# Integration and Discrimination of the Chinese Ethnic Minority in Spain 

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#### Abstract

This thesis uses quantitative and qualitative analyses to explore the integration of Chinese minorities living in Spain - especially, of the second generation born or educated in the country - and the problems of discrimination. The main findings include, first, that Chinese immigrant youths have lower educational attainments than other ethnic minorities in Spain. Parents' low educational background and lack of ambition for the educational attainments of their children, and Chinese immigrant youths' high perceived discrimination play significant roles in explaining their low educational attainment. In order to get a deeper understanding of the source of such perceived discrimination, the thesis next explores the role played by coping strategies and community support on these feelings of discrimination. It finds that while many Chinese immigrant youths adopt negative coping strategies to face perceived discrimination, they compensate them with a strong social support from their own ethnic community. The community provides them with a comfortable and secure environment to live in, but also contributes their gradual segregation from the Spanish society, which further leads to discrimination. In the third part of the thesis I further explore the issue of discrimination through experimental methods. I test whether there is discrimination against Chinese minority groups by doing an experiment on the extent to which they have more difficulties than the nationals for buying and selling products in online, second-hand commodity trading markets. I also explore if any discrimination is likely to be


taste-based or statistical. I find that when Chinese buyers offer to buy products for sale in the market, they receive fewer positive responses from the sellers than nationals, which demonstrates that they are discriminated against, at least in trading. However, I do not find evidence that they are discriminated against when selling products. This, and the fact that sellers and buyers adjust their responses to a change in the price in the same way regardless of the nationality of the person altering the price, leads me to conclude that they are affected mostly by statistical discrimination, i.e., that they discriminate on the basis of stereotypes about the lower socioeconomic status of the Chinese ethnic minority.

Keywords: Chinese ethnic minority, educational attainment, integration, discrimination

## RESUMEN

Esta tesis utiliza análisis cuantitativos y cualitativos para explorar la integración de las minorías chinas que viven en España especialmente, de la segunda generación nacida o educada en el paísy los problemas que experimentan de discriminación. Los principales hallazgos incluyen, en primer lugar, que los jóvenes inmigrantes chinos tienen logros educativos más bajos que otras minorías étnicas en España. El bajo nivel educativo de los padres y la falta de ambición por los logros educativos de sus hijos, así como la alta discriminación percibida por los jóvenes inmigrantes chinos juegan un papel importante en la explicación de su bajo nivel educativo. Con el fin identificar más profundamente la fuente de tal discriminación subjetiva, la tesis explora a continuación el papel que juegan en estos sentimientos de discriminación las estrategias de afrontamiento y el apoyo de la comunidad. Concluye que mientras muchos jóvenes inmigrantes chinos adoptan estrategias de afrontamiento negativas para enfrentar la discriminación percibida, las compensan con un fuerte apoyo social de su propia comunidad étnica. La comunidad les brinda un ambiente próspero y seguro para vivir, pero también contribuye a su segregación de la sociedad española, lo que conduce aún más a la discriminación. En la tercera parte de la tesis se explora más a fondo el tema de la discriminación a través de métodos experimentales. Se evalúa si hay discriminación contra los grupos minoritarios chinos haciendo un experimento sobre la medida en que tienen más dificultades que los nacionales para comprar y vender productos en los mercados de comercio de segunda mano en línea.

También se explora si es probable que la discriminación esté basada en el gusto o si es podría ser estadística. Los resultados muestran que cuando los compradores chinos ofrecen comprar productos en venta en el mercado, reciben menos respuestas positivas de los vendedores que los nacionales, lo que demuestra que son discriminados, al menos en el comercio. Sin embargo, no se encuentran evidencias de que sean discriminados cuando venden productos. Esto, y el hecho de que vendedores y compradores ajustan sus respuestas a un cambio en el precio independientemente de la nacionalidad de la persona que modifica el precio, lleva a concluir que se ven afectados mayoritariamente por formas de discriminación estadística, es decir, que son discriminados sobre la base de estereotipos que muy probablemente tienen que ver con el bajo nivel socioeconómico de la minoría étnica china.

Palabras clave: Minoría étnica china, nivel educativo, integración, discriminación

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## 1. INTRODUCTION

Immigration is a very prominent demographic and social phenomenon in the modern world, and it can have an important impact on many aspects of people's lives in the origin and host countries. For origin countries, the flow of immigrants can lead to a loss of human and economic capitals and a decrease in productivity. For host countries, the flooding of an immigrant population can pose serious challenges to their social, economic, political and cultural stability. The immigrant population can not only bring about more intense competition in the local labor market, but it may also trigger forms of racial discrimination and hostility from locals. If the number of immigrants from different cultural backgrounds rises, it might make it more difficult for the host governments to formulate and implement immigration and integration policies. Therefore, the study of the history and status quo of immigrants in the host countries can contribute to a better understanding of factors associated with the wellbeing and socio-economic development of ethnic minorities in
the receiving societies, helping assess the effectiveness of integration policies. This thesis is able to provide some enlightenment to do just that.

### 1.1 Spain as an Emerging Immigrant-receiving Country

Historically, Spain has served as an emigrant country, mainly exporting labor force to South America and European countries. As a consequence, Spain has faced in the past a labor shortage associated with a massive loss of labor force. Until the first half of the 1980s, Spain also acted as an emigrant country, but at a slower pace (Izquierdo et al., 2015). Although immigrants also came to Spain during this period, they were mostly from Latin America or other European countries with similar cultures to Spain, making it easy to integrate them. But since the early 1990s, Spain has become an important immigrant-receiving country largely due to its rapid economic growth (Reher \& Requena, 2009). Among the immigrants
arriving to Spain, an increasing number had completely different cultural backgrounds.

Although Spain has been a receiving country only for only around three decades, the number of immigrants has been growing fast. This is a result of many factors, including its rapid economic growth in the 1990s, the establishment of the Schengen Area within the EU, the global mobility of its labor force, and the tight kindship and geographic ties with some of the immigrant communities. Recently, more and more minorities have come to Spain and begun to established their own communities, becoming important parts of the Spanish population.

Table 1-1 Ethnic Minorities with more than 100,000 Population in Spain (2002-2020)

| 2002.1 | 2007.1 | 2012.1 | 2017.1 | 2020.1 |
| :--- | :--- | :--- | :--- | :--- |
| UK | Bulgaria | Bulgaria | Bulgaria | Bulgaria |
| Morocco | Italy | France | France | France |
| Colombia | Portugal | Italy | Italy | Italy |
| Ecuador | UK | Portugal | UK | Portugal |


| Germany | UK | Germany | UK |
| :--- | :--- | :--- | :--- |
| Romania | Germany | Romania | Germany |
| Morocco | Romania | Morocco | Romania |
| Argentina | Morocco | Colombia | Ukraine |
| Bolivia | Bolivia | Ecuador | Morocco |
| Colombia | Colombia | China | Honduras |
| Ecuador | Ecuador |  | Colombia |
| Peru | Peru |  | Ecuador |
| China | China |  | Peru |
|  |  |  | Venezuela |
|  |  |  | China |

Source: Instituto Nacional de Estadística

Table 1 shows the ethnic minorities living in Spain with a population of more than 100,000 from January 2002 to January 2020. As can be seen from the table, the number of ethnic minority groups in Spain with a population of more than 100,000 grew from only 4 groups in 2002 to 13 in 2007 , to 15 in 2020 . The number of immigrants declined between 2012 and 2017, largely because of the European debt crisis, and a sluggish Spanish economy, which led many ethnic minorities to return to their home countries or move to others.

As we can also see from Table 1, most ethnic minorities share a close relationship with Spain. Some ethnic minorities come from other European countries or European neighbors, whereas others use Spanish as their first language in their origin countries. Amongst all the immigration groups, the Chinese minority stands out most for its uniqueness, sharing far less cultural or linguistical ties with Spain than others. The population of the Chinese ethnic minority has remained above 100,000 since 2007 . Even though the population of many other ethnic minorities in Spain recorded a decrease in 2017, the population of Chinese ethnic minority has remained above 100,000 $(179,405)$. The cultural and linguistical differences, combined with the large size of the immigrant population, has made the Chinese ethnic minority an increasing focus of attention for the local society. Their adaptation and integration not only affect their socio-economic development, but also that of Spanish society as a whole.

### 1.2 The Chinese Ethnic Minority in Spain

Although historical documents show that the Chinese immigrants began moving to Spain as early as in the 16th century, current studies on the Chinese ethnic minority primarily focus on a relatively short period starting in the 1990s. This is perhaps understandable as the Chinese were not allowed to move abroad (including to Spain) on a large scale until this time. A number of historical events happened in both China and Spain during this period also contributed to these results. Firstly, the establishment of the diplomatic relationship between Spain and China provided an official system for people-topeople exchanges between these two countries, causing many Chinese to immigrate to Spain through legal means. Secondly, China's reform and opening-up policy made it politically possible for the Chinese to move to other countries. It also made it possible for those Chinese who had already settled in Spain to bring more relatives to Spain on the grounds of family reunions. Thirdly, the fast-growing economy in Spain produced a large numbers of job openings, particularly those for low-skilled workers, which provided ample employment opportunities for the Chinese ethnic minority.

Fourthly, the amnesty for illegal immigrants conducted by the Spanish government helped many illegal immigrants to obtain a legal status, conversely encouraging the arrival of more illegal immigrants to Spain.

Figure 1-1 The top 10 ethnic minorities by population in Spain (2020)


Source: Instituto Nacional de Estadística

Figure 1-2 The population of Chinese ethnic minority in Spain (2002-2010)


Source: Instituto Nacional de Estadística

These social circumstances and immigration policies led to a sharp increase in the number of Chinese immigrants in Spain from the 1990s onwards. Figure 1-1 shows the top ten ethnic minorities in Spain, in terms of the size of their populations, in 2020. The Chinese ethnic minority population ranked sixth in 2020, the third if one considers non-European origin countries. The Chinese ethnic minority population is not only characterized by these large numbers, but also by continuous growth. Figure 1-2 displays through a bar chart the growth of the Chinese ethnic minority population from 2002
to 2020 . As shown, except for a small decline in 2014 , its population has been steadily growing during the entire period.

### 1.3 Chinese Ethnic Minority's Integration

According to Berry (1997), integration could lead to favorable results for ethnic minorities in the host countries, by avoiding their segregation and other problems associated with their marginalization. However, ethnic minorities, especially those with different cultural backgrounds from the host countries, often face more difficult challenges during the process of integration. Low language capacity, low educational levels, low occupational qualifications and other factors could constitute serious challenges to them. Meanwhile, there are also obstacles resultant from being an immigration society, such as discrimination against ethnic minorities.

Typically, the first-generation of Chinese immigrants experienced serious linguistic, educational and occupational problems. They often came to Spain following other Chinese immigrants on the basis
of kinship and geographic proximity. Therefore, they largely found employment only within the existent local Chinese community and engaged in low-skill industries. This made it difficult for them to become integrated into the host society or develop socioeconomically. As a consequence, the task of promoting the integration of the Chinese immigrant community fell overtly on the shoulders of second-generation Chinese immigrants.

The most effective instrument for second-generation Chinese immigrants to integrate themselves into the host society and gain greater opportunities for social mobility is educational attainment. Researching the socio-economic factors that encourage the educational attainment of Chinese immigrant youths is thus key for ascertaining their future chances of upward mobility (Yiu, 2013). In addition to family background and socio-economic characteristics, another important factor affecting the educational attainment of second-generation Chinese immigrants is the discrimination they face from the local society. Certainly, the impact of discrimination
goes beyond the education of second-generation Chinese immigrants, affecting the labor-market integration of the Chinese ethnic minority community into the local society. Discrimination can occur in various areas, including the commodity trading market - an area that is explicitly explored in this thesis.

Discrimination is a common problem faced by ethnic minorities in the host countries, but the degree of discrimination and its negative impact is particularly serious for minorities who have very different cultural backgrounds from that of their receiving countries, like the Chinese ethnic minority in Spain. The study of discrimination has practical significance for the integration of this community, especially if it can identify its sources - prejudices or stereotypes.

### 1.4 The Content of This Thesis

There are three chapters to demonstrate the integration and discrimination of Chinese ethnic minority in Spain.

Chapter 1 starts with an investigation of the education of Chinese immigrant youths, and of the factors that affect their educational attainment, including their family background and the discrimination they face by the mainstream society according to their subjective appraisal. Educational attainment is an important tool for ethnic minorities to better integrate into the host societies, and can help predict their future socio-economic development and mobility in the host societies. Using simultaneous equations models applied to survey data, it found that Chinese immigrant youths have lower educational attainment than other ethnic minority youths in Spain. Factors negatively affecting their educational attainment include less parental, human and social capital investments, lower educational ambitions, and higher perceived discrimination.

The specific ways in which Chinese immigrant youths cope with subjective discrimination, as well as the role played by education and the Chinese community in limiting its most damaging effects, is analyzed in Chapter 2. This chapter focuses on the relationship
between coping strategies, social support and perceived discrimination among Chinese immigrant youths. Coping strategies and social support are seen as two effective mechanisms used to deal with discrimination. Through the qualitative analyses of extensive interviews with 60 Chinese youngsters living in Barcelona, it found that although educational attainment helped to adopt positive coping strategies against discrimination the most important and prevalent factor accounting for the relatively low impact of discrimination on the well-being of Chinese youths was the strong social support they receive from the rest of the Chinese community. This over-reliance on the Chinese community leads, on the one hand, to Chinese immigrants facing fewer emotional and economic problems, contributing to their personal wellbeing, but, on the other hand, maintains the segregation of the community and limits integration into the Spanish society, further contributing toward the discrimination of the Chinese ethnic minority.

Finally, in Chapter 3, I investigate the extent to which the Chinese community faces true discrimination from locals (not just perceives it), and the sources of this discrimination, taking discrimination within the commodity trading market as an example. Analyzing a field experiment conducted in Barcelona in 2020, in which fictitious sellers and buyers were made to operate in the most important second-hand commodity online trading platform, I explore whether Chinese sellers/buyers have the same market opportunities as Spanish-Catalans. By comparing positive responses, obtained from genuine buyers and sellers, to fake product postings and fake purchasing offers, I assess whether there is discrimination against the Chinese ethnic minority in the commodity trading market, and explore if this discrimination is more likely to be based on a dislike for the Chinese (taste-based discrimination) or on stereotypes about their typical behavior in markets (statistical discrimination). I found that buyers from the Chinese ethnic minority received fewer positive responses than Spanish-Catalan buyers, confirming that the Chinese ethnic minority experience discrimination in the commodity trading
market. Interestingly, however, they do not face discrimination as acting as sellers and, because the rates of positive responses to the purchasing offers vary according to the price offered in the same way as for nationals, I concluded that the discrimination faced by the Chinese ethnic community is mostly of a statistical nature.

In the concluding chapter of the thesis, I summarize its main findings, discuss the implications for the future integration and socioeconomic development of the Chinese community, point out some of the limitations of the study and possible ways to overcome them in future work.

### 1.5 Reference

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

Instituto Nacional de Estadística, https://www.ine.es/jaxiT3/Tabla.htm?t=9674\&L=1

Izquierdo, M., Jimeno, J. F., \& Lacuesta, A. (2015). Spain: from Immigration to Emigration?.

Reher, D., \& Requena, M. (2009). The National Immigrant Survey of Spain: A new data source for migration studies in Europe. Demographic Research, 20, 253-278.

Yiu, J. (2013). Calibrated Ambitions: Low Educational Ambitions as a Form of Strategic Adaptation Among Chinese Youth in Spain. International Migration Review, 47(3), 573-611.

## 2 DETERMINANTS OF EDUCATIONAL ATTAINMENTS OF CHINESE IMMIGRANT YOUTHS IN SPAIN


#### Abstract

The Chinese immigrant population in Spain has boomed in the past decades, which highlights the issue of educating Chinese immigrant descendants. Scholars have already paid some attention to the issue, although deep research on this issue remains absent, as it is still an emerging theme. Building on previous studies, the paper focuses on the determinants of Chinese immigrant youths' educational attainments. This study yielded four findings: Chinese immigrant youth have lower academic attainment than youth of other ethnic groups in Spain; lower parental capital, educational ambitions, and high perceived discriminations are the main factors resulting in Chinese immigrant youths' lower educational attainments; differences in the three factors above lead to different outcomes for Chinese youths; and regarding parental capital, parental educational capital plays a more significant role in Chinese immigrant youths' educational attainments than their economic capital.


### 2.1 Introduction

Education is important for immigrants as a useful predictor for their economic success (Sewell et al., 1969; Feliciano, 2005), potential productivity (Spence, 1974), and adaptation (Zhou, 1997), Moreover, education is considered a significant channel for achieving upward mobility in the host society (Hirschman \& Wong, 1986). As Feliciano has stated (2005), the education mobility of immigrant youths is one of the issues dominating the contemporary immigration debate. Therefore, with the growing presence of Chinese immigrant youths in Spanish schools, their educational attainments have necessarily received great attention from scholars.

However, the educational attainments of Chinese immigrant youths in Spain displays an unusually scenario compared with that of Chinese immigrant youths in the United States (US). As is well known, because of their success in schools and labor markets, Chinese-Americans have been labeled as a "model minority" and as
"middlemen" ${ }^{(1)}$ (Barringer et al., 1990). In the case of education, Chinese immigrant youths achieve remarkably highly in school, even higher than native-born U.S. youths (e.g., Barringer et al., 1990; Ong, 1976; Peng, 1988). Similar situation also happened in the UK. The study of Yaojun Li (2010) mentioned that in Britain, Chinese had higher qualifications than Whites on the basis of Confusion attachment. However, recent studies that examine the educational attainments of Chinese immigrant youths in Spain show their educational performance as the worst among youths from all ethnic groups (e.g. Yiu, 2013). Furthermore, because most of Chinese immigrant youths were still at the stage of compulsory education at the time of these studies, these studies were unable to obtain definite data on educational attainments and just used the predictors of educational attainments as the variables of educational attainments.

[^0]However, at present, with the completion of compulsory education for a generation Chinese immigrant youths, it is necessary to continue to explore their real educational attainments. Unlike their parents, who were educated in China and mainly pursue economic improvement in Spain, Chinese immigrant youths should receive their education in Spain. As shown in some studies, managing family businesses is a good choice for Chinese immigrant youths when they graduate from compulsory education; however, their adaptation and integration in Spain means that they must achieve more comprehensive development, such as political participation, which reasonably requires higher educational attainments.

This study aims to explore the determinants of Chinese immigrant youths' educational attainments, which points to their real educational attainments, instead of its predictors. Research questions include the following: (a) How does the degree of Chinese immigrant youths' educational attainments compare with that of youths from other immigrant groups in Spain? (b) What factors mainly influence

Chinese immigrant youths' educational attainments? And (c) Which factor or factors are most important to Chinese immigrant youths? The paper will shed some light on the picture of Chinese immigrants' educational attainments in Spain in detail.

The sections of this paper are as follows. The research background and research questions of this article are introduced in section one. Section two will briefly present the history of Chinse immigrants in Spain. Section three will focus on reviewing the determinants of educational attainments and Chinese immigrant youths' educational attainments explored in previous studies in Spain. Chapter four describes data, methods, and hypotheses for the current study. Chapter five presents the main results of quantitative analysis. Sections six and seven consist respectively of discussion and conclusion.

### 2.2 Chinese Immigrants in Spain

According to the historical document of Spain, Chinese immigrants to Spain can be traced back to the 16 th century $(\mathrm{Li}, 2016)$, although Chinese history records report that the Chinese did not start to immigrate to Spain until the early 20th century (Yiu, 2013; Wu, 2013). Despite this discrepancy, scholars have agreed that the 1980s was the beginning of extensive Chinese immigration into Spain (Yiu, 2013; Wu, 2013).

The influx of Chinese immigrants to Spain in the 1980s was driven by multiple factors. First, the establishment of the China-Spain diplomatic relationship in 1973 provided the official approach for the two sides to advance people-to-people exchange (Li, 2016). Second, the reform and opening-up policy inaugurated in the late 1970s relaxed the requirements for Chinese to move abroad (Lin, 2014). This policy granted Chinese citizens the legal opportunities to go abroad, in particular those in traditional Qiaoxiang ${ }^{(2)}$. In this period, many Chinese from Zhejiang province, which hosts some

[^1]Qiaoxiangs and is the largest source of Chinese immigrants in Spain (Lin, 2014), immigrated to Spain on the grounds of family reunification. Third, with Spain joining the European Community in 1986, the Spanish economy gained strong growth momentum, which led to a gap in the labor force and thus abundant employment opportunities for immigrants (Li, 2016). Fourth, illegal Chinese immigrants constitute the lion share of the Chinese population in Spain. However, the four amnesties granted by Spanish government, respectively, in 1985, 1991, 1996, and 2000 legitimized undocumented immigrants, including Chinese, and made them legal identifications (Li, 2016). The amnesty further lured a large number of illegal immigrants to Spain with the expectation of more amnesties.

These historical reasons resulted in the dramatic recent increase in Chinese immigrants. Although the recession caused by the economic crisis frustrated the Spanish economy, the population of Chinese immigrants continues to increase year by year. The Chinese population in Spain has seen growth, even during the financial crisis,
which hit the Spanish economy harder. As per the Spanish Statistical Office (INE, 2020) the number of Chinese immigrants in Spain has reached around two hundred thousand in 2020 and ranks fifth among all groups of immigrants, and China is the first Asian country in terms of immigrant population.

Historically, China is not a traditional immigrant country for Spain, but the increase in the number of Chinese immigrants in recent years has gradually overtaken many traditional immigrant countries to become an important part of the Spanish population. Although it has been shown that the education level of Chinese immigrant parents is generally low, they have achieved their targets-namely economic development-and have further created a stable job market and labor market in their own community. Therefore, the future development and integration of the Chinese community in the host society mainly depends on the growth in Chinese immigrant youths. The fundamental cultural differences and the short history of large-scale migration make it more difficult for Chinese immigrant youths to
integrate into their local societies. As mentioned above, education is the main channel for Chinese immigrant youths to achieve upward mobility in the host country.

### 2.3 Previous Studies

## Determinants of Educational Attainments

a) Parental Capital: Parental Education and Family Income

Among all sorts of parents' resources, parental education is considered an important and unique predictor of youths' educational attainments (Dubow et al., 2009; Haveman \& Wolfe, 1995). Youths whose parents have higher education are themselves more likely to attain higher education (Black et al., 2005). Although previous studies have confirmed the positive role of parental education for youths' educational attainment through the capital mechanism, different opinions remain on the categories of capital. Two types of
capital, in this case, have been identified: human capital and cultural capital.

Some scholars have suggested that parental education serves the role of human capital in the youths' educational attainments (Black et al., 2005; Li Y, 2010; Mirowsky \& Ross, 1998; Portes et al., 2013). Inequality in parental education level results in differences in youths' educational attainments (Baum \& Flores, 2011; Portes \& MacLeod, 1999). According to the concept of human capital (Insights, 2007), it embodies several intangible assets of individuals, such as knowledge, skill, and competencies. For example, parents with higher educational levels have the advantage of knowledge relating to youths' school curricula and are competent to guide their study (Gang \& Zimmermann, 2000; Leibowitz 1974, 1977; Mercy \& Steelman 1982; Mirowsky \& Ross, 1998), which can improve youths’ average grade points in schools (Gutman \& Midgley, 2000). Assuming that youths' human capital is at least partly biologically determined, they inherit more human capital from parents with
higher intelligence. Parents' involvement in youths' study is a strong predictor of youths' academic performance in school and other positive school behaviors (Anderson \& Minke, 2007; Cotton \& Wikelund, 1989; Egalite, 2016). In this context, parents with higher education levels and advanced language skills are more capable of communicating with their children and teachers. As a result, they can be aware of youths' academic performance in school and encourage and guide them on time. Moreover, parents' excellent language skills can cultivate children's complex speech and extensive vocabulary (Egalite, 2016), which is able to improve children's educational achievements in schools.

The idea that parental education is a measure of cultural capital has also been illustrated in some previous studies (Bourdieu, 1973, 1977; De Graaf, 1986; DiMaggio \& Mohr, 1985; Halsey et al., 1980; Robinson \& Garnier, 1985). For Bourdieu, cultural capital refers to the ability and behavior of understanding and managing "educated" language (Sullivan, 2001). Compared with parents’ human capital,
which plays a direct role in youths' educational attainments, the role of cultural capital is usually indirect. It provides invisible and potential power to foster youths' educational attainments (Grenfell \& James, 1998). For example, parents with higher educational levels usually perform some studying behaviors, such as reading usually. Doing so, helps create a favorable education environment that can help youths form good study habits and thus promote their educational attainments (Corwyn, 2004; Graaf et al., 2000; Smith et al., 1997).

As an investment activity, education also relies on other investments of capital, such as economic capital. Among them, family income is one of the significant kinds of economic capital that is closely involved in youths' educational attainments. In association orientation, the majority of previous studies have suggested that family income is positively correlated with children's educational attainments, and this positive relationship is displayed at various educational stages. For instance, Blanden and Gregg (2004), who
discussed the correlation between family income and children's educational attainments in the UK, revealed that family income, importantly, relates to children's educational attainments; furthermore, the relationship strengthens over time. And, Baum and Flores (2011) have found that children from low-income families "face significant barriers to enrolling and succeeding in postsecondary education" (p. 172). Similarly, the study of Taubman (1989) found that children's educational attainments are limited by parental income when governmental aid is absent. With respect to high education levels, the argument that children with high family income tend to get access to university education also has been demonstrated in previous literature (Acemoglu \& Pischke, 2001; Corak et al., 2004; Ellwood \& Kane, 2000).

Economic capital affects youths' educational attainments in two main ways. First, with the help of abundant family economic capital, youths can get access to more and better educational resources. For example, with strong family financial support, youths can attend
extracurricular classes and interest classes, which can help them get higher education attainments. Moreover, educational materials and resources, such as books, toys, and expensive cultural outings such as concerts can supplement youths' educations but are not likely accessible for low-income families (Sedikides et al., 2004). Second, family income affects choice of school type. Some prior studies have demonstrated the close relationship between education attainments and school type (Ferrera et al., 2011). Private schools are believed to affect children's educational attainments more positively than public ones (Hirschman, 2001); however, they are usually more expensive, which makes them less accessible for low-income families. Even in some cases where private schools are not popular, family income can still exert its impact on youths' education attainments by determining whether they live in a neighborhood favorable to educational attainments(Zhou \& Kim, 2006).

However, it is necessary to pay attention to whether economic capital, such as family income, has a negative effect on youths' educational
attainments compared with parents' human capital and cultural capital. Previous studies have shown that when parents have sufficient human and cultural capital, the negative impact of family income on children's education can be mitigated. Davis-Kean (2005) demonstrated the positive role parents' emotional support plays for children from low-income families. He described how the negative impact of low income can be minimized when parents can provide emotional support and motivation to their children (see also Barnard, 2004; Bukodi \& Goldthorpe, 2012; De Graaf et al., 2000). In this case, parents who hold the notion that education is an important path for children to achieve upward mobility, promote and wish to motivate their children toward higher educational attainments. It means that, to some extent, human capital and cultural capital provided by parents compensate for the disadvantage of economic capital. As stated by Acemoglu and Pischke (2001), "whether income (economic capital) truly matters is still a hotly debated issue" (p.891).
b) Youths' Educational Ambitions and Perceived Discriminations

Beyond the previously discussed external parental factors, youths' own educational ambitions and perceived discriminations, which constitute the internal factors in the investigation, also play significant roles to their educational attainments. In a word, higher educational ambitions lead to higher educational attainments.

Educational ambitions consist of educational aspirations and expectations. In short, educational aspirations refer to youths' desire of reaching the highest level of education in the ideal case, whereas educational expectations denote youths' beliefs regarding the highest level of education they can realistically reach (Yiu, 2013). As a significant internal personal motivation and a psychosocial variable, youths' educational ambitions provide them with a strong driving force. This was elaborated outright by Portes et al. (2010): "if a young person aims at some lofty goal, she may not achieve it; but if she does not aim high in the first place, she will surely not get there" (p. 793).

The impact of youths' educational aspirations on their educational attainments was first found in a classic status attainments model, the Wisconsin model (Sewell \& Hauser, 1972). This model suggests that youths' educational aspirations are key factors that lead to their subsequent educational attainments (Portes et al., 2010), which has been confirmed by following studies (e.g., Marjoribanks, 2003). In the case of education expectations, its positive relationship with educational attainments has also been revealed (e.g. Messersmith \& Schulenberg, 2008; Ou \& Reynolds, 2008). Above relationships between educational attainments and educational aspiration and expectation are also robust when applying to immigration studies. For example, in explaining Asian Americans' higher educational attainments than their white counterparts, Goyette and Xie (1999) found that Asian Americans' higher educational expectations were the key.

Educational aspirations and expectations generate influence to a different extent at youths' different life stages. Educational
aspirations are more crucial for youths during their early education (Nurimi, 2004). Youths usually possess ideal goals for their educational attainments at the beginning, which can drive them to work hard to reach their educational goals. However, as their experience grows, youths may reset their educational goals based on realistic considerations such as their interests, perceived abilities, individual characteristics, and even their socioeconomic status (Beal \& Crockett, 2010). At this moment, their educational expectations start to play a more important role in their educational attainments.

Discrimination, including both actual and perceived discriminations, is regarded as another important factor in shaping youths' educational attainments. Actual discrimination has been found difficult to measure, so researchers have usually adopted perceived discrimination as the indicator of discrimination to investigate (Berg et al., 2011; Zhang et al., 2006). Perceived discrimination, usually defined as "the perception of being denied recognition and treatment as a fellow national" (Simonsen, 2016, p. 374), has been more
frequently examined in research. Discriminations that immigrant youths experience can come from natives of their host nation as well as members of other immigrant ethnic groups. With respect to the association between perceived discriminations and educational attainments of immigrant youths, considerable numbers of studies have demonstrated that perceived discrimination plays a destructive in the educational attainments of immigrant youths. The perception of discrimination mainly affects their physical and mental health as well as their behavior norms, which has a negative impact on their educational attainments. First, numerous previous empirical studies prove that perceived discrimination affects immigrants' mental and physical health (e.g. Finch et al., 2000; Mossakowski, 2003; Sevillano et al., 2014; Tran et al., 2010), both of which are important factors in educational attainments. Second, immigrants with higher perceived discriminations are more likely to have behavior problems (Berg et al., 2011), including excessive drinking, smoking (Tran et al., 2010), drug abuse, and even more serious crimes. These behavior problems damage immigrant youths' educational attainments.

Meanwhile, it has been noted that some discriminatory legislation and actions already existent in institution in the host society may harm the education rights of immigrant youths (Tran et al., 2010). Moreover, immigrants' feelings of being discriminated against may persist and grow over time, producing long-lasting harm to immigrant youths' education (Banks et al., 2006).

Perceived discrimination is one of the biggest challenges for immigrants, and higher levels of perceived discrimination damage immigrant youths' educational attainments in the host countries. However, it does not mean that there is no way to resolve or decrease the perceived discrimination that immigrant youths experience. Immigrants' positive coping strategies and other powerful and sufficient social support are able to reduce the level of perceived discrimination they experience and thus promote their educational attainments.

According to the World Migration Report 2018, China is the fourth largest migrant-exporting country in the world. Today, Chinese immigrants are seen in almost every country in the world. The US has been the largest importer of Chinese immigrants, which now is the third-largest foreign-born group in the country (Zong \& Batalova, 2016). The education of Chinese immigrants in the U.S. attracted scholars' attention as early as the 1970s. Interestingly, studies have found that the level of Chinese-Americans educational attainments is higher than that for whites, blacks, and Hispanics (e.g. Barringer et al., 1990; Xie \& Goyette, 2004). Largely because of their educational achievements, Chinese-Americans are tagged "model minorities" (Feliciano, 2005; Hurh \& Kim 1989; Kao 1995; Kitano, 1976; Zhou, 1997) or "middlemen" (Bonacich, 1973).

In addition to the U.S., the phenomenon in which Chinese immigrant youths have higher educational attainments than other ethnic groups are found in other countries. For example, Abada and Tenkorang (2009) found that, in Canada's case, Chinese educational
achievements were higher than those for such ethnic groups as South Asians and blacks. The proportion of Chinese immigrant youths who attained a university education youths was the largest among all ethnic groups in Canada. The same situation was also found in the U.K. A report of the U.K. Department for Education and Employment found that British-Chinese youths stood out prominently in the education system for their educational attainments (DfEE, 2001a). The extraordinary educational attainments of Chinese immigrant youths have been observed throughout the entire education system, not only in compulsory and post-compulsory education, but also in higher education (Owen, 1994).

However, compared with the impressive records of Chinese youths in the above nations, their performance in Spain is a different picture.

Statistics show that the proportion of Chinese immigrant youths enrolled in post-compulsory secondary education was only $20 \%$ in Catalonia in 2010. The figure is not only lower than that of the total adolescent population (40\%) but also lower than that of the
immigrant youth population (30\%) (Generalitat de Catalunyan, 2010). This finding is further reinforced by research into language learning, which is an important aspect of educational attainments. It shows that Chinese immigrant youths locate at the bottom of the ranking which includes three ethnic groups (e.g. Pérez Milans, 2006). Subsequently, Alarcón and Rubio (2017) also demonstrated this through quantitative analysis.

The Center for Migration and Development at Princeton University initiated the Longitudinal Study of the Second Generation (ILSEG) in 2007. It is the first attempt to get insight into the adaptation of immigrant children in Spain, including their educational performance. Borrowing the ILSEG data, Yiu (2013) found that Chinese immigrant youths have lower educational ambitions, which this paper uses as an indicator of educational attainments, than youths of all other ethnic groups in Spain, including Moroccan, Ecuadoran, and other Asian groups.

Given Chinese immigrant youths' educational disadvantages, some scholars have devoted their research to analyzing different explanations. Some have considered that mobility in Spanish society for Chinese immigrants has been blocked, causing Chinese immigrant youths to tend give up on higher educational attainments and turn to pursuit of higher economic development (Aparicio \& Portes, 2014; Yiu, 2013). Others have interpreted these findings from a cultural perspective. For example, Pérez Milans (2006) argued that cultural differences between Spain and China, namely those between Western and Eastern cultures, are the main reasons for Chinese immigrant youths' poor Spanish ability.

Despite these findings, two gaps remain in the research on Chinese immigrant youths' education attainments in Spain. First, although previous studies suggest that both the blocked-mobility nature of Spanish society and Chinese immigrants' self-employment preferences have resulted in their lower educational attainments, some other important factors-in particular, Chinese immigrant
parents and Chinese immigrant youths themselves-remain unexamined. Second, previous studies apply some indicators of educational attainments to represent Chinese immigrant youths' educational attainments. Although they scratched the issue and presented some interesting findings, there is no analysis of actual educational attainments, whereas previous studies failed to analyze the effect factors of Chinese immigrant youths' educational attainments in-depth.

### 2.4 Methodology

## Data

Data of the Longitudinal Study of the Second Generation (ILSEG) is employed in this study. This ILSEG was conducted by the Center for Migration and Development of Princeton University in two stages, 2007-2008 and 2011, in two cities, Madrid and Barcelona. Thousands of immigrant youths participating in the first round of the survey were re-surveyed in 2011, while a portion of immigrant
youths' parents were also surveyed in that year. Note that because the Spanish compulsory education extends to 16 years of age, immigrant youths under 16 have been excluded from the analysis.

Table 2-1 shows the demographic characteristics of the sample of immigrant youths adopted in this study.

Table 2-1 The Demographic Characteristics of Immigrant Youths in ILSEG ( $\mathrm{N}=959$ )

| Ethnic <br> Minorities | Chinese | Other <br> Asian | European | African | Others | Total | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | 78 | 164 | 417 | 281 | 19 | 959 |  |
| \% | 8.13 | 17.10 | 43.48 | 29.30 | 1.98 | 100 |  |
| Gender |  |  |  |  |  | 959 |  |
| Male | 35 | 74 | 179 | 140 | 8 | 436 | 45.46 |
| Female | 43 | 90 | 238 | 141 | 11 | 523 | 54.54 |
| Age |  |  |  |  |  | 959 |  |
| 17 | 26 | 74 | 134 | 106 | 6 | 346 | 36.08 |
| 18 | 26 | 57 | 164 | 100 | 8 | 355 | 37.02 |
| 19 | 21 | 25 | 87 | 51 | 4 | 188 | 19.60 |
| 20 | 4 | 6 | 28 | 19 | 0 | 57 | 5.94 |
| 21 | 1 | 2 | 4 | 5 | 1 | 13 | 1.36 |
| Birthplace |  |  |  |  |  | 959 |  |
| Spain | 23 | 54 | 117 | 117 | 6 | 317 | 33.06 |
| Foreign | 55 | 110 | 300 | 164 | 13 | 642 | 66.94 |

Since the Latin Americans are native to Spanish, it is discussed in this study to exclude this group. Mainly selecting Chinese, other Asians, Europeans, Africans and Others as ethnic minorities will be tested. Among samples, totally, female respondents are more than males, but the numbers of female and male respondents for Chinese, Africans and Others are similar. In terms of age, most of respondents from these five ethnic minorities are at and below 18 years old, this age feature is helpful in examining whether their family socioeconomic background and their own educational ambitions affected their educational choices. With respect to birthplace, they share a common feature, namely, the majority of them were born in home countries, which is conducive to comparative analysis.

Table 2-2 presents the descriptive statistics for the analysis sample, which focuses on ethnic minority youths' family socio-economic background, perceived discrimination and their educational ambitions. As can be seen from this table, the educational level of

Chinese minority youths' parents is much lower than that of other ethnic minorities' youths. However, the family income of Chinese minority youths is the highest among all of ethnic minorities. In terms of perceived discrimination and educational ambitions, Chinese minority youths have the worst perceived discrimination and the lowest educational ambitions among all of them. The indicator of educational attainment is Spanish level, including listening, speaking, reading and writing abilities. According to Table 2-2, Chinese minority youths in these four Spanish abilities are lower than other minority youths in the "well and perfect" level. Based on the above descriptive statistics, we can see that, in addition to family income, Chinese minority youths are lower than other ethnic minorities' youths in terms of parental education level, educational ambitions and educational attainment. At the same time, their perceived discrimination is the worst among all of ethnic minorities.

Table 2-2 Descriptive Statistics of Analytical Samples by Socio-economic Characteristics Across Ethnic Minorities in Spain

|  | China <br> (\%) | Other Asian <br> (\%) | European <br> (\%) | African | Others <br> (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Parental Capital <br> Fathers' educational level |  |  |  |  |  |
|  |  |  |  |  |  |
| lower secondary | 88.5 | 60.4 | 40.5 | 87.5 | 21.1 |
| upper secondary | 6.4 | 8.5 | 33.8 | 4.3 | 5.3 |
| university and higher | 5.1 | 31.1 | 25.7 | 8.2 | 73.7 |
| Mothers' educational level |  |  |  |  |  |
| lower secondary | 92.3 | 49.4 | 45.3 | 89 | 26.3 |
| upper secondary | 3.8 | 7.3 | 24.5 | 4.3 | 10.5 |
| university and higher | 3.8 | 43.3 | 30.2 | 6.8 | 63.2 |
| Family income |  |  |  |  |  |
| less than 1000eur | 10.3 | 15.2 | 11.3 | 75.1 | 15.8 |
| between 1000 and 2000eur | 80.8 | 80.5 | 80.6 | 22.1 | 84.2 |
| between 2000 and 4000eur | 7.7 | 3.7 | 6.2 | 2.8 | 0 |
| more than 4000eur | 1.3 | 0.6 | 1.9 | 0 | 0 |
| Perceived Discrimination ${ }^{\text {® }}$ |  |  |  |  |  |
| Question 1 |  |  |  |  |  |
| never | 25.6 | 48.8 | 55.9 | 58 | 73.7 |
| some | 69.2 | 47.6 | 38.4 | 34.9 | 26.3 |
| often | 5.1 | 3.7 | 5.8 | 7.1 | 0 |
| Question 2 |  |  |  |  |  |
| false | 75.6 | 65.2 | 49.4 | 61.2 | 36.8 |
| true | 24.4 | 34.8 | 50.6 | 38.8 | 63.2 |
| Question 3 |  |  |  |  |  |
| false | 75.6 | 64.6 | 52 | 59.8 | 47.4 |
| true | 24.4 | 35.4 | 48 | 40.2 | 52.6 |
| Educational Ambitions |  |  |  |  |  |
| Educational expectations |  |  |  |  |  |
| lower secondary | 30.8 | 17.7 | 17.3 | 23.8 | 15.8 |
| upper secondary and | 53.8 | 54.3 | 53.7 | 50.5 | 26.3 |
| university and higher | 15.4 | 28 | 29 | 25.6 | 57.9 |

[^2]Educational aspirations

| lower secondary | 25.6 | 15.9 | 9.8 | 16.4 | 5.3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| upper secondary and | 39.7 | 40.8 | 43.6 | 47 | 26.3 |
| university and higher | 34.6 | 43.3 | 46.5 | 36.7 | 68.4 |
| Educational Attainment |  |  |  |  |  |
| Speaking Spanish level |  |  |  |  |  |
| little and not well | 44.9 | 14.6 | 3.6 | 7.1 | 0 |
| well and perfectly | 55.1 | 85.4 | 96.4 | 92.9 | 100 |
| Understanding Spanish |  |  |  |  |  |
| little and not well | 35.9 | 9.1 | 1.7 | 4.6 | 0 |
| well and perfectly | 64.1 | 90.9 | 98.3 | 95.4 | 100 |
| Reading Spanish level |  |  |  |  |  |
| little and not well | 47.4 | 12.8 | 6 | 8.5 | 0 |
| well and perfectly | 52.6 | 87.2 | 94 | 91.5 | 100 |
| Writing Spanish level |  |  |  |  |  |
| little and not well | 43.6 | 15.2 | 7.2 | 8.5 | 0 |
| well and perfectly | 56.4 | 84.8 | 92.8 | 91.5 | 100 |
| Continuously studying |  |  |  |  |  |
| No | 33.3 | 18.9 | 15.1 | 20.2 | 31.6 |
| Yes | 66.7 | 81.1 | 84.9 | 79.7 | 68.4 |
| TOTAL | 78 | 164 | 417 | 281 | 19 |

Source: ILSEG 2008; 2011

## Method

The structural equation model (SEM) is applied in the study. This is built on two considerations. First, there is no existing path analysis model to illustrate the associations among impact factors, such as the
relationship between initial factors and median factors, the relationship between median factors and educational attainments, the association between initial factors and educational attainments, and other relevant associations and connections. Second, it is necessary to build a model that considers all impact factors of immigrant youths' educational attainments simultaneously, which is useful to understand the full view of Chinese immigrant youths' educational attainments.

The evaluation of Chinese immigrant youths' educational attainments consisted of two steps. The first step was to build a path analysis model, the Immigrant Youths' Educational Attainments Model (IYEAM), to demonstrate the relationship among impact factors, mediating factors, and outcome variables of educational attainments for all ethnic groups in Spain. The second step was to evaluate whether the population of Chinese immigrant youths corresponds with this model in terms of education.

## Hypotheses

Hypothesis 1: Parental capital has direct, significant, and positive impacts on immigrant youths' educational attainments.

Hypothesis 2: Parental capital significantly and positively affects immigrant youths' educational ambitions, which, in turn, significantly and positively affect immigrant youths' educational attainments.

Hypothesis 3: Parental capital significantly and negatively affects immigrant youths' perceived discriminations, which significantly and negatively affect immigrant youths' educational attainments.

Hypothesis 4: Parental capital significantly and negatively affects perceived discriminations, which significantly and negatively affect immigrant youths' educational ambitions, which, in turn, significantly and positively affect immigrant youths' educational attainments.

Hypothesis 5: Chinese immigrant youths have significantly lower educational attainments than youths from other ethnic groups in Spain.

Hypothesis 6: Chinese immigrant youths have less parental capital, which is significant and positive to educational ambitions and thus is significant and positive to educational attainments.

Hypothesis 7: Chinese immigrant youths have less parental capital, which is significant and negative to perceived discrimination, which is significant and negative to educational attainments.

Hypothesis 8: Chinese immigrant youths have significantly lower educational ambitions, which are significant and negative to their educational attainments.

Hypothesis 9: Chinese immigrant youths experience more perceived discriminations, which are significant and negative to their educational attainments.

## Procedure

To examine the determinants of the educational attainments of Chinese immigrant youths in Spain, this study consisted of two stages. The first stage explored the determinants of educational attainments for all the immigrant youths in Spain. The purpose of this stage was to determine the main impact factors of the educational attainments of immigrant youths in Spain. It provided the basic model for stage 2, which focused on discussing the determinants of Chinese immigrant youths' educational attainments based on the results of stage one. Both stages adopted the SEM method.

## Model Building

The first step in building this model was to select and confirm the effect factors of the educational attainments of all of immigrant youths. For immigrant youths, their families and parents play significant roles in their educational attainments in that they tend to rely on their own families rather than on the host society. Hence,
familial capital and parental capital are usually considered the most important factors affecting immigrant youths' educational attainments. Furthermore, they are usually considered external impact factors. However, the effect of familial and parental capital on youths' educational attainments is exerted through some median factors, which usually first affects other aspects of youths' lives and then affects their educational attainments.

This study has adopted parental capital as an initial effect factor. It includes three main indicators: father's educational level, mother's educational level, and family income. There are two main external factors, namely youths' educational ambitions and perceived discriminations. The dependent variable is youths' educational attainments. As a control variable, birthplace, in this model, affects every factor. Thus, the immigrant youths' educational attainments model (IYEAM) was constructed as depicted in Figure 2-1.

Figure 2-1 Immigrant Youths' Educational Attainments Model in Spain (IYEAM)


As Figure 2-1 shows, most of the factors analyzed in the analytical model are thought to be latent constructs captured via several lowlevel variables. For example, the factor of 'Parent's capital' is seen as a latent construct capturing the shared variance of three variables: fathers' education, mothers' education, and family income. Table 23 shows the shared variances of other latent variables, immigrant youths' educational ambitions, and perceived discriminations.

The dependent variable is immigrant youths' educational attainments, also as a latent variable, which captures five indicators: abilities of speaking, understanding, reading, and writing Spanish, and whether
continuously studying after completing compulsory education. Immigrant Youths' Educational Attainments Model is a structural equation model that causally links a group of external and internal factors-or latent variables-through a set of equations connecting them via direct and indirect paths. This model estimates which of these causal paths are significant and which are not, and the estimated model means influence directions among these variables. They are marked as "+" and "-" in the model.

Table 2-3 The Indicators of Latent Variables of IYEAM

## Parental Capital

| x1: Fathers' educational level |
| :--- | :--- |
| x2: Mothers' educational level |
| x3: Family income |

Immigrant Youths' Perceived Discriminations
y1: Have you ever felt discriminated against or treated differently by others
y2: I have not felt discriminated against or treated differently by others ${ }^{\oplus}$
y3: The reason for discriminating against you or for not treating you the same as others

Immigrant Youths' Educational Ambitions

[^3]y4: Youths' educational expectations
y5: Youths' educational aspirations
Immigrant Youths' Educational Attainments

```
y6: Speaking Spanish level
y7: Understanding Spanish level
y8: Reading Spanish level
y9: Writing Spanish level
y10: Whether continuously studying after compulsory education
```

Source: ILSEG 2008; 2011

According to Figure 2-1, there are six paths among latent variables.

This study aims to find out certain whole paths from parental capital to immigrant youths' educational attainments, which are influenced by two mediating factors, immigrant youths' educational ambitions and perceived discriminations.

### 2.5 Results

## Determinants of Educational Attainments of Immigrant Youths in

## Spain

Figure 2-2 presents IYEAM results, displaying each path's coefficients and significant levels. According to Figure 2-2, the main results are as follows.

First, results of the estimation of IYAEM show that the parental capital of immigrants has a significant indirect effect on immigrant youths' educational attainments via two mediating factors: immigrant youths' educational ambitions and their perceived discriminations, with significant levels of $p \leq 0.01$ and $p \leq 0.05$, respectively. Meanwhile, the signs of the effects between parental capital and these two median factors are following two of hypotheses, namely that parental capital positively affects immigrant youths' educational ambitions and negatively affects immigrant youths' perceived discriminations. These results mean that immigrant youths who come from families in which parental capital is higher are more likely to hold higher educational ambitions while experiencing less perceived discriminations. However, parental capital does not
directly and significantly influence immigrant youths' educational attainments. Hence, hypothesis 1 is rejected.

Second, it is identical to previous studies, Figure 2-2 shows that immigrant youths' educational ambitions are significant impact factors in their educational attainments ( $p \leq 0.05$ ). Immigrant youths who have higher educational ambitions tend to obtain higher educational attainments. According to the above results, we can confirm that hypothesis 2 has been established.

Third, previous studies suggest that perceived discrimination is the significantly negative factor affecting immigrant youths' educational attainments. This study proves it. From Figure 2-2, we can see that the relationship between immigrant youths' perceived discriminations and their educational attainments is significantly negative (-.08), with a P -value of $\leq 0.01$. However, regarding the association between immigrant youths' perceived discriminations and their educational ambitions, this study does not find a significant
causal relationship. These results confirm hypothesis 3 but refute hypothesis 4.

Figure 2-2 Results of IYEAM Path Analysis


Last, as an important control variable, birthplace is also estimated in IYEAM. Figure 2-2 shows that birthplace is a significant factor that affects immigrant youths' educational ambitions and their educational attainments but does not significantly affect perceived discriminations. Two codes of birthplace are code 0 , which
represents Spain, and code 1, which represents others, including their origin countries and other countries. Hence, the results of Figure 2-2 mean that immigrant youths who were born in Spain are more likely to have higher educational ambitions ( -.15 and $p \leq 0.01$ ) and educational attainments ( -.12 and $p \leq 0.01$ ), which are correlated with findings in previous studies (Rumbaut, 2005).

Overall, the above analysis results verify that among four hypotheses in this study, both hypothesis 2 and hypothesis 3 are supported. In these two completed paths, parental capital is a crucial and initial impact factor in educational attainments for all of the immigrant youths in Spain, exerting their functions through two main median factors: youths' educational ambitions and perceived discriminations. However, there is no significant association between these two median factors.

These results indicate that immigrant youths, who have more parental capital, are inclined toward higher educational ambitions and feel
less discrimination from Spanish society. Subsequently, they are more likely to achieve higher educational attainments.

The next section explores the impact paths of educational attainments of Chinese immigrant youths in Spain. The following model changes the status of the external variables of the previous model, treating them as internal or mediating the impact of Chinese origin on educational attainments. In the new model, Chinese origin is the only external variable. Next, we test whether this ethnic origin has an impact on educational attainments via capital, aspirations, expectations, and perceived discriminations, controlling for birthplace.

Determinants of Educational Attainments of Chinese Immigrant

## Youths in Spain

Figure 2-3 Results of Path Analysis of IYEAM after Adding Factor of

## "Chinese Immigrant Youths"



Here an observed variable, "Chinese immigrant youths," has been added into IYEAM. The variable "Chinese immigrant youths" is coded to "Chinese ethnic group" (Code 1) and "Other ethnic minorities" (Code 0), which includes all of non-Chinese. The variable of "Chinese immigrant youths" is first considered as another external variable, and a relationship is constructed between it and the other four latent variables. Strategies in this section explore the
associations between Chinese immigrant youths and four latent variables and then find out the impact paths of educational attainments of Chinese immigrant youths in Spain.

This section first tests whether Chinese immigrant youths have lower educational attainments than youths from other ethnic groups in Spain and then identifies paths in which latent variables result in Chinese immigrant youths' lower educational attainments.

First, we see the general situation of Chinese immigrant youths in four latent variables. Figure 2-3 affirms that Chinese immigrant youths have significantly lower parental capital ( $p \leq 0.01$ ) and educational attainments $(p \leq 0.01)$ and significantly higher perceived discriminations (. 14 and $p \leq 0.01$ ). These factors confirm hypothesis 5. Although Chinese immigrant youths also have lower educational ambitions, this direct effect is not significant. Hence, hypothesis 8 is rejected.

However, according to Figure 2-3, there are some changes in the relationships among four latent variables compared with the results in Figure 2-2. Similar to Figure 2-2, parental capital is significant and positive to educational ambitions (. 45 and $p \leq 0.01$ ), and perceived discriminations and educational ambitions are the crucial impact factors in educational attainments ( -.28 and $p \leq 0.01 ; .066$ and $p \leqslant$ $0.01)$. These results prove hypothesis 6 and hypothesis 9 . But there is a change: namely, the negative association between parental capital and perceived discriminations is not significant. This change is especially important because it tells us that what appeared to be an effect of low capital in fostering discriminations is indeed an effect of being Chinese because of the association between Chinese and low capital. Therefore, hypothesis 7 is rejected.

In Figure 2-3, the birthplace also significantly affects educational ambitions and educational attainments. However, there is no significant relationship between birthplace and educational attainment for Chinese immigrant youths. It means the birthplace is
not an important factor to explain Chinese immigrant youths' lower educational attainments.

## Analysis

According to Figure 2-3, there are two main paths to explain Chinese immigrant youths' lower educational attainments. First, hypothesis 2 points to the positive relationships among parental capital, educational ambitions, and educational attainments. However, Figure 2-3 shows that Chinese immigrant youths have lower parental capital and, therefore, lower educational ambitions and, further, lower educational attainments. Second, hypothesis 3 shows the negative association between perceived discriminations and educational attainments. And Figure 2-3 shows that Chinese immigrant youths have serious perceived discriminations compared with youths from other ethnic groups and that because of their lower capital, this perception is not mediated. Consequently, they have lower educational attainments.

These two paths demonstrate that lower parental capital and more perceived discriminations are the main factors in Chinese immigrant youths' lower educational attainments. However, there is a contradiction with previous studies arguing that Chinese immigrant families have better economic status because the majority of them engage in businesses, such as bars, stores, and restaurants. According to Figure $2-3$, we can see their advantage in economic status not only do not improve their overall capital but also do not reduce their perceived discriminations. The only way to test this would be to separate capital into parental education and family income and then explore the relationship between their different capital and perceived discriminations respectively. There are two possibilities. First, perhaps the relationship between family income and Chinese immigrant youths' educational attainments is less negative than that between parental education and Chinese immigrant youths' educational attainments. In this case, being richer would reduce feelings of discriminations. Second, Chinese immigrant parents have the lowest education levels. The significance of the negative impact
of the lowest education levels on their children's educational attainments exceeds the possible positive impact of their economic status.

Therefore, to clearly explain this conflict issue, the following will analyze the impact of different Chinese immigrant parents' capital, mainly focusing on their educational capital and economic capital, on Chinese immigrant youths' educational attainments. The main purpose for this is to explore whether Chinese immigrant parents' different capital have different impacts on their children's educational attainments.

The following two models are designed based on Figure 2-3; Figure 2-4 differs in that it solely analyzes parental educational capital, mainly including fathers' and mothers' educational levels, while Figure 2-5 concentrates on exploring parental economic capital, namely family income.

Figure 2-4 The Impact of Parental Educational Capital of IYEAM


Figure 2-4 shows that the impact orientation and significant level of other paths do not change, except for the relationship between parental educational capital and perceived discriminations. In this model, Chinese immigrant parents' educational capital has a significant negative effect on their children's perceived discriminations (-. 02 and $p \leq 0.05$ ). It demonstrates that Chinese parents' lowest education levels significantly and negatively affect Chinese immigrant youths' educational attainments. In this path, perceived discriminations play an important median role.

Figure 2-4 confirms that Chinese immigrant parents' lower educational capital play a significant role in their children's lower educational attainments by negatively affecting their perceived discriminations.

Next, we examine the relationship among Chinese immigrant parents' economic capital, Chinese immigrant youths' perceived discriminations, and educational attainments.

Figure 2-5 presents the results of the impact of parental economic capital on immigrant youths' educational attainments. It provides a very different outcome from that of Figure 2-4. This model shows that parental economic capital plays a small, insignificant role in perceived discriminations. Figure 2-5 further illustrates that, compared with Chinese immigrant parents' economic capital, their lower educational capital is the main factor in Chinese immigrant youths' lower educational attainments.

Analysis of the above two figures shows that Chinese immigrant parents' higher economic levels not alleviated the negative impact of perceived discriminations on Chinese immigrant youths' educational attainments. On the contrary, the lower educational level of Chinese immigrant parents has a more important negative impact on Chinese immigrant youths' educational attainments.

Figure 2-5 The Impact of Parental Economic Capital in IYEAM


### 2.6 Discussion

The above results state that parental capital is the main impact factor for Chinese immigrant youths' lower educational attainments; however, different kinds of parental capital have different impact degrees. Compared with parental economic capital, parental educational levels play more significant roles in Chinese immigrant youths' educational attainments. Specifically, the impact of parental educational capital on Chinese immigrant youths' educational attainments occupies a dominant position compared with the effect of parents' economic levels. Chinese immigrant parents' lower educational capital negatively influences their children's educational ambitions and perceived discriminations and then negatively impact Chinese immigrant youths' educational attainments.

There are three possible explanations to illustrate these negative relationships. First, parental education capital mainly points to their education level and those resources based on educational levels, which, as a basis for their development in the host society, in particular closely and positively affect their occupation and family
income. Parents with higher education levels are more likely to obtain highly paid jobs, which is beneficial for youths to have qualified education resources. In addition to providing material resources, it also provides a better neighborhood characterized by educated and capable neighbors in which immigrant youths are less likely to face discrimination. Meanwhile, parental education levels are directly and closely related to children's educational attainments. For instance, parents with higher education levels are able to guide children's curricula and help immigrant youths improve their educational attainments while motivating them to take part in activities conducive to studying that encourage immigrant youths to integrate actively with their local peers. Both improvement of educational attainments and integration help reduce immigrant youths' perceived discriminations. However, the above results show that the education level of Chinese immigrant parents is much lower than that of other ethnic groups in Spain; and, as a consequence, they cannot enjoy the advantages mentioned above.

Second, although higher family income has a positive impact on immigrant youths' educational attainments, its preconditions are that family income should be spent on immigrant youths' educational activities and that they should eliminate the negative effects of certain factors, such as discrimination. However, Chinese immigrant parents do not spend their family income on the above aspects. On the one hand, the majority of Chinese immigrants in Spain dream of having their own business to improve their economic level and living conditions, which are their main goals in immigrating (Li, 2016). Hence, their incomes are used to expand their businesses rather than their children's education. On the other hand, because Chinese immigrant parents focus particularly on business, they ignore or have no time to focus on the comprehensive improvement and development of Chinese immigrant youths' quality of life and education which are the key factors that strengthen youths' selfesteem and confidence and reduce their feelings of discrimination. Therefore, Chinese immigrant parents' higher family income does not play a role in reducing perceived discrimination experienced by

Chinese immigrant youths and thus does not promote Chinese immigrant youths' educational attainments.

The third consideration focuses on an objective fact, namely the history of Chinese immigration in Spain. The Chinese have been immigrating to the U.S. for nearly a hundred years. Most Chinese immigrant youths in the U.S., who are considered to be a "model minority," are concentrated in the second and third generations of Chinese immigrant families. However, the Chinese have been immigrating to Spain for only 20 years. Most second-generation Chinese immigrant youth have been coming of age recently, and most of the third generation are infants or small children. Consequently, this issue needs to be watched carefully for a long period. It is possible that Chinese immigrant youths' educational attainments will improve in the future.

### 2.7 Conclusion

This study focuses on discussing Chinese immigrant youths' educational attainments in Spain and further explores their determinants through quantitative analysis. Finally, it shows that Chinese immigrant youths have lower educational attainments than youths from other ethnic groups in Spain. With respect to determinants, this study finds that lower parental capital and youths' educational ambitions and higher perceived discrimination are the main impact factors, which play negative roles in Chinese immigrant youths' educational attainments. Among these impact factors, two paths explain this phenomenon. The first is Chinese immigrant youths' lower parental capital, which negatively influences their educational ambitions and results in lower educational attainments. However, further analysis also points out, among two types of capital, that parents' educational capital plays a more important role than their economic capital. The second path argues that Chinese immigrant youths feel more discrimination than the youth of other ethnic minorities, which results in lower educational attainments.

The Chinese ethnic minority is the fastest-growing group among ethnic minorities in Spain. Not only are more and more Chinese immigrants coming to Spain from China, but the number of secondand even third- generation Chinese immigrants attending local schools is also growing rapidly. Their educational attainments are related not only to their own development but also to the overall development of the Chinese community in Spain. However, the current research shows that the low level of Chinese immigrant youths' educational attainments is very worrying and that it is critical to find effective ways to improve their educational attainments so as to make the Chinese community achieve upward mobility in the local society in the future. Therefore, future research can be devoted to exploring ways and methods to improve the educational attainments of Chinese immigrant youths so as to promote the education attainments of the Chinese immigrant descendants.

### 2.8 Reference

Acemoglu, D., \& Pischke, J. S. (2001). Changes in the wage structure, family income, and children's education. European Economic Review, 45(4-6), 890-904.

Abada, T., \& Tenkorang, E. Y. (2009). Pursuit of university education among the children of immigrants in Canada: The roles of parental human capital and social capital. Journal of Youth Studies, 12(2), 185-207.

Alarcón, A. A., \& Rubio, S. P. (2017). Linguistic integration of the descendants of foreign immigrants in Catalonia. Migraciones Internacionales, 6(24), 101-130.

Anderson, K. J., \& Minke, K. M. (2007). Parental involvement in education: Toward an understanding of parents' decision making. Journal of Educational Research, 100(5), 311-323.

Aparicio, R., \& Portes, A. (2014). Growing up in Spain: The integration of the children of immigrants. Barcelona: La Caixa Foundation (Social Studies Collection No. 38).

Barnard, W. M. (2004). Parent involvement in elementary school and educational attainments. Children and Youth Services Review, 26(1), 39-62.

Barringer, H. R., Takeuchi, D. T., \& Xenos, P. (1990). Education, occupational prestige, and income of Asian Americans. Sociology of Education, 27-43.

Baum, S., \& Flores, S. M. (2011). Higher education and children in immigrant families. The Future of Children, 171-193.

Beal, S. J., \& Crockett, L. J. (2010). Adolescents' occupational and educational aspirations and expectations: Links to high school activities and adult educational attainments. Developmental Psychology, 46(1), 258.

Black, S. E., Devereux, P. J., \& Salvanes, K. G. (2005). Why the apple doesn't fall far: Understanding intergenerational transmission of human capital. American Economic Review, 95(1), 437-449.

Blanden, J., \& Gregg, P. (2004). Family income and educational attainments: A review of approaches and evidence for Britain. Oxford Review of Economic Policy, 20(2), 245-263.

Bonacich, E. (1973). A theory of middleman minorities. American Sociological Review, 583-594.

Bourdieu, P. (1973). Cultural reproduction and social reproduction. Tavistock.

Bourdieu, P. (1977). The economics of linguistic exchanges. Information (International Social Science Council), 16(6), 645-668.

Bukodi, E., \& Goldthorpe, J. H. (2012). Causes, classes and cases. Longitudinal and Life Course Studies, 3, 292-296.

Corak, M., Lipps, G., \& Zhao, J. (2003). Family income and participation in post-secondary education. Ottawa, ON: Statistics Canada.

Corwyn, R. F. (2004). Family process mediators of the relation between SES and child outcomes, The University of Memphis.

Cotton, K., \& Wikelund, K. R. (1989). Parent involvement in education. School Improvement Research Series (SIRS). Washington DC: Office of Educational Research and Improvement.

Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievements: The indirect role of parental expectations and the home environment. Journal of Family Psychology, 19(2), 294.

De Graaf, P. M. (1986). The impact of financial and cultural resources on educational attainments in the Netherlands. Sociology of Education, 237-246.

De Graaf, N. D., De Graaf, P. M., \& Kraaykamp, G. (2000). Parental cultural capital and educational attainments in the Netherlands: A refinement of the cultural capital perspective. Sociology of Education, 92-111.

Department for Education and Employment (2001) Opportunity and skills in the knowledge-driven economy. London: DfEE.

DiMaggio, P., \& Mohr, J. (1985). Cultural capital, educational attainments, and marital selection. American Journal of Sociology, 90(6), 1231-1261.

Dubow, E. F., Boxer, P., \& Huesmann, L. R. (2009). Long-term effects of parents' education on children's educational and occupational success: Mediation by family interactions, child aggression, and teenage aspirations. Merrill-Palmer Quarterly, 55(3), 224.

Egalite, A. J. (2016). How family background influences student achievements: can schools narrow the gap? Education Next, 16(2), 70-79.

Ellwood, D. T., \& Kane, T. J. (2000). Who is getting into college? Family background and the growing gaps in enrollment. Securing the Future', Russell Sage, New York.

Feliciano, C. (2005). Does selective migration matter? Explaining ethnic disparities in educational attainments among immigrants’ children. International Migration Review, 39(4), 841-871.

Ferrera, J. M. C., Cebada, E. C., Chaparro, F. P., \& González, D. S. (2011). Exploring educational efficiency divergences across Spanish regions in PISA 2006. Revista De Economía Aplicada, 19(57), 117-145.

Finch, B. K., Kolody, B., \& Vega, W. A. (2000). Perceived discrimination and depression among Mexican-origin adults in California. Journal of health and social behavior, 295-313.

Gang, I. N., \& Zimmermann, K. F. (2000). Is Child Like Parent? Educational attainments and ethnic origin. Journal of Human Resources, 550-569.

Goyette, K., \& Xie, Y. (1999). Educational expectations of Asian American youths: Determinants and ethnic differences. Sociology of Education, 22-36.

Grenfell, M., James, D., Hodkinson, P., Reay, D., \& Robbins, D. (1998). Bourdieu and education: Acts of practical theory (Vol. 1). Falmer Press.

Gutman, L. M., \& Midgley, C. (2000). The role of protective factors in supporting the academic achievements of poor African American students during the middle school transition. Journal of Youth and Adolescence, 29(2), 223-249.

Halsey, A. H., Heath, A. F., \& Ridge, J. M. (1980). Origins and destinations: Family, class, and education in modern Britain. Clarendon Press.

Haveman, R., \& Wolfe, B. (1995). The determinants of children's attainments: A review of methods and findings. Journal of Economic Literature, 33, 1829-1878.

Hirschman, C. (2001). The educational enrollment of immigrant youth: A test of the segmented-assimilation hypothesis. Demography, 38(3), 317-336.

Hirschman, C., \& Wong, M. G. (1986). The extraordinary educational attainments of Asian-Americans: A search for historical evidence and explanations. Social Forces, 65(1), 127.

Hurh, W. M., \& Kim, K. C. (1989). The "success" image of Asian Americans: Its validity, and its practical and theoretical implications. Ethnic and Racial Studies, 12(4), 512-538.

Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 39(1), 31-36.

Kao, G. (1995). Asian Americans as model minorities? A look at their academic performance. American Journal of Education, 103(2), 121-159.

Kitano, H. (1976). Japanese Americans: The evolution of a subculture. Prentice-Hall.

Leibowitz, A. (1974). Home investments in children. Journal of Political Economy, 82(2, Part 2), S111-S131

Leibowitz, A. (1977). Parental inputs and children's achievements. The Journal of Human Resources, 12(2), 242251.

Li, Minghuan. (2016). Chinese communities in Spain. Overseas Chinese History Studies, 7(2).

Li, Y. (2010). The Labour Market Situation of Minority Ethnic Groups in Britain and the US. EurAmerica, 40(2).

Lin, Guoyang. (2014). Study on the Chinese exclusion problem in Spain-Take the Qingtianese new immigrants from Zhejiang province as example [Unpublished master's thesis]. Ji Nan University.

Marjoribanks, K. (2003). Learning environments, family contexts, educational aspirations and attainments: A moderationmediation model extended. Learning Environments Research, 6(3), 247-265.

Mercy, J. A., \& Steelman, L. C. (1982). Familial influence on the intellectual attainments of children. American Sociological Review, 532-442.

Messersmith, E. E., \& Schulenberg, J. E. (2008). When can we expect the unexpected? Predicting educational attainments when it differs from previous expectations. Journal of Social Issues, 64(1), 195-212.

Mirowsky, J., \& Ross, C. E. (1998). Education, personal control, lifestyle and health: A human capital hypothesis. Research on Aging, 20(4), 415-449.

Mossakowski, K. N. (2003). Coping with perceived discrimination: Does ethnic identity protect mental health?. Journal of health and social behavior, 318-331.

Ong, C. (1976). The educational attainments of the Chinese in America. Unpublished manuscript, University of California, Berkeley, Department of Anthropology.

Ou, S.-R., \& Reynolds, A. J. (2008). Predictors of educational attainments in the Chicago Longitudinal Study. School Psychology Quarterly, 23(2), 199.

Owen, D. (1994). Chinese people and "other" ethnic minorities in Great Britain: Social and economic circumstances. Centre for Research in Ethnic Relations, University of Warwick.

Peng, S. (1988, April). Attainments status of Asian Americans in higher education. Paper Presented at the National Association for Asian and Pacific American Education (NAAPE) Conference, Denver, CO.

Pérez Milans, M. (2006). Spanish education and Chinese immigrants in a new multicultural context: Cross-cultural and interactive perspectives in the study of language teaching methods. Journal of Multicultural Discourses, 1(1), 60-85.

Portes, A., \& MacLeod, D. (1999). Educating the second generation: Determinants of academic achievements among children of
immigrants in the US. Journal of Ethnic and Migration Studies, 25(3), 373-396.

Portes, A., Aparicio, R., Haller, W., \& Vickstrom, E. (2010). Moving Ahead in Madrid: Aspirations and Expectations in the Spanish Second Generation 1. International Migration Review, 44(4), 767-801.

Portes, A., \& Fernández-Kelly, P. (2008). No margin for error: Educational and occupational achievements among disadvantaged children of immigrants. The Annals of the American Academy of Political and Social Science, 620(1), 1236.

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

Portes, A., Vickstrom, E., Haller, W. J., \& Aparicio, R. (2013). Dreaming in Spain: Parental determinants of immigrant children's ambitions. Ethnic and Racial Studies, 36(4), 557-589.

Robinson, R. V., \& Garnier, M. A. (1985). Class reproduction among men and women in France: Reproduction theory on its home ground. American Journal of Sociology, 91(2), 250-280.

Rumbaut, R. G. (2005). Turning points in the transition to adulthood: Determinants of educational attainment, incarceration, and early childbearing among children of immigrants. Ethnic and racial studies, 28(6), 1041-1086.

Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., \& Rusbult, C. (2004). Are normal narcissists psychologically healthy?: Self-esteem matters. Journal of Personality and Social Psychology, 87(3), 400.

Sevillano, V., Basabe, N., Bobowik, M., \& Aierdi, X. (2014). Healthrelated quality of life, ethnicity and perceived discrimination among immigrants and natives in Spain. Ethnicity \& Health, 19(2), 178-197.

Sewell, W. H., Haller, A. O., \& Portes, A. (1969). The educational and early occupational attainments process. American sociological review, 82-92.

Sewell, W. H., \& Hauser, R. M. (1972). Causes and consequences of higher education: Models of the status attainments process. American Journal of Agricultural Economics, 54(5), 851-861.

Smith, J. R., Brooks-Gunn, J., \& Klebanov, P. K. (1997). Consequences of living in poverty for young children's cognitive and verbal ability and early school achievements. New York: Russell Sage Foundation.

Spence, M. (1974). Competitive and optimal responses to signals: An analysis of efficiency and distribution. Journal of Economic Theory, 7(3), 296-332.

Sullivan, A. (2001). Cultural capital and educational attainments. Sociology, 35(4), 893-912.

Taubman, P. (1989). Role of parental income in educational attainments. The American Economic Review, 79(2), 57-61.

Tran, A. G., Lee, R. M., \& Burgess, D. J. (2010). Perceived discriminations and substance use in Hispanic/Latino, Africanborn Black, and Southeast Asian immigrants. Cultural Diversity and Ethnic Minority Psychology, 16(2), 226-236.

Wu, Yang. (2013). Struggle and Hope-An Analysis of the Current Situation of Chinese Immigrants in Spain. Journal of Southwest Petroleum University (Social Sciences Edition), 15(4).

Xie, Y., \& Goyette, K. (2004). Asian Americans: A demographic portrait. Russell Sage Foundation.

Yiu, J. (2013). Calibrated Ambitions: Low Educational Ambitions as a Form of Strategic Adaptation Among Chinese Youth in Spain. International Migration Review, 47(3), 573-611.

Zhou, M. (1997). Growing up American: The challenge confronting immigrant children and children of immigrants. Annual Review of Sociology, 23(1), 63-95.

Zhou, M., \& Kim, S. (2006). Community forces, social capital, and educational achievements: The case of supplementary education in the Chinese and Korean immigrant communities. Harvard Educational Review, 76(1), 1-29

Zong, J., \& Batalova, J. (2016). College-educated immigrants in the
United States. Migration Information Source:
https://www.migrationpolicy.org/article/college-educated-immigrants-united-states-2018

## Appendix

## Test of IYEAM

## Reliability and Validity Analysis

Analysis of reliability mainly adopts the Cronbach's Alpha (CA).

Table 2-4 shows the CA values of latent variables and the total variables of IYEAM.

Table 2-4 Reliability Analysis of IYEAM

| Latent variables | Observed | CA |
| :--- | :--- | :--- |
|  | variables |  |
| Parental Capital | $\mathrm{x} 1-\mathrm{x} 3$ | 0.695 |
| Perceived Discriminations | $\mathrm{y} 1-\mathrm{y} 3$ | 0.864 |
| Educational Ambitions | $\mathrm{Y} 4-\mathrm{y} 5$ | 0.821 |


| Educational Attainments | $\mathrm{Y} 6-\mathrm{y} 10$ | 0.852 |
| :--- | :--- | :--- |
| Total |  | 0.714 |

Validity analysis refers to two measures. First is the Kaiser-MeyerOlkin (KMO) measure of sampling adequacy, which is used to test whether data is suitable to do factor analysis. The value is between 0.7 and 0.8 is good (Hair et al., 2006). Second is Bartlett's Test of Sphericity, the value represents the significant level. Their values are presented in Table 2-5.

Table 2-5 Validity Analysis of IYEAM

| KMO value |  | 0.754 |
| :--- | :--- | :--- |
|  | Approx. | 6205.281 |
| Bartlett's | df | 91 |
|  | Sig. | 0.000 |

## Model Fitting Evaluation

To affirm whether this model is used to access the educational attainments of immigrant youths in Spain, a fitting evaluation is necessary. Here the Maximum Likelihood is used to estimate the
impact factors in the educational attainments of immigrant youths. The main indicators that will be selected include chi-square, degrees of freedom and RMSEA, TLI (Tucker-Lewis), and CFI. Furthermore, SRMR is used to test for a bad fit. The values of every indicator are shown in Table 2-6.

Table 2-6 Results of Fitting Evaluation of IYEAM

| Indicators | x2 | df | RMSEA | TLI | CFI | SRMR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Value | 6247.626 | 171 | 0.061 | 0.947 | 0.961 | 0.043 |
| Standard | - | - | $\leq 0.1$ | $\geq 0.9$ | $\geq 0.9$ | $\leq 0.08$ |

## Test of IYEAM After Adding the Factor of "Chinese Immigrant

## Youths"

This test is the same as above; hence, the following will display the measure results.

| Latent variables | Observed variables | CA |
| :--- | :--- | :--- |
| Parental Capital | $\mathrm{x} 1-\mathrm{x} 3$ | 0.695 |
| Perceived Discrimination | $\mathrm{y} 1-\mathrm{y} 3$ | 0.864 |
| Educational Ambitions | $\mathrm{Y} 4-\mathrm{y} 5$ | 0.821 |
| Educational Attainments | $\mathrm{Y} 6-\mathrm{y} 10$ | 0.852 |
| Total |  | 0.716 |

Table 2-8 Validity Analysis of CIYEAM

| KMO value |  | 0.754 |
| :--- | :--- | :--- |
|  | Approx. | 6736.608 |
| Bartlett's | df | 171 |
|  | Sig. | 0.000 |

## Model Fitting Evaluation

Table 2-9 Results of Fitting Evaluation of CIYEAM

| Indicators | x 2 | df | RMSEA | TLI | CFI | SRMR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Value | 6462.730 | 171 | 0.061 | 0.941 | 0.954 | 0.045 |
| Standard | - | - | $\leq 0.1$ | $\geq 0.9$ | $\geq 0.9$ | $\leq 0.08$ |

## Test of IYEAM with Parental Educational Capital

## Reliability and Validity Analysis

Table 2-10 Reliability Analysis of CIYEAM-Parental Educational Capital

| Latent variables | Observed variables | CA |
| :--- | :--- | :--- |
| Parental Capital | $\mathrm{x} 1-\mathrm{x} 2$ | 0.788 |
| Perceived Discrimination | $\mathrm{y} 1-\mathrm{y} 3$ | 0.864 |
| Educational Ambitions | $\mathrm{Y} 4-\mathrm{y} 5$ | 0.821 |
| Educational Attainments | $\mathrm{Y} 6-\mathrm{y} 10$ | 0.852 |
| Total |  | 0.711 |

Table 2-11 Validity Analysis of CIYEAM-Parental Educational Capita

| KMO value |  | 0.748 |
| :--- | :--- | :--- |
|  | Approx. | 6044.585 |
| Bartlett's | df | 78 |
|  | Sig. | 0.000 |

## Model Fitting Evaluation

Table 2-12 Results of Fitting Evaluation of CIYEAM-Parental Educational Capital

| Indicators | x2 | df | RMSEA | TLI | CFI | SRMR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Value | 6251.041 | 171 | 0.064 | 0.942 | 0.956 | 0.044 |
| Standard | - | - | $\leq 0.1$ | $\geq 0.9$ | $\geq 0.9$ | $\leq 0.08$ |

## Test of IYEAM with Parental Economic Capital

## Reliability and Validity Analysis

Table 2-13 Reliability Analysis of CIYEAM-Parental Economic Capital

| Latent variables | Observed variables | CA |
| :--- | :--- | :--- |
| Parental Capital | x 3 | - |
| Perceived Discrimination | $\mathrm{y} 1-\mathrm{y} 3$ | 0.864 |
| Educational Ambitions | $\mathrm{Y} 4-\mathrm{y} 5$ | 0.786 |
| Educational Attainments | $\mathrm{Y} 6-\mathrm{y} 10$ | 0.714 |
| Total |  | 0.692 |

Table 2-14 Validity Analysis of CIYEAM-Parental Economic Capital

| KMO value |  | 0.760 |
| :--- | :--- | :--- |
|  | Approx. | 5425.610 |
| Bartlett's | df | 56 |
|  | Sig. | 0.000 |

## Model Fitting Evaluation

Table 2-15 Results of Fitting Evaluation of CIYEAM-Parental Economic Capital

| Indicators | x2 | df | RMSEA | TLI | CFI | SRMR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Value | 5633.297 | 171 | 0.069 | 0.937 | 0.953 | 0.045 |
| Standard | - | - | $\leq 0.1$ | $\geq 0.9$ | $\geq 0.9$ | $\leq 0.08$ |

## 3 PERCEIVED DISCRIMINATION AMONG CHINESE IMMIGRANT YOUTHS IN SPAIN: THE MODERATING ROLES OF COPING STRATEGIES AND SOCIAL SUPPORT


#### Abstract

Through in-depth interviews with 60 Chinese immigrant youths in Spain, including 30 young people with educational attainment at the university level or above and 30 young people with educational attainment at the high-school level or below, the paper explores how coping strategies and social support moderate the discrimination they perceive, with educational attainment as a mediating factor. It finds that among Chinese immigrant youths, regardless of their educational attainment, their perceived discrimination is generally high. But for Chinese immigrant youths, perceived discrimination has different causes depending on their education level. Meanwhile, coping strategies and social support play different moderating roles in perceived discrimination of Chinese immigrant youths with different educational attainment. Chinese immigrant youths with low educational attainment tend to adopt negative coping strategies, which actually aggravates the perceived discrimination. Chinese


immigrant youths with high educational attainment tend to adopt positive coping strategies, which help to weaken their perceived discrimination. With respect to social support, Chinese immigrant youths of different educational attainment show some commonalities: they are able to get great social support from their own ethnic community. But the Chinese immigrant youths with lower educational attainment are more dependent on the ethnic community, which results in more serious segregation from the host society. However, stronger social support from the ethnic community provides Chinese immigrant youths with higher educational attainment with abundant resources to assimilate into and adapt to local society.

### 3.1 Introduction

For immigrants integrating into and adapting to their host society, perceived discrimination is a challenge that they must overcome. Comprehensive research has shown that perceived discrimination is seriously harmful to immigrants' mental and physical health (e.g. Paradies, 2006; Williams \& Mohammed, 2009), sociocultural adjustment (e.g. Berry et al., 2010; Zlobina et al., 2006), and selfesteem (e.g. Deng \& Shi, 2013; Fan et al., 2013). The harm can make their survival and development in the host society more difficult.

Although Chinese immigrants in Spain have been successful in business, existing studies find that Chinese immigrant youths have lower educational attainment (Aparicio \& Portest, 2014; Yiu, 2013). Perceived discrimination has been suggested as an important explanation for this phenomenon. In particular, Chinese immigrant youths' higher perceived discrimination is one of the main causes of their lower educational attainment (Yiu, 2013). As I also show in

Chapter 1 of this dissertation, perceived discrimination not only directly and negatively affects Chinese immigrant youths' educational attainment but also plays a negative role as a mediating factor between parental capital and educational attainment.

Actually, perceived discrimination is the most significant source of stress for vulnerable groups, including ethnic minorities in host countries (Fan et al., 2013). Some researchers argue that perceived discrimination could create unique stress for immigrants. Thus, it is reasonable to expect that Chinese immigrant youths' high perceived discrimination could very likely play a negative role in aspects of their lives other than education. As the Chinese immigrant population in Spain has been increasing in recent years, their adaptation and integration are not only challenges for themselves but also for the Spanish government and society. Therefore, it is necessary to pay great attention to the issue of Chinese immigrant youths' high perceived discrimination, which is of practical significance.

As elaborated earlier, higher perceived discrimination is one of the main causes of Chinese immigrant youths' lower educational attainment compared with that of youths of other ethnic minorities in Spain. This leads to other questions, for example, whether Chinese immigrant youths with higher educational attainment also perceive discrimination? how Chinese immigrant youths with different educational attainment face and cope with the negative impact of perceived discrimination in their lives and education? what factors else result in their higher perceived discrimination?

According to Berry (1997), integration could lead to the more favorable results in terms of the adaptation in the host countries than assimilation, separation, and marginalization. And the ultimate goal of integration lies in obtaining self-identity (Ni \& Li, 2014). For immigrants, developing and establishing a self-identity is the most difficult part of integration because they are affected by two different cultural systems after immigration. In this context, how they organize and manage their dual self-identities is the key to their integration
into the host society. Amiot et al. (2007) suggest that both coping well with discrimination and having social support in coping with discrimination play positive roles in immigrants' integration and diminish their perception of discrimination and prejudice in the host society.

Considering educational attainment is a factor that might moderate the negative effect of discrimination on integration, the sampling strategy adopted in this study consists of dividing the group of interest - first and second generation young Chinese migrants - into two groups based on their educational attainment. The paper aims to investigate the relationship between coping strategies and social support in dealing with perceived discrimination, as part of the process of integration of Chinese immigrant youths. In other words, the paper will try to answer questions, including: what coping strategies Chinese immigrant youths with different educational attainment adopt? which social support they receive when facing
perceived discrimination? how these strategies and support affect their adaptation into the host society?

This paper adheres to the following section plan. Section 1 introduces the research background and presents the main research questions. Section 2 identifies several important concepts that this paper will discuss. Section 3 reviews previous studies focusing on immigrants' perceived discrimination and coping strategies and social support. Section 4 introduces the theoretical framework. Section 5 describes the method and interviews used in this paper. Section 6 is going to answer the main research questions shown above. Discussion and conclusion constitute the final section.

### 3.2 Illustration of Several Basic but Important Concepts

It is necessary to define the concept of "discrimination" before moving to the meaning of perceived discrimination. About the definition of discrimination, there is a generic explanation in the
academic arena (Witcher, 2013). It describes discrimination as "the process (or set of processes) by which people are allocated to particular social categories with an unequal distribution of rights, resources, opportunities and power. It is a process through which certain groups and individuals are disadvantaged and oppressed" (Thompson, 1998, p 78). In this process, people's particular social categories can be defined by their age, gender, disability, religion, race, ethnicity etc.. Among them, categories based on race and ethnicity are particular sources of discrimination.

Race and ethnicity have different implications. Race mainly focuses on biological characteristics (Krieger, 2000) such as skin color, and ethnicity mainly points to cultural homogeneity within one group (Cornell \& Hartmann, 2006): for example, a group whose members all speak the same language. But it is important in particular to explore whether biological characteristics of race have a social meaning. Studies relating to race and ethnicity generally focus on
two groups which have opposing social features. Consequently, immigrant groups in the host societies become the optimal choice.

For immigrants with ethnicities that differ from those of natives, it is reasonable to assume that they suffer from more serious discrimination, which may affect their health and other aspects of lives. These negative relationships have been presented in many previous studies (e.g. Finch et al., 2016; Liu et al., 2011; Noh \& Kaspar, 2003; Nyborg \& Curry, 2003). Depending on what kind of discrimination people encounter, research on discrimination constitutes two branches: actual discrimination and perceived discrimination. Because it is difficult to objectively evaluate actual discrimination in a research setting (Zhang et al., 2016), most research frequently adopts perceived discrimination as a research object (Berg et al., 2011; Yuan et al., 2017). Compared with actual discrimination, perceived discrimination points to a subjective experience (Pascoe \& Richman, 2009), which is based on the local society's attitude towards people's race and ethnicity (Berg et al.,
2011). Thus, perceived discrimination can be defined as individuals' perception of unfair treatment because of their races.

For ethnic minorities, perceived discrimination means discrimination they subjectively perceive due to their race and ethnicity status, which may lead to unfair treatment and alienation from the mainstream culture (Berg et al., 2011). "Feel" in this concept implies that perceived discrimination primarily focuses on immigrants' psychological activity. Dion and Kawakami (1996) suggested that "perceptions of discrimination do, nevertheless, represent an important psychological reality for immigrants and ethnic minority group members" (p. 204). Thus, evaluation of perceived discrimination is generally based on self-reporting (e.g. Ellis et al., 2008; Essed, 1991; Kessler et al., 2009; Schulz et al., 2008; Williams et al., 1997; Williams et al., 1999).

In this study, Chinese immigrant youths' perceived discrimination means they think they are unfairly treated by the local people and
institutions, which makes them difficult to adapt and integrate into the host society. However, because of its subjective character, perceived discrimination from their own reports has, to some extent, invisible features. For instance, interviewees are prone to distort information because of self-interest. Thus, it is necessary for the researcher to analyze the meanings inherent in the actions and thinking of immigrant youths.

Folkman and Lazarus (1985, p.152) define "coping" as "cognitive and behavior efforts to manage (master, reduce, or tolerate) a troubled person-environment relationship". Furthermore, they conclude that coping takes two major forms: emotion-focused coping and problem-focused coping. The former is usually used when facing an unchangeable environment, and the latter is frequently adopted to deal with changeable situations (see also Folkman \& Lazarus, 1980).

Social support is another significant moderating factor for perceived discrimination. It not only directly affects immigrant youths'
perceived discrimination but also how they cope with perceived discrimination. According to Hobfoll and Stokes (1988), social support is considered a psychological phenomenon in which social interactions supply individuals with assistance or embrace them into social relationships characterized as loving, caring, and available.

### 3.3 The Present Research

The Effects of Perceived Discrimination on Immigrants

A number of studies have shown that perceived discrimination plays a negative role in immigrants' integration into and development in the host countries. Explanations of its negative effects are illustrated from three different viewpoints on the basis of existing findings. ac

First, perceived discrimination causes problems for immigrants' mental and physical health. For example, Finch et al. (2000) argued that, in America, perceived discrimination against adults of Mexican origin directly resulted in depression. Subsequently, Sevillano (2014)
showed that immigrants in Spain experience similar negative impact: perceived discrimination damages the mental and physical health of immigrants in Spain. Previous studies on mental and physical damage caused by perceived discrimination focus on the relationship between unhealthy psychological state and physiological performance. With respect to unhealthy psychological state, most papers explore the effects of perceived discrimination on immigrants' stress, anxiety, and depression (e.g., Edwards \& Romero, 2008; Schmitt et al., 2014; Williams \& Williams-Morris, 2000). Most immigrants have low socioeconomic status which may be a reason why some locals believe they are taking advantage of the host countries' resources without making enough contributions. In general, they are rarely accepted by the natives (Louis et al., 2007), which leads to stress acculturation among immigrants. Perceived discrimination and acculturation stress have damaged the mental health of Colombian and Sub-Saharan African immigrants in Spain (Sevillano et al., 2014). Such mental disorders may have a significant negative influence on immigrant youth and make them lose
confidence in themselves and finally give up their attempts at integration and upward mobility.

Importantly, mental health problems can turn to physical health problems, and vice versa (Creed, 1999; Roose et al., 2001). Because of certain unhealthy mental states, perceived discrimination can physically sicken immigrants. For example, some studies have shown that perceived discrimination can result in depression and hypertension (Armstead et al., 1989; Gully et al., 2001; Ren et al., 1999; Steffen et al., 2003, Williams et al., 2003). They deprive immigrants the energy and strength necessary for completing their work and prevents them from meeting their needs, including finance, prognosis, therapy and potential life changes (Beveridge et al., 2006; Patterson \& Garwick, 1994). Failure in the labor market generally mires them in poverty and causes them to fail to integrate (Prelow et al., 2004).

Second, immigrants with higher perceived discrimination are more likely to have behavioral problems (Berg et al., 2011), such as excessive drinking and smoking (Tran et al., 2010), drug use, and even crimes. For instance, Keyes et al. (2011) find that discrimination is one of the main stressors leading to alcohol abuse: people who experience more discrimination have the greater potential to develop alcohol abuse. These behavioral problems not only impede the integration process but also widen the gap between natives and ethnic minorities, which causes greater discrimination.

Third, perceived discrimination is the serious negative factor influences immigrants' integration in social system. Perceived discrimination partly derives from objective discrimination. Daldy, Poot, and Roskruge (2013) explored the perceived discrimination of immigrants in New Zealand and found immigrants have higher selfreported workplace discrimination than employees born in New Zealand. And Hainmueller and Hangartner (2013) argued that immigrants' attributes, country of origin, language, and economic
status are the standards used to determine which immigrants may obtain Swiss citizenship. Williams and Williams-Morris (2000) found that institutional discrimination is an obstruction mechanism that blocks socioeconomic mobility. Moreover, serious institutional discrimination can aggravate immigrants' perceived discrimination.

Perceived discrimination is one of the biggest challenges for immigrants, and higher perceived discrimination damages immigrants' integration into and development in the host countries. However, this does not mean that there is no way to resolve or decrease immigrants' perceived discrimination. Immigrants' positive coping strategies and powerful and sufficient social support can reduce their perceived discrimination.

## Coping and Perceived Discrimination of Immigrants

As stated above, perceived discrimination is a negative factor that has a serious impact on immigrants' physical and mental health.

However, is this negative association between them necessary? A
large body of research suggest that coping and social support can moderate the negative effect of perceived discrimination on physical and mental health (e.g., Amiot et al., 2007; Fang et al., 2008).

At the center of explaining various outcomes between coping and perceived discrimination is whether ethnic minorities adopt coping strategies that deal with perceived discrimination, namely positive coping strategies or negative coping strategies. Schwarzer and Knoll (2003) illustrated positive coping from two perspectives. On the one hand, "positive" presents an attitude that points out that individuals do not appraise risk, demand, and opportunity; rather they consider a demanding situation to be a challenge that they intend to overcome. On the other hand, "positive" means active behaviors. Individuals adopting positive coping make efforts to build up general resources that facilitate progress towards challenging goals and personal growth. This, in turn, could lead to better living conditions and higher levels of performance. In this sense, positive coping is effective for overcoming difficulties and achieve better results. Examples of
positive coping strategies include emotion-focused and problemfocused efforts and information support (Dempsey, 2002). Different coping strategies has different functions. For example, emotionfocused coping aims to regulate stressful emotions, whereas problem-focused coping is used to manage or alternate the relationship between a person and their environment that results in stress (Folkman \& Lazarus, 1980a).

Contrary to the functions of positive coping strategies, which encourage individuals to take better actions to resolve problems, negative coping strategies generally relate to greater difficulties (Altshuler \& Ruble, 1989). Negative coping strategies consist of certain behaviors that have asocial or antisocial characteristics without paying attention to stressors themselves (Dempsey, 2002). Distraction, withdrawal and aggression are examples of negative coping strategies.

Some studies have shown that physical and mental health consequences of perceived discrimination of ethnic minorities vary according to individuals’ coping responses (Gee, 2008). Whereas positive coping strategies enable adjustment to negative effects of perceived discrimination, negative coping strategies can strengthen perceived discrimination (Fang et al., 2008). Krieger (1990) argued that negative coping strategies are the most harmful way of coping for both white and black respondents.

However, some research describes different impact of negative coping strategies on perceived discrimination. For example, Noh et al. (1999) found that forbearance, originally considered a negative coping strategy according to the definition above, is positive to overcome the negative influence of perceived discrimination because "it might help to avoid direct hostilities" (p. 194). But there is a significant factor moderating this association, namely ethnic identity. They deem that "the beneficial effect of forbearance was significantly greater among those holding stronger ethnic
identification" (p. 193). It follows that the function of coping is affected not only by one's local environment but also, for immigrants, by their own ethnic community.

In summary, it has been shown that positive coping strategies decrease immigrants' perceived discrimination. Certain negative coping strategies may also help them overcome the negative effect of perceived discrimination, but only when they have a stronger ethnic identity. In this context, a strong ethnic identity is advantageous for promoting integration into the host country. However, integration in this case is not complete and is known as "segmented assimilation" (Portes, 2007),which suggests some immigrants eventually are able to adapt to the mainstream culture while others may remain segregated.

## Social Support and Perceived Discrimination of Immigrants

In the literature, social support is broadly defined as the assistance and protection given by society to individuals (Shumaker \&

Brownell, 1984). Assistance can be tangible, such as financial aid, or intangible, such as emotional assistance, and protection mainly refers to protecting people from the adverse effects of living stress (Cobb, 1982; Sarason \& Sarason, 1985). In addition to these practical help, powerful social support is useful to strengthen ethnic identities of immigrants for their ethnic community. As mentioned above, strong ethnic identity may contribute to a successful coping with perceived discrimination of immigrants.

There is no single type of social support. Existing studies identified four types of social support: emotional support, instrumental support, information support, and appraisal support (Langford et al., 1997). Moss (1973) defines emotional support as a "subjective feeling of belonging, of being accepted, of being loved, of being needed" (p. 237). The biggest difference between instrumental support and emotional support is that the former focuses on tangible aid (House, 1983; Tilden \& Weinert, 1987). Tangible aid is also explained as concrete assistance, such as financial or employment assistance.

Informational support provides useful information that helps individuals overcome stress. Some researchers posit that information support focuses on providing effective information to solve problems (Cronenwett, 1985). Appraisal support highlights individuals’ selfevaluation based on positive information from other people (House, 1983; Kahn, 1980).

Although different types of social support work in different ways, social support tends to be negatively correlated with perceived discrimination: the more sufficient and stable social support is, the lower the individual's perceived discrimination is, which is beneficial to the individual's physical and mental health. On the contrary, scarce and unstable social support will increase the degree of individual's perceived discrimination and damage their physical and mental health. This relationship between social support and perceived discrimination also occurs within ethnic community. Immigrants receive social support from multiple sources, including their ethnic minorities and the host society. Chou's (2012) article
suggests that social support, including one's own social network (family and friend network) and neighborhood, can mitigate the negative impact of perceived discrimination on the depressive symptoms of immigrants in Hong Kong.

Studies apply three models to explain the relationship between social support and perceived discrimination: the stress buffering model, the support mobilization model, and the social support deterioration model. The stress buffering model suggests that individuals who are highly stressed such as perceived discrimination are protected from the adverse effects of stress through social support (DeGarmo \& Martinez, 2006; Jasinskaja-Lahti et al., 2006). Clark (2006) found that social support can act as a buffer against the negative effects of racial discrimination on health. In the stress buffering model, social support mainly helps to achieve its positive impact by providing emotional support, financial support, and job opportunities. Because of fundamental cultural differences, minorities living in immigrant societies are more likely to integrate into the same community and
buffered against natives' discrimination. If the same ethnic groups are well developed politically, economically, and culturally, their members are able to gain more social support from their own ethnic groups. But, a strong minority group can keep its members isolated from the host society, thus shielding them against discrimination and exclusion from the host society. For example, the Chinese immigrant community in the United States has formed its own employment network, and new immigrants can obtain jobs through the network to achieve their immigration goals. In such cases, social support not only reduces their perceived discrimination but also enables them to improve their economic level. The stress buffering model focuses on social support to protect individuals from outside discrimination by providing favorable support, especially some substantive help, thereby weakening individual feelings of discrimination linked to lack of opportunities, and promoting physical and mental development. Under the stress buffering model, social support has an inverse effect on all aspects of an individual's perceived discrimination.

The support mobilization model argues that social support, which comes from outsiders, can suppress the negative effects of stress and lead to a reduction in psychological distress. 'I the support mobilization model, the influence of social support on perceived discrimination is mainly reflected in psychological adjustment in the face of stressful events (Barrera, 1988). Meyer (2003) believed that social support can create a protective layer between stress, such as discrimination, and mental health to mitigate the effects of stress on mental health. The positive effects of social support discussed in the support mobilization model are mainly limited to the psychological stress caused by the individual's perceived discrimination, and no other convenience is discussed.

The social support deterioration model holds that certain types of events, especially traumatic or defamatory events, lead to a decrease in effective social support, and increase in perceived discrimination and ultimately in psychological distress. For example, Prelow et al. (2006) prove that African Americans who perceived more racial
discrimination obtained less social support. Furthermore, they raised three explanations to this causal relationship. First, individuals are isolated from possible social support because of their experience with perceived racial discrimination. The second and third explanations are drawn from the views of social support providers, who do not know how to respond because racial discrimination makes them uncomfortable. They may provide invalid support, respond with avoidance, or not provide help because of different understanding of racial discrimination. In particular, social support serves as a dependent variable and perceived discrimination as an independent variable in this model, which is contrary to the causal relationship between perceived discrimination and social support of the previously mentioned two models, suggesting the endogeneity of perceived discrimination and social support.

Because there are more or less cultural and economic differences between ethnic minorities and immigrant societies, between and within ethnic minorities, the models of social support for each ethnic
group are different. Prelow et al. (2006), for example, found that the African-American community was more inclined to the social support deterioration model, while Chou (2012) found that immigrants in Hong Kong tend to adopt support mobilization model. Thus, it is necessary to discuss which social support strategy can explain the relationship between social support and perceived discrimination for different ethnic minorities in different host countries.

As mentioned above, discrimination exerts serious pressure on immigrants to survive and develop in their countries of immigration, and regulating their perceived discrimination is a necessary condition for their healthy development, such as their socioeconomic attainment. Immigrants who have higher perceived discrimination are less likely to achieve higher socioeconomic attainment, including educational and occupational attainment (e.g. Carter Andrews, 2012; Thomas et al., 2009; Wheeler et al., 2020). In this context, it is reasonable to predict that negative coping and less social support can
strengthen the negative association between perceived discrimination and socioeconomic attainment.

At present, there are only a handful studies on Chinese immigrant youths in Spain, as well as on the relationship between their perceived discrimination and coping strategies and social support. Furthermore, existing studies have proven the negative association between perceived discrimination and educational attainment of Chinese immigrant youths (Yiu, 2013). Does low educational achievement mean that Chinese immigrant youths typically adopt negative coping strategy when they face perceived discrimination, and have not received effective social support? What is the importance of educational attainment in adopting positive coping strategies to deal with perceived discrimination? And what is the role of social support from local communities in lowly educated Chinese youngsters' coping strategies regarding their perceived discrimination? These questions are also explored in this paper.

### 3.4 Methodology

Here, we conclude our main research questions based on above questions: 1) whether there are differences in perceived discrimination for Chinese immigrant youths with different educational attainment, 2) whether there are differences in coping strategies and social support for Chinese immigrant youths with different educational attainment, and 3) what coping strategies and social support Chinese immigrant youths with different educational attainment adopt.

A qualitative research method has been adopted to address the above three main problems, for the following reasons. First, Spain, as a new recipient of immigrants, has a scarcity of general social surveys covering all aspects of immigration, so the data used for quantitative analysis are limited. Because of the particularity of the economic culture of Chinese immigrant groups and the short history of largescale migration, the available data are even more scarce. Second, the
existing social investigation problems are relatively broad and deeper explanations are harder to identify. For example, about perceived discrimination, the Longitudinal Study of the Second-Generation questionnaire asks only, "Have you ever been treated unfairly? and does not provide in-depth follow-up questions asking about specific instances of unfair treatment, how respondents deal with it, or whether family and friends provide support. To the extent that coping with discrimination may be a complex process in which many intervening variables may operate (e.g., different forms of coping and social support), qualitative methods may be more appropriate for exploring the phenomenon of interest in depth through, for example, the semi-structured interview.

The semi-structured interview, which mainly refers to informal interviews based on a rough interview outline, is applied in the study. This method has only basic requirement for the condition of interviewees, and the questions to be asked, and so on. This kind of interview is advantageous for interviewers, who can make necessary
adjustments flexibly according to the actual situation of the interview, and can make in-depth inquiries about the issues they concern most and the information behind interviewees' behaviors and opinions. At the same time, semi-structured interview has no specific requirements regarding, for example, the wording or order of questions, the way the interviewees answer, the way the interview is recorded, or the time and place of the interview. However, the lack of strict requirements may often result in non-answers, transfer topics, and other issues, so the semi-structured interview requires interviewers to grasp the central question and to maintain the interview's rhythm and effectiveness.

This study adopts snowball sampling and analytically driven sampling to select interviewees in three ways. First, the author focuses on interviewing Chinese immigrant youths who study in local universities and asks them to introduce their Chinese immigrant classmates or friends for interview. This approach aims to find the coping style and social support characteristics of Chinese immigrants
who have higher educational attainment. Second, the author tries to interview Chinese immigrant youths with high-school educational level or below in the Chinese community. Third, the author looks for interviewees via a religious network. The purpose of this strategy is to find out how the religious network within the ethnic group affects the coping style and social support of Chinese immigrant youths, whether its influence on Chinese immigrant youths is different depending on their educational level, and whether the effect of social support for each group on coping styles also differed. Some main interview questions are showing in Table 3-1.

For the purpose of the study, 60 Chinese immigrant youths aged from 18 to 36 were interviewed in 2018 in Barcelona. Among these 60 respondents, 30 were educated at the undergraduate level or above, and 30 were educated at the senior high school level or below. The interview time for each interviewee was 30 minutes to 1 hour, mainly according to the identity and occupation of the interviewee. The interviews took place in settings such as school, bar, home, and
church. The sample selection attempts to balance gender ratio, age, and other demographic characteristics.

Table 3-1 Some Questions in the Semi-structured Interview

|  | With Lower Educational <br> Attainment | With Higher Educational Attainment |
| :---: | :---: | :---: |
| Do you have perceived discrimination in school or other fields? |  |  |
| What the most differences you think in perceived discrimination between school and other fields? |  |  |
| Do you think perceived discrimination has a serious impact on your educational attainment? | Do you think perceived discrimination directly results in your lower educational attainment? | If it is, why do you have higher educational attainment? |
| How do you face perceived discrimination in the process of education? |  | Among them, which is reason do you think the most important? |
| What do you think are the reasons for perceived discrimination? Among them, what is the reason that affects you most? |  |  |
| Do you think Spanish or Catalan proficiency affects your perceived discrimination? | Do you think poor Spanish or Catalan results in your lower educational attainment? | Do you have perfect Spanish or Catalan level? <br> And does it promote your educational attainment? |


|  |  | What the main ways for |
| :--- | :--- | :--- |
| Do you look for ways or means to |  | you to overcome the |
| overcome the negative effects of |  |  |
| perceived discrimination on your |  | perceived discrimination to effect of <br> obtain higher educational <br> educational attainment or other fields? |
|  | attainment? |  |

Do you tell your parents or friends when you have perceived discrimination? Why you said or didn't
say?
Do they offer some help in alleviating your perceived discrimination?

Are Chinese or Spanish friends the most among your friends?

Do you prefer to make Chinese or Spanish friends? What are the reasons for this choice?

What occupations do you want to do now or in the future?
Do you think educational attainment affects your occupational choices?

Who can help when you choosing a job or having difficulty in it?

Are you more likely to find work in the local Chinese community or in the local labor market? What are the reasons for your choice?

Do you think the greatly dependence on the local Chinese community hinders the process of integration in the local society? Please explain briefly.

Do you think the greatly dependence on the local Chinese community aggravates the degree of perceived discrimination? Please explain briefly.

What level of integration do you hope to achieve in Spanish society? You can choose from the following four options: (A) a complete dependence on the local Chinese community, including work and life; (B) a willingness to engage with the local society for work, but a greater willingness to rely on the Chinese community for life; (C) both, keep Chinese and integration in Spain; and (D) a desire to be a real Spaniard. Please explain briefly.

### 3.5 Findings

## Perceived Discrimination and Educational Attainment of Chinese

## Immigrant Youths

As elaborated earlier in the paper, Chinese immigrant youths have higher perceived discrimination than other ethnic minorities of Spain which negatively affects their educational attainment. However, the negative association between perceived discrimination and educational attainment also occurs between groups of Chinese immigrant youths-that is, Chinese immigrant youths with higher educational attainment have lower perceived discrimination than those with lower educational attainment. In the following sections, the author explores the possible reasons for this correlation.
a) Perceived Discrimination and Chinese Immigrant Youths with Lower Educational Attainment

Among 30 Chinese immigrant youths with lower educational attainment interviewed, 24 individuals made it clear that they had been treated unfairly in life. Although the rest did not explicitly declare that they experienced discrimination from natives, they indicated that they had an unfriendly image over the host society. Their highly perceived discrimination is an outcome of a combination of causes that includes internal and external factors of the Chinese community.

Their poor language ability should be blamed first and foremost.

Fluent local language abilities can ease the pressure on immigrants and promote their integration into local society, and it is advantageous to get high educational attainment. But in the group of Chinese immigrant youths with lower educational attainment, poor language proficiency has become an important barrier to integration, especially for Chinese immigrant youths born in China.

[^4]with me, and I also lost confidence to fit into this new group, so I gave up." (Zhu, male, 28, high school)

*     *         * 

> "In fact, I also want to go to college, but my language level does not afford me to go to high school, not to mention college. Compared with the locals, I feel like a mute in class, can't understand and can't say. Although my parents say they have financial ability to support me to go to college, I know that my language ability is not enough." (Huang, female, 26, secondary school)

The negative effect of poor language ability on perceived discrimination is more serious for Chinese immigrant youths born in China but perceived discrimination is also prevalent among Chinese immigrant youths born in Spain. Chinese immigrant youths born in Spain can usually speak the local language frequently and may hold onto local culture. Why do they, then, experience higher perceived discrimination?
"I was born in Spain, Spanish is my mother tongue. In contrast, my Chinese is not good. But I also experienced some discrimination events, such as some local people insulting me. I think they just see my skin color is different." (Ma, 24, female, high school)

Skin color is a classic emblem of racial discrimination, but it is usually suitable to explain the discriminatory activities of local
people who are deeply prejudiced toward ethnic minorities or who have less contact with ethnic minorities.

Another reason for the higher perceived discrimination of Chinese immigrant youths who have lower educational attainment has to do with the characteristics of the Chinese immigrant community.

Studies have shown that Chinese immigrant parents are more likely to let youths work in their own restaurants and bars or support youths' own businesses. Employment within the Chinese immigrant community in Spain is popular among Chinese immigrant youths.

According to the interviewees, it can guarantee an occupation that is conducive to their well-being in the host society.

[^5]One problem with being employed within one's ethnic group, however, is that it can deepen the gap with the local community, reinforcing the host community's prejudice against Chinese immigrant groups.
> "My family does small commodity wholesale, providing goods to bazaar that Chinese open. My work is delivering goods. The job is stable and well paid, but because it always deals with Chinese, I feel no different than I do in China although I've been in Barcelona for 10 years, except language. Perhaps because of cultural differences, I cannot adapt in the local society, and I also feel that the local people don't accept us at all." (Hua, female 22, technical secondary school).

While finding employment in the family and in the Chinese local community businesses is common among Chinese immigrant youths, many of them said that their parents did not force them to give up their studies; rather, they respected their children's choices. An important reason that led them to abandon their studies was the experiences of discrimination that Chinese migrant youths experienced early in their life, in the form of exclusion by peer groups in school. Some respondents immigrated to Spain at a younger age and began their education in local schools from primary school. In
primary schools, local students do often influence each other and gradually expand feelings of exclusion to immigrants, thus affecting the mental health of immigrant students and further obstructing their integration into schools and finally into local society.

> "When I entered primary school, many local students think China is a backward country and they always have a sense of superiority. They were unwilling to play with me, and even say a few insulting words to me. At that time, I was young and timid and dare not tell parents and teachers. I did not want to go to school." (Shen, male, 25, secondary school)

In addition to the direct impact of peer groups, some parents of native children have indirectly influenced perceived discrimination of Chinese immigrant youths by influencing the attitudes of their children and local schools. Some prejudiced local parents think that having too many immigrants in school will negatively affect their children's study life, so they protest against schools and urge to contain or reduce numbers of immigrant students.
"One thing happened when I was in elementary school. The parents of one girl in our class joined several other parents to protest to the school that there were too many immigrant students in the class, which would affect their girl's academic performance and personal safety. Of course, this protest was not accepted by the school. But it made me feel that Spain was not
my home, and that society might not accept me. Even if I get a high level of education, I don't think I'll find a good job there." (Lin, male, 27, secondary school)

For Chinese immigrant youths, the local peer group in the school is the first social group on their way of integrating into the host country. The natives' opinions directly influence their views of the local society and their attitudes towards integration. Through the interview, the author found that Chinese immigrant youths with lower educational attainment experienced and perceived much discrimination in the process of school integration, which dampened their confidence of integrating. There is a clear inverse relationship between perceived discrimination and educational attainment for Chinese immigrant youths, whereby low educational attainment and perceived discrimination reinforce each other.
> "After coming to school in here, learning is a particularly difficult thing for me. My language is not good, and I cannot understand the lessons, let alone the examination, so the results are very bad. My classmates weren't very friendly to me, and my poor grades made them even more isolated from me." (Sun, 24, female, secondary school)

Arguably, the relationship between perceived discrimination and educational attainment for Chinese immigrant youths with lower educational attainment is a vicious circle. Serious perceived discrimination leads them to lower educational achievement, and then lower educational attainment further aggravates their perceived discrimination.
b) Perceived Discrimination and Chinese Immigrant Youths with Higher Educational Attainment

Overall, Chinese immigrant youths with higher educational attainment have lower perceived discrimination than their lowly educated counterparts. Below, I argue that parents' ambitions regarding their children's educational attainment play an important role in triggering this process. But before I discuss this issue in more detail, it is worth noting that not all Chinse immigrant youths that continued into higher education were able to overcome their feelings of discrimination. According to the interview demographic statistics,
among the 30 Chinese immigrant youths with bachelor's degrees and above, 12 youths felt they were treated unfairly in college, labor markets, and other aspects of Spanish society. This suggests that attaining a higher education, while important, is not a sufficiently strong factor to overcome feelings of discrimination.

Wu (female, 19, undergraduate) said she clearly felt the rejection from her classmates in university:
"Homework in university is mostly done in groups, but in the process of grouping, even if our-Chinese immigrantslanguage is very good, the local students are still unwilling to group with us. I am used to group with other Chinese immigrants. Later, it is defaulted that Chinese immigrants is one group."


#### Abstract

*** "The most unfair treatment I felt during school came from my classmates. At first, because my language is not very good, I am not clear to homework and content of the lecture, then I will ask local students. But to my surprise, they didn't tell me. And they had the same attitude when I asked them some problems. They said they had encountered similar things when chatting with other Chinese friends. I knew maybe they didn't like the Chinese. Later, I ask some Chinese classmates who speaks a good local language." (Wen, male, 30, master's degree)


Perceived discrimination in college not only occurs in the studentstudent relationship; it also occurs in the teacher-student relationship.

Barcelona belongs to the Catalan autonomous region. Catalan is another official language and it is very frequently used by teachers in universities. It adds considerable difficulties for Chinese immigrant youths. In class, teachers need to repeat their messages when students can't understand or hear them clearly. But some Chinese immigrant youths say that some teachers treat students differently based on their origin. Chen (female, 21, undergraduate) told the author,
> "I was 12 when I came to Spain with my parents. I couldn't speak any Spanish at the time, let alone Catalan. Although school had language classes for immigrants, there are many immigrant children in one class, so most of the time our language learning still relies on our own and some after-school language tutorial classes. But in college, some professors teach in Catalan, I don't understand many of them, so I ask the teacher in class. Every time a student from Europe and America asks, the professor answers. But when I ask, the professor just doesn't hear it. It hurts my self-esteem. So, I worked very hard after class, trying not to ask the teacher in class."

University is a larger environment in which perceived discrimination is often hidden. For example, because of the notion of fairness and anti-racial discrimination, both students and teachers can engage in discrimination more covertly or more silently.

Compared with discrimination in college, discrimination in the labor market is more serious, more direct, and inescapable. Based on responses from the interviewees, perceived discrimination of Chinese immigrant youths with higher educational attainment in the field of employment manifested in three ways: the inability to meet salary requirements, the limited space for professional development, and the mismatch between majors and jobs.

Li (female, 25, master's degree) works for a local company in Barcelona. In the workplace, she said, she often is limited in getting opportunities for promotions and salary raises because of her Chinese identity.

> "I've been working here for three years, and because of my language strengths, I'm responsible for some China-related matters. I feel like I've done a lot of work, and when I ask my boss for raises, it doesn't work. But the salary of the locals who are similar to my years of work has increased. I think my boss has a prejudice against me, and I'm ready to move on."

Similar to Li's situation, Lin (male, 26, master's degree) found some jobs in several local companies after receiving his master's degree.

But he often found himself excluded from various projects until, finally, he could only act as an interpreter for his boss. In this context, the development opportunities and space he could obtain are limited.

> "I was working for two years in that company. I did not participate in any projects except interpretation."

In this case, Lin chose to resign and start his own business.

> "My company is not big, but at least I can take control of my career without being looked down upon by others. I have confidence in my career."

In contrast to Li and Lin , some other Chinese immigrant youths with higher educational attainment were unable to find jobs matching their majors. They believe it is the institutional discrimination that excluded them from the local labor market.

Qiu (female, 24, undergraduate) graduated in sociology, with a social work specialization. When applying for jobs in her field after graduation, she found that many organizations mostly recruit employees with Spanish citizenship. Ultimately, she did not find a
job fits her expertise. When asked what occupation she was currently engaged in, she said:
"Now I'm doing shopping guide, I need to feed myself first. I hope I can find an ideal job in the future. But I am considering whether to naturalize, due to naturalization is very convenient and beneficial for me to find a job."

For Chinese immigrant youths with higher educational attainment, their perceived discrimination mainly comes from the local society's exclusion of immigrant communities through institutional discrimination in schools and the labor market.
c) Parents' High Ambitions for Their Children's Educational Attainment

As noted in previous chapters, using a quantitative research method, and as reported by my informants during the course of this qualitative research, parental support and parents' ambitions for their children appear to be important to explain Chinese immigrant youths' educational attainment. For the majority of the interviewees with
better educational attainment, education contributes to decreasing the feelings of discrimination or to alleviate its negative effects on physical health and mental stress.
> "I remember when I was a child, some of my friends said it didn't matter if they didn't like studying. Their parents said they could be their own boss when they grew up. When I was young, I was brought to Spain by my parents. I always felt that I wasn't here, so I didn't have any high goal for my study. Hearing my little friend say so, I also went home and asked my mom and dad if I would be the boss in the future. But I remember very clearly, my mother said that there were no college students in the whole family, and she wanted me to go to college. She said that their hard-earned money is the hope that we can learn in peace of mind. There are four brothers and sisters in our family. I have graduated from master's degree and my sister is a sophomore. Another sister and brother are still young, but mom and dad say they hope they can get into college later." (Zhang, female, 26, master's degree)

When asked if she felt discriminated as a Chinese immigrant, she said,
"There would be more than one, especially when I was in junior high school. But the feeling of perceived discrimination waned as my grades at school got better."

The above quotes show that the impact of parental support on

Chinese immigrant youths' perceived discrimination is indirect; their
educational attainment plays a mediating role in this process.

Parental support can reduce the negative effect of perceived discrimination by enhancing Chinese immigrant youths' educational attainment. Conversely, the parents of Chinese immigrant youths with low educational attainment provided less positive support for their children with regard to education. They did not display much educational ambitions for their children.
> "My parents didn't ask me what kind of diploma I could get. When I completed compulsory education, I told my parents that I don't want to go to school; they then let me go to the restaurant to help." (Chen, 28, technical secondary school)

Some respondents revealed that parents' lack of ambition regarding their children's educational attainment played an important role in
their poor language ability. Wu (28, female, technical secondary school) said,
> "When I was a child, my Spanish and Catalan were not good. When I offered to find a language tutor or go to a language school, my parents weren't very supportive. They think it's enough for me to study at school as long as I work hard. And they think it doesn't matter if I don't study well, I can inherit my family business later. But they sent me to Chinese school. They thought Chinese should be learned well. When I asked them why, they thought it was important to us live in a foreign country. We should keep in touch with their own ethnic group by Chinese, to get help from their own ethnic group, which can help us live here."

The Roles of Coping Strategies and Social Support in Explaining Perceived Discrimination and in Moderating its Negative Effects among Chinese Immigrant Youths

Although education contributes to ameliorate the feelings of discrimination of a majority of educated Chinese migrant youths, it is unclear what is the mechanism through which it produces this effect, or why its effects are not always sufficient to reduce the feelings of discrimination. Could coping strategies and of social support received by some educated Chinese migrant youths explain their lower perceived discrimination?
a) Coping Strategies

During the interviews I found that among Chinese immigrant youths, educational attainment was associated with specific coping strategies with discrimination. In general, Chinese immigrant youths who display certain positive coping strategies have higher educational attainment, whereas Chinese immigrant youths with lower
educational attainment usually perform negative coping strategies.

These positive coping strategies might explain both their higher educational achievements and the positive impact that education had on their perceived discrimination.

Coping with the difficulties of language learning provides a good example. Chinese immigrant youths that end up with higher educational attainment and lower feelings of discrimination are able to establish a firm belief about their capacities early in life, which help them find effective ways to improve their language ability, and overcome the negative influences of perceived discrimination. In the process, they develop a positive attitude toward local society and successfully handle people's prejudices and discriminatory behaviors.
> "The biggest difficulty was language after I came here. I knew that if [my] language was not good, I couldn't go to college, so I told myself I had to work hard on language study. So, in class, although I didn't know my pronunciation and grammar were right or wrong, I also answered questions; after class, I chatted with the local classmates. Of course, at first, I could see that they didn't like to chat with me because my language was so bad. I experienced much hit, discrimination, but I knew I had to do it.

Now my language is very good, and I have got my master's degree." (Wang, male, 32, master's degree)

In contrast, in the interviews, I found that immigrant youths with lower educational attainment were apt to give up language learning because of difficulties.
> "The process of language learning is greatly difficult, besides spending a lot of time and energy, but also to endure others' ridicule. Honestly, I have friends in school, they are Chinese children. We can chat with Chinese. Particularly, I won't be discriminated against by the local students. " (Chen, female, 26, technical secondary school)

Clearly, different coping strategies can modulate the reciprocal effects of perceived discrimination and educational attainment among Chinese immigrant youths.
b) Social Support

Among the three models of social support mentioned above in the literature review, the role of social support of Chinese immigrant youths is closer to the buffering model: social support helps them to avoid the pressure from the host society and promotes their normal
development. Unlike coping strategies, the effect of social support appears to be invariant during my interviews. All my informants enjoyed a similarly high level of social support from the Chinese migrant community, and hence this could not explain why some of them experience feelings of discrimination and others do not. However, social support seems to have played a beneficial role in alleviating the negative consequences on physical and mental conditions of perceived discrimination among those who experienced it.

Based on the interviews, three kinds of social supports help alleviate the negative effects of perceived discrimination on Chinese immigrant youths through improving their self-esteem and wellbeing, even if they have lower educational attainment: peer groups, coethnic community, and religious social support.

Co-ethnic Peer Groups Social Support

When asked whether they had more Chinese or Spaniards among their close friends, Chinese immigrant youths of both higher and lower educational attainment almost all answered, "Chinese".
> "When I first went to school, my local classmates were not friendly to me, I felt very lonely. Later, with the increase of Chinese immigrants in Barcelona, there were more and more Chinese immigrant students in school. I made many Chinese friends. I didn't care much about the attitude of other local students to me, because I have my own good friends." (Deng, male, 23, undergraduate)

Relying on a network of one's own ethnic group might lead to an increase in perceived discrimination as a result of one's growing separation from the host society and feelings of anxiety and distress.

Why this did not happen among my informants could be associated, for the better educated, to their higher education. Perceived discrimination negatively affects educational attainment, but Chinese immigrants with higher educational attainment have lower perceived discrimination compared with those have lower educational attainment, especially, when it is accompanied by positive coping strategies. However, other arguments must be put forward to explain
the apparent well-being of the typically less educated individuals who displayed feelings of discrimination.

Co-ethnic Community Social Support

Immigrants' adaptation to the local society is mainly determined by the occupations they end up performing. For immigrants, discrimination in the job market, as a type of institutional discrimination, is hard to overcome through individual effort. However, unlike other ethnic immigrant youths who must enter the local labor market due to the lack of economic resources, Chinese immigrant youths have other options, namely employment in the labor market of the co-ethnic community. This can not only protects Chinese immigrant youths from the natives' discrimination but also enable them to achieve economic independence.

During my interviews, I found that most Chinese immigrant youths do not suffer from mental and behavioral problems, although they experience high perceived discrimination. One important reason is
that although discrimination prevents Chinese immigrant youths from obtaining jobs in the local labor market, the co-ethnic community is capable of providing them with adequate employment opportunities, although often of lower socioeconomic status.
> "It's very difficult to find a job in a Spanish company with my education and language skills, and a lot of places don't want to hire Chinese. My parents run a Chinese restaurant, and they let me help in the restaurant first. When they retire, I can take over. Hence, the local employment environment around me doesn't really affect me. I still have a job to support myself." (Liu, female, 26, secondary school)

***
"After graduated, I tried to submit my résumé to some local Spanish companies, but I didn't even have the opportunity for interview. It was impossible not to feel sad. Just then, my parents opened a second bazar in another place and they needed someone to manage our first bazar. Until now, I am working there. Now I also feel very good. In particular in the context that the local labor market situation is not good, I have a work with better income." (Zhao, male, 33, undergraduate)


#### Abstract

* * * "I stopped studying after secondary school since I really could not keep up with the school curriculums. At that time, I was not allowed to work because of age problem. After adulthood, I came out to look for a job. But because of low education and no skills, I hit a lot of walls and saw a lot of Spaniards' arrogant look. I was not only depressed, but also confused. Then, a friend (Chinese) opened a bar, needed a tallyman. They wanted to hire Chinese staff, who were better to bear hardships. He remembered that I was looking for a job, asked me whether to do it. I certainly did. " (Zhang, male, 28, secondary school)


The Chinese immigrant community in Spain is characterized by kinship and geography, which makes it easy to form close social networks. This social network not only provides employment support but also emotional support for Chinese immigrant youths. The emotional support comes from a quite extended social network, which includes family, relatives, friends and peers, and even some co-ethnic strangers. Whether in the form of employment support or emotional support, social support from the community helps Chinese immigrant youths develop a stronger sense of belonging to the ethnic group and thus overcome or ignore discrimination from the local community. However, at the same time, it reinforces the segregation of the Chinese community, isolating the youths from mainstream Spaniards and making them more difficult to explore new ways of increasing social mobility.

Religious Social Support: The Chinese Christian Churches

For Chinese immigrant youths, religious organizations, such as the east hall of the Chinese Christian Church in Barcelona, constitute a special form of social support. The church holds youth fellowship encounters every week. Youth participants include students (high school, undergraduate, graduate, and doctoral students), white-collar workers working in Spanish companies, clerks working in service industries, and shopkeepers running small businesses. Youths of different educational levels and professions are engaged in the same work in the church, which is to preach to more Chinese. In the actual implementation, this work not only manifests itself as a longing for Jesus Christ but also as a strong recognition of one's own Chinese identity. In fellowship, youths can testify, ask for intercession, and express their perplexity, while others can act as listeners, fellow travelers, and helpers. On the premise that God is the spiritual sustenance, the fellowship is more like a family relationship, which continues into daily life and becomes an important spiritual prop. grievance or any difficulties, I tell others in the church: please
pray for me. We are co-ethnic, we also have a common Lord." (Xu, female, 32, undergraduate)

In the face of discrimination in local society, the church becomes the voice of believers and provides important spiritual support to alleviate hurt psyches, thereby relieving or overcoming the disadvantage of perceived discrimination.

From the Chinese immigrant youths' point of view, these three kinds of social support play roles in alleviating their perceived discrimination. But can these social supports play the same positive roles when these social supports from its own ethnic group are so strong that immigrant individual can satisfy all aspects of lives in the receiving country without contacting with the local society?

### 3.6 Discussion

Coping strategies and social support are important factors affecting the perceived discrimination of Chinese immigrant youths. This study finds that Chinese immigrant youths with different educational
attainment have different coping strategies. We have seen that coping strategies are closely related to the educational attainment of Chinese immigrant youths. Compared to those with lower educational attainment, Chinese immigrant youths with higher educational attainment tend to adopt positive coping strategies, which enable them to devote themselves to finding effective ways to overcome the negative effects of perceived discrimination and vice versa, promote their educational attainment. Chinese immigrant youths with lower educational attainment employ negative coping strategies, which prevent them from facing up to the challenges of perceived discrimination, and thus they often choose to stay away from people and activities that result in discrimination.

In terms of social support, I found no differences that could explain variations in Chinese immigrant youths' educational attainment or perceived discrimination. Chinese immigrants of both higher and lower educational attainment seek to obtain social support from their co-ethnic community when facing perceived discrimination. These
social supports play positive roles in weakening, overcoming, and eliminating perceived discrimination among the Chinese immigrant youths who experience them.

Both coping strategies and social support are two important means for dealing with perceived discrimination or its negative consequences. Coping strategies pertain to the psychological realm of the individual, while social support has more to do with the socioeconomic characteristics of the families and communities where individuals live. This study found that coping strategies could explain better the differences in perceived discrimination while social support can provide a good explanation for similarities in the generally positive reactions that Chinese immigrant youths display with regards to discrimination.

As mentioned above, perceived discrimination, as a negative factor, is disadvantage to immigrants' mental health, self-confidence, employment, or income. However, this study partly demonstrates
that this is not the case mainly because they can enjoy the social support of their co-ethnic community. The Chinese immigrant community in Spain has expanded in size in recent years to form a stable economic development network based, on a large degree, on self-employment and family businesses. This network has succeeded in fostering the long-term development of the community by reproducing itself from generation to generation, ensuring the employment of the Chinese immigrant community and its youth over time.

At the same time, the kinship and geographic proximity of Chinese immigrants make the interpersonal network very closely knit, making their members more dependent on one another. This allows social capital and strong ties of solidarity not only to flow within the family but also be exchanged within the co-ethnic community. The flow of bonding social capital within the same ethnic group provides Chinese immigrants with certain important social support, such as employment, helping them to ignore the discrimination of the native
society. However, this has come at a cost, generally, of not integrating into the host society and its culture. The relative economic well-being of the Chinese immigrant community in Spain, the strong family ties that bind their members to each other, and the strong feelings of communal identity developed in local and religious institutions may have helped Chinese immigrant youths to avoid the forms of dissonant acculturation that have accompanied other, less advantaged and cohesive migrant communities. This form of "segmented assimilation" into the host society (Portes \& Rumbaut 2001, p.54) preserves the Chinese immigrant community's culture and values and ensures the economic integration of its members, although only within the immigrant community.

Fortunately, there are signs that for some of these Chinese youth this may just be a temporary phase before reaching out into the larger society via, fundamentally, higher educational attainment. Indeed, some of the Chinese immigrant youths with higher educational attainment and positive coping strategies attained a stronger
integration into the Spanish society by, for example, entering local enterprises or changing Chinese passports into Spanish passports.

> "I have been working for a local company since I graduated. This is Spain, after all; the industry is relatively sound; I just can find a position suitable with my major in the local company. The most important thing is that I know that I will be living in Spain, and I certainly want to be able to fit in so that I can live a more comfortable life." (Qi, female, 32, master's degree)
> $* * *$
"I gave up my Chinese passport at the previous stage and chose to join Spanish citizenship. I find it easier to live here as a Spanish citizen." (Zhao, male, 25, studying in university)

For Chinese immigrants with low education this path appears to be, for time being, closed, and they continue to be segregated from the native society.

Among the 30 interviewees of Chinese immigrant youths who have higher educational attainment, 18 interviewees, in addition to 12 interviewees who had high perceived discrimination, said they have no perceived discrimination in their daily lives. Why do some Chinese immigrant youths who receive higher education experience perceived discrimination while others do not?

First of all, it should be noted that the proportion of perceived discrimination of Chinese immigrant youths who get higher educational attainment was lower than those who get lower educational attainment. Their perceived discrimination mainly occurred in the process that they actively integrated into the local society. For example, in the local labor market, some Chinese immigrant youths would like to be employed by local enterprises, and further, they expected to be able to get development. In this context, they may be discriminated against and have perceived discrimination. But this perceived discrimination does not happen until they are willing to contact with the locals.

Why do some Chinese immigrant youths with higher educational attainment not feel being discriminated? Through the investigation, the author found that it is attributed to their identification to both groups: origin country and the host country. For Chinese immigrant youths with higher educational attainment and high perceived discrimination, they are more likely to identify with their origin
countries and rely on social support from the Chinese community. As mentioned above, the Chinese community has gradually alienated Chinese immigrant youths from the local society by providing strong social support to them, which enhancing their perceived discrimination. However, Chinese immigrant youths who have high educational attainment but have no awareness of discrimination, not only have the identity to their origin country but also the local society. For example, they would like to work in the local labor market, even in the price of changing nationality.

> "I came to Spain with my parents when I was very young, and I'm used to living here. There are more equal opportunities. I would like to settle right here, so last year I gave up my Chinese citizenship and got Spanish citizenship. But I think I am still a Chinese person in the ideology, and I still follow the principles taught by my parents, and I think they are right." (Jiang, 26, female, master degree)

Identity to the host country helps to encourage Chinese immigrant youths to take a more proactive approach to adapt and integrate into the local country. In this context, there are more possibilities to change stereotypes or negative perceptions to Chinese immigrants through contacting with the locals. In this way, Chinese immigrants
naturally do not feel discriminated against. This is why the 18 young Chinese immigrants who received higher education had no perceived discrimination.

### 3.7 Conclusion

Generally, the Chinese immigrant youths have higher perceived discrimination compared to other ethnic minorities in Spain, but within group, there are some differences in perceived discrimination of Chinese immigrant youth with different educational attainment. With the assistance of qualitative interviews, this chapter found that perceived discrimination is generally high among all Chinese immigrant youths but lower among the better educated. Based on their different level of perceived discrimination, this chapter also found that there are some similarities and differences in reasons of perceived discrimination, copying strategies and social support, which are shown in Table 3-2.

According to Table 3-2, the higher perceived discrimination of Chinese immigrant youths with lower educational attainment can be explained by poor language ability, skin color, and segregation of their ethnic community. Despite the generally weaker perception of discrimination among the better educated, I also found a group who experienced it as a consequence of blocked opportunities in universities and blocked mobility in labor markets. Reasons of perceived discrimination of Chinese immigrant youths with higher educational attainment focus on experience of treated unfairly, institutional discrimination.

Table 3-2 Reasons of Perceived Discrimination, Cope Strategies and Social Support of Chinese Immigrant Youths with Higher and Lower Educational Attainment

| Chinese immigrant | Chinese immigrant |
| :---: | :---: |
| youths with higher | youths with lower <br> educational attainment |
| educational attainment |  |
| Reasons of Perceived Discrimination |  |
| Language (Spanish and Catalan) | $\checkmark$ |


| Heavy reliance on Chinese |  |  |
| :---: | :---: | :---: |
|  |  | $\checkmark$ |
| community |  |  |
| Experience of treated unfairly | $\checkmark$ |  |
| Institutional discrimination | $\checkmark$ |  |
| Parents' support | $\checkmark$ |  |
| Copying Strategies |  |  |
| Educational attainment | $\checkmark$ |  |
| Language learning | $\checkmark$ |  |
| Social Support |  |  |
| Peer groups | $\checkmark$ | $\checkmark$ |
| Co-ethnic community | $\checkmark$ | $\checkmark$ |
| Religion | $\checkmark$ | $\checkmark$ |

On the one hand, this chapter found that the main factor that could explain differences in the perceived discrimination has to do with coping strategies. Chinese immigrant youths with low perceived discrimination adopt positive coping strategies, such as facing up and trying to overcome rejection and prejudice. In contrast, the Chinese immigrant youths that have feelings of discrimination are more likely to adopt negative coping strategies, such as avoiding incidents and problems that could lead to discrimination, which often means giving
up higher education or employment in the Spanish native labor market.

On the other hand, this chapter also found that the main factor explaining the resilience that the large majority of Chinese immigrant youths display with regard to the negative consequences of discrimination has to do with the strong social support they receive from the Chinese co-ethnic community, and the strong sense of common identity they develop thanks to local employment networks and religious institutions. The Chinese community in Barcelona has consolidated economically and created an ethnic enclave where its members can find stable employment and develop strong feelings of identity related to their Chinese country of origin. However, this form of segmented assimilation based on the rejection-identification model, might have the undesirable effect of further segregating the Chinese community and making it even more difficult for its immigrant youths to integrate into the mainstream society. Overreliance on social support from their own community often leads

Chinese immigrant youths to avoid integration into the Spanish society. Education, I found, could break this vicious circle and provide the better educated youth with necessary self-confidence to fight discrimination more effectively. Parents' ambitions regarding their children's education appeared to be crucial for providing the new generations with this important acculturation tool, although I also found that education, while necessary, may not be a sufficient condition to attain this assimilation. Further research should focus on the additional factors that, in interaction with education, may facilitate a less segmented assimilation of Chinese immigrant youths into the Spanish society, focusing on the biographies of the youths that have been able to overcome discrimination and integrate more fully into mainstream society.

### 3.8 Reference

Altshuler, J. L., \& Ruble, D. N. (1989). Developmental changes in children's awareness of strategies for coping with uncontrollable stress. Child Development, 60(6), 1337-49.

Amiot, C. E., De La Sablonnire, R., Terry, D. J., \& Smith, J. R. (2007). Integration of social identities in the self: toward a cognitive-developmental model. Personality and Social Psychology Review, 11(4), 364-88.

Aparicio, R., \& Portes, A. (2014). Growing up in Spain: The integration of the children of immigrants. (Social Studies Collection No. 38).

Armstead, C. A., Lawler, K. A., Gorden, G., Cross, J., \& Gibbons, J. (1989). Relationship of racial stressors to blood pressure responses and anger expression in black college students. Health Psychology, 8(5), 541.

Barrera, M. (1988). Models of social support and life stress: Beyond the buffering hypothesis. In L. H. Cohen (Eds.), Life events and psychological functioning: Theoretical and methodological issues (pp. 211-236). Newbury Park, CA: Sage.

Berg, A. O., Melle, I., Rossberg, J. I., Romm, K. L., Larsson, S., Lagerberg, T. V., Andreassen, O.A.\& Hauff, E. (2011). Perceived discrimination is associated with severity of positive
and depression/anxiety symptoms in immigrants with psychosis: a cross-sectional study. BMC psychiatry, 11(1), 77.

Berry, J. W., Phinney, J. S., Sam, D. L., \& Vedder, P. (2010). Immigrant youth: Acculturation, identity and adaptation. Zeitschrift fur Padagogik (Beiheft), 55(3), 17-43.

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

Beveridge, R. M., A. Berg, C., J. Wiebe, D., \& L. Palmer, D. (2006). Mother and adolescent representations of illness ownership and stressful events surrounding diabetes. Journal of Pediatric Psychology, 31(8), 818-827.

Borrell, L. N., et al. (2010). Perceived racial/ethnic discrimination, smoking and alcohol consumption in the multi-ethnic study of atherosclerosis (MESA). Preventive Medicine, 51(3-4), 307-12.

Carter Andrews, D. J. (2012). Black achievers' experiences with racial spotlighting and ignoring in a predominantly white high school. Teachers College Record, 114(10), 1-46.

Chou, K. L. (2012). Perceived discrimination and depression among new migrants to Hong Kong: The moderating role of social support and neighborhood collective efficacy. Journal of Affective Disorders, 138(1-2), 63-70.

Clark, R. (2006). Perceived racism and vascular reactivity in black college women: Moderating effects of seeking social support. Health Psychology, 25(1), 20.

Cobb, S. (1982). Social support and health through the life course. In H. McCubbin, A. E. Cauble, \& J. M. Patterson (Eds). Family stress, coping and social support (pp. 189-199). Springfield, Ill. : Thomas, c1982.

Cornell, S., \& Hartmann, D. (2006). Ethnicity and race: Making identities in a changing world. Sage Publications.

Creed, F. (1999). The importance of depression following myocardial infarction. Hearth, 86, 406-408.

Cronenwett, L. R. (1985). Network structure, social support, and psychological outcomes of pregnancy. Nursing Research, 34(2), 93-99.

Daldy, B., Poot, J., \& Roskruge, M. J. (2013). Perception of Workplace Discrimination among immigrants and native born New Zealanders. IZA Discussion Paper No. 7504, 34. Available at SSRN: https://ssrn.com/abstract=2314798

DeGarmo, D. S., \& Martinez Jr, C. R. (2006). A culturally informed model of academic well-being for Latino youth: The importance of discriminatory experiences and social support. Family Relations, 55(3), 267-278.

Dempsey, M. (2002). Negative coping as mediator in the relation between violence and outcomes: Inner-city African American youth. American Journal of Orthopsychiatry, 72(1), 102-9.

Deng, X., \& Shi, B. (2013). Migrant children's perceived discrimination and self-esteem: The effect of social support and migration duration. Chinese Journal of Special Education, 158(8), 50-56.

Dion, K. L., \& Kawakami, K. (1996). Ethnicity and perceived discrimination in Toronto: Another look at the personal/group discrimination discrepancy. Canadian Journal of Behavioural Science, 28(3), 203-13.

Edwards, L. M., \& Romero, A. J. (2008). Coping with discrimination among Mexican descent adolescents. Hispanic Journal of Behavioral Sciences, 30(1), 24-39.

Ellis, B. H., MacDonald, H. Z., Lincoln, A. K., \& Cabral, H. J. (2008). Mental health of Somali adolescent refugees: The role of trauma, stress, and perceived discrimination. Journal of Consulting and Clinical Psychology, 76(2), 184-93.

Essed, P. (1991). Understanding everyday racism: An interdisciplinary theory. Sage.

Fan, X-H., et al. (2013). The effect of social support and social identity on the relationship between perceived discrimination
and socio-cultural adjustment among Chinese migrant children. Acta Psychologica Sinica, 44(5), 647-63.

Xing-hua, F., Xiao-yi. F., \& Yang, L. (2008). Perceived Discrimination and Loneliness: Moderating Effects of Coping Style Among Migrant Children. Psychological Development and Education, 16(4). 93-99.

Finch, B. K., Kolody, B., \& Vega, W. A. (2000). Perceived discrimination and depression among Mexican-origin adults in California. Journal of Health and Social Behavior, 41(3), 295313.

Folkman, S., \& Lazarus, R. S. (1985). Study of emotion and coping during three stages of a college examination. Personality and Social Psychology, 48(1), 150-70. https://webs.wofford.edu/steinmetzkr/Teaching/Psy150/Lectur e PDFs/Coping.pdf.

Folkman, S., and Lazarus, R. S. (1980a). An analysis of coping in a middle-aged community sample. Journal of Health and Social Behavior, 21(3), 219-39.
-_. (1980b). An analysis of coping in a middle-aged community (sample). Journal of Health and Social Behavior, 21(3), 219239.

Gee, G. C. (2008). A multilevel analysis of the relationship between institutional and individual racial discrimination and health
status. American Journal of Public Health, 98(Supplement_1), S48-56.

Guyll, M., Matthews, K. A., \& Bromberger, J. T. (2001). Discrimination and unfair treatment: relationship to cardiovascular reactivity among African American and European American women. Health Psychology, 20(5), 315.

Hainmueller, J., \& Hangartner, D. (2013). Who gets a Swiss passport? A natural experiment in immigrant discrimination. American Political Science Review, 107(1), 159-87.

Hobfoll, S. E., \& Stokes, J. P. (1988). The process and mechanics of social support. In S. Duck, D. F. Hay, S. E. Hobfoll, W. Ickes, \& B. M. Montgomery (Eds.), Handbook of personal relationships: Theory, research and interventions (p. 497-517). John Wiley \& Sons.

House, James S. (1983). Work stress and social support. AddisonWesley.

Jasinskaja-Lahti, I., Liebkind, K., Jaakkola, M., \& Reuter, A. (2006). Perceived discrimination, social support networks, and psychological well-being among three immigrant groups. Journal of Cross-cultural Psychology, 37(3), 293-311.

Kahn, R. L. (1980). Convoys over the life course: Attachment roles and social support. Life-span Development and Behavior, 3, 253-86.

Kessler, R., Mickelson, K., \& Williams, D. (2009). The prevalence , distribution, and mental health correlates of perceived discrimination in the United States. Journal of Health and Social Behavior, 40(3), 208-30.

Keyes, K. M., Hatzenbuehler, M. L., \& Hasin, D. S. (2011). Stressful life experiences, alcohol consumption, and alcohol use disorders: the epidemiologic evidence for four main types of stressors. Psychopharmacology, 218(1), 1-17.

Krieger, N. (1990). Racial and gender discrimination: Risk factors for high blood pressure? Social Science \& Medicine, 30(12), 1273-81.
—_. (2000). Refiguring 'race': Epidemiology, racialized biology, and biological expressions of race relations. International Journal of Health Services, 30(1), 211-16.

Langford, C. P. H., Bowsher, J., Maloney, J. P., \& Lillis, P. P. (1997). Social support: A conceptual analysis. Journal of Advanced Nursing, 25(1), 95-100.

Liu, X., Zhao, J., \& Shi, B. (2011). Dual effects of perceived discrimination and its psychological mechanism. Psychological Development and Education, 27, 216-23.

Louis, W. R., Duck, J. M., Terry, D. J., Schuller, R. A., \& Lalonde, R. N. (2007). Why do citizens want to keep refugees out?

Threats, fairness and hostile norms in the treatment of asylum seekers. European Journal of Social Psychology, 37(1), 53-73.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. Psychological Bulletin, 129(5), 674.

Moss, G. E. (1973). Illness, Immunity, and Social Interaction: The Dynamics of Biosocial Resonation. Wiley.

Mossakowski, K. N. (2003). Coping with perceived discrimination: Does ethnic identity protect mental health? Journal of Health and Social Behavior, 44(3), 318-31.

Ni, S., \& Li, H. (2014). The effect of coping and social support on the relationship between perceived discrimination and identity integration among Chinese migrant children. Psychological Development and Education, 30 (1), 31-38.

Noh, S., Beiser, M., Kaspar, V., Hou, F., \& Rummens, J. (1999). Perceived racial discrimination, depression, and coping: A study of Southeast Asian refugees in Canada. Journal of Health and Social Behavior, 40(3), 193-207.

Noh, S., \& Kaspar, V. (2003). Perceived discrimination and depression: Moderating effects of coping, acculturation, and ethnic support. American Journal of Public Health, 93(2), 23238.

Nyborg, V. M., \& Curry, J. F. (2003). The impact of perceived racism: Psychological symptoms among African American boys. Journal of Clinical Child and Adolescent Psychology, 32(2), 258-66.

Paradies, Y. (2006). A systematic review of empirical research on self-reported racism and health. International Journal of Epidemiology, 35(4), 888-901.

Pascoe, E. A., and Richman, L. S. (2009). Perceived discrimination and health: A meta-analytic review. Psychological Bulletin, 135(4), 531-54.

Patterson, J. M., \& Garwick, A. W. (1994). The impact of chronic illness on families: A family systems perspective. Annals of Behavioral Medicine, 16(2), 131-142.

Portes, A. (2007). Migration, development, and segmented assimilation: A conceptual review of the evidence. The Annals of the American Academy of Political and Social Science, 610(1), 73-97.

Prelow, H. M., Danoff-Burg, S., Swenson, R. R., \& Pulgiano, D. (2004). The impact of ecological risk and perceived discrimination on the psychological adjustment of African American and European American youth. Journal of Community Psychology, 32(4), 375-389.

Prelow, H. M., Mosher, C. E., and Bowman, M. A. (2006). Perceived racial discrimination, social support, and psychological adjustment among African American college students. Journal of Black Psychology, 32(4), 442-54.

Ren, X. S., Amick, B. C., \& Williams, D. R. (1999). Racial/ethnic disparities in health: the interplay between discrimination and socioeconomic status. Ethnicity \& Disease, 9(2), 151-165.

Roose, S. P., Glassman, A. H., \& Seidman, S. N. (2001). Relationship between depression and other medical illnesses. Jama, 286(14), 1687-1690.

Sarason, I. G, \& Sarason, B. R. (1985). Social support-Insights from assessment and experimentation. In Sarason, I. G, \& Sarason, B. R. (Eds.) Social Support: Theory, Research and Applications (pp. 39-50), Springer.

Schmitt, M. T., Branscombe, N. R., Postmes, T., \& Garcia, A. (2014). The consequences of perceived discrimination for psychological well-being: a meta-analytic review. Psychological Bulletin, 140(4), 921.

Schulz, A., et al. (2008). Unfair treatment, neighborhood effects, and mental health in the Detroit metropolitan area. Health (San Francisco), 41(3), 314-32.

Schwarzer, R., \& Knoll, N. (2003). Positive coping: Mastering demands and searching for meaning. In S. J. Lopez \& C. R.

Snyder (Eds.), Positive psychological assessment: A handbook of models and measures (p. 393-409). American Psychological. Association. https://doi.org/10.1037/10612-025

Sevillano, V., Basabe, N., Bobowik, M., \& Aierdi, X. (2014). Health-related quality of life, ethnicity and perceived discrimination among immigrants and natives in Spain. Ethnicity \& Health, 19(2), 178-97.

Shumaker, S. A., \& Brownell, A. (1984). Toward a theory of social support: closing conceptual gaps. Journal of Social Issues, 40(4), 11-36.

Steffen, P. R., McNeilly, M., Anderson, N., \& Sherwood, A. (2003). Effects of perceived racism and anger inhibition on ambulatory blood pressure in African Americans. Psychosomatic Medicine, 65(5), 746-750.

Thomas, O. N., Caldwell, C. H., Faison, N., \& Jackson, J. S. (2009). Promoting academic achievement: The role of racial identity in buffering perceptions of teacher discrimination on academic achievement among African American and Caribbean Black adolescents. Journal of Educational Psychology, 101(2), 420431.

Thompson, N. (1998). Promoting equality. Springer.

Tilden, V. P, \& Weinert, C. (1987). Social support and the chronically ill individual. The Nursing Clinics of North America, 22(3), 613-20.

Tran, A. G. T. T., Lee, R. M., \& Burgess, D. J. (2010). Perceived discrimination and substance use in Hispanic/Latino, Africanborn Black, and Southeast Asian immigrants. Cultural Diversity and Ethnic Minority Psychology, 16(2), 226-236.

Wheeler, L. A., Arora, P. G., \& Delgado, M. Y. (2020). The distal role of adolescents' awareness of and perceived discrimination on young adults' socioeconomic attainment among Mexicanorigin immigrant families. Journal of Youth and Adolescence, 49(12), 2441-2458.

Williams, D. R., Yu, Y. Jackson, J. S., \& Anderson, N. B. (1997). Racial differences in physical and mental health. Socioeconomic status, stress and discrimination. Journal of Health Psychology, 2(3), 335-51.

Williams, D. R., \& Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. Journal of Behavioral Medicine, 32(1), 20-47.

Williams, D. R., Neighbors, H. W., \& Jackson, J. S. (2003). Racial/ethnic discrimination and health: Findings from community studies. American Journal of Public Health, 93(2), 200-208.

Williams, D. R., Spencer, M. S., \& Jackson, J. S. (1999). Race, stress, and physical health: The role of group identity. In R. J. Contrada \& R. D. Ashmore (Eds.), Rutgers series on self and social identity, Vol. 2. Self, social identity, and physical health: Interdisciplinary explorations (p. 71-100). Oxford University Press.

Williams, R. D., \& Williams-Morris, R. (2000). Racism and mental health: The African American experience. Ethnicity \& Health, 5(3-4), 243-68.

Witcher, S. (2013). Discrimination. In Inclusive Equality: A Vision for Social Justice. Bristol University Press.

Yen, I. H., Ragland, D. R. Greiner, B. A., \& Fisher, J. M. (1999). Workplace discrimination and alcohol consumption: Findings from the San Francisco MUNI health and safety study. Ethnicity \& Disease, 9(1), 70-80.

Yiu, J. (2013). Calibrated ambitions: Low educational ambition as a form of strategic adaptation among Chinese youth in Spain. International Migration Review, 47(3), 573-611.

Yuan, X., Li, S., \& Wu, H. (2017). Perceived discrimination of migrant children in second-tier city: Characteristic and its relation to depression. Health Medicine Research Practice, 14(2), 31-34; 50.

Zhang, G., Jiang, N., Liang, Z., \& Deng, H. (2016). The relation between perceived discrimination and migrant children's school adaptation: A longitudinal study. Psychological Development and Education, 32(5), 587-94.

Zlobina, A., Basabe, N., Paez, D., \& Furnham, A. (2006). Sociocultural adjustment of immigrants: Universal and groupspecific predictors. International Journal of Intercultural Relations, 30(2), 195-211.

# 4 IS THERE DISCRIMINATION AGAINST THE CHINESE ETHNIC MINORITY IN ONLINE TRADING MARKETS IN SPAIN? A FIELD EXPERIMENT 


#### Abstract

This study adopted the quantitative method to explore whether there is discrimination against the Chinese ethnic minority in the secondhand commodity trading market in Spain. Fictitious selling and purchase product information was sent to real buyers and sellers at the same time by Chinese ethnic minority sellers and buyers and Spanish-Catalan sellers and buyers, and then comparing the positive responses they received. Results shown that Chinese ethnic minority sellers and buyers received fewer positive responses than SpanishCatalan sellers and buyers. But, when adjusting the selling and buying prices, Chinese ethnic minority sellers and buyers received more positive responses than Spanish-Catalan sellers and buyers. Therefore, this study suggests that Chinese ethnic minority were discriminated against in the Spanish commodity trading market, but focused on statistical discrimination.


### 4.1 Introduction

Recently, immigration has become, along with unemployment and terrorism, one of the three main problems that worry Spanish people the most (Agrela, 2002). With ever-increasing numbers of individuals arriving into the country belonging to ethnic minorities with different cultural background, the discrimination of ethnic minorities is becoming a hot topic in both society and academia.

Historically, Spain has been an emigration country. However, with the improvement of its economic, political and social environment and its incorporation into the European Union in the 1980s, Spain has become an important and popular immigration country (Enesco et al., 2005). It not only receives immigrants from other European countries, the traditional destination of Spanish emigrants, it also attracts immigrants from other countries from around the world with different cultures. In this context, the Spanish government and society have come to face a completely different situation compared
to the past, one in which the adaptation and integration of the incoming ethnic minorities must be promoted. The Chinese ethnic minority, the biggest minority group among Asian ethnic minorities, is part of this group.

Adaptation and integration of the Chinese ethnic community into the host society is bound to be tough. Discrimination is the primary challenge they have to confront and conquer. There are various complex reasons for discrimination. Here, it suffices to mention the two most important. Firstly, prejudices based on cultural differences between East and West may be the main cause of discrimination. This prejudice may be reinforced by feelings of rejection against the Chinese ethnic minority based on natives' belief that they emigrated in order to occupy Spanish jobs and seize local economic resources. In recent years, given Spain's uncertain economy and high unemployment rates, many natives find it difficult to find jobs and believe that the Chinese ethnic minority may seize the few jobs available due to their hard-working spirit. This may lead to an
unfriendly treatment by local people toward the Chinese ethnic minority. As explained in more detail below, this form of discrimination is known in the literature as taste-based discrimination - discrimination of a community based on emotional grounds. Secondly, stereotypes of Chinese ethnic minorities may be the cause of their being discriminated against by the local society. Locals may believe that the Chinese ethnic minority should not be trusted, based on their own experience and previous interactions with individuals of Chinese origin. For instance, they may deem that Chinese businessmen often sell inferior or counterfeit products. This form of discrimination is known in the literature as statistical discrimination, stereotypes formed against, in this case, the Chinese ethnic minority.

Discrimination against the Chinese ethnic minority, whether in the form of taste or statistical discrimination, may be difficult to detect. Recently, with the majority of host countries advocating racial equality, individuals tend to conceal their discriminatory views in
accordance with policies to treat ethnic minorities fairly. Another difficulty is presented in terms of how to separate tasted-based from statistically-based discrimination. Some effort has been made in the literature, which are reviewed further below. This chapter will also aim at making this differentiation in this article.

In Spain, as well as in other Western countries, the status of Chinese people in society is complex and ambivalent (Dickinson \& Oaxaca, 2009). In addition to the negative perceptions mentioned above, the local people also express some positive attitudes towards Chinese ethnic minorities. For example, some believe that the Chinese ethnic minority is diligent and law-abiding. Some locals may, therefore be able to change their negative impressions through positive interactions with the Chinese ethnic minority. This change might be achieved not only by social interactions with the Chinese ethnic minority, but also by economic exchange in which the locals may benefit from transacting with individuals of Chinese origin.

As noted, there are two types of discrimination, taste-based discrimination and statistical discrimination. Both are important and may negatively affect the adaptation and integration of ethnic minorities into host societies. However, local people who discriminate on different grounds may behave very differently with ethnic minorities. For example, in the commodity trade, natives who discriminate on a taste-based basis may be reluctant to buy goods from certain ethnic minorities, even when the prices of these goods are lower than those sold by native people. In contrast, natives discriminating on a statistical basis may be more willing to deal with ethnic minorities if ethnic minority goods are sold at lower prices.

Research on the Chinese ethnic minority in Spain has mainly focused on its history, development and the status quo. Few studies have investigated the extent to which they experience discrimination. This is an important topic, as the majority of the Chinese ethnic minority in Spain engages in business activities and they may find that discrimination by the Spanish society affects their business activities.

Equally important to investigate is the extent to which each form of discrimination affects the Chinese community more frequently. This chapter draws from a field experiment to analyze the transactional behavior between individuals of Spanish and Chinese ethnic origin within a second-hand trading market. It investigates not only if there is discrimination, but also the extent to which this discrimination is based on statistical stereotypes about the behavior of sellers and buyers of Chinese origin within this market, or on taste-based discrimination.

This chapter is structured as follows: Section 2 reviews the literature reliant on field experiments to study the discrimination of ethnic minorities in some important fields, including the labor market, the real estate market, and the commodity trading market. Discrimination in the commodity trading market is highlighted because it is the field investigated in the empirical part of the paper. Section 3 presents the theoretical framework, discussing taste-based discrimination and statistical discrimination theories. Section 4
includes a detailed description of the field experiment carried out in the research, and of the hypotheses being tested. The results of the experiment are shown and interpreted in Section 5. Section 6 is devoted to discussing the results and draws the main conclusions of the study.

### 4.2 Previous Studies

Field experiments researching the social phenomenon of discrimination have been carried out for more than 30 years (Heath \& Di Stasio, 2019). Only some have focused on discrimination against ethnic minorities and immigrants in host societies. Discrimination has been measured in various aspects of the lives of the ethnic minorities, such as employment within the labor market, renting and buying within the real estate market, commodity transaction, and other fields.

Discrimination against Ethnic Minorities in Certain Fields

Many studies have used field experiments to study discrimination against ethnic minorities in the labor market. The main question in regard to this issue is that whether ethnic minorities are discriminated against by recruiters during the process of job-hiring. According to previous studies, candidates' race is a significant factor that impacts employers' decisions (Wilson, 2011). Various studies have used field experiments to study race discrimination during job hiring. They investigated whether applicants with some marks, indicating their belonging to some ethnic minorities, were less likely to receive positive responses from recruiters than their local counterparts. The common characteristic used in previous studies was the name of the applicant, with some being typical of ethnic minorities and others of the majority groups. Bertrand and Mullainathan (2004) carried out a field experiment in Boston and Chicago, in the United States. They sent resume to interviewees who advertised job openings. Some applicants' names sounded very African-American and others had typical names for Whites. They then compared the call-back rates of responses of applicants with different names. As predicted, they
found that the African-American names received lower call-backs from employers than the White names, even though the resume with African-American names had the same merits than the White ones. Therefore, they concluded that racial discrimination was still a prominent feature in the labor market of the United States.

Discrimination against ethnic minorities in the labor market has been shown to occur also in Canada. By sending résumés to recruitment job sites in Toronto, Oreopoulos (2011) found that in general, employers showed considerable discrimination against applicants of foreign nationalities. About 40 per cent more applicants with English names received positive responses than applicants with Chinese names.

As the number of ethnic minorities in European countries continues to rise, more researchers have engaged in field experiments to find out whether there is discrimination against ethnic minorities within the labor markets of European countries. A recent field experiment
by Larsen and Di Stasio (2019), based on an experiment conducted in five European countries, found there was discrimination against Pakistani ethnic minority applicants in both the U. K. and Norway. It mainly manifested in their receiving less positive feedback from employers than applicants from mainstream groups. Through field experiments, a number of studies have further found that discrimination against applicants from other ethnic minorities also exists in other European countries, such as with Arabs in Sweden (Bursell, 2012), non-Irish in Ireland (McGinnity et al., 2009), and Moroccans in both Spain and the Netherlands (Ramos et al., 2019).

To explain why applicants from ethnic minorities were subjected to discrimination by recruiters, researchers proposed two explanations. Firstly, the recruiters may have personal negative attitudes - or prejudices -- towards certain ethnic minorities. Recruiters with prejudices against ethnic minorities do not consider the qualifications of applicants, rejecting their applications and resume simply because they do not like them, showing an emotional rejection toward some
minority groups. Prejudice is a hindrance to immigrants in getting the fair opportunities they merit within the labor market because, being emotionally-based, it is hard to eliminate. The second explanation of discrimination is that recruiters have imperfect information about candidates that they then try to fill with assumptive information on their ethnicity, usually characteristics typically associated with minority groups. For example, it may be that some data or experiences indicate that the productivity of a particular ethnic group is low, and so recruiters then use that stereotypical assumption to judge all individuals from that group (Baumle \& Fossett, 2005). These stereotypes act as shortcuts that allow recruiters to save on the costs of obtaining valuable information that is otherwise hard to obtain.

Field experiments have also been used to study discrimination against ethnic minorities in the real estate market. Undeniably, these previous studies have shown that ethnic minorities are treated differently by landlords and rental agencies, not only in terms of their
willingness to rent or sell to ethnic minorities, but also in terms of the prices they charge, which are typically higher.

Since the 1870s, American scholars have been concerned about the discrimination faced by African-Americans and Hispanics in the United States housing market. In 1977, Wienk et al. (1979) conducted the Housing Market Practices Survey and found that there was significant discrimination against African-Americans in both sales and rental housing markets. Subsequently, another survey, the Housing Discrimination Study was performed in 1989 and also found that African-Americans were again discriminated against in sales and rental housing markets (Riach \& Rich, 2002). This study also showed that Hispanics were discriminated against by the natives in the United States. A 2000 study again confirmed that discrimination against African-Americans and Hispanics in the real estate market had persisted (Ross \& Turner, 2005).

Discrimination against ethnic minorities in real estate markets has also been detected in studies conducted in other countries, such as France and Spain. Bovenkerk et al. (1979) compared discrimination against two ethnic groups in the rental house market in France Portuguese and Antillean. They found that net discrimination against Antilleans was as high as $31.9 \%$ during applications for renting house. No discrimination against Portuguese ethnic minority applicants was found. Bosch, Carnero and Farre (2010) explored discriminatory behaviors against ethnic minorities in the rental market in Spain using a field experiment, and they also found that applicants with Moroccan sounding names were less likely to receive positive responses from landlords and housing agents than applicants with more traditional Spanish names.

Price discrimination in the real estate market is a significant challenge to immigrants. Yinger (1998) provided an example of the price discrimination that some ethnic minorities encounter in their host countries. According to a report of the San Antonio Fair Housing

Council (1997), in San Antonio, United States, an Hispanic female applying to rent a two-bedroom apartment was quoted a rent of $\$ 670$ per month with a $\$ 200$ security deposit in 1997 . However, an equally qualified white female applying for renting the same apartment was quoted a special rent of $\$ 616$ per month with a $\$ 100$ security deposit. This demonstrates that some landlords or rental agencies are less willing to rent apartments to some ethnic groups or, when they do, usually at higher prices.

Previous studies have discussed three main possible explanations for discrimination against ethnic minorities in the real estate market. The first explanation is based upon what has been labelled the economics of discrimination, a theory initially proposed by Becker in 1957. This theory determines that discrimination in the real estate market derives from the personal prejudice of landlords and house agents.

Discrimination against ethnic minorities occurs because landlords and housing agents in the host countries have preferences for individuals and families who do not belong to ethnic minorities. This
lack of preference or distaste for minorities may lead landlords and housing agents to behave in dishonestly in their dealing with applicants from ethnic minorities, such as when raising house prices or providing ineffective or no information, and by other means.

Yinger proposed a second explanation in 1995, arguing that agents in the real estate market of host countries discriminate against applicants from ethnic minorities, not because they themselves are prejudiced against ethnic minorities, but rather because their white customers are. Real estate agents may believe that if ethnic minority groups were allowed to live in some communities, neighbors might leave the area and this might reduce the attractiveness of the neighborhoods, negatively affecting housing rents and occupancy rates. This may be the reason why housing agents refuse to show white-majority neighborhoods to ethnic minorities, to avoid offending their prospective white clients, and so reduce their real estate market activities amongst ethnic minorities. This kind of discrimination accelerates the physical separation between the
mainstream group and the disadvantaged groups, such as ethnic minority immigrants in the host countries, and may foster conflicts between them.

A third explanation for the discrimination against ethnic minorities in the real estate market is that white people, or other members of a majority group, may have negative views about the minority based on their own past experiences or the experiences of others. This may lead them to reject making deals with applicants from ethnic minorities. They may view ethnic minorities as having some characteristics that might be conducive to economic losses when transacting with them within the real estate market. For example, house agents may be reluctant to trade with ethnic minorities if most of them work in low-status jobs and have a low level of income. These characteristics may lead ethnic minorities to be seen as incompetent or uncreditworthy, and less likely to pay the rent on time.

# Discrimination against Ethnic Minorities in the Commodity Trading Market 

Besides experiencing discrimination in the labor market and the real estate market, ethnic minorities may experience discrimination in commodity trading markets. This has been the focus of additional research, but the use of field experiments in this research area is rare. The few existing studies have shown that ethnic minorities are also discriminated against when they sell or buy products in commodity markets.

Using a field experiment, Ayres and Siegelman (1995) found that, in the car market, local dealers earned significantly more profit when selling cars to black than to white buyers, whether they be male or female. Additional profits reached up to more than $\$ 1,000$ from black men. Goldberg (1996) also used regression analysis to investigate price discrimination among a number of minority groups in car sales. The results showed that when buying a minivan or utility vehicle, a
minority member gets a far smaller discount. The study of Gneezy, List and Price (2012) also focused on the discrimination against ethnic minorities in the car market, but this time in Chicago. They compared African-American with Caucasian buyers to test whether they could detect any taste-based discrimination or statistical discrimination against the former, using a field experiment. Their results showed that there was no obvious difference between African-American and Caucasian in the price paid for the low-end cars. However, African-Americans received a higher final price quote for high-end cars than their Caucasian counterparts. They further tested if there was discrimination against African-Americans in the bargaining process. They found no detectable difference in the final bargaining price or bargaining time for African-Americans and Caucasian for low-end cars, but when bargaining on high-end cars, African American received a higher final bargaining price and the bargaining time was shorter than among Caucasian buyers. They expected African-Americans to receive a higher price quote for both the low-end and high-end cars if they experienced taste-based
discrimination, which ultimately did not match the results. They interpreted the difference in the dealers' behavior, according to the price of the car, as a sign that they engaged in forms of statistical discrimination based on stereotypes about the characteristics of African-American buyers and their typically lower earnings.

List (2004) tested the trading behaviors of dealers and buyers at the American sports card markets and found that ethnic minorities paid more for sports cards than white men ( $4.2 \%$ more for sports cards than white buyers in the final offer). In 2009, Doleac and and Stein (2013) tested if buyers of iPods, sold through shopping sites, would discriminate against black sellers. They found that black sellers received $13 \%$ fewer responses and $17 \%$ fewer offers than white sellers.

The second-hand commodity trading market is a trading market that has gradually emerged in recent years, and online second-hand trading platforms have also become an important way of shopping.

Different from the sale and purchase of brand-new products, secondhand products cause personal characteristics of the seller or buyer, such as minority identity, to become an important factor affecting retransactions. Although there are few studies on whether minorities encounter discrimination in second-hand goods transactions either as sellers or buyers, the few existing studies have shown that, compared to locals, minorities tend to be discriminated against. Thus, the research by Nunley, Owens and Howard (2011) explored the impact of race in second-hand markets by comparing the prices of paired second-hand goods, sold at the same time on eBay, by black and white sellers given racialized names. They found that there was discrimination in the transaction of second-hand goods, and that this discrimination depended on the "racialized" characteristics of the product and the race of the seller. When white sellers sold goods, they discriminated against black buyers. However, black people were not discriminated against when buying goods sold by black sellers.

In 2012, Bosch and Cobacho (2012) carried out a field experiments in which they sent purchasing requests emails to sellers on secondhand websites in Spain. They compared the response rates of fake buyers, of both Spanish and non-Spanish origin, to explore whether non-Spanish buyers encountered discrimination when doing transactions in second-hand markets. This article is relevant to the current research, and so it is important to examine its results so as to compare them with those presented in the empirical sections of this chapter. Similar to the study of Nunley et al., Bosch and Cobacho used names to distinguish buyers from different ethnic groups. They examined three minority ethnic groups in Spain: British, North African and Latin American. The study found that all buyers with non-Spanish names obtained much lower rates of response than buyers with Spanish names, even when buying very cheap goods.

How can discrimination against ethnic minorities in commodity trading markets be explained? The research on discrimination against minorities in commodity markets has focused on statistical
discrimination. It has pointed out that sellers often refuse to trade with ethnic minority buyers because they believe that certain ethnic minorities are untrustworthy, and that dealing with them may harm their interests (Nunley et al., 2011). This attitude of the sellers is based on existing general or statistical views about the characteristics of the given ethnic groups. These views are used as shortcuts to reduce the costs of obtaining more reliable information about the buyers, which is often unavailable.

As noted, most existing discrimination studies have focused on discrimination against minority groups in either the labor market and real estate markets, rather than in commodity transactions, especially second-hand commodity markets. However, the study of the relations between minority groups and locals or dominant groups in commodity markets can better reflect the patterns of general discrimination in society against minority or immigrant groups as commodity markets are more opened to more general or less specialized economic agents than labor and real estate markets.

Moreover, as the population of the Chinese ethnic minority has increased rapidly in Spain in recent years, the existing research did not pay much attention to whether this group was discriminated against in market transactions, let alone in second-hand commodity markets. This article aims to fill this gap by investigating patterns of discrimination against the Chinese ethnic minority in Spain's second-hand markets. This study is expected to shed light on the relationship between locals and the Chinese ethnic minority, and more generally between Spaniards and Asian ethnic minorities.

### 4.3 Taste-based vs. Statistical Discrimination

The evidence reviewed so far indicates that, whether in the labor market, real estate market or commodity market, ethnic minorities tend to remain in a disadvantageous position, and are discriminated against by the dominant groups. This may have serious negative impacts on them and their chance to integrate into the society at large. As noted, discrimination of the dominant group against ethnic
minorities can take two forms: taste-based discrimination and statistical discrimination. In this section, I explored in more detail the nature of these two forms of discrimination.

Taste-based discrimination and statistical-discrimination were initially used as part of an economic model to explain discrimination in the labor market. According to Becker (1971), taste-based discrimination assumes that the main deciding factor that leads employers to discriminate against minorities is their interethnic bias or distaste for minority groups. This is an emotional response that defines employers' preferences. It could explain why ethnic minority or immigrant applicants are less likely to get jobs than majority applicants (Thijssen, 2016). In contrast to taste-based discrimination, statistical discrimination does not consider interethnic bias to be the cause of discrimination of ethnic minorities in the labor market. Instead, this notion suggests that discrimination may be 'a rational behavioral response to uncertainty' (GEMM Project, 2016, p. 2). According to this explanation employers and other economic agents
use information about membership in an ethnic group as a reasonable basis for evaluating the potential productivities of ethnic minority members (Baumle \& Fossett, 2005). Because information about the specific potential productivity of a candidate is costly to obtain, employers rely on indirect evidence on the typical productivity of members of different social groups, based on their own experience or on social stereotypes existing in society, to assist them in their hiring decisions. If these stereotypes portray ethnic minorities as having lower productivity, this would explain why employers discriminate against them.

In subsequent studies, the distinction between taste-based discrimination and statistical discrimination was gradually extended to other fields and markets, giving rise to the two main theories for explaining discrimination. Which theory is better to explain discrimination against ethnic minorities? So far, there is no consensus among researchers (Guryan \& Charles, 2013). The main
reason being that ethnic minorities tend to encounter both taste-based and statistical discrimination in these fields.

For example, the review performed above indicated that the main reason explaining why ethnic minorities eventually face discrimination from landlords and housing agents during the process of renting and buying houses, is the prejudice of landlords and housing agents against ethnic minorities. Not only do these prejudices result in discrimination against minorities and negatively affects their wellbeing due to their being excluded from accessing key resources, they may also damage landlords and house agents interests, as falls in the benefits from economic transactions are likely to ensue in non-competitive markets. But we have also seen that discrimination often has statistical bases. Local people may rely on stereotypes that place ethnic minorities at the bottom of society or in low-income occupations. This may lead them to believe that ethnic minorities are less trustworthy, or that they may be more likely to fall behind on a payment or rent.

Taste-based discrimination and statistical discrimination often occur at the same time. It is, therefore, necessary to examine the effects of both when analyzing discrimination against ethnic minorities. The most striking difference between taste-based discrimination and statistical discrimination is that taste-based discrimination of dominant groups is often unaffected by changing conditions, that is, prejudicial individuals do not change their behavior against ethnic minorities, regardless of new or better information about the characteristics of the person they deal with, and even when the consideration of these characteristics may prove advantageous to them. For example, in commodity trading, even when ethnic minority buyers increase their prices and bids for goods, local sellers with taste-based discrimination may still be unwilling to sell their goods to them. On the contrary, local sellers relying on stereotypes and discriminating against minorities on a statistical basis might alter their discriminatory behavior when minorities offer higher prices for their goods. The surplus obtained in the transaction could serve as a quantification of the negative characteristic associated with the
minorities by the persons who discriminate against them. If these persons did not alter their behaviors when prompted to do it, or did it less often for non-minorities, that would be a sign of taste-based discrimination. Similarly, one could argue that the differences in the behavior of locals towards minorities, when considered in comparison to locals acting as either sellers or buyers in commodity trading could be an indication of their acting on the basis of stereotypes about minority behaviors as buyers and sellers.

### 4.4 Objectives and Hypotheses

Despite the active advocacy of racial equality in all countries, discrimination against ethnic minorities continues to occur in many countries, particularly for those ethnic minorities who are culturally different from the host countries. As mentioned previously, there is some research focusing on discrimination against ethnic minority groups in commodity markets but very little on discrimination in trading markets in e-shopping platforms. Are ethnic minorities
discriminated against in the process of buying and selling online? Do locals refuse to trade with certain ethnic minority groups based on their stereotypes or prejudices? Does any discriminatory behavior vary according to whether the ethnic minorities are selling or buying or if they buy at higher prices or sell cheaper? In this chapter, the author will explore these questions using a field experiment.

More formally, the purpose of this study is to assess the extent to which there is discrimination against Chinese minority members in Spain's main online trading market. Because the difference between taste-based discrimination and statistical discrimination is so important, a second objective of the paper is to identify which of these forms is more prevalent. The following hypotheses will be tested:

Firstly, I will test if there is any discrimination against Chinese buyers or sellers by local sellers and buyers (discrimination hypothesis). This will be determined according to whether there are
significant differences between fake Spanish and Chinese buyers or sellers in the rates of positive responses they receive from real sellers or buyers when they operate in the second-hand market.

Secondly, I will test the extent to which any observed discrimination is taste-based (taste-based discrimination hypothesis). This will be calculated according to whether discrimination against Chinese buyers is as intense as the discrimination against Chinese sellers. It is unlikely that locals may hold the same stereotypes about Chinese minority members when they play these two different roles, for stereotypes tend to relate to behaviors occurring under specific circumstances, not according to immutable personal characteristics. Discrimination against Chinese minorities will also be deemed to be taste-based if locals' discriminatory behavior does not change according to the price at which a fake Chinese buyer or seller proposes to buy or sell a product, or if it is less than when the buyer or seller is a local. In other words, I will determine that discrimination is likely to be taste-based if locals are not willing to modify their
response to price changes in the market when the interacting agent is Chinese, but they do when she or he is a national.

Thirdly, I will test the extent to which any observed discrimination is statistically based. (statistically-based discrimination hypothesis). I will determine that it is if discrimination was observed when the Chinese ethnic minority acts as a buyer but not as a seller, or the other way around, or if the degree of discrimination differs according to the role played by the Chinese minorities. The difference between the two will be interpreted as a evidence that the locals base their discrimination on stereotypes about some characteristic or behavior attached to the Chinese that makes them less attractive when playing one particular market role rather than another. In contrast, I will interpret whether locals engage in statistical discrimination if their reaction to a change in the price offered for a product or the prices at which it is sold was the same if the buyer or the seller is a local than when he or she is Chinese, and if Chinese are discriminated against when buying or selling at the same price as the nationals. This would
mean that the locals act based on some negative stereotypes about the Chinese, but that they are willing to change their response if the circumstances changed as much as they would do for a national.

It is possible that both forms of discrimination may be operating at the same time, as when the locals discriminate against Chinese buyers or sellers who buy or sell their products at the same prices as the nationals and change their response to a change in price less when the buyer or seller is a national than when he or she is Chinese. The difference in the response to a price change between the nationals and the Chinese would be a measure of taste-based discrimination, whilst a difference in the response when selling at the same price would be a measure of statistical discrimination.

### 4.5 Methodology

The field experiment was conducted in Catalonia, within the city of Barcelona. The research team, which the author of this article joined as a field assistant, was led by Prof. Rodríguez-Menés from the

Pompeu Fabra University. The experiment aimed to assess whether there was discrimination against buyers and sellers belonging to three ethnic minorities. These minorities, which are the three largest in Spain in terms of population, originate from Latin America, Arabian countries (mostly Morocco), and China. The experiment consisted of creating fake profiles of buyers and sellers with personal names, typically used in these ethinic groups, in the main online second-hand market application operating in Spain, and comparing the extent to which the offers they made to buy goods, or the products they placed for sale, received fewer positive responses than those from other buyers and sellers with Catalan-Spanish names. From February 2020 to October 2020, 583 field experiments were conducted in which four fake buyers (three from the abovementioned ethnic minorities plus one with a Spanish or Catalan name) made offers to buy products from real sellers advertising products. Simultaneously, another 508 experiments were carried out in which four fake sellers with names reminiscent of the three ethnic origins mentioned above, plus one Catalan-Spanish, placed four equivalent products for sale. The
products being bought or sold were divided into three classes depending on their typical prices in the market (low: from 15 to 49 euros; medium: from 50 to 149 euros; and high: from 150 to 550 euros) and an equal number of experiments were carried out in each class. The specific names and genders of the fictitious buyers and sellers were randomly assigned, like the order in which the bids were made or the products uploaded, all made within a short time span. The research team then recorded all positive responses from real sellers to the purchasing bids, or any interests expressed by real buyers on the products sold, and compared if their numbers differed by the ethnic origin of the fictitious buyer or seller. In all cases in which positive responses or interests were received from real sellers or buyers, these were immediately informed that the fake buyers of sellers was no longer interested in buying or selling the article.

In about half of the "buying" field experiments, the fake native buyer and one of the fake ethnic minority buyers, randomly selected from the three ethnic minorities, made an offer to the same seller to buy
his/her product at a price less than the listed price (at about 15-25\% discount). This had two key purposes. The first was to test if the seller would accommodate his/her behavior depending on the prices offered by the buyers. The second purpose was to evaluate if this accommodation was the same for the native and ethnic minority buyer. If the sellers did not adjust their behaviors when the ethnic minority tried to buy at a discount or if they did it less than when a native buyer bargained the same discount, this difference could be attributed to taste-based discrimination - to a prejudice against or moral rejection of the ethnic minorities that would operate even when the selling conditions change. On the contrary, if there were no differences in the responsiveness of the sellers to changes in the purchasing prices, but he or she still showed a preference for the natives when all buyers (including the natives and ethnic minorities) offered to buy at the same listed price, then it could be concluded that there was statistical discrimination associated with stereotypes or beliefs about some characteristics of the ethnic minorities that make them less attractive to the seller than the natives (e.g. because of a
distrust affecting the probability that the transaction may be completed).

Table 4-1: Number of products for which an offer is made and \% of positive responses to the offer, by the price category of the product and by whether or not the native made an offer for less than the selling price

|  | Native and |  | Native offer is for less |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | minority's offer is for | ffer is for price | than the selling price |  |  |  |
|  | Spanish/ |  | Spanish/ |  | Spanish/ |  |
|  | Catalan |  | Catalan |  | Catalan |  |
| Product Level |  |  |  |  |  |  |
| Low (15 to 49 euros) |  |  |  |  |  |  |
| Offers made (count) | 176 | 176 | 175 | 175 | 351 | 351 |
| Positive responses (\%) | 65\% | 58\% | 38\% | 54\% | 51\% | 56\% |
| Medium (50 to 149 euros) |  |  |  |  |  |  |
| Offers made (count) | 78 | 78 | 78 | 78 | 156 | 156 |
| Positive responses (\%) | 72\% | 59\% | 42\% | 53\% | 57\% | 56\% |
| High (150 to 550 euros) |  |  |  |  |  |  |
| Offers made (count) | 38 | 38 | 38 | 38 | 76 | 76 |
| Positive responses (\%) | 55\% | 50\% | 45\% | 47\% | 50\% | 49\% |
| Total |  |  |  |  |  |  |
| Offers made (count) | 292 | 292 | 291 | 291 | 583 | 583 |
| Positive responses (\%) | 65\% | 57\% | 40\% | 53\% | 53\% | 55\% |

In about half of the "selling" field experiments, the research team similarly varied the price at which two of the four equivalent products were sold. Nationals and one of the minorities randomly selected from the pool of three increased the selling price of the goods being sold from $5 \%$ to $20 \%$ above the baseline price. If buyers adjusted their behaviour according to the price of the goods in question (making fewer offers when it was sold at higher prices, and more when sold cheaper) but they did it more for the national and less for the minorities, it could be concluded that the buyers exercised taste-based discrimination. On the contrary, if the buyers adjusted their behaviour to the selling prices and similarly when dealing with national and minority sellers, but they still preferred a national over a minority when both sold a product at the same price, it could be concluded that the buyers discriminated statistically against the minorities, based on some stereotype about their characteristics (characteristics unobserved to the experimenter) or the characteristics of the products sold by the minorities (e.g. lower quality products).

Table 4-2: Number of products advertised for sale and number of positive responses received, by the price category of the product and by whether or not the native
sold at a higher price than the minority

|  | Native sold at about the same price than the minority |  |  | Native sold at a more expensive price than the minority |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Spanish/ <br> Catalan | Chinese | Total | Spanish/ <br> Catalan | Chinese | Total | Spanish/ <br> Catalan | Chinese | Total |
| Product Level: |  |  |  |  |  |  |  |  |  |
| Low-priced product (15 to 49 euros) |  |  |  |  |  |  |  |  |  |
| Sales (count) | 120 | 120 | 240 | 118 | 118 | 236 | 238 | 238 | 476 |
| Responses (mean) | 1.39 | 1.02 | 1.2 | 1.25 | 1.64 | 1.45 | 1.32 | 1.33 | 1.33 |
| Medium-priced product (50 to 149 euros) |  |  |  |  |  |  |  |  |  |
| Sales (count) | 53 | 53 | 106 | 57 | 57 | 114 | 110 | 110 | 220 |
| Responses (mean) | 2.6 | 2.62 | 2.61 | 2.46 | 1.98 | 2.22 | 2.53 | 2.29 | 2.41 |
| High-priced product (150 to 550 euros) |  |  |  |  |  |  |  |  |  |


|  | Sales (count) | 26 | 26 | 52 | 27 | 27 | 54 | 53 | 53 | 106 |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Responses (mean) | 3.65 | 4.38 | 4.02 | 1.93 | 2.7 | 2.31 | 2.77 | 3.53 | 3.15 |
| Total |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Sales (count) | 199 | 199 | 398 | 202 | 202 | 404 | 401 | 401 | 802 |
|  | Responses (mean) | 2.01 | 1.88 | 1.95 | 1.68 | 1.88 | 1.78 | 1.85 | 1.88 | 1.86 |

Table 4-1 and Table 4-2 show descriptive statistical analysis of the positive responses received by Chinese ethnic minorities and Spanish-Catalans as buyers and sellers when buying and selling products. Table 4-1 mainly shows the descriptive statistical analysis of the "buying" field experiment, and positive responses are calculated as the percentage. It can be seen from Table 4-1 that when buyers from the Chinese and the Spanish-Catalans offer the same purchase price, the Spanish-Catalan buyers obtain high positive responses than Chinese buyers when they bought products with three levels of prices. However, when Spanish-Catalan buyers provided lower buying prices than that of Chinese buyers, they received less positive responses than Chinese buyers. This may only be affected by price, and the real sellers hope to get more benefits.

The descriptive statistical analysis of the "selling" field experiment is shown in Table 4-2. In the "selling" field experiment, the fictitious sellers from Chinese ethnic group and the Spanish-Catalan group sold the same or similar products, and the positive responses they
received are in the mean values, results of descriptive statistical analysis of the "selling" field experiments show different picture from the "buying" field experiments. When the Chinese sellers and the Spanish-Catalan sellers sold the same or similar low-priced products at the same price, the Spanish-Catalan sellers receive more positive responses than the Chinese sellers. However, when these two groups sold medium- and high-priced products at the same price, Chinese sellers received more positive responses. When SpanishCatalan sellers sold high-price goods at the higher price than Chinese sellers, they receive less positive responses than Chinese sellers. This may be similar to the "buying" filed experiment, because the real buyers would like to receive a more cost-effective price. But when Spanish-Catalan sellers selling median-priced products at higher price, they received more positive responses than Chinese sellers. From this result, it can be seen that real buyers were willing to pay higher prices to buy more expensive products were sold by SpanishCatalans sellers and they were unwilling to buy cheaper products sold by Chinese sellers. Obviously, descriptive statistical analysis shows
that there is discrmination against Chinese ethnic group in the "selling" filed experiments.

In the next section, only the results of the experiment corresponding to the comparison between Spaniards/Catalans and the Chinese ethnic minority are shown and discussed.

To analyze the patterns of discrimination in the process of selling products I rely on multilevel negative binomial regression, where sellers of different ethnic origins (Chinese ethnic minority sellers and Catalonian-Spaniard sellers) are nested within experiments. The number of positive responses to the offers made by the fake buyers to buy at the full or at a discounted price in this model is the dependent variable, and the main independent variable is ethnicity. An interaction effect between selling prices and ethnicity was also included to test the source of discrimination. Finally, several controls were added, such as the seller's gender, the order in which the product was uploaded into the market platform and the time of the
upload, the language in which the advertisement was posted (in Spanish or Catalan), the class of the product being sold (high, medium, or low class, sold at high, medium or low price ranges, respectively), and a subjective assessment of the attractiveness of the picture included in the posting.

To analyze the results corresponding to buying products, I apply multilevel logistic regression techniques, with buyers of different ethnic origin being nested within each experiment. The dependent variable is whether or not the seller responded positively to the buyer's purchasing offer. The main independent variables are the ethnic origin of the buyer (Chinese ethnic minority or CatalanSpaniard) and the interaction effect between ethnic origin and the purchasing price offered by the buyer, so as to test the type of discrimination applied by the seller. The controls are: the buyer's gender, the order in which the offer was made, the date, time and the language (Spanish or Catalan) in which it was posted, the class of the product being sold (high, medium, or low class, sold at high, medium
or low price ranges, respectively), the number of times the product had been seen by other buyers, and the evaluation of the seller in the platform (number of positive stars).

### 4.6 Results

The results are presented separately for the "selling" and the "buying" experiments.

## Are Chinese Ethnic Minority Sellers Discriminated Against by

## Buyers?

Table 4-3 shows the estimates obtained from the multilevel negative binomial regression analysis predicting the number of positive contacts received by our fake sellers.

The results show, first, that the number of positive messages expressing an interest received by Chinese ethnic minority sellers from real buyers did not significantly differ from the number
received by fake sellers with Catalan/Spanish names when they were sold at the same price - see the main coefficient for Chinese in Table $4-3$. The direction of the coefficient is positive, against expectations, indicating that if anything, sellers appeared to prefer products sold by Chinese individuals than by locals, perhaps because of the existence of stereotypes about the Chinese being more trustworthy sellers (as noted in other chapters of this thesis, many Chinese operate 'Bazars' and other small retail businesses in Spain). However, once again, the difference is not significant. This is a first indication that locals may discriminate against minorities (in this case, positively) only in specific circumstances based on stereotypes or statistical expectations about the roles played by ethnic minorities in the market and the quality of the product they sell.

This is corroborated by the absence of a significant interaction effect between the nationality of the seller and the price at which he or she sells his or her products. Not only is the interaction effect nonsignificant, but it is close to zero. This indicates that buyers do not
react differently to a change in the price at which the products are sold by National or Chinese sellers. In both cases the reaction is one of decreasing the interest for the product as the price increases - see negative coefficient for the price increase variables, which is nearly significant at the 0.05 level in a directional test.

Table 4-3 Factors Predicting the Number of Positive Contacts Received by Fictitious Sellers from Real Prospective Buyers

| Dep. Var: Number of positive responses | b | se |
| :--- | :---: | :---: |
| Spanish/Catalan | 0.00 | $\cdot$ |
| Chinese | -0.26 | 0.404 |
| \% more expensive | -0.01 | 0.01 |
| Spanish/Catalan \# \% more expensive | 0.00 | $\cdot$ |
| Chinese \# \% more expensive | 0.01 | 0.024 |
| Female | 0.00 | . |
| Male | -0.19 | 0.16 |
| Order of product uploading | 0.00 | 0.036 |
| Low-level product | 0.00 | . |
| Medium-level product | $0.66^{* * *}$ | 0.144 |
| High-level product | $0.84^{* * *}$ | 0.182 |
| Spanish language | 0.00 | . |
| Catalan language | $0.35^{*}$ | 0.176 |
| Buyer's gender defined | 0.00 | . |


| Buyer's gender undefined | $-1.31^{* * *}$ | 0.124 |
| :--- | :---: | :--- |
| Date in which the product was uploaded | $0.00^{* * *}$ | 0.001 |
| Subjective quality of picture (lower to higher quality rank) | 0.14 | 0.076 |
| Constant | $-98.92^{* * *}$ | 13.25 |
| lnalpha | $0.69 * * *$ | 0.083 |
| N | 802 |  |

Estimates from Multilevel Negative Binomial Regression

In summary, the results from the experiments in which Chinese and National sellers were compared in terms of the number of positive interests they received show no discrimination against Chinese ethnic minorities.

## Are Chinese Ethnic Minority Buyers Discriminated Against by

## Sellers?

Table $4-4$ shows the estimates obtained from running a multilevel logistic regression predicting whether or not our fake buyers received a positive response from the sellers to whom they made an offer.

Table 4-4 shows that the Chinese are significantly discriminated against by sellers of second-hand commodities compared to locals when buying at the same listed price - see significantly negative coefficient for the main effect for the Chinese. This discrimination is shown graphically in Figure 4-1, which depicts the marginal probabilities of obtaining a positive response from a seller by Spanish/Catalan and Chinese buyers estimated from the model. This probability is about $12 \%$ smaller if the buyer is Chinese than if she or he is Spanish/Catalan.

Table 4-4 Factors Predicting Whether or not the Fictitious Buyers Recevied a Positive Response from Real Sellers to Their Purchasing Offers

| Dept. Var.: Received a positive response | b | se |
| :--- | :---: | :---: |
| Spanish/Catalan | 0.00 | . |
| Chinese | $-0.60^{* *}$ | 0.208 |
| 1/percent discount bargained | $0.14^{* * *}$ | 0.019 |
| Spanish/Catalan \# 1/percent discount bargained | 0.00 | . |
| Chinese \# 1/percent discount bargained | -0.04 | 0.032 |
| Spanish language | 0.00 | . |
| Catalan language | 0.01 | 0.147 |
| Female | 0.00 | . |


| Male | 0.10 | 0.138 |
| :--- | :---: | :---: |
| Low-level product | 0.00 | . |
| Medium-level product | 0.05 | 0.272 |
| High-level product | -0.47 | 0.362 |
| \# of times the product was seen by other buyers | $-0.02^{* * *}$ | 0.004 |
| Number of weeks for sale | $-0.18^{* * *}$ | 0.042 |
| Constant | $2.77^{* * *}$ | 0.371 |
| lnsig2u | $1.68^{* * *}$ | 0.133 |
| N | 2332 |  |

Estimates from Multilevel Logistic Regression

The fact that Chinese minority members are discriminated against when operating as buyers but not as sellers is a first indication that the sources of this discrimination may be statistical, based on stereotypes of how the Chinese act when playing these two roles. Perhaps locals see the Chinese as trustworthy sellers based on their previous experiences transacting with them but believe they should not be trusted when buying commodities based on their typical lower incomes or other characteristics that may jeopardize the realization of the sale.

Figure 4-1 Purchases Predicted Probability of Receiving a Positive Response from a Seller for Inidividuals Buying at the Selling Price, by Ethnicity, and with 95\% Confidence Intervals


Other indications support this interpretation. The interaction effect between the percent discount bargained and the ethnicity of the buyer is not significant, indicating that the sellers adapt to bargaining in the same way when the buyer is a national than when he or she is Chinese, and hence that the discrimination against the Chinese is not tastebased or insensitive to buyers' behavior. Note that the variable "bargained discount" is inverted. This offers a visualization of how
much more a Chinese buyers should pay to have the same chances of being sold the product he or she is offering to buy, given that he or she is discriminated against when buying at the selling price. The visualization is carried out in Figure 4-2.

Figure 4-2 Changes in the Predicted Probability of Receiving a Positive Response with Every Percent Increase in the Offer Over the listed Price, by Ethnicity, with 95\% Confidence Intervals


Figure 4-2 shows the probabilities of receiving a positive response from a seller to a purchasing offer, depending predicted with every
per cent increase in the offer over the selling price, separately for local and Chinese buyers. Because the interaction effect is nearly zero, the curves are parallel for most of the percentage increases and only converge at high magnitudes due to the logistic form of the curve. To have the same probability of being sold the same product as a local buyer, a Chinese buyer would need to offer about $65 \%$ more over the selling price.

In terms of the hypotheses, the results confirm the first that there is some form of discrimination against the Chinese in online secondhand markets in Spain, refute the second about the existence of tastebased discrimination and confirm the third, that the discrimination against the Chinese is statistically-based or rooted in stereotypes about the characteristics or behaviour of Chinese buyers.

### 4.7 Conclusion and Discussion

This study aimed to evaluate whether there is discrimination against the Chinese ethnic minority in online trading markets in Spain, a
multicultural society with a recent history of immigration from other countries. A field experiment was conducted to assess this issue by making fictitious purchasing offers to real sellers or by posting fictitious products for sale to real buyers in the most popular Spanish online, second-hand trading platform. The analysis was carried out in two steps: first, we compared the average number of positive messages expressing interest that real buyers sent for the products sold by fake sellers with Chinese and Spanish-Catalan names; and second, we compared the proportions of positive responses received by fake Chinese and Spanish-Catalan buyers from real sellers. The aim was to first test whether there was discrimination against the Chinese ethnic minority in the second-hand commodity trading market when either selling or buying products and, secondly, to assess whether this discrimination was taste-based or statisticallybased.

The results show Chinese ethnic minorities are discrimintated against only when acting as buyers, but not when selling products. When
buying products placed for sale by real sellers in the online training market, the fake Chinese buyers received $7.5 \%$ fewer positive responses from the sellers than the fake national buyers, controlling multiple factors. Hence, the first conclusion of this chapter is that, indeed, Chinese minority members experience discrimination in Spain's main second-hand commodity trading market. That they only do when acting as buyers and not as sellers, and the degree of the discrimination remains stable regardless of whether they and their nationa counterparts negotiate a discount was taken as indicative that the discrimination faced by Chinese minorities in these markets is of the statistical type. Hence, the second conclusion of this chapter is that, while the Chinese are discriminated against in online trading markets, the discrimination they face is not based on prejudice or a dislike for them, but on stereotypes about how they behave as buyers and not as sellers.

It is unclear what these stereotypes might be. Statistical discrimination against ethnic minorities mainly results from beliefs
or stereotypes about typical characteristics of ethnic minorities or behaviors based on previous personal experiences or on streotypical views about the culture of these ethnic minority groups. Cultural differences between East and West have been, traditionally, deep-set and may have shaped these stereotypes, particularly since the Chinese immigrant community has always been a relatively closed community within the local society, despite having been present in Spain in significant numbers for more than 30 years. The specialization of the Chinese community in retail markets in Spain, in the form of the proliferation of small businesses and Bazars operated by members of the community and selling cheap merchandise, may have also contributed to the formation of these stereotypes. On one hand, the popularity of these shops may have contributed to Spaniards trusting the Chinese community as sellers of fair-quality merchandise at good prices. On the other hand, because these businesses have typically occupied the low end of the market, and because the Chinese community continues to lag in education compared to mainstream Spaniards and other minorities,

Spaniards may have developed images of the Chinese community as being made up of low-status, low-income individuals. If these images were important in valuing buyers, for example, if sellers thought that low-income individuals may be more likely to bargain at the time the sale is finalized, this could explain why the Chinese are discriminated against when buying products in second-hand markets.

Discrimination is an important impediment to the integration of ethnic minorities into the host countries. The discrimination encountered by ethnic minority groups in the commodity trading markets has been documented in previous research, but to my knowledge, this is the first time that discrimination against the Chinese in online shopping markets has been studied. With increasing numbers of Chinese ethnic minorities arriving in Spain in recent years, the study of factors that may foster or hinder their integration into the host society has become ever more important for researchers. This study has approached potential discrimination
against the Chinese community using more scientific methods than ever before. The results are reliable and relevant.

Howevere, this study is not without its limitations. Firstly, since all our fake buyers and sellers were placed in the city of Barcelona, the results do not necessarily reflect the situation of the Chinese ethnic minority in Spain as a whole, or on a broader scale. Future work should expand the data collection and analysis to other cities and regions in Spain. However, Barcelona is one of two Spanish cities where the Chinese ethnic minority is most concentrated, and hence it is unlikely that results may differ substantially from those offered here. Secondly, while we interpreted the difference in discrimination faced by Chinese when acrting as sellers and buyers as a sign of their being discriminated on a statistical basis, other interpretations are also possible. The lack of discrimination against the Chinese when selling products may be due to or having inadvertently introduced experimental effects. While we tried to make the products sold by nationals and minorities as equivalent as possible in their technical
specifications or in the words and pictures used to advertise them, we may have unintentionally added subtle differences favoring some groups like the Chinese, obscuring their discrimination. However, it must be said that the pictures and descriptions were randomly assigned to the fake sellers across the experiments. Furtermore, in the analysis, we controlled for the potential attractiveness of the pictures and descriptions used when selling each product by addding two variables with our subjective appraisal of such attractiveness and an objective appraisal based on how much the interest expressed for the product deviated from the average interest obtained by each ethnic groups across all experiments. The results did not change when adding these controls. Finally, it must be pointed out that the results express discrimination against the Chinese when treating it as a homogenous group. The results could vary for subgroups of Chinese people, for instance, for males and female Chinese individuals. In future work, we will investigate these and other potentially interesting interaction effects. This study aimed to provide a first and general overview of discrimination against the Chinese minority in

Spain, but could and certainly should be expanded to consider additional factors.

As one of the fastest-growing ethnic minority groups in Spain in recent years, the in-depth study of the Chinese ethnic minority could help the Spanish authorities to formulate better policies to eliminate discrimination. The elimination of discrimination may be conducive to the socio-economic development of the Chinese community in Spain, promoting its integration into the local society,

### 4.8 Reference

Agrela, B. (2002). Spain as a Recent Country of Immigration: How Immigration Became a Symbolic, Political, and Cultural Problem in the" New Spain".

Ayres, I., \& Siegelman, P. (1995). Race and gender discrimination in bargaining for a new car. The American Economic Review, 304321.

Baumle, A. K., \& Fossett, M. (2005). Statistical discrimination in employment: Its practice, conceptualization, and implications for public policy. American Behavioral Scientist, 48(9), 12501274.

Becker, G. S. (2010). The economics of discrimination. University of Chicago press.

Bertrand, M., \& Mullainathan, S. (2004). Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. American Economic Review, 94(4), 991-1013.

Bosch, M., Carnero, M. A., \& Farre, L. (2010). Information and discrimination in the rental housing market: Evidence from a field experiment. Regional Science and Urban Economics, $40(1), 11-19$.

Bosch, M., \& Cobacho, M. B. (2012). Discrimination in second-hand consumer markets: evidence from a field experiment. Applied Economics Letters, 19(17), 1727-1730.

Bovenkerk, F., Kilborne, B., Raveau, F., \& Smith, D. (1979). Comparative aspects of research on discrimination against nonwhite citizens in Great Britain, France and the Netherlands. Problems in International Comparative Research in the Social Sciences, 105-124.

Bursell, M. (2012). Ethnic discrimination, name change and labor market inequality: Mixed approaches to ethnic exclusion in Sweden. Acta Universitatis Stockholmiensis.

Council, H. (n.d.). San Antonio Metropolitan Area Rental Audit 1997. San Antonio.

Dickinson, D. L., \& Oaxaca, R. L. (2009). Statistical discrimination in labor markets: An experimental analysis. Southern Economic Journal, 76(1), 16-31.

Doleac, J. L., \& Stein, L. C. D. (2013). The visible hand: Race and online market outcomes. The Economic Journal, 123(572), F469-F492.

Enesco, I., Navarro, A., Paradela, I., \& Guerrero, S. (2005). Stereotypes and beliefs about different ethnic groups in Spain. A study with Spanish and Latin American children living in

Madrid. Journal of Applied Developmental Psychology, 26(6), 638-659.

Gneezy, U., List, J., \& Price, M. K. (2012). Toward an understanding of why people discriminate: Evidence from a series of natural field experiments. National Bureau of Economic Research.

Goldberg, P. K. (1996). Dealer price discrimination in new car purchases: Evidence from the consumer expenditure survey. Journal of Political Economy, 104(3), 622-654.

Guryan, J., \& Charles, K. K. (2013). Taste-based or statistical discrimination: the economics of discrimination returns to its roots. The Economic Journal, 123(572), F417-F432.

Heath, A. F., \& Di Stasio, V. (2019). Racial discrimination in Britain, 1969-2017: a meta-analysis of field experiments on racial discrimination in the British labour market. The British journal of sociology, 70(5), 1774-1798.

Larsen, E. N., \& Di Stasio, V. (2019). Pakistani in the UK and Norway: different contexts, similar disadvantage. Results from a comparative field experiment on hiring discrimination. Journal of Ethnic and Migration Studies, 1-21.

List, J. A. (2004). The nature and extent of discrimination in the marketplace: Evidence from the field. The Quarterly Journal of Economics, 119(1), 49-89.

McGinnity, F., Nelson, J., Lunn, P., \& Quinn, E. (2009). Discrimination in Recruitment: Evidence from a field experiment.

Nunley, J. M., Owens, M. F., \& Howard, R. S. (2011). The effects of information and competition on racial discrimination: Evidence from a field experiment. Journal of Economic Behavior \& Organization, 80(3), 670-679.

Oreopoulos, P. (2011). Why do skilled immigrants struggle in the labor market? A field experiment with thirteen thousand resumes. American Economic Journal: Economic Policy, 3(4), 148-171.

Ramos, M., Thijssen, L., \& Coenders, M. (2019). Labour market discrimination against Moroccan minorities in the Netherlands and Spain: a cross-national and cross-regional comparison. Journal of Ethnic and Migration Studies, 1-24.

Riach, P. A., \& Rich, J. (2002). Field experiments of discrimination in the market place. The Economic Journal, 112(483), F480F518.

Ross, S. L., \& Turner, M. A. (2005). Housing discrimination in metropolitan America: Explaining changes between 1989 and 2000. Social Problems, 52(2), 152-180.

Taste-based versus statistical discrimination: placing the debate into context. GEMM Project (2016).

Wienk, R. E. (1979). Measuring racial discrimination in American housing markets: The housing market practices survey (Vol. 444). Division of Evaluation, US Department of Housing and Urban Development ....

Wilson, W. J. (2011). When work disappears: The world of the new urban poor. Vintage.

Yinger, J. (1995). Closed doors, opportunities lost: The continuing costs of housing discrimination. Russell Sage Foundation.

Yinger, J. (1998). Evidence on discrimination in consumer markets. Journal of Economic Perspectives, 12(2), 23-40.

## 5. CONCLUSION

### 5.1 The Integration and Discrimination of Chinese Ethnic Minority in Spain

Integration is often portrayed as the best choice for ethnic minorities immigrating into the host countries (Berry, 1997), and is also the final goal of the host governments' immigration policies (e.g. Domalewska \& Żakowska, 2009). However, in the process of integration, ethnic minorities are usually discriminated against (Borrell et al., 2015). This sets up barriers to their integration into the host country. Ethnic minorities with larger cultural differences with the population of the host countries often suffer more discrimination (Rong \& Brown, 2002). Through the use of quantitative and qualitative research methods of analysis, this thesis explored two main issues: the level of integration of the Chinese ethnic minority in Spain and the discrimination they perceive and experience in the country.

Educational attainment is an important mechanism for ethnic minorities to better integrate into the host countries' society (Zhou, 1997). It is often used as an indicator (St-Hilaire, 2002) to predict their social development trends in the host country. In the second chapter of this thesis, I used quantitative methods of analysis - and more specifically simultaneous equations models - to investigate the educational attainment of Chinese immigrant youths and the factors that could explain them. While previous studies had found that the educational attainment of Chinese immigrant youths was lower than that of other ethnic minorities in Spain, very few had investigated the reasons for this. The low educational attainment of the Chinese ethnic minorities in Spain contrasts sharply with their attainment in other countries where, as shown in Chapter 2, it tends to be higher. This sparked my interest in conducting a more in-depth exploration of the factors that could explain this. As a result of this investigation, I found that Chinese immigrant youths born or educated in Spain had parents with low capitals, especially human or educational and social, and with low educational ambitions and expectations regarding their
children's educational attainments. These factors, and the higher discrimination that Chinese youths perceived from the host society compared to other minorities, all significantly and negatively affected their educational attainment.

When exploring the family background characteristics of Chinese immigrant youths, I found that, in sharp contrast to their parents' education, their families' economic incomes were higher than other immigrant communities. However, surprisingly, these higher family economic levels did not promote the educational attainment of Chinese immigrant youths. Why did this happen? This is a question worth studying. My research found that the entrepreneurship prevalent in the Spanish-Chinese community appeared to push the parents of the Chinese immigrant youths to use the economic resources on expanding their businesses and provide work opportunities for their children, instead of investing in their children's education. Therefore, the high economic level of Chinese immigrant families was not conducive to the education of their
children. This, plus the fact that the parents of Chinese immigrant youths lacked the necessary human capital to support and encourage the educational attainment of their children, explained Chinese immigrant youths' low educational performance. Moreover, many Chinese immigrant families are overly dependent on their own ethnic group to sustain their living standards, further contributing to hamper their integration into the local society and reducing their social capital. The disadvantages of Chinese immigrant families in these two aspects had a serious negative impact on the educational attainment of Chinese immigrant youths.

Based on the results of this chapter, the following one explored, through qualitative methods the relationship between coping strategies, social support and perceived discrimination among 60 Chinese immigrant youths in Barcelona, Spain. As I argued in Chapter 3, coping strategies and social support are often seen in the literature as two effective ways to deal with perceived discrimination. The results of the extensive interviews that I conducted with the 60
youths showed that, while the few Chinese immigrant youths with higher educational attainments tend to adopt active and positive coping strategies, most of the Chinese immigrant youths I interviewed adopted negative ones. Why did this not lead to negative outcomes - I concluded - could be since most Chinese immigrant youths can rely on strong social support from their own ethnic group. This support is given to all youths, regardless of their educational attainment. Unfortunately, this over-reliance on the Chinese community, which takes the form of strong emotional, occupational, and social support, contributes toward the increase of the gap between them and the Spanish society, further exacerbating the impact of discrimination on the Chinese ethnic minority.

In view of the important impact of discrimination on Chinese immigrant youths, in Chapter 4 I embarked on an investigation about the discrimination experienced by the Chinese ethnic minority in Spain. I aimed to assess if the subjective feelings of discrimination that I had detected in previous chapters among Chinese youths had
an objective basis. Through a field experiment conducted in the most important second-hand trading platforms in Spain, I analyzed whether there is discrimination against the Chinese ethnic minority in the commodity trading market. In the experiment fake buyers and sellers with Chinese or Spanish-Catalan published fictitious buying and selling information for real buyers and sellers on the main second-hand commodity trading platform in Spain. I tried to answer two main questions by comparing the positive responses they received. The first was whether there was discrimination against Chinese ethnic minority in the commodity exchange market when they sold or bought products at the same price as nationals. The second was whether any observed discrimination was taste-based (i.e. based on prejudices against or a dislike of the Chinese), or statistical (i.e. based on stereotypes about the likely behavior of the Chinese and nationals as buyer and sellers).

The results showed that the Chinese ethnic minority was discriminated against only when they acted as buyers, but were not
discriminated against when they sold products. On the one hand, the results confirmed that the Chinese ethnic minority was discriminated against in the second-hand commodity market. However, the fact that they were not discriminated against when acting as sellers and that the real sellers reacted in the same way to the fake buyers' attempts at bargaining regardless of their Chinese or Spanish-Catalan identities suggested that the discrimination faced by Chinese ethnic minority in the commodity trading market was of the statistical kind. The main conclusion of this chapter was that the discrimination of the Chinese ethnic minority in the online trading market in Spain was not based on prejudices or a dislike against them, but on stereotypes about their behavior as buyers, probably associated with their low socio-economic status, which makes them less reliable buyers.

In the process of integrating into Spanish society, the Chinese ethnic minority faces important discrimination from the host members. This discrimination is clearly felt by Chinese youths and has a negative impact on their educational attainment, and eventually, also on their
chances of fully integrating into the host society. The discrimination experienced by the Chinese ethnic minority is likely to be statistical and could be explained by Spanish stereotypes about the community, based on cultural differences between East and West, but also on the limited interactions they have with the community in Spain. Stereotypes based on cultural differences between East and West often lead Spaniards to see individuals from the East as being submissive, conservative and hard-working (Nieto, 2003; Sun, 2019). These stereotypes may contribute toward the thwarting of communication between locals and the Chinese ethnic minority, and to the segregation of the latter. These are likely to be reshaped by day-to-day interactions with the community. Due to the strong segregation of the Chinese community, these interactions are likely to have been limited to business. Many members of the Chinese ethnic minority work in small shops and bazars owned by themselves or other members of the community. These shops are located at the low end of the market and this may reinforce Spanish views of the community as being low status and less trustworthy when their
members act against expectations, as when buying products in an online second-hand market or looking for a job requiring high education.

Fortunately, some findings of this thesis suggest that, because discrimination against the Chinese is likely to be statistical and based on stereotypes about their typical characteristics, it may decline as these characteristics change, as when increasing members of the community become more educated and look for jobs outside their community.

### 5.2 The Contributions and Limitations of This Thesis and Future Research

The rapid expansion and development of the Chinese ethnic minority in Spain has made it ever more difficult to ignore their social consequences and problematics. Because of the recent nature of this expansion, studies on the adaptation and integration of the community into the Spanish society are rare. The few studies on the

Chinese community in Spain paid more attention to the history of its expansion and the socio-demographic characteristics of its members. The first contribution of this thesis has been to start filling in this gap and provide an in-depth study about the most important problems faced by the Chinese ethnic minority in the process of integration into the host society - the low levels of educational attainment of the second generation and the discrimination faced by the community. My main conclusion is that, as of today, the Chinese community is highly segregated and has settled into the local community by forming ethnic enclaves that provide living, emotional and social support to their members, but that further contribute to their segregation and to the creation of stereotypes that fuel discrimination by the mainstream society. However, I was also able to detect small changes in the community towards improving the educational attainments of some of its members, which may contribute to the demise of stereotypes of the community in the future as more individuals follow this path.

The second contribution of this thesis is methodological. The research methods used in the thesis combined quantitative and qualitative techniques of analysis. This combination has provided the basis for describing the profile and problematic of the Chinese ethnic minority in Spain from multiple angles. In the past, studies on the Chinese ethnic minority mostly adopted a single research method, and rarely studied the community with both quantitative and qualitative methods, let alone with an experimental one. Each method is best adapted to answer different questions. For example, with quantitative methods, I could establish the degree to which second generation Chinese immigrant youths see discrimination as an important aspect hindering their educational attainments. With qualitative methods I was able to better understand the different way in which these youths cope with discrimination. Finally, with experimental methods, I could assess the degree of discrimination against the Chinese community and its most likely sources. Thus, the combination of all three methods, helped me obtain a most complete
picture of the phenomenon of discrimination against the Chinese community.

Of course, like most studies, this also has limitations. First of all, the data used in this study were mainly collected in Madrid and Barcelona, and did not include samples from other cities in Spain.

Future research should collect data more extensively, so as to show a more comprehensively integrated situation of the Chinese ethnic minority in Spain. However, it must be said that the Chinese are mainly concentrated in these two cities of Madrid and Barcelona. Therefore, the results of this study can serve as a reference for understanding the overall situation of the Chinese ethnic minority.

Secondly, the research here conducted on the discrimination of Chinese ethnic minority has mainly focused on the fields of education and commodity trading, and it did not explore other fields. Future research should involve more fields, such as whether Chinese
ethnic minorities are discriminated against in the labor or housing rental markets.

Thirdly, the research objects of this study mainly focused on the one-and-a-half and second-generations of Chinese immigrants who are currently living in Spain. The research referred to their sociodemographic characteristics, immigration history, immigration background, to name a few. As these individuals grow up and have their own children, the problematic of integration may change for the Chinese community and should be explored in future work. However, this does not invalidate the results of this thesis, it only questions their durability.

The process for ethnic minorities to adapt and integrate into the host countries is tortuous and long. Because the Chinese ethnic minority has a fundamentally different cultural background from Spain's, its members have to face more difficulties in adaptation and integration. Some efforts can be made to overcome these difficulties. Firstly, I
found that some positive strategies to cope with discrimination were more effective in avoiding over-reliance on the support of their own ethnic group. These strategies should be promoted. Unsurprisingly, the individuals who relied on these strategies were also more highly educated. Hence, a second recommendation is that the Chinese ethnic community should attribute greater importance to educating the new generations. Economic success has been proven largely ineffective in helping Chinese immigrants to integrate. It is time to turn the focus on education. The young Chinese people and their families should face this problem and act. In the qualitative interviews I could confirm that the awareness of education is improving, with the parents of Chinese immigrant youths expecting their children to reach higher education levels, providing generous support to help them achieve this goal. This is an encouraging sign, and there are reasons to expect the Chinese ethnic minority will become better integrated into Spanish society in the future.

### 5.3 Reference

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

Borrell, C., Palència, L., Bartoll, X., Ikram, U., \& Malmusi, D. (2015). Perceived discrimination and health among immigrants in Europe according to national integration policies. International journal of environmental research and public health, 12(9), 10687-10699.

Domalewska, D., \& Żakowska, M. (2019). Immigrant integration policy and practices in Poland. Security and Defence Quarterly, 25(3), 3-14.

Nieto, G. (2003). The Chinese in Spain. International Migration, 41(3), 215-237.

Rong, X. L., \& Brown, F. (2002). Socialization, culture, and identities of Black immigrant children: What educators need to know and do. Education and Urban Society, 34(2), 247-273.

St-Hilaire, A. (2002). The social adaptation of children of Mexican immigrants: Educational aspirations beyond junior high school. Social science quarterly, 83(4), 1026-1043.

Sun, M. (2019). Estereotipos sobre China" made in Spain": un análisis a través del discurso informativo del periódico El

País. Asiadémica: revista universitaria de estudios sobre Asia Oriental, 11-26.

Zhou, M. (1997). Growing up American: The challenge confronting immigrant children and children of immigrants. Annual Review of Sociology, 23(1), 63-95.


[^0]:    ${ }^{(1)}$ Middleman minorities point to some ethnic minorities who rely on engaging businesses eventually attains prosperity in the host countries.

[^1]:    ${ }^{2}$ A general term for the hometowns that overseas Chinese immigrants.

[^2]:    ${ }^{3}$ These three questions are shown in the Table 2-3.

[^3]:    ${ }^{4}$ The differences between y 1 and y 2 are y 1 points to the degree of discrimination and y 2 focuses on YES or No.

[^4]:    "When I arrived in Spain with my parents, I was already 16 years old. I have no ability to learn a completely new language. I cannot exchange with my classmates at school, cannot communicate with teachers. Over time, no classmate chatted

[^5]:    "As a matter of fact, education level does not affect my work. When I didn't graduate from high school, my parents told me that I would run their restaurant by the time I was old enough to work. They feel that it doesn't matter whether I go to college or not. In the end, I have to find a job. If they can offer a job to me and I needn't go to college. I also think my parents were right. After graduating from high school, I went back to work in their restaurant. Although I think I still can't integrate into the local society, because my income is good, all aspects of my life are quite comfortable. All the friends around me were Chinese, and everyone whose family has a business finally took over the business. I think it is a better choice." (Zhao, male, 24, high school)

