0%	13%	50%	0%	0%	38%
	Widowed	50%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%
If you are married, is your spouse U.S. citizen?	Never married/Divorced/Separated/Widowed	6%	11%	24%	38%	21%	8%	3%	3%	4%	10%	19%	12%	12%	31%
	No	0%	12%	4%	35%	50%	8%	8%	8%	4%	8%	0%	27%	15%	23%
	Yes	5%	5%	22%	39%	29%	1%	3%	3%	9%	2%	11%	10%	23%	39%
How many children are in your household?	0	5%	8%	25%	36%	25%	7%	4%	5%	7%	7%	16%	13%	15%	25%
	1	9%	12%	16%	30%	33%	5%	4%	2%	2%	9%	12%	9%	18%	40%
	2	2%	6%	17%	47%	28%	2%	4%	2%	8%	4%	8%	13%	21%	40%
	3	0%	11%	22%	56%	11%	0%	0%	0%	0%	0%	22%	33%	0%	44%
What is your highest education degree?	College graduate	9%	5%	18%	45%	23%	6%	4%	2%	6%	11%	12%	11%	14%	33%
	Masters degree	2%	11%	29%	30%	28%	6%	1%	5%	6%	6%	15%	10%	18%	33%
	PhD, MD, or Advanced College Degree beyond Masters	4%	10%	12%	38%	36%	2%	6%	4%	4%	0%	14%	20%	18%	32%
How do you rate your health status in general?	Very bad	56%	11%	33%	0%	0%	0%	0%	0%	11%	11%	22%	11%	0%	44%
	Reasonably bad	11%	44%	33%	11%	0%	11%	0%	11%	11%	11%	22%	0%	11%	22%
	Not good/not bad	9%	9%	55%	14%	14%	9%	0%	0%	14%	0%	18%	9%	14%	36%
	Reasonably good	1%	10%	16%	57%	17%	6%	5%	7%	4%	13%	14%	12%	16%	23%
	Very good	3%	5%	16%	34%	43%	4%	4%	1%	5%	2%	10%	15%	20%	40%

Descriptive Statistics. Descriptive statistics were utilized to summarize the population

sample and study variables and can be found in table 4 (shown at the construct level). In

Appendix B, a detailed description of each measurement is listed, along with frequency

percentage and descriptive statistics of measurements.

Table 4: Descriptive statistics of scales

	N	Minimum	Maximum	Mean	Std. Deviation
ATM	230	1.00	49.00	24.28	13.32
SNM	230	1.00	49.00	23.98	13.27
PBCM	230	1.00	7.00	4.39	1.52
MI	230	1.00	5.00	3.73	1.11
MB (%Completed)	230	0.00%	100.00%	72.07%	29.75%

To review the detailed scores of each subscale, the histogram graph of frequency for

individual subscale is provided as follows (Figure 3). The frequencies were distributed normally

for each scale. For instance, regarding the ATM's subscale for the dimension of personal living

conditions under the construct of ATM, total of 20 scores (ranging from 1 to 49) were computed

in the following sequence: first, extracting each indicator's score for behavioral beliefs about

outcomes of migration and favorability of the migration outcomes from the responses of the

eight (8) survey questions (Q8,10,12,14 were to measure the behavioral beliefs about outcomes

of migration for 4 indicators, and Q9,11,13,15 were to measure favorability of the migration

outcomes for 4 indicators; referring to Appendix D: Survey); second, multiplying the score of

behavioral beliefs with the score of favorability for each indicator; the last, averaging the scores

obtained from step #2 for 4 indicators.
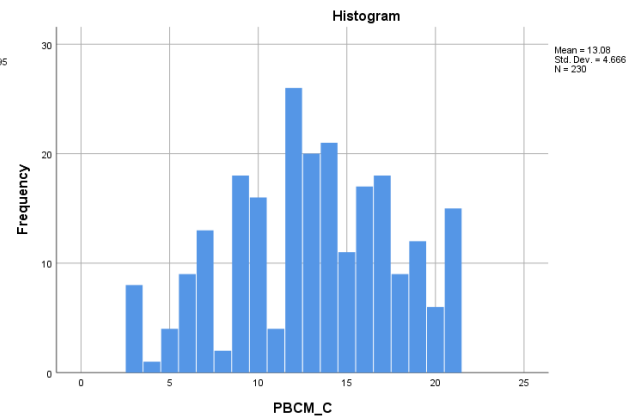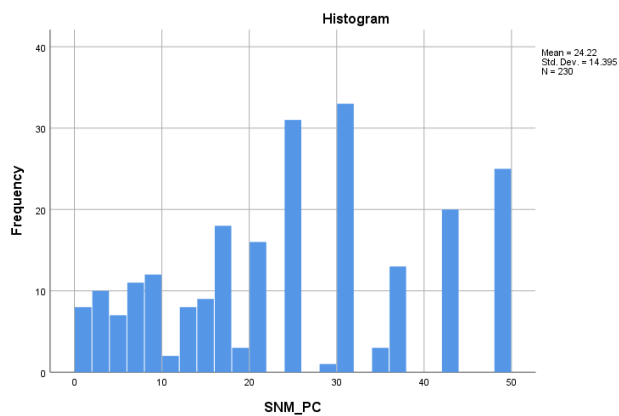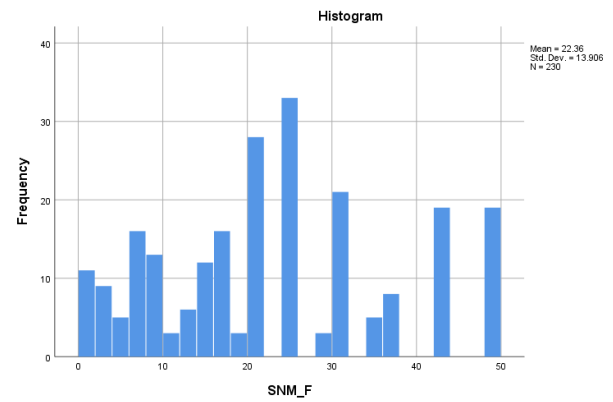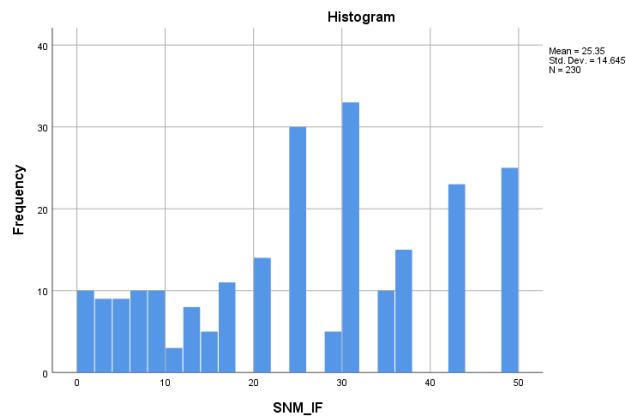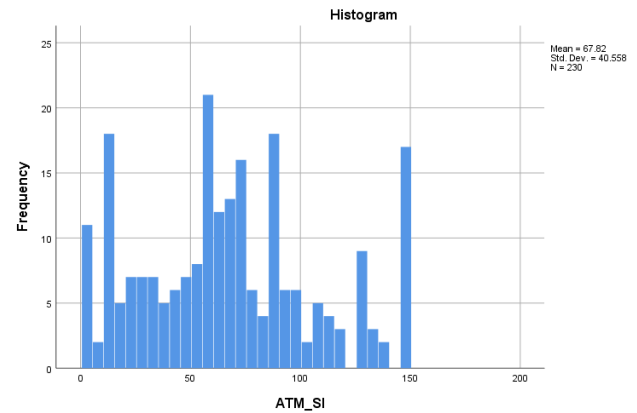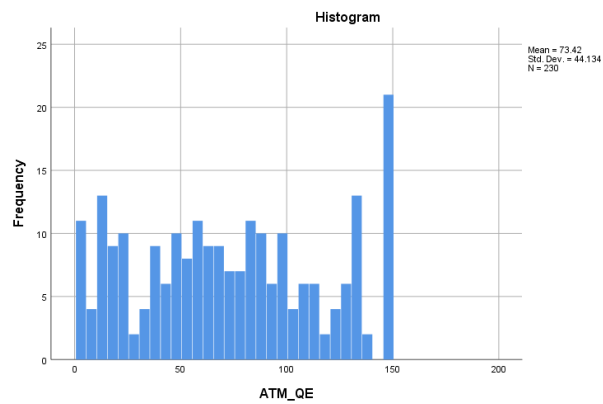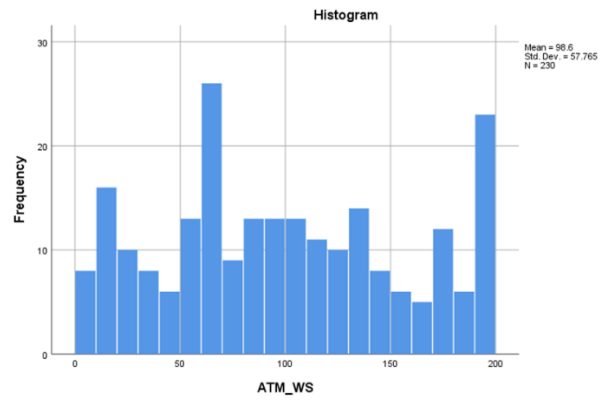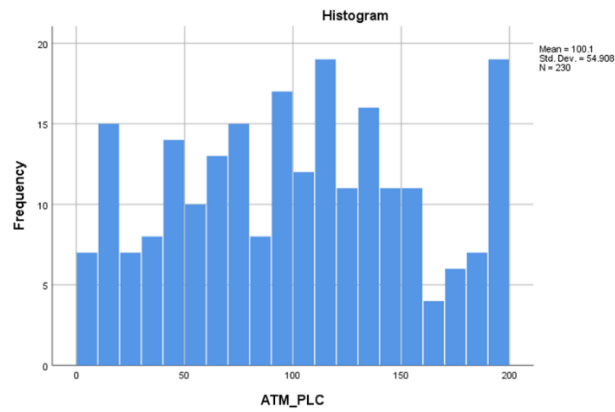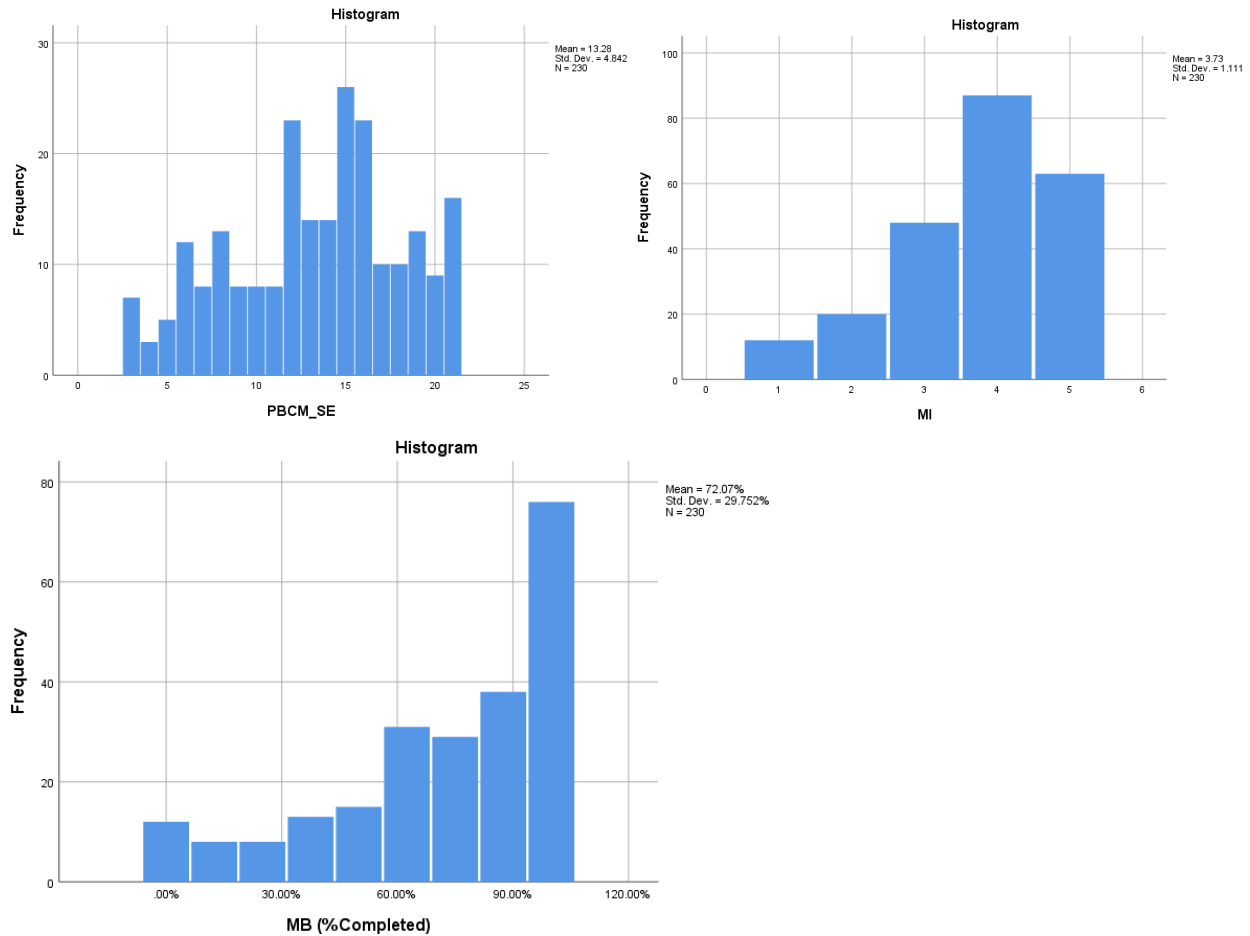
Figure 3: The histogram graph of each tested subscale

Scale Reliability and Validity. Multiple scales were utilized in this study, and therefore, specific analysis was conducted to ensure the scales' reliability and internal consistency. Internal consistency was determined using the Cronbach's alpha coefficient, with a value of .7 or above demonstrating strong internal consistency (DeVellis, 2012). Scale reliability was calculated for the following 12 scales and subscales (including 3 scales and 9 subscales from those 3 scales: ATM, SNM and PBCM): attitude toward migration (ATM) scale, ATM–personal living conditions subscale, ATM–welfare systems subscale, ATM–the quality of environments subscale, ATM–society issues subscale; social norms for migration (SNM) scale, SNM–immediate family members subscale, SNM–friends subscale, SNM–professional contacts

subscale; perceived behavioral control over migration (PBCM) scale, PBCM–controllability

subscale, and PBCM–self-efficacy subscale. Cronbach's alpha values were considered to be a

measure of scale/subscale reliability, and are a measure of internal consistency that demonstrates

how closely related a set of items are as a group (DeVellis, 2012). As shown in Table 5, the

Cronbach's Alpha value of all scales and subscales is above .8, suggesting very good internal

consistency reliability for the scale with the sample. MI and MB are not included because each

of them had only one single question.

Table 5: Reliability and validity analysis of the scales and subscales

Scales and Subscales/Indicators	Cronbach's Alpha	Number of Items
ATM (Attitude toward Migration)	.959	4
ATM_Personal Living Conditions	.926	4
ATM_Personal Living Conditions_Home	.858	2
ATM_Personal Living Conditions_Salary	.856	2
ATM_Personal Living Conditions_Working conditions	.873	2
ATM_Personal Living Conditions_Relationship with social contacts	.819	2
ATM_Welfare Systems	.953	4
ATM_Welfare Systems_Healthcare quality	.849	2
ATM_Welfare Systems_Social benefits	.890	2
ATM_Welfare Systems_Law and order	.888	2
ATM_Welfare Systems_Pension system	.876	2
ATM_Quality of Environments	.928	3
ATM_Quality of Environments_Pollution	.893	2
ATM_Quality of Environments_Natural resources	.872	2
ATM_Quality of Environments_Population density	.872	2
ATM_Society Issues	.861	3
ATM_Society Issues_Crime level	.830	2
ATM_Society Issues_Noise pollution	.868	2
ATM_Society Issues_Ethnic diversity	.801	2
SNM (Social Norms for Migration)	.919	3
SNM_Immediate family members	.883	2
SNM_Friends	.818	2
SNM_Personal contacts	.889	2
PBCM (Perceived Behavioral Control over Migration)	.919	2
PBCM_Controllability	.865	3
PBCM_Self-Efficacy	.911	3

Scale Correlation Analysis. A series of correlation analysis were conducted between all the subscales described as above, which includes four dimensions of ATM (personal living conditions, welfare system, quality of environments, society issues), three aspects of SNM (immediate family members, friends, professional contacts) and two components of PBCM (controllability, self-efficacy).

Here is the detailed information regarding the computation of composite scores for each construct (ATM, SNM and PBMC). ATM construct was measured by four different dimensions - personal living conditions (8 questions for 4 indictors – referring to Q8 to Q15), welfare systems (8 questions for 4 indicators – referring to Q16 to Q23), the quality of environments (6 questions for 3 indicators – referring to Q24 to Q29), society issues (6 questions for 3 indicators – referring to Q30 to Q35). Each of the measurement was computed by multiplying the behavioral beliefs about the consequences of migration with favorability of the consequences of migration. Then, the final scores for ATM was the average of the above four dimensions. For example, regarding ATM-society issues subscale, 6 survey questions (Q30 to Q35) for 3 indicators (including crime levels, noise pollution and ethnic density) were developed, referring to Appendix D – Survey. Three of the questions (Q30, Q32 and Q34) were designed to measure the behavioral beliefs about the consequences of migration, such as Q30 "*If I migrate permanently to the United States, I believe that the communities in which I live will have a lower crime level.*". Another set of three questions (Q31, Q33 and Q35) was meant to measure favorability of the consequences of migration. For instance, aligning with Q30, Q31 was developed to measure the respondent's favorability by asking "*How favorable would it be to you to live in communities which will have a lower crime level?*".

The results shown in table 6 reveal a statistical significance ($p<0.01$ or $p<0.05$), demonstrating high correlation between each subscale measurement. Therefore, it can be confidently concluded that the subscales under each construct are related to one another as might be expected within the theory: ATM, SNM and PBCM.

Table 6: Correlation analysis between all the subscales of ATM, SNM, PBCM, MI and MB

Measure	1	2	3	4	5	6	7	8	9	10
1.ATM_Personal living conditions										
2.ATM_Welfare systems	.865**									
3.ATM_Quality of environments	.826**	.874**								
4.ATM_Society issues	.827**	.871**	.865**							
5.SNM_Immediate family members	.792**	.810**	.778**	.822**						
6.SNM_Friends	.709**	.754**	.679**	.779**	.809**					
7.SNM_Professional contacts	.713**	.759**	.742**	.763**	.759**	.801**				
8.PBCM_Controllability	.592**	.643**	.625**	.687**	.692**	.737**	.701**			
9.PBCM_Self-efficacy	.701**	.696**	.679**	.728**	.763**	.777**	.746**	.817**		
10.Migration Intention (MI)	.595**	.647**	.654**	.677**	.693**	.635**	.647**	.589**	.668**	
11.Migration Behavior (MB)	.143*	.106	.077	.172**	.080	.174**	.161*	.202**	.200**	.085

Note: **Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

Multiple Regression Analysis. Hierarchical multiple regression was used to assess the ability of three independent variables (ATM, SNM, and PBCM) to predict MI (DV) among the highly skilled temporary Chinese migrants. Also, hierarchical multiple regression was applied to evaluate the ability of two independent variables (PBCM and MI) to predict MB (DV) among highly skilled temporary Chinese migrants. The Table 7. model summary shows each of three

independent variables (ATM, SNM, PBCM) has a significantly positive relationship with MI, and

PBCM has a significantly positive relationship with MB. However, the MI Scale had no significant

relationship with MB.

Table 7: Model summary and coefficients analysis

Model	R	Adjusted R^2	F Change	Sig. F Change	Standardized Coefficients Beta	t	Sig.	VIF
1[a]	0.731	0.528	86.236	0.000**		11.969	0.000**	
ATM					0.233	2.560	0.011*	4.015
SNM					0.336	3.048	0.003**	5.906
PBCM					0.207	2.519	0.012*	3.278
2[b]	0.223	0.041	5.913	0.003**		8.424	0.000**	
MI					-0.095	-1.105	0.270	1.772
PBCM					0.274	3.176	0.002**	1.772

a. Dependent Variable: MI; b. Dependent Variable: MB; *.p<0.05, **.p<0.01

The total variance explained by the model as a whole (referring model 1 in table 7) was

52.8%, F (3,226) = 86.236, $p < .01$. In model 1, all three independent variables (ATM, SNM and

PBCM) were statistically significant, with the SNM Scale recording a higher beta value (beta

= .336, $p < .01$) than the PBMC Scale (beta = .207, $p < .01$) and ATM Scale (beta = .233, p

< .05).

Multicollinearity of Scales. Multicollinearity was assessed to determine whether or not

there was a high correlation of at least one independent variable in combination with other

independent variables, and was measured by variance inflation factors (VIF) and tolerance (Hair

et.al, 2010). If VIF values exceed 10.0 or have tolerance less than 0.1, then there is a problem

with multicollinearity (Hair et. al, 2010). As shown in Table 7, all VIF values were between 0.1

and 10.0.

V.2 Results of The Hypotheses Analysis

The statistical analysis of the research model supported that the model was valid and it could be used to assess the hypotheses. Table 8 provides a summary of the results of the hypotheses analysis.

Table 8: Results of the hypotheses analysis

	Result
Hypotheses 1: Attitude toward migration and migration intention	
1. The highly skilled Chinese migrants' attitude toward becoming permanent residents in the United States has a positive relationship with their intention to complete an application for permanent residence (green card).	Supported (p<.05)
Hypothesis 2: Social norms for migration and migration intention	
2. The highly skilled Chinese migrants' social norms have a positive relationship with their intention to complete an application for permanent residence (green card).	Supported (p<.01)
Hypothesis 3: Perceived behavioral control over migration and migration intention	
3. The highly skilled Chinese migrants' perceived behavioral control over migration has a positive relationship with their intention to complete an application for permanent residence (green card).	Supported (p<.01)
Hypothesis 4: Migration intention and migration behavior	
4. The highly skilled Chinese migrants' intention to complete an application for permanent residency (green card) has a positive relationship with their behavioral action toward completing an application for permanent residency.	Not Supported (p>.05)
Hypothesis 5: Perceived behavioral control over migration and migration behavior	
5. The highly skilled temporary Chinese migrants' PBCM has a positive relationship with their behavioral action toward completing an application for permanent residency.	Supported (p<.01)

Hypotheses 1: ATM and MI

1. The highly skilled Chinese migrants' attitude toward becoming permanent residents in the United States has a positive relationship with their intention to complete an application for permanent residence (green card).

The migrants' attitude toward becoming permanent residents in the U.S. had a positive and significant relationship with their intention to complete an application for permanent residence (green card), thereby supporting Hypothesis 1. Furthermore, to investigate which indicator under each subscale of ATM has the most impact on MI among highly skilled Chinese temporary migrants, supplementary multiple regression analysis was applied in Appendix E. It shows that, at the dimension level, the outcome that had the strongest relationship with intentions (highest overall R-squared) included indicators of improving society issues (including crime level, noise pollution, and ethnic density). The lowest overall R-squared was for personal living conditions.

Hypothesis 2: SNM and MI

2. The highly skilled Chinese migrants' social norms have a positive relationship with their intention to complete an application for permanent residence (green card).

The migrants' social norms for becoming permanent residents in the U.S. had a positive and significant relationship with their intention to complete an application for permanent residence (green card), thereby supporting Hypothesis 2. Further analysis was performed to find out which social opinion matters the most to the highly skilled Chinese migrants. The data representing in Appendix E suggests that both groups of immediate family members and personal contacts had the highest relationship to intentions to migrate permanently to the U.S.. Apparently, the opinion from these two groups of social network matter the most to the highly skilled Chinese migrants.

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Hypothesis 3: PBCM and MI.

3. The highly skilled Chinese migrants' PBCM has a positive relationship with their intention to complete an application for permanent residence (green card).

The present results suggest that the migrants' PBCM had a positive and significant relationship with their intention to complete an application for permanent residence (green card), thereby supporting Hypothesis 3. Further analysis (referring to Appendix E) was pursued to determine which component (controllability or self-efficacy) has more impact on their migration intention. Based on the data in Appendix, self-efficacy (beta=.615, p<0.01) had a significant effect while controllability (beta=.085, p>.05) did not. This suggests self-efficacy was more important as a predictor.

Hypothesis 4: MI and MB

4. The highly skilled Chinese migrants' intention to complete an application for permanent residency (green card) has a positive relationship with their behavioral action toward completing an application for permanent residency.

The results show that no relationship existed between the migrants' intention to complete an application for permanent residency (green card) and their behavioral action toward completing an application for permanent residency, and thus, Hypothesis 4 was not supported. That is, the migrants' intention by itself was not sufficient to predict their behavioral action toward completing an application.

Hypothesis 5: PBCM and MB

5. The highly skilled temporary Chinese migrants' PBCM has a positive, significant relationship with their behavioral action toward completing an application for permanent residency.

As shown in table 7, the migrants' PBCM had a positive and significant relationship with their behavioral action toward completing an application for permanent residency, thereby supporting Hypothesis 5.

Given the surprising results for the relationship between PBCM and MI and MB, I conducted a supplementary test of a possible moderating effect of PBCM in between MI and MB. Therefore, against the relationship between PBCM and MB in the traditional TPB theory, it was calculated by using cross-product of the predictor PBCM and MI (modified variable: PBCMxMI) to study PBCM's moderator effect. The results presented in Appendix F suggests a significant interaction effect, which indicates the perceived behavioral control moderates the relationship between migration intention and migration behavior. In order to interpret the nature of this interaction effect, two steps were taken. First, the sample was split into two groups. One group (n=65) included those migrants reporting a lower PBCM level (below 4) and the other group (n=165) included those who reported a higher PBCM level (4 and higher on the seven-point scale). The correlation analysis was conducted within both groups. The results show that in the group of respondents with higher PBCM, there was a positive relation between MI and MB ($r = .147$, n = 165, p<.05), but in the group with a lower level of PBCM, there was a negative relation between MI and MB ($r = -.236$, n = 65, p<.05 (See: Appendix G). Therefore, the research model can be modified as below. A second way to interpret the interaction included plotting regression lines of the relation between intentions and behavior at lower (-1SD) and higher (+1SD) levels of PBCM. The two regression lines show in Appendix H also reflect the conclusion that the relationship between MI and MB depends on PBCM: It is more positive when PBCM is high and it is more negative when PBCM is low. Therefore, a modified research model is implied as shown in Figure 4.
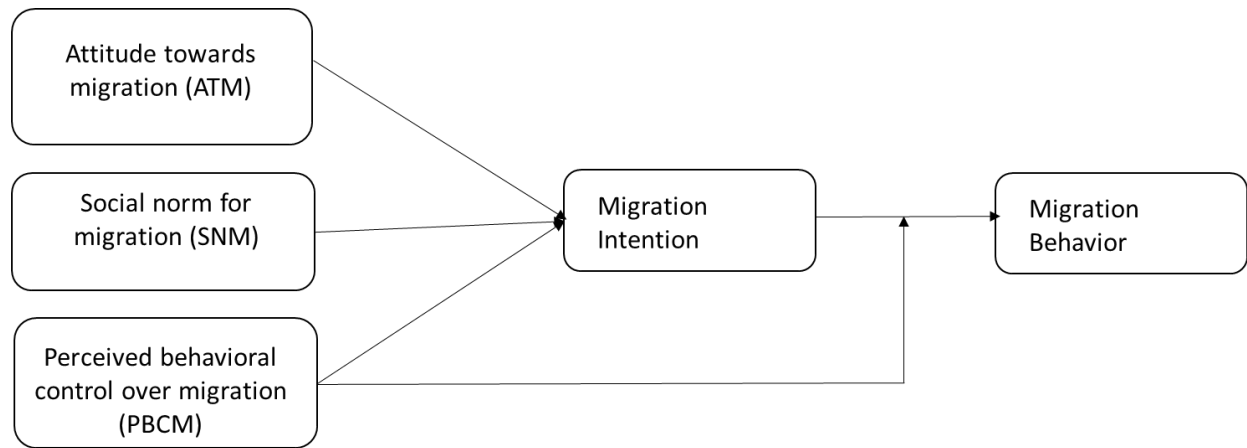
Figure 4: Modified research model

VI DISCUSSION

VI.1 Key Findings and Implications

The highly skilled temporary Chinese migrants' ATM had an impact on their MI.

Studies have demonstrated the relationship between the attitude toward a behavior and the degree to which people have a favorable or unfavorable estimation of it (Ajzen, 1991; Van Dalen and Henkens, 2013). Positive behavioral beliefs about migration would likely reflect benefits to one's future wellbeing, whereas negative behavioral beliefs would likely reflect detriments to it, and thus holding more positive beliefs basically positively drives attitudes toward migration. This study examined the relationship between ATM and MI among highly skilled temporary Chinese migrants in the U.S. through the lens of the TBP, which has not been previously performed. This study revealed that ATM had a positive relationship with the intention to apply for permanent residency in the U.S.. This finding implies that when highly skilled temporary Chinese migrants' positive beliefs about migration to the U.S. increase, their MI will increase, or when their positive beliefs about migration to the U.S. decrease, their MI will decrease.

In particular, this study suggests that among the four public dimensions that play a critical role in international migration decision-making, society issues (a dimension driven by people' rankings of the levels of crime, noise pollution, and ethnic diversity) has the most impact on MI for highly skilled temporary Chinese migrants. To be more specific, the most important indicator (highest beta coefficient) for the dimension of society issues was ethnic diversity, followed by crime level. Other dimensions also had significant relationships, but at slightly lower levels. These other dimensions included personal living conditions, welfare systems, and the quality of environments. Within the dimension of personal living conditions, only the indicator of relationship with social contacts was significant. Within the welfare system

dimension, only law and order and pension systems were significant. Within the environments

dimension, only pollution level and natural resources were significant. These more specific

supplementary analyses shed light on particular beliefs that may be more important in shaping

attitudes that ultimately predict intentions to migrate.

The highly skilled temporary Chinese migrants' SNM had an impact on their MI.

Relevant studies (Mincer, 1978; Stark and Bloom, 1985) have demonstrated that migration

decision-making cannot simply be considered an individual process because it is affected by

immigrants' social networks, including family, friends, and colleagues. In this study, the impact

of social networks was investigated on migration decision-making among highly skilled

temporary Chinese migrants. These findings revealed that immediate family members had the

most influence on the MI of these migrants (referring to Appendix E), which matches the

research findings of Morten (2015) regarding the impact of risk-sharing strong ties on temporary

migrants' decisions about permanent migration. Strong risk-sharing networks can help temporary

migrants go through all the risk of temporary migration, which increases people's intention to

leave their home country. In addition, professional contacts plays a significantly positive role in

highly skilled temporary Chinese migrants' decision making of permanent migration to the U.S.,

which can also be explained by Lee's (2009) finding that this positive network mechanism helps

in the labor market realm where established professional network assist newly arrived migrants

to enter the mainstream employment sector.

Interestingly, the data show a high inter-correlation (.866) between ATM and SNM (see

table 4), which means that ATM and SNM have a lot of empirical overlap on predicting MI. This

finding matched with past research results (Ajzen, 1991), suggesting that, personal beliefs tended

to overshadow the influence of social norms, in terms of the behaviors/actions taken on.

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However, both ATM and SNM have a significantly positive relationship with MI, respectively, suggesting that the unique information provided from either ATM or SNM has a meaningful impact on MI.

The highly skilled temporary Chinese migrants' PBCM had an impact on their MI.

Relevant studies have comprehensively defined PBC, which refers to people's beliefs of to what extent they can control and perceive a given behavior (Ajzen and Madden, 1986). PBC can predict people's intentions and behaviors (Armitrage & Conner, 2001; Godin & Kok, 1996; Munoz-Silva, Sanchez-Garcia, Nunes, and Martins, 2007; Sheeran and Taylor, 1999). However, PBC measured in different ways (e.g., ease/difficulty, confidence, perceived controllability, and locus of control). In this study, two components (controllability and SE) of PBC were investigated, which is consistent with other studies (Ajzen, 2002; Bandura, 2001). The two measures were combined into one index to test the overall model and then were also investigated separately to examine which had the highest relationship with intentions. The findings from this study showed that overall PBCM had an impact on the migrants' intention to become permanent resident in the U.S., suggesting consistency with other researchers' findings (Pertl, Hevey, Thomas, Craig, Ni Chuinneagain, and Maher, 2010). Based on the supplementary data analysis (referring to Appendix E), evidently, self-efficacy was a greater predictor than controllability of MI among the highly skilled temporary Chinese migrants. This was consistent with another study's findings (Trafimow, Sheeran, Conner, and Finlay, 2002). In general, the data show that highly skilled temporary Chinese migrants' controllability did not have as much influence as self-efficacy on their intention toward permanently migrating to the U.S.. I think one possible explanation could be the mixture of difficulties with and lack of control over the entire migration process as well as the lack of support from the current immigration policy

(https://www.migrationpolicy.org/programs/us-immigration-policy-program). Some or many of the steps in applying for residency are dependent on government actions and processing time, not on the immigrants themselves. In particular, based on the information reflecting processing times presented by the US government (e.g. https://egov.uscis.gov/processing-times/), the current processing time for Form I-140 (Immigrant Petition for Alien Worker) can take up to 9.5 Months, and the current processing time for Form I-485 (Application to Register Permanent Residence or Adjust Status) would take up to 41 Months, depending on different service centers.

Similarly, the data suggest a high inter-correlation between PBCM and ATM and SNM (in reference to table 5), which means that all these constructs have significant overlap for predicting MI. However, PBCM, like ATM and SNM, has a significantly positive relationship with MI, indicating that there are unique contributions of each of these constructs, ATM, SNM, and PBCM in predicting MI. Furthermore, by looking at the correlations between PBCM and ATM and SNM in the past studies, high correlations were demonstrated (92 and .91; Watters,1989; Doll and Ajzen, 1990) as well.

The highly skilled temporary Chinese migrants' MI didn't have a direct impact on their MB, but did interact with PBCM.

Although studies have found significant correlations between people's intention and behaviors through sociocognitive scenarios by applying the TBP (Ajzen, 1985, 1991), and studies have found this relationship among health topics, such as smoking, drinking, and HIV prevention behaviors (White, Terry, and Hogg, 1994; Godin and Kok, 1996; Sheeran and Taylor, 1999; Conner and Norman, 2005; Shukri, Jones, and Conner, 2016), this study did not find support for the notion that highly skilled temporary Chinese migrants' MI directly impacts their MB. However, based on the results of moderator effect testing on PBCM (referring to

Appendix F, G and H), it appears that the effects of MI on MB were moderated by the level of PBCM. That is, if immigrants have higher PBCM, their intentions are more positively related to behavior in comparison to immigrants with lower PBCM. When comparing the results of this research with those of past research, the results may differ because past research studies were investigating different areas of behavior in which individuals have much more total control over their behavior driven by their intention. Studies on migration decision-making (Lu, 1999; Yazdanpanah & Zobeidi, 2016; Willekens, 2017) have invited deeper exploration and questions about whether intentions to move abroad lead to actual behaviors toward permanent migration. This is because temporary migrants must deal with formal barriers such as obtaining and retaining visas, residence permits, and work permits—all legal documents that are increasingly difficult to obtain. In this study, when addressing the behavioral steps toward becoming a permanent resident in the U.S., the measure likely reflects the migrants' involvement but also much of the U.S. government's actions and decision-making process and speed (in reference to the VI. Migration Behavioral Steps in Appendix D: Survey).

VI.2 Contributions

Contributions to Practice

This study can assist policy makers and potential immigrants to understanding the factors associated with the transition from temporary to permanent migration among highly skilled Chinese migrants, and it presents a framework for getting more detailed insight into the decision-making involved with the complex realities of migration. ATM, SNM, and PBCM do impact their intention of becoming permanent residents in the U.S..

Creating awareness the actual behavioral steps toward permanent migration, this study developed new measures and tools to help the migrants understand their own beliefs and

empower themselves in the U.S.. New measures such as the four public dimensions for ATM, allow the researchers to study the migrants' attitude from different perspectives. Also, such tools measuring the most influential social network enhances their awareness of their own decision making versus their social networks' (especially their immediate family members) influences.

The current policies for H1b visas (See: https://my.uscis.gov/exploremyoptions/h1_visas_for_temporary_workers) are designed for skilled temporary workers who hold at least a bachelor's degree in a specialty field, or being engaged in cooperative research and development projects administered by the U.S. Department of Defense, or those of distinguished merit and ability. A life coaching and/or career counselling program can be developed to help these temporary migrants realize these options, set up their personalized goals in schools, choose the right career paths for themselves, and build up their self-efficacy for the transition. On the other hand, trainings/seminars would be recommended for government officials who examine visa applications in the United States and those who are involved in issuing the visas at U.S. consulates overseas to understand highly skilled temporary migrants' needs, see the bigger picture of how highly skilled immigrants help grow the U.S. economy, then adjust their strategic planning to meet the flexible manpower needs. Politicians in the U.S., despite their party affiliation, should separate the debate on highly skilled legal immigrants from the debate on illegal immigrants.

Contributions to Academic Literature

This study provides additional empirical research to the context of the TPB for a better understanding of highly skilled temporary Chinese migrants' decision-making toward their migration intentions and behaviors. In particular, this study applied and elaborated the TPB by exploring the highly skilled temporary Chinese migrants' attitude and normative belief

dimensions with the intentions of determining which dimensions and which social groups have the most influence on their MI. In the literature, no research has been completed to investigate temporary migrants in the U.S.

For more details, dividing PBCM into self-efficacy and controllability for two different indicators allowed this study to examine the nature of PBC's impact on migration intentions and behaviors. Overall, self-efficacy demonstrated a better predictive relationship to MB and MI for highly skilled Chinese temporary migrants in comparison to perceived control. Also, the moderating effect of PBCM was new to the literature, as the prior studies only explored its direct impact on people's actual behaviors. This is key in the current context: Perceived control makes a difference in how much intentions relate to behavior in the present immigration context, suggesting perceived behavioral control should receive more attention in future research.

In addition, this study adds the first research focusing on highly skilled Chinese migrants to the TPB and makes connection from this literature to topics of migration from developing countries.

VI. 3 Limitations and Future Research

A key limitation of this study was its cross-sectional design: It was not longitudinal carried out over an extended period of time following the decision and actions of immigrants. In the future, a longitudinal study would help to explore the relationship between these migrants' MI and MB as it unfolds over time. Some research on migration decision-making (Lu, 1999; Yazdanpanah & Zobeidi, 2016; Willekens, 2017) has studied participants for 4–5 years to track their behavior toward the final act of decision-making. The process of transitioning from temporary to permanent migration does take time. Also, it was challenging to measure MB in this context because neither using 0/1 to capture completing the first step towards migration or

not, nor using the percentage of completed steps was totally satisfactory in truly understanding behavior. As discussed above regarding the real steps of MB toward becoming a permanent resident in the U.S., the sequence of application steps is to some extent likely out of migrant's control (See: Migration Behavioral Steps in Appendix D: Survey). Furthermore, if participants came to the U.S. to study in a graduate program, the minimum time to complete the program would be 2 years plus the time required for obtaining sponsorship/employment for the H-1b visa. Therefore, conducting research over a longer time could be useful.

In addition, studying highly skilled immigrants' decision-making in terms of applying for U.S. citizenship would be worthwhile. Moreover, a comparative study should be applied to cross-cultural ethnic groups, such as temporary migrants from other Asian countries, to gain insight into cultural differences in the types of variables addressed here.

Regarding the methodology, sample limitations may have applied. Given the three qualifying questions, it was difficult to recruit targeted respondents. In the future, those F1 visa holders who returned to China after completing their graduate programs in the U.S. should be contacted to conduct a comparison study for determining the various factors associated with their decision not to become permanent residents in the United States. Additionally, some interviews should be conducted with those who returned to China and those who migrated to the U.S. permanently to further explore qualitative data relevant to thoughts on the entire migration and decision-making processes.

APPENDICES

Appendix A: G*Power Sample Size Computation

Central and noncentral distributions | Protocol of power analyses

critical t = 1.9722

Test family

t tests

Statistical test

Correlation: Point biserial model

Type of power analysis

A priori: Compute required sample size – given α, power, and effect size

Input Parameters

	Tail(s)	Two
Determine =>	Effect size |ρ|	0.25
	α err prob	0.05
	Power (1−β err prob)	0.95

Output Parameters

Noncentrality parameter δ	3.6239941
Critical t	1.9722041
Df	195
Total sample size	197
Actual power	0.9501310

Appendix B: Descriptive statistics for all the variables (N = 230)

Variable	Description	Measurement	Mean/ Std. Deviation/ Percentage
Attitude toward migration_Personal living condition (ATM_PLC)	If I migrate permanently to the United States, I believe that I will have a more affordable and spacious home.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.80/ 1.81 7.4% 8.3% 6.5% 12.2% 26.1% 19.1% 20.4%
ATM_PLC	How favorable would it be to you to have access to a more affordable and spacious home?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable 6= Highly favorable 7= Extremely favorable	4.73/1.83 4.3% 10.4% 12.6% 15.7% 18.3% 14.8% 23.9%
ATM_PLC	If I migrate permanently to the United States, I believe that I can earn higher salary.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.89/ 1.80 5.7% 7.4% 11.3% 10.4% 20.9% 21.7% 22.6%
ATM_PLC	How favorable would it be to you to be able to earn higher salary?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable 6= Highly favorable 7= Extremely favorable	4.79/ 1.83 4.8% 11.3% 9.6% 11.7% 23.9% 14.8% 23.9%
ATM_PLC	If I migrate permanently to the United States, I believe that I will have access to better working conditions.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.96/ 1.89 6.5% 9.1% 7.0% 11.3% 19.1% 19.1% 27.8%
ATM_PLC	How favorable would it be to you to have access to better working conditions?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable	4.77/ 1.83 5.7% 8.7% 10.4% 15.7% 22.2%

		6= Highly favorable	12.6%
		7= Extremely favorable	24.8%
ATM_PLC	If I migrate permanently to the United States, I believe that I will have a better relationship with my social contacts.		4.62/ 1.67
		1= Very strongly disagree	4.8%
		2= Strongly disagree	7.0%
		3= Disagree	11.7%
		4= Neither agree nor disagree	23.0%
		5= Agree	22.6%
		6= Strongly agree	13.5%
		7= Very strongly agree	17.4%
ATM_PLC	How favorable would it be to you to have a better relationship with your social contacts?		4.49/ 1.69
		1= Not favorable	4.3%
		2= Minimally favorable	10.0%
		3= Somewhat favorable	13.5%
		4= Favorable	22.2%
		5= Very favorable	19.1%
		6= Highly favorable	16.1%
		7= Extremely favorable	14.8%
Attitude toward migration_welfare systems (ATM_WS)	If I migrate permanently to the United States, I believe that my access to quality health care will improve.		4.72/ 1.79
		1= Very strongly disagree	5.7%
		2= Strongly disagree	9.1%
		3= Disagree	10.0%
		4= Neither agree nor disagree	16.1%
		5= Agree	21.3%
		6= Strongly agree	17.4%
		7= Very strongly agree	20.4%
ATM_WS	How favorable would it be to you to have access to an improved quality health care?		4.77/ 1.92
		1= Not favorable	6.1%
		2= Minimally favorable	12.6%
		3= Somewhat favorable	8.3%
		4= Favorable	12.2%
		5= Very favorable	18.3%
		6= Highly favorable	17.8%
		7= Extremely favorable	24.8%
ATM_WS	If I migrate permanently to the United States, I believe that I will have better social benefits.		4.62/ 1.76
		1= Very strongly disagree	5.2%
		2= Strongly disagree	10.4%
		3= Disagree	11.3%
		4= Neither agree nor disagree	14.3%
		5= Agree	24.8%
		6= Strongly agree	17.0%
		7= Very strongly agree	17.0%
ATM_WS	How favorable would it be to you to have access to better social benefits?		4.61/ 1.80
		1= Not favorable	6.1%
		2= Minimally favorable	10.0%
		3= Somewhat favorable	10.4%
		4= Favorable	17.4%
		5= Very favorable	21.7%
		6= Highly favorable	15.2%

		7= Extremely favorable	19.1%
ATM_WS	If I migrate permanently to the United States, I believe that I will have access to better law and order.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.80/ 1.87 7.0% 9.1% 8.3% 13.9% 19.1% 19.6% 23.0%
ATM_WS	How favorable would it be to you to have access to better law and order?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable 6= Highly favorable 7= Extremely favorable	4.70/ 1.85 6.5% 9.6% 9.6% 16.1% 22.2% 12.6% 23.5%
ATM_WS	If I migrate permanently to the United States, I believe that I will have access to a better pension system.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.65/ 1.81 6.1% 10.0% 11.3% 13.5% 21.3% 20.0% 17.8%
ATM_WS	How favorable would it be to you to have access to a better pension system?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable 6= Highly favorable 7= Extremely favorable	4.70/ 1.84 6.1% 8.7% 12.2% 15.7% 18.7% 16.5% 22.2%
Attitude toward migration_the quality of environment (ATM_QE)	If I migrate permanently to the United States, I believe that the pollution level I will experience will be lower and under better control.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.90/ 1.88 5.2% 10.0% 10.0% 11.7% 17.8% 17.8% 27.4%
ATM_QE	How favorable would it be to you to have lower and better controlled pollution level?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable 6= Highly favorable 7= Extremely favorable	4.66/ 1.86 7.0% 7.8% 13.5% 14.3% 22.2% 11.7% 23.5%

ATM_QE	If I migrate permanently to the United States, I believe that I will have access to better natural resources.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.65/ 1.82 7.0% 9.1% 10.4% 14.3% 22.2% 18.3% 18.7%
ATM_QE	How favorable would it be to you to have access to better natural resources?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable 6= Highly favorable 7= Extremely favorable	4.43/ 1.83 8.3% 9.6% 12.6% 17.0% 20.9% 16.1% 15.7%
ATM_QE	If I migrate permanently to the United States, I believe that the population density I will experience will be lower.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.85/ 1.92 8.3% 7.4% 9.1% 11.3% 20.9% 16.5% 26.5%
ATM_QE	How favorable would it be to you to have lower population density?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable 6= Highly favorable 7= Extremely favorable	4.53/ 1.89 7.4% 10.4% 11.3% 16.5% 20.4% 10.4% 22.2%
Attitude toward migration_society issues (ATM_SI)	If I migrate permanently to the United States, I believe that the communities in which I live will have a lower crime level.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.17/ 1.91 12.2% 8.3% 17.8% 17.4% 17.0% 11.7% 15.7%
ATM_SI	How favorable would it be to you to live in communities which will have a lower crime level?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable 6= Highly favorable 7= Extremely favorable	4.41/ 2.01 12.2% 11.3% 9.1% 10.9% 22.6% 14.8% 19.1%
ATM_SI	If I migrate permanently to the	1= Very strongly disagree	4.57/ 1.86 7.0%

	United States, I believe that the noise pollution I experience will be lower and under better control.	2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	10.9% 11.3% 14.8% 21.3% 15.2% 19.6%
ATM_SI	How favorable would it be to you to have lower and better controlled noise pollution?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable 6= Highly favorable 7= Extremely favorable	4.54/ 1.86 5.7% 13.5% 11.3% 14.3% 21.7% 13.0% 20.4%
ATM_SI	If I migrate permanently to the United States, I believe that the ethnic diversity of people around me will be higher.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.76/ 1.92 8.7% 7.8% 10.9% 9.1% 22.2% 17.8% 23.5%
ATM_SI	How favorable would it be to you to have higher ethnic diversity of people around you?	1= Not favorable 2= Minimally favorable 3= Somewhat favorable 4= Favorable 5= Very favorable 6= Highly favorable 7= Extremely favorable	4.41/ 1.86 6.5% 13.5% 13.5% 15.7% 17.0% 17.4% 16.5%
Social norm for migration_immediate family members (SNM_IF)	Your immediate family members think it is better for you to migrate permanently to the United States.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.77/ 1.81 7.0% 8.7% 7.4% 13.0% 26.5% 16.5% 20.9%
SNM_IF	Regarding your decision making about migrating permanently to the United States, please rate the importance of the opinions of your immediate family members	1= Extremely unimportant 2= Highly unimportant 3= Unimportant 4= Neither important nor unimportant 5= Important 6= Highly important 7= Extremely important	4.79/ 1.77 6.1% 9.1% 8.3% 10.0% 27.0% 21.7% 17.8%
Social norm for migration_friends (SNM_F)	Your friends think it is better for you to	1= Very strongly disagree 2= Strongly disagree	4.47/ 1.79 8.3% 8.7%

	migrate permanently to the United States.	3= Disagree	11.7%
		4= Neither agree nor disagree	16.1%
		5= Agree	24.3%
		6= Strongly agree	16.1%
		7= Very strongly agree	14.8%
SNM_F	Regarding your decision making about migrating permanently to the United States, please rate the importance of the opinions of your friends.	1= Extremely unimportant	4.53/ 1.72
		2= Highly unimportant	6.1%
		3= Unimportant	8.7%
		4= Neither important nor unimportant	12.2%
			16.5%
		5= Important	28.3%
		6= Highly important	12.6%
		7= Extremely important	15.7%
Social norm for migration_professional contacts (SNM_PC)	Your professional contacts think it is better for you to migrate permanently to the United States.	1= Very strongly disagree	4.73/ 1.70
		2= Strongly disagree	5.2%
		3= Disagree	7.8%
		4= Neither agree nor disagree	10.0%
		5= Agree	14.3%
		6= Strongly agree	27.8%
		7= Very strongly agree	17.4%
			17.4%
SNM_PC	Regarding your decision making about migrating permanently to the United States, please rate the importance of the opinions of your professional contacts in the United States.	1= Extremely unimportant	4.61/ 1.76
		2= Highly unimportant	7.0%
		3= Unimportant	7.0%
		4= Neither important nor unimportant	13.0%
			14.8%
		5= Important	22.6%
		6= Highly important	20.4%
		7= Extremely important	15.2%
Perceived behavioral control over migration_controllability (PBCM_C)	Migrating permanently to the United States is easy for me.	1= Very strongly disagree	4.11/ 1.65
		2= Strongly disagree	5.7%
		3= Disagree	10.0%
		4= Neither agree nor disagree	25.7%
		5= Agree	15.7%
		6= Strongly agree	22.6%
		7= Very strongly agree	10.0%
			10.4%
PBCM_C	Whether or not I migrate permanently to the United States is completely up to me?	1= Very strongly disagree	4.49/ 1.84
		2= Strongly disagree	7.0%
		3= Disagree	10.9%
		4= Neither agree nor disagree	13.9%
		5= Agree	12.6%
		6= Strongly agree	24.3%
		7= Very strongly agree	13.0%
			18.3%
PBCM_C	How much control do you have over your	1= None	4.48/ 1.76
			6.1%

	migration permanently to the United States?	2= Very little 3= A little 4= Some 5= A lot 6= Quite a lot 7= Complete	9.6% 12.2% 20.9% 22.2% 11.7% 17.4%
Perceived behavioral control over migration_self-efficacy (PBCM_SE)	I am certain that I can migrate permanently to the United States.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.43/ 1.78 8.3% 8.7% 12.6% 16.1% 25.2% 14.8% 14.3%
PBCM_SE	How confident are you that you will migrate permanently to the United States.	1= Not at all 2= Very little 3= A little 4= Some 5= A lot 6= Quite a lot 7= A great deal	4.40/ 1.69 4.3% 13.0% 12.6% 19.1% 22.2% 17.0% 11.7%
PBCM_SE	There is a lot that I can do to be sure of migrating permanently to the United States.	1= Very strongly disagree 2= Strongly disagree 3= Disagree 4= Neither agree nor disagree 5= Agree 6= Strongly agree 7= Very strongly agree	4.46/ 1.78 7.8% 8.7% 13.0% 16.1% 23.5% 16.5% 14.3%
Migration intention (MI)	Do you intend to complete an application for permanent residence in the United States?	1= No, I am absolutely certain that I will not complete an application. 2= No, I am reasonably certain that I will not complete an application. 3= I don't have a decision yet. 4= Yes, I am reasonably certain that I will complete an application. 5= Yes, I am absolutely certain that I will complete an application.	3.73/ 1.11 20.9% 5.2% 8.7% 27.4% 37.8%
Migration behavior (MB)	Have you found an employer who can sponsor your application for permanent residence in the United States?	0= No 1= Yes	0.77/ 0.42 22.6% 77.4%
MB	Have you completed the immigration medical exam?	0= No 1= Yes	0.78/ 0.42 22.2% 77.8%

MB	Have you filed Form I-140 (Immigrant Petition for Alien Worker) or Form I-130 (Petition for Alien Relative)?	0= No 1= Yes	0.73/ 0.44 26.5% 73.5%
MB	Have you filed Form I-485 (Application to Register Permanent Residence or Adjust Status)?	0= No 1= Yes	0.70/ 0.46 29.6% 70.4%
MB	Have you filed Form I-765 (Application for Employment Authorization)?	0= No 1= Yes	0.79/ 0.41 20.9% 79.1%
MB	Have you been notified about biometrics services appointment at a local Application Support Center (ASC) to provide your fingerprints, photograph, and/or signature?	0= No 1= Yes	0.74/ 0.44 26.1% 73.9%
MB	Has an interview been scheduled for you at a USCIS office?	0= No 1= Yes	0.62/ 0.49 37.8% 62.2%
MB	Are you still waiting on the status of your Form I-485?	0= No 1= Yes	0.62/ 0.49 37.8% 62.2%

Appendix C: Informed Consent

<div align="center">

Georgia State University
Robinson College of Business
Informed Consent Form

</div>

Title: A Study of Permanent Residency Intentions and Behaviors by Highly Skilled Temporary Chinese Migrants in the United States

Principal Investigator: Todd J. Maurer, Ph.D.

Student Principal Investigator: Chloe Shay

Procedures

You are being asked to take part in a research study. If you decide to take part, you will be involved in an online survey that will take approximately 20 minutes of your time. The surveys involve mainly rating-type questions with multi-point response scales. Your participation will remain anonymous. Please note that you can only participate in this study if you are fluent in English. Also, you must be a Chinese citizen and have at least a bachelor's degree, and you are/ were holding a F1 visa in the United States. A total of 300 participants will be recruited for this part of the study.

Voluntary Participation and Withdrawal

Participation in research is voluntary. You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions or stop participating at any time. Whatever you decide, you will not lose any benefits to which you are otherwise entitled.

Compensation

Qualtrics will be compensating you $1.50 per respondent fee that is being paid to collect survey respondents.

Contact Information

Contact Dr. Todd Maurer at DrMresearch@gsu.edu, 404-413-7538 or Chloe Shay at xxie6@student.gsu.edu, 706-421-9708, if you have questions, concerns, or complaints about this study.

Consent

If you agree to participate in this research, please continue with the survey and click "yes" in response to the question about agreeing to participate. As a participant of this online survey, you can print a copy of the informed consent form for your records. If you do not agree, simply click "no" in response to the question below or log out of your browser.

Appendix D: Survey

Q1 If you agree to participate in this research, please click "Yes" to start the survey.

○ Yes (1)

○ No (2)

Skip To: End of Survey If If you agree to participate in this research, please click "Yes" to start the survey. = No

End of Block: Consent

Start of Block: Qualifying Questions

Q1 Are you a Chinese citizen?

○ Yes (1)

○ No (2)

Skip To: End of Survey If Are you a Chinese citizen? = No

Skip To: Q2 If Are you a Chinese citizen? = Yes

Q2 Do you at least have a bachelor's degree?

○ Yes (1)

○ No (2)

Skip To: End of Survey If Do you at least have a bachelor's degree? = No

Skip To: Q3 If Do you at least have a bachelor's degree? = Yes

---

Q3 Are/ Were you holding a F1 visa?

○ Yes (1)

○ No (2)

Skip To: End of Survey If Are/ Were you holding a F1 visa? = No

Skip To: End of Block If Are/ Were you holding a F1 visa? = Yes

End of Block: Qualifying Questions

Start of Block: Survey

I. Demographic: The following are basic demographic questions. Please select the best choice.
Q1 What is your current age?

○ Under 18 (1)

○ 18 - 24 (2)

○ 25 - 34 (3)

○ 35 - 44 (4)

○ 45 - 54 (5)

○ 55 - 64 (6)

○ 65 - 74 (7)

○ 75 - 84 (8)

○ 85 or older (9)

Q2 Sex

○ Male (1)

○ Female (2)

Q3 How long have you been in the United States?

○ 1-2 years (1)

○ 3-4 years (2)

○ 4-6 years (3)

○ 6-8 years (4)

○ 8-10 years (5)

○ more than 10 years (6)

Q4 Which of these fields best describes your major, or your anticipated major? You may indicate more than one if applicable.

○ Agriculture (1)

○ Biological/life sciences (biology, biochemistry, botany, zoology, etc.) (2)

○ Business (accounting, business administration, marketing, management, etc.) (3)

○ Communication (speech, journalism, television/radio, etc.) (4)

○ Computer and information sciences (5)

○ Education (6)

○ Engineering (7)

○ Ethnic, cultural studies, and area studies (8)

○ Foreign languages and literature (French, Spanish, etc.) (9)

○ Health-related fields (nursing, physical therapy, health technology, etc.) (10)

○ History (11)

○ Humanities (English, literature, philosophy, religion, etc.) (12)

○ Liberal/general studies (13)

○ Mathematics (14)

○ Multi/interdisciplinary studies (international relations, ecology, environmental studies, etc.) (15)

○ Parks, recreation, leisure studies, sports management (16)

○ Physical sciences (physics, chemistry, astronomy. Earth science, etc.) (17)

○ Pre-professional (pre-dental, pre-medical, pre-veterinary) (18)

○ Public administration (city management, law enforcement, etc.) (19)

○ Social sciences (anthropology, economics, political science, psychology, sociology, etc.) (20)

○ Visual and performing arts (art, music, theater, etc.) (21)

○ Undecided (22)

○ Other: what? (23) _____

Q5 What's your marital status?

○ Married (1)

○ Widowed (2)

○ Divorced (3)

○ Separated (4)

○ Never married (5)

Skip To: Q6 If What's your marital status? = Married
Skip To: Q7 If What's your marital status? != Married

Q6 If you are married, is your spouse U.S. citizen?

○ Yes (1)

○ No (2)

Q7 How many children are in your household?

○ 0 (1)

○ 1 (2)

○ 2 (3)

○ 3 (4)

○ 4 or more (5)

II. Beliefs About Outcomes of Migration: For the following questions, please use the scale to describe your beliefs about the outcomes you will experience if you permanently migrate to the USA in comparison to what you would experience in your country of origin.

Personal Living Conditions

Q8 If I migrate permanently to the United States, I believe that I will have a more affordable and spacious home.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q9 How favorable would it be to you to have access to a more affordable and spacious home?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q10 If I migrate permanently to the United States, I believe that I can earn higher salary.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q11 How favorable would it be to you to be able to earn higher salary?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q12 If I migrate permanently to the United States, I believe that I will have access to better working conditions.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q13 How favorable would it be to you to have access to better working conditions?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q14 If I migrate permanently to the United States, I believe that I will have a better relationship with my social contacts.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q15 How favorable would it be to you to have a better relationship with your social contacts?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Welfare Systems

Q16 If I migrate permanently to the United States, I believe that my access to quality health care will improve.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q17 How favorable would it be to you to have access to an improved quality health care?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q18 If I migrate permanently to the United States, I believe that I will have better social benefits.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q19 How favorable would it be to you to have access to better social benefits?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q20 If I migrate permanently to the United States, I believe that I will have access to better law and order.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q21 How favorable would it be to you to have access to better law and order?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q22 If I migrate permanently to the United States, I believe that I will have access to a better pension system.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q23 How favorable would it be to you to have access to a better pension system?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

The Quality of Environments

Q24 If I migrate permanently to the United States, I believe that the pollution level I will experience will be lower and under better control.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q25 How favorable would it be to you to have lower and better controlled pollution level?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q26 If I migrate permanently to the United States, I believe that I will have access to better natural resources.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q27 How favorable would it be to you to have access to better natural resources?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q28 If I migrate permanently to the United States, I believe that the population density I will experience will be lower.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q29 How favorable would it be to you to have lower population density?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Society Issues

Q30 If I migrate permanently to the United States, I believe that the communities in which I live will have a lower crime level.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q31 How favorable would it be to you to live in communities which will have a lower crime level?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q32 If I migrate permanently to the United States, I believe that the noise pollution I experience will be lower and under better control.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q33 How favorable would it be to you to have lower and better controlled noise pollution?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q34 If I migrate permanently to the United States, I believe that the ethnic diversity of people around me will be higher.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q35 How favorable would it be to you to have higher ethnic diversity of people around you?

○ Not favorable (1)

○ Minimally favorable (2)

○ Somewhat favorable (3)

○ Favorable (4)

○ Very favorable (5)

○ Highly favorable (6)

○ Extremely favorable (7)

Q36 Previously you rated how favorable it would be to you to have various outcomes of migrating permanently to the United States. Listed below are the four categories of outcomes. Please rank order the following in terms of the importance of each category of outcome to you where 1 is the most important outcome to you on the list and 4 is the least important outcome to you on the list. You must assign each rank (1, 2, 3, 4) only once in the list below. Assign 1 as your most important outcome, 2 as your second most important outcome, and so on.

_____ Personal living conditions (home, income, working environment, relationship with social contacts)
_____ Welfare systems (health care system, social benefits, justice system, and retirement and pension system)
_____ The quality of environments (level of pollution, natural resources, and population density)
_____ Society issues (the crime level, noise pollution, and level of ethnic diversity)

III. Social Influences for Migration: Please answer the following questions regarding possible social influences for migration (including the opinions of family, friends and professional contacts).

Q37 Do you have any immediate family members who have migrated to the United States?

○ Yes (1)

○ No (2)

Skip To: Q38 If Do you have any immediate family members who have migrated to the United States? = Yes

Skip To: Q39 If Do you have any immediate family members who have migrated to the United States? = No

-----

Q38 How many of your immediate family members have migrated to the United States?

_____

Q39 Do you have any friends who have migrated to the United States?

○ Yes (1)

○ No (2)

Skip To: Q40 If Do you have any friends who have migrated to the United States? = Yes
Skip To: Q41 If Do you have any friends who have migrated to the United States? != Yes

-----

Q40 How many of your friends have migrated to the United States?

_____

Q41 Do you have any professional contacts who can help your career development in the future and are living in the United States?

○ Yes (1)

○ No (2)

Skip To: Q42 If Do you have any professional contacts who can help your career development in the future and are... = Yes

Skip To: Q43 If Do you have any professional contacts who can help your career development in the future and are... != Yes

-----

Q42 How many of your professional contacts are living in the United States?

_____

Please use the scale following each item below to respond.

95

Q43 Your immediate family members think it is better for you to migrate permanently to the United States.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q44 Regarding your decision making about migrating permanently to the United States, please rate the importance of the opinions of your immediate family members.

○ Extremely unimportant (1)

○ Highly unimportant (2)

○ Unimportant (3)

○ Neither important nor unimportant (4)

○ Important (5)

○ Highly important (6)

○ Extremely important (7)

Q45 Your friends think it is better for you to migrate permanently to the United States.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q46 Regarding your decision making about migrating permanently to the United States, please rate the importance of the opinions of your friends.

○ Extremely unimportant (1)

○ Highly unimportant (2)

○ Unimportant (3)

○ Neither important nor unimportant (4)

○ Important (5)

○ Highly important (6)

○ Extremely important (7)

Q47 Your professional contacts think it is better for you to migrate permanently to the United States.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q48 Regarding your decision making about migrating permanently to the United States, please rate the importance of the opinions of your professional contacts in the United States.

○ Extremely unimportant (1)

○ Highly unimportant (2)

○ Unimportant (3)

○ Neither important nor unimportant (4)

○ Important (5)

○ Highly important (6)

○ Extremely important (7)

IV. Behavioral Questions: Please use the scale following each behavioral question below to respond.

Q49 Migrating permanently to the United States is easy for me.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q50 Whether or not I migrate permanently to the United States is completely up to me?

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

Q51 How much control do you have over your migration permanently to the United States?

- ○ None (1)

- ○ Very little (2)

- ○ A little (3)

- ○ Some (4)

- ○ A lot (5)

- ○ Quite a lot (6)

- ○ Complete (7)

Q52 I am certain that I can migrate permanently to the United States.

- ○ Very strongly disagree (1)

- ○ Strongly disagree (2)

- ○ Disagree (3)

- ○ Neither agree nor disagree (4)

- ○ Agree (5)

- ○ Strongly agree (6)

- ○ Very strongly agree (7)

Q53 How confident are you that you will migrate permanently to the United States.

○ Not at all (1)

○ Very little (2)

○ A little (3)

○ Some (4)

○ A lot (5)

○ Quite a lot (6)

○ A great deal (7)

Q54 There is a lot that I can do to be sure of migrating permanently to the United States.

○ Very strongly disagree (1)

○ Strongly disagree (2)

○ Disagree (3)

○ Neither agree nor disagree (4)

○ Agree (5)

○ Strongly agree (6)

○ Very strongly agree (7)

V. Migration Intention: Please select the best choice below to describe your intention to complete an application for permanent residence in the United States.

Q55 Do you intend to complete an application for permanent residence in the United States?

○ No, I am absolutely certain that I will not complete an application. (1)

○ No, I am reasonably certain that I will not complete an application. (2)

○ I don't have a decision yet. (3)

○ Yes, I am reasonably certain that I will complete an application. (4)

○ Yes, I am absolutely certain that I will complete an application. (5)

VI. Migration Behavior Steps: Please answer the following questions regarding the steps you have taken toward completing an application for permanent residency.

Q56 Have you found an employer who can sponsor your application for permanent residence in the United States?

○ Yes (1)

○ No (2)

Q57 Have you completed the immigration medical exam?

○ Yes (1)

○ No (2)

Q58 Have you filed Form I-140 (Immigrant Petition for Alien Worker) or Form I-130 (Petition for Alien Relative)?

○ Yes (1)

○ No (2)

Q59 Have you filed Form I-485 (Application to Register Permanent Residence or Adjust Status)?

○ Yes (1)

○ No (2)

Q60 Have you filed Form I-765 (Application for Employment Authorization)?

○ Yes (1)

○ No (2)

Q61 Have you been notified about biometrics services appointment at a local Application Support Center (ASC) to provide your fingerprints, photograph, and/or signature?

○ Yes (1)

○ No (2)

Q62 Has an interview been scheduled for you at a USCIS office?

○ Yes (1)

○ No (2)

Q63 Are you still waiting on the status of your Form I-485?

○ Yes (1)

○ No (2)

Q64 Has a decision been made to your application for permanent residence in the United States?

○ Approved (1)

○ Denied (2)

VII. Human Capital: Please select the best choice.
Q65 What is your highest education degree?

○ College graduate (1)

○ Masters degree (2)

○ PhD, MD, or Advanced College Degree beyond Masters (3)
Q66 How do you rate your health status in general?

○ Very bad (1)

○ Reasonably bad (2)

○ Not good/not bad (3)

○ Reasonably good (4)

○ Very good (5)

Appendix E: Multiple regression analysis of each subscale of ATM, SNM and PBCM with MI

	Model	R^2	Adjusted R^2	F	Standardized Coefficients Beta	Sig.	VIF
1	(Constant)	0.357	0.345	31.199**			
	ATM_personal living condition_home				0.157	0.112	3.392
	ATM_personal living condition_salary				0.165	0.185	5.395
	ATM_personal living condition_working conditions				0.116	0.355	5.457
	ATM_personal living condition_relationship with social contacts				0.227	**0.004****	2.126
2	(Constant)	0.431	0.421	42.655**			
	ATM_welfare systems_healthcare quality				0.232	0.064	6.167
	ATM_welfare systems_social benefits				-0.070	0.521	4.749
	ATM_welfare systems_law and order				0.326	**0.007****	5.661
	ATM_welfare systems_pension system				0.201	**0.034***	3.498
3	(Constant)	0.441	0.433	59.367**			
	ATM_the quality of environments_pollution level				0.207	**0.030***	3.630
	ATM_the quality of environments_natural resources				0.424	**0.000****	3.710
	ATM_the quality of environments_population density				0.069	0.466	3.619
4	(Constant)	0.464	0.457	65.291**			
	ATM_society issues_crime level				0.263	**0.000****	1.917
	ATM_society issues_noise pollution				0.147	0.078	2.917
	ATM_society issues_ethnic diversity				0.36	**0.000****	2.361
5	(Constant)	0.517	0.510	80.477**			
	SNM_immediate family members				0.439	**0.000****	3.219
	SNM_friends				0.081	0.368	3.804
	SNM_personal contacts				0.249	**0.003****	3.101
6	(Constant)	0.474	0.469	102.133**			
	PBCM_Controllability				0.085	0.354	3.600
	PBCM_Self-efficacy				0.615	**0.000****	3.600

Note: **. p<0.01, *.p<0.05

Appendix F: Moderating effect test of perceived behavioral control over migration (PBCM) between MI and MB

|	Model	R	Adjusted R²	F Change	Sig. F Change	Standardized Coefficients Beta	t	Sig.	VIF
1	(Constant)	0.223	0.041	5.913	0.003**		8.424	0.000**	
	MI					-0.095	-1.105	0.270	1.772
	PBCM					0.274	3.176	0.002**	1.772
2	(Constant)	0.310	0.084	8.002	0.000**		7.236	0.000**	
	MI					-0.532	-3.471	0.001**	5.868
	PBCM					-.404	-1.873	.062	11.652
	PBCMxMI					1.043	3.410	0.001**	23.373

Note: Dependent Variable: MB (%Completed); **.p<0.01

Appendix G: Correlation analysis between MI and MB at the high or low level of PBCM

Measure	1
High Level of PBCM	
1. MI	
2. MB (%Completed)	.147*
Low Level of PBCM	
1. MI	
2. MB (%Completed)	-.236*

Note: *. $p < 0.05$

Appendix H: Plots of MI and MB by the level of PBCM
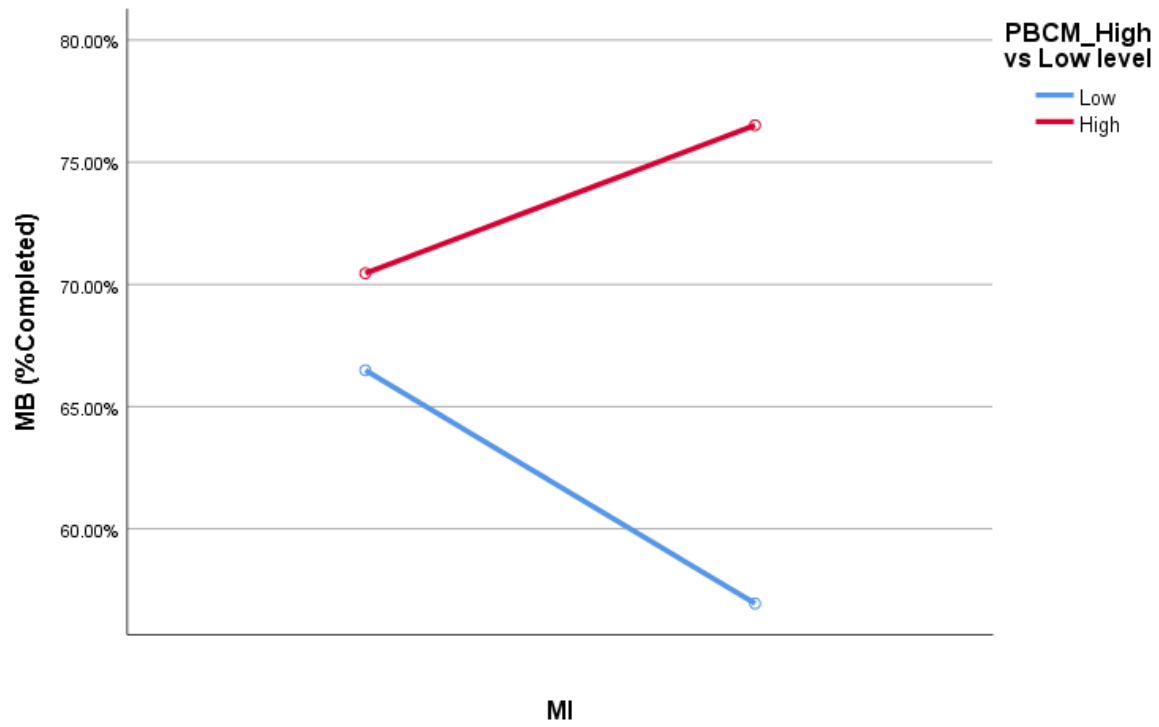
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