Original research article

Study on Multidimensional Urban Adaption of Muslim Migrants in Lanzhou City of China

Abstract: With rapidly development of urbanization, a large number of Muslim migrants, as one of special groups, swarm into cities, whether they adapt to cities has caused wide concerns. The purpose of this paper is to reveal the general law of multi-dimensional adaptation of Muslim migrants and provide guidance for better serving and managing this group. Based on survey or information of migrant Muslims in some important areas of Lanzhou city, This paper discusses some aspects about adaptation of migrant Muslims such as environmental, economic, social, cultural and psychology, respectively, by the following analysis methods: by Summers dy coefficient, Pearson product-moment correlation coefficient, Principal component factors. It draws several key conclusions about adaptation of Muslim migrants to Lanzhou city for better serving and managing them. The study found that in terms of environmental adaptation, the distance between the source of Muslim migrants and Lanzhou City and their urban adaptability showed a strong correlation; while the relationship between traffic conditions, recreational facilities and their urban adaptation was not obvious; In terms of economic adaptation, the economic income of Muslim migrants has a strong correlation with its urban adaptability; In terms of social adaptation, as time goes by, Muslim migrants gradually adapt to the their urban lifestyle; The psychological adaptation of Muslim migrants can be summarized as "self-identity" and "urban belonging". They showed a more obvious adaptability in the "self" understanding, but strong non-adaptation in the "identity" and "city sense of belonging".

1. Introduction

For the European and American countries where there is a prominent immigrant population, the study of social adaptation and integration of immigrants has always been a hot topic in the social sciences. Parsons (1960) proposed the social integration connotation from the structural functionalism paradigm; Schwarzweller (1964) thought that the social fusion represents the individual's participation in a certain group, the degree of recognition, and the degree of interdependence among group members. Sen (1999) believes that integrated society refers to the participation and enjoyment of equality by members of society, sharing of social experience and access to basic social welfare. The basic orientation of social integration is divided into such two schools as "assimilation theory" and "polyphyletic theory" (Sorensen, 2002). The former emphasizes immigration's recognition of local mainstream culture and its abandonment of original cultural traditions. For example, Park (1930) regards the integration and assimilation of ethnic groups as a process of gradual integration into a common cultural life that individuals and groups obtaining memories, emotions, attitudes and sharing experiences and history from other groups. The latter emphasizes the right to maintain differences between different ethnic groups and social groups. Kaplan (1987) proposes the concept of "non-zero-sum assimilation" for "Korean ethnicity" studies and points out that Korean immigrants are culturally adapted to many European and American countries where there have a prominent immigration structure. The study of social adaptation and integration of immigrants has been a hot topic in the social

sciences. Parsons (1960) proposed the social integration connotation from the structural functionalism paradigm; Schwarzweller (1964) thought that the social fusion represents the individual's participation in a certain group, the degree of recognition, and the degree of interdependence among group members. While adapting to the American society, some immigrants still retain their own cultural core, which is called "persistent adaptation". Some scholars have studied various aspects such as economy, society, culture, politics, transfer of self-awareness, acceptance and internalization of attitudes and values of recipients, and satisfaction of post-immigrant life in the study of the interaction between immigrants and recipients. In addition, Chinese-originated scholar Zhou Min (1995), after studying Chinatown, pointed out that Chinatown has evolved from its original refuge function into a large-scale national economy, which is an adaptive response of Chinese immigrant entrepreneurs to the cruel reality of American society.

The theoretical research on urban adaptation in China mainly involves social exclusion, social distance, social capital, and symbiotic theory. In the dimension of urban adaptation, there are differences in the dimensions of adaptation that different scholars are concerned with, such as three-dimensional (economic or physical, social or institutional, psychological or spiritual) adaptation (Chen Xiaoyi.2005), four-dimensional (economic, residential, language, psychological) adaptation (Gao Xiang et al., 2010), and six-dimensional adaptation, etc. For the ethnic minority floating population, especially the floating Muslims, in addition to the general content, their urban adaptation also includes the adaptation of religious activities in particular, and the main adaptation of different ethnic groups in the city is also different. In terms of urban adaptation strategies and models, Zhang Jijiao (2004) 、Ma Xuefeng (2007) and Zhang Wei(2013) believe that there are three adaptation strategies for ethnic minority floating populations after they arrive in cities, namely, network and adaptation strategies, national characteristics and adaptation strategies, and cultural differences and adaptation strategies. And in different stages, they adopt different adaptation strategies according to their self-adaptability. Urban adaptation model is diversified, and the dual modes are "changing self, adapting to the city" and "reconstructing the original living environment and culture in the city"; the three modes are integration type, embedded type, and migration type. There are 10 ethnic minorities in China with about 20 million Muslims, and as many as 3 million have flowed into the cities (Qiu Y.H, 2009). China is in a period of social transformation, in the process of these tens of thousands of Muslim migrants undergoing the "changing baptism" of social transformation and urban modernization, due to the particularity of the nation, their urban adaptation become more complex and sensitive, which is related to the stability of the city and long-term stability(Hao Shiyuan, 2014). It brings a series of challenges to existing urban management and requires a highly aware of the urgency and importance of studying such issues. In views that the current academic research on urban adaptation of ethnic minority floating populations is mostly done in the form of description, this paper takes Lanzhou, a city which featured with multi-ethnic agglomeration and plenty of Muslim migrants' concentration, as the research area, and tries to explore its urban adaptation process from a quantitative perspective.

2. Area of Study
The study area, Lanzhou city, is one of typical larger city inhabited by many ethnic groups in

Northwest China. As the capital of Gansu Province and transport hub in Northwest China, the city covers approximately 13085.6 km^2 with a census population of 3.83 million in 2016(Lanzhou's Statistical Bureau). It comprises five urban districts (Chengguan, Qilihe, Anning, Xigu, and Honggu) and three counties (Yuzhong, Yongdeng, and Gaolan). Further five urban districts are divided into two parts, namely main city zone(also intra-urban districts) including Chengguan, Qilihe, Anning and Xigu district and exurban district including Honggu (Figure1). Now 37 minorities reside with a population of 116,200 in 2016, accounting for 3.6% of the total population in Lanzhou. 10 minorities of them, mainly Hui, Dongxiang, Shala, Baoan, Uygur, and Kazak, profess Islam. These 10 minorities have a population of 110,000, accounting for 94.7% of Lanzhou's minority population (Lanzhou's Statistical Bureau). Moreover, approximately 72,000 migrant Muslims reside in Lanzhou, 54,000 of which are located in the main city zone and 18000 of which are located in outlying Honggu district and three counties including Yongdeng, Gaolan and Yuzhong (Lanzhou Committee on Population in 2016).
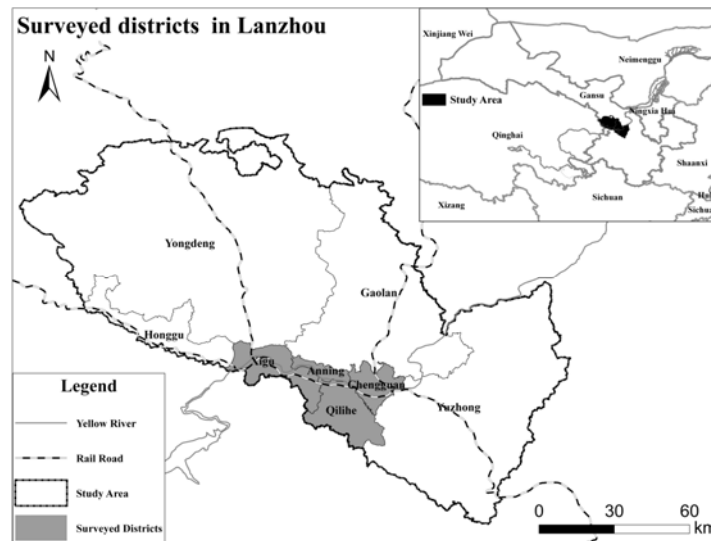

Figure 1 The sketch map of study

3. Methodology

3.1 Data Collection

Historically, migrant Muslims in Lanzhou are mainly concentrated in several areas of downtown, including Xiguanshizi and Dongbushichang in Chengguan district, Xiaoxihu and Shangxiyuan in Qilihe district, Peiliguangchang in Anning district and Fulilu in Xigu distirct. Thus, the migrant Muslims found in these six areas were selected for the detailed survey (Figure 2).
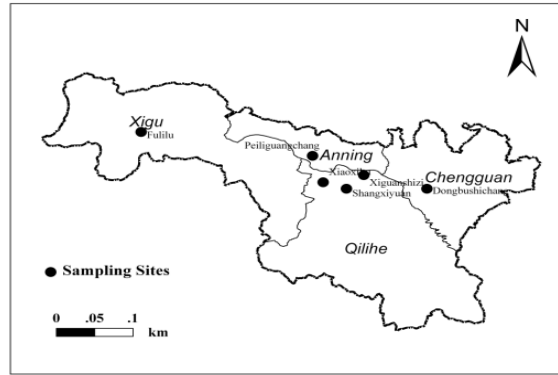
Figure2 Sampling sites in surveyed districts

From March 2016 to March 2016, 1700 questionnaires were sent out and 1512 questionnaires were returned, representing an effective recovery rate of 88.94%. In all, 333 questionnaires were eliminated from our analysis due to incomplete information as other problems; thus, 1467 questionnaires were finally selected representing an effective percentage of 86.3%. The questionnaire involved queries on many aspects relating to migrant Muslims, such as basic information (gender, age, marital status, educational level), population flow field and urban adaptation.

3.2 Multiple characteristics of migrant Muslims in Lanzhou city

3.2.1 Basic information of migrant Muslims

Of 1467 survey respondents 880 males and 587 females; 86.5% of them married. Most of them fall into the elderly category, and migrants at different ages showed different educational background, occupation and income (Table 1).

Table 1 Descriptive Statistic for Survey Samples in Lanzhou（N=1467）

Variable	Age, years									
	≤20 (n=207)		21–30 (n=173)		31–40 (n=587)		41–50 (n=475)		≥50 (n=26)	
	No.	%	No.	%	No.	%	No.	%	No.	%
Education										
Illiteracy	12	12.0	7	7.0	26	26.0	29	29.0	26	26.0
Primary school	103	26.5	42	10.8	141	36.2	103	26.5	0	0.0
Middle school	76	8.5	80	9.0	401	45.1	332	37.3	0	0.0
College or higher	16	17.6	44	48.4	19	20.8	11	12.1	0	0.0
Job										
Self-employed	6	1.0	11	1.7	209	33.0	385	60.7	23	3.6
Builder	8	11.0	23	31.5	38	52.1	4	5.5	0	0
Catering waiter	177	72.0	29	11.8	30	12.3	7	2.8	3	1.2
Official	2	2.7	8	10.8	43	58.1	21	28.4	0	0.0
Part-time job	14	3.2	102	23.2	287	65.2	48	10.9	0	0.0
Monthly income （CNY）										
Under 500	141	65.3	17	7.9	21	9.7	37	17.1	0	0.0
500–2000	60	5.9	106	10.4	417	40.9	415	40.7	26	2.6

2000–5000	6	3.2	41	21.7	123	65.1	19	10.1	0	0.0
Over 5000	0	0.0	13	30.2	26	60.5	4	9.3	0	0.0

First, most of the respondents report receiving only standard education. The total illiteracy rate is 6.8%, of which more females were found to be illiterate than males; the respondents aged 21–30 have better educational backgrounds, equivalent to college or higher. Second, most migrant Muslims either have set up a small business such as retail sale of ethnic food, clothes, and religious products, or employed as waiters in restaurants or builders in construction sites. Few work in white-collar jobs as officials. Many Muslim teenagers under 20 work in Muslim-owned restaurants, accounting for 72% of all respondents. Third, the monthly income of all migrant Muslims was found to be far below that of urban residents in Lanzhou (Lanzhou's Statistical Bureau 2016). Of the respondents, 43.8% reported a monthly income ranging from 500 CNY to 1000 CNY, making it difficult for them to keep a normal living. Furthermore, young migrants under 20 reported the lowest income; migrants with higher education generate more revenue. Overall, migrant Muslims in Lanzhou could be characterized as having lower education, less promotion, and less income than the average resident of Lanzhou, which, in some way, determine the spatial pattern of their dwelling.

3.2.2 Housing and Urban Life Satisfaction of Muslim Migrants in Lanzhhou city

According to the survey, 63.8% of Muslim migrants are renting houses, 23.1% are house owners, and the rest account for 13.1%. When asked about whether they can adapt to the current housing life, only 12.1% of Muslims showed a strong maladjustment. This shows that the Muslim migrants in Lanzhou had mental preparations for poor housing conditions before they entered the city. They can basically adapt to it, demonstrating a very strong urban survival capability and adaptability in the material and economical aspect. A survey of the current satisfaction level with life and work shows that 7.5% of the respondents are very satisfied, 32.9% are satisfied, 40.4% are relatively satisfied, 15.4% are unsatisfied, and 3.8% are very unsatisfied. Among the Muslim migrants' groups who are satisfied or very satisfied with life and work, more than 90% of the respondents who are very satisfied are self-employed; and in terms of age structure, young people are more satisfied than middle-aged and elderly people.

3.2.3. Medical Services for Muslim migrants

In terms of medical care, 3.3% of the respondents think current medical expenditures account for a very high proportion of their total income, 20.8% hold it to be relatively high, 46.7% hold it to be normal, 17.1% hold it to be relatively low, and 12.1% hold it to be very low. This shows that after the Muslims migrants enter the city life, the basic medical security of the city is still not perfect. When respondents were asked what kind of treatment they would take when they were sick, 12.9% choose large public hospitals, 44.8% choose to go to a private community clinic, and 42.3% choose to buy medicine casually by themselves. The survey shows that the Muslim migrants in the city still has a heavy burden on medical expenses. It also reflects the fact that the "health care" index plays a large part in the process of Muslims' adaptation to urban life, which is directly related to the urban adaptability of Muslim migrants.

3.2.4. Daily Consumption of Muslim migrants

According to surveys, 45.1% of the household income of Muslim migrants is used for daily living expenses, 33.9% for education expenditure, 9.6% for home purchase, 2.9% for interpersonal communication, 1.1% for recreational activities, and 7.4% for miscellaneous

items. It can be seen that daily expenses and education expenditure are their main consumption trends. This shows that Muslim migrants are gradually beginning to pay attention to their children's education. At the same time, this rational consumption concept, to some degree, also reflects the adaptation of Muslim migrants to the modern urban lifestyle.

3.2.5. Religious Activities of Muslim migrants

According to the survey, as Muslims, 49.8% of the surveyed samples go to mosques every week, 33.9% go sometimes, and 15.3% do not go. For some Muslim migrants who have fixed jobs, the formerly more rigorous "five ceremonies per day" and "several times per week" have become "weekly gatherings" and "annual rituals". Among the surveyed samples, when asked what they are not used to in the city, 29.5% believe that there is a lack of religious activities, and more than 80% of them are willing to make friends with people of different faiths. When asked about the attitude in case their friend is in preparation for getting married with a people of other nationality, 38.7% hold it is a personal matter deserving no opinions, 19.7% express agreement, 21.1% express disapproval, 6.6% are resolutely opposed, and 13.9 % have never thought about it. When asked about their child's marriage, 72.8% think that they must have the same ethnic and religious beliefs, 20.5% think that they must be in good relationship, and 6.6% think that they must be matched in family background.

4. Results and Discussion

4.1. Environmental adaptation

The Muslim migrants in Lanzhou mainly come from the Linzie Hui Autonomous Prefecture, Dingxi, Yuzhong, Tianshui, Wuwei, Zhangye and Qinghai, Henan, and Shanxi, etc. Due to the different distances between these regions and Lanzhou City, Muslim migrants from different regions have shown inconsistent adaptability in terms of climate conditions, water and soil conditions, traffic conditions, and recreational facilities. Based on the above situation, we have adopted the Summers coefficient d_y (Li Peiliang, 2002) to analyze the relationship between the Muslim migrants' hometown distance from Lanzhou and their adaptability to the urban environment. In order to facilitate analysis, for the source of Muslim migrants, we classified Linxia, Dingxi, and Yuzhong within 160 kilometers from Lanzhou into nearby areas; Tianshui and other areas within 800 kilometers of Lanzhou are classified as medium-distance areas; The trans-provincial sources above 800 kilometers are classified into faraway areas. The number of distributions after interaction classification is shown in Table 2 below.

Table 2 Relationship between the source distance of Muslim migrants and their adaptation to the environment

Distance	Climatic conditions				Natural environment				Traffic condition				Entertainment facilities			
	Very adaptable	Medium adaptable	Not adaptable	Total	Very adaptable	Medium adaptable	Not adaptable	Total	Very adaptable	Medium adaptable	Not adaptable	Total	Very Adaptable	Medium adaptable	Not adaptable	Total
Nea	169	173	0	342	178	132	1	311	68	87	31	186	65	89	53	207
Mediu	42	97	3	142	63	88	4	155	71	93	19	183	57	67	34	158

Far	7	21	20	48	23	21	22	66	52	92	19	163	55	93	19	167
Total	218	291	23	532	264	241	27	532	191	272	69	532	177	249	106	532

To calculate d_y, the equation of coefficient is as below:

$$d_y = \frac{N_s - N_d}{N_s + N_d + T_y}$$

$$N_s = f_{11}(f_{22} + f_{23} + f_{32} + f_{33}) + f_{12}(f_{23} + f_{33}) + f_{21}(f_{32} + f_{33}) + f_{22}(f_{33})$$

$$N_d = f_{13}(f_{22} + f_{21} + f_{32} + f_{31}) + f_{12}(f_{21} + f_{31}) + f_{23}(f_{32} + f_{31}) + f_{22}(f_{31})$$

$$T_y = f_{11}(f_{12} + f_{13}) + f_{12}(f_{13}) + f_{21}(f_{22} + f_{23}) + f_{22}(f_{23}) + f_{31}(f_{32} + f_{33}) + f_{32}(f_{33})$$

Where Ns denotes the same order logarithm; Nd denotes the log of the different orders; Ty is the logarithm of the same score only on the dependent variable. Because the d_y coefficient is X predicting Y, if two cases have high or low scores on X, we have to predict or estimate their relative grade on Y. Therefore, the denominator in the formula must include Ns and Nd, plus Ty, in order to accurately represent the maximum error that can be made when forecasting. We believe that the distance of the source of Muslim migrants from Lanzhou City is self-variable (X), and the urban adaptability is dependent variable (Y). You can use d_y to simplify the situation. F_{11}, f_{12}, f_{13}, f_{21}, f_{22}, f_{23}, f_{31}, f_{32}, and f33 respectively represent the numerical values of the number of rows and columns corresponding to weather conditions, water and soil conditions, traffic conditions, and entertainment facilities. A positive value for the d_y coefficient gives a positive correlation between Y and X, and a negative value indicates no correlation between Y and X. The result of the calculation is as follows: d_{y_1} (climate) = +0.2958, d_{y_2} (water and soil) = +0.3085, d_{y_3} (traffic conditions) = +0.0035, d_{y_4} (entertainment facilities) = -0.0749. Therefore, it can be seen that climate adaptation, soil and water adaptation, and traffic adaptation are positively related to the distance from Muslim sources, that is, the closer the distance, the stronger the degree of adaptation. If the distance of the source is used to predict or estimate the degree of adaptation of the Muslim environment, the errors of 29.58%, 30.85%, and 0.35% in the above three indicators can be reduced respectively. From the value of d_y coefficient, the d_y value of climatic conditions and soil and water conditions is higher than traffic conditions and recreational facilities, which shows that the adaptability of Muslim migrants in terms of climate conditions and water and soil conditions is stronger than the distance from Lanzhou.

From the geographical perspective, Lanzhou is located in the transitional zone between the monsoon climate zone and the non-monsoon climate zone. It is a typical temperate semi-arid continental climate. Lanzhou has an average elevation of 1,520 meters. Compared with other cities in China, Lanzhou has a higher altitude. Linxia, Dingxi, and Yuzhong, within 160 kilometers of Lanzhou City is basically sharing the same climate with Lanzhou. Therefore, for Muslims from these regions, there is basically no problem of adaptability to climatic conditions and water and soil conditions. Although Tianshui and other areas within 800 kilometers of Lanzhou are different in terms of rainfall and air humidity, the overall difference is

not significant. Muslim migrants from these regions can basically adapt to the life of Lanzhou. For the trans-provincial source areas over 800 kilometers from Lanzhou City, the eastern and southern regions of China have a distinct monsoon climate with heavy rainfall, humid air, and low altitude. This survey found Muslim migrants from these regions often complain about the dry climate, high altitude, poor sleep, and large temperature difference between day and night. Due to the factors of climate, water and soil condition, they cannot properly adapt to the life of Lanzhou. The western and northern regions are controlled by the temperate continental arid climate. Compared to Lanzhou City, the rainfall is lower and the air is drier. The Muslims from these regions have also shown some incompatibility in terms of climate and land & water. Due to the rapid economic development and the increase of urbanization in various provinces and cities in China, the adaptability of Muslim migrants from different regions in respect of traffic conditions and recreational facilities has not shown strong relationship with the distance from their hometown to Lanzhou.

4.2. Economic adaptability

When Muslim migrants were asked about the reasons for living in Lanzhou, 40.9% believe that their economic income is higher than that in rural areas, 22.7% hold that rural life is more bitter and they could make less money, and 6.3% of people think that they are mainly in order to broaden their horizons, 25% hold that entering the city is due to admiring the life of the city, 2.8% believe that there is no work in the countryside, and 2.3% hold it to have fun in the city. This shows that economic factors are one of the main driving forces for Muslim migrants to enter urban life. In order to quantitatively analyze the adaptability of Muslim migrants' economic income and urban life, this paper used the Pearson product moment correlation coefficient (r) to research it. The Pearson product-moment correlation coefficient describes how closely the two fixed-range variables are related. The simple correlation coefficient of the sample is generally expressed by r, and the calculation formula is:

$$r = \frac{\sum_{i=1}^{n} x_i y_i - \frac{\sum_{i=1}^{n} x_i \sum_{i=1}^{n} y_i}{n}}{\sqrt{\sum_{i=1}^{n} x^2_i - \frac{\left(\sum_{i=1}^{n} x_i\right)^2}{n}} \sqrt{\sum_{i=1}^{n} y^2_i - \frac{\left(\sum_{i=1}^{n} y_i\right)^2}{n}}}$$

Where n denotes the sample size; xi denotes the monthly income of the i-th Muslim migrant family and y_i is the i-th Muslim migrants' score on urban adaptability. For the calculation of y in the formula, using the method of assignment, 5 points for "much adapted", 4 points for "adapt", 3 points for "not sure", and 2 points for "not to adapt", and 1 point for "extremely not to adapt". x represents the monthly income of a Muslim migrant family. r describes the degree of linear correlation between two variables. The value of r is between -1 and +1. If r>0, it indicates that the two variables are positively correlated. That is, the larger the value of one variable is, the larger the value of the other variable is. If r<0, it means that the two variables are negatively correlated, that is, the larger the value of one variable, the smaller the value of the other variable. The larger the absolute value of r is, the stronger the correlation is. Based on the processing of 532 sample data, the Pearson product moment correlation coefficient (r) is calculated by the formula, and the r value is 0.7869. Therefore, there is a strong correlation between the two variables (Due to the large amount of data, and in consideration of the article space requirement, the original data sheet could not be attached).

It can be seen that the level of economic income greatly influences the adaptability of

Muslim migrants in urban life. The economic base determines the superstructure. Economic factors play a non-negligible role in the adaptability of Muslim migrants. Stable income is the basis for meeting their minimum needs in urban life. It is also a solid foundation for better material and cultural life as well as leisure and entertainment. For most of the floating Muslims who have just entered urban life, their consumption behavior is basically limited to "must-consumption". Their demands for life are relatively low. Their reference system for life is not urban citizens but their source of origin. Therefore, in the survey, the author also found that even if the monthly income is relatively low, some Muslim migrants show good adaptability to urban life. But for most Muslim migrants, the higher the economic income, the more helpful they are to adapt to the life of the city. The high-income group are more likely to participate in the daily activities of the city than low-income Muslim migrants, which makes their lives more urbanized and better integrated into the main body of urban life.

4.3. Social adaptability

For Muslim migrants, to achieve interpersonal adaptation means that they must re-learn the norms of urban social interaction and master the basic rules of urban social interaction. As an institutionalized role-relationship model, the social communication behavior of cities has different characteristics from traditional agricultural society (Parker, 1987; Jiang Lihua, 2000). Muslims who enter Lanzhou are a special group. They believe in Islam, and the Islamic culture has been deeply implanted into their material and spiritual worlds, affecting their production and living. Thus, when they enter the city, they show their unique adaptability in terms of social adaptation.

4.3.1. Adaptability of religious culture

Islam is not only a religion, but also a way of life, a culture, and a social system. The British scholar Jensen (1983) once said, "Islam is not only a religion. It is a vulgar, general, and unitary lifestyle. It is a set of beliefs and ways of worship. It is a broad and interconnected legal system. It is a culture and a civilization. It is an economic system and a business method. It is a form of government and a means of governance. It is a special social and governance method."

After the Muslim migrants enter the life of Lanzhou, the time and space requirements of the city's work and life brings about major changes to the Muslim migrants who formerly had a relatively stable religious life. In the survey, the author found that 29.5% of Muslim migrants are unable to adapt well to urban life because of lack of religious activities; similarly, the national psychological, national customs, and national cultural values also hinder their adaptation to urban life. However, with the passage of time in urban life, they will gradually find a balance between urban life and religious culture. This is a process Muslims diminish their own nationality in the course of adaptation to the urban life, as well as a process of national assimilation and citizenization for the Muslims. The investigation of the ethnic culture of the Muslims migrants in Lanzhou shows that they have shown strong preservation of their ethnic and religious culture. Although they may not seem to care about their friends and others, they are quite strict with themselves and their family members. As a special group in the society, they are eager for people to understand and respect their religion, culture, and national activities. But they also fear that social development will have a huge impact on the traditional heritage of their national culture.

4.3.2. Adaptation of daily life

From the point of view of the Chicago school representative, Louis Wirth (1938) "City as a life style", the city has a whole set of social and cultural characteristics that are different from the countryside. For the reasons of the formation of urbanity, Werth believes that it lies in such demographic characteristics as population size, population density, and cultural heterogeneity. It is mainly manifested in five aspects: social organizations (neighborhood organizations, political organizations, economic organizations, community organizations, intermediary organizations, various informal organizations, etc.), survival of the fittest, role communication, geographical relations, and lifestyle systems. In the investigation of the floating Muslims in Lanzhou City, it was found that Muslim migrants have not formed an ideal social organization. They merely spontaneously live in certain areas in Lanzhou according to blood, clan, surname, etc., which is consistent with the distribution characteristics of the overall ethnic minorities in China, i.e., co-habitation with other ethnics massively, and compact community as individual ethnic groups. Although the urban competition does not become the main theme of their lives in Lanzhou, as an ethnic minority good at business, the Muslim migrants are surrounded by a strong atmosphere of competition inside their groups and with other ethnic peoples around them. After entering urban life, they feel that the accelerated rhythm of urban life and enhanced modern consciousness. They also feel that the trust between people is gradually missing, interpersonal relationships are becoming increasingly indifferent, and mutual help and assistance becomes rare, while heterogeneity is increasing. In addition, in other aspects of life, "the recessive issue of the household registration system" has become an important issue for Muslim migrants after they enter urban life. In the survey, we found that Muslim families often have quarrels with schools due to their children's household registration and they complain to the investigators. At the same time, when asked about the "domestic registration issue", many Muslims would be filled with indignation.

4.4 Psychological adaptability

"When the social individual or group background changes, the psychological state formed in their original cultural background becomes a psychological background, and the psychological reactions that appear in the new environment first falls on this psychological background. At this time, if the psychological response in the new environment is coordinated with the psychological background, it is the adaptation of the individual or group to the new cultural background. Otherwise, mental activities can't adapt to the new environment without coordination" (Li Peilin, 1996). "Self-identity" and "urban belongingness" are the two most important aspects of the process of psychological adaptation of Muslim migrants into urban life. "Self" is an important concept of modern psychology. William James proposed the theory of self-concept as early as 1890, and subsequent psychologists continued to develop the self-concept (Zhou Xiaohong, 1996). "Identity" includes not only objective similarities or identical characteristics, such as the same identity, the same performance, etc., but also the consistency of psychological understanding and the resulting relationship (Dong Mingwei, 2008; Yang Juhua, 2009). After the Muslim migrants represented by the Hui, Dongxiang and Baoan ethnic groups enter Lanzhou, their self-knowledge of "self" "identity", and their sense of belonging to the city harmoniously will be directly related to their own internal conflicts and the "marginalization" of their special group.

Although the general tendency of Muslims' psychological adaptation can be seen in the survey, yet there are many indicators and there are correlations between them, which results

in overlapping information and ineffective analysis. Therefore, we have selected the most representative and inclusive 15 indicators for research, as shown in Table 3. Observe the corresponding values of the indicators. Observe the numerical values corresponding to each index and find that all the indicators are of good quality data, without missing values, abnormal values, etc. that have important influence on factor analysis. On the basis of the descriptive statistics in Table 3, the indicators are analyzed using spss17.0 software. Through the extraction of the common factors, the 15 indicators are divided into two categories: "self-identity" and "urban belonging".

Table 3 Psychological Adaptation Questionnaire for Muslim Migrants

Item	Conformance (%)	Unclear (%)	Non-conformance (%)
1. I'm already an urban citizen	35.8	16.4	47.8
2.There's no distinction between rural and urban citizens	59.6	5.9	34.5
3. I care about how others treat me	61.2	25.1	13.7
4. I encourage and care others frequently	68.7	20.9	10.4
5. I feel that everyone likes to approach me	59.7	34.6	5.7
6. I'm optimistic about my future	73.3	22.9	3.8
7. I feel that I'm a valuable person.	65.2	30.5	4.3
8. I feel that I'm a person with good morals.	55.9	38.2	2.9
9. I feel that I can do things well	53.6	30.3	16.1
10. I feel that the locals hold discriminations against strangers	33.5	42.3	24.2
11.I feel that there is no one I can talk my worries with	30.6	29.7	39.7
12. I once avoided interacting with others	24.9	31.1	44.0
13. I frequently feel scared, nervous and worried	23.2	20.0	56.8
14. I feel great disparity with the urban citizens	33.4	19.7	48.9
15. I feel that others hold lots of prejudices against minority people	58.9	13.5	27.6

Table 4 Analysis of psychological adaptation factors of Muslim migrants

Item	Extraction factor		Extraction factor after rotation	
	Common factor1	Common factor2	Common factor1	Common factor2
1. I'm already an urban citizen	-.476	.879	.064	.998*
2.There's no distinction between rural and urban citizens	.369	.929	.807*	.591
3. I care about how others treat me	.921	.389	.987*	-.160
4. I encourage and care others frequently	.895	.445	.995*	-.099

5. I feel that everyone likes to approach me	.998	.067	.881*	-.474
6. I'm optimistic about my future	.935	.354	.980*	-.197
7. I feel that I'm a valuable person.	.982	.187	.931*	-.364
8. I feel that I'm a person with good morals.	.997	-.082	.801*	-.599
9. I feel that I can do things well	.970	.244	.951*	-.308
10. I feel that the locals hold discriminations against strangers	.603	-.798	.087	-.996*
11.I feel that there is no one I can talk my worries with	-.879	.477	-.491	.871*
12. I once avoided interacting with others	-.996	.092	-.795*	.607*
13. I frequently feel scared, nervous and worried	-.880	.475	-.493	.870*
14. I feel great disparity with the urban citizens	-.619	.786	-.106	.994*
15. I feel that others hold lots of prejudices against minority people	.590	.807	.929*	.370

In order to facilitate the interpretation of the practical significance of the common factors, the Varimax variance maximum method is adopted to rotate, and the rotated factor load matrix is obtained as shown in Table 4. It can be seen that the original indicators with the * corresponding to the common factor 1 are the indicators 2-9, 12, and 15, respectively. Therefore, the common factor can be regarded as the "self-identification" factor, and the larger value in common factor 2 with the * corresponding to the original indicators are indicators 1, 10-14, so the common factor can be seen as a "city belonging" factor.

The Muslim migrants in Lanzhou City have demonstrated sufficient adaptation to urban life in their understanding of "self." Although the current state of life is not satisfactory enough, they have always maintained a positive attitude. In terms of "identification", they show a lack of adaptability to "urban identity," "group identity," and "Muslim migrant identity." Urban life and labor conditions, income and material living standards, potential development opportunities, and available social resource stocks have not received Muslim migrants' full satisfaction and recognition. They are aware of the difference between themselves and the "real" urban citizens and the uniqueness of inability to "really" integrate into the lives of non-ethnic groups. In terms of "city ownership", more than 45% of Muslim migrants still have a strong "work attitude" and "passing passenger mentality". They regard Lanzhou as "theirs" rather than "ours" and consider their "root" to be in their hometown. This attitude allows them to position their own future in their hometown, thinking that they are only temporarily living in Lanzhou, so there is no sense of belonging or "ownership", and they always maintain a "stranger" feeling.

5. Conclusion

Muslim migrants living in Lanzhou City show different adaptability in terms of environment, economy, society, and psychology. In terms of environmental adaptation, the Summers dy coefficient test shows that the differences of the origins of Muslim migrants and Lanzhou City about urban climate and water and soil condition show a strong correlation with their urban adaptability. However, about traffic conditions and recreational facilities the correlation is not

obvious. The proportion of Muslim migrants from different sources indicates that the attractiveness of Lanzhou to Muslim migrants gradually weakens as the expanding distance between the source and Lanzhou, the attraction is strong for Muslims migrants around Lanzhou. In terms of economic adaptation, the Pearson product-moment correlation coefficient (r) of income and adaptability of Muslim migrants is 0.7869, showing that there is a strong correlation between the two. In terms of social adaptation, the Muslim migrants' adaptation to religious activities shows a unique way. Religious cultural life, as part of the daily life of Muslim migrants, plays an indispensable role in the process of adaptation. Over time, Muslim migrants gradually adapt to the city's daily lifestyle. Muslim migrants' psychological adaptation can be summed up in such two categories as "self-identity" and "urban belonging". Muslim migrants showed a clear adaptability in their "self" understanding, but they show a strong maladjustment in terms of "identity" and "urban belonging".

As a special group that enters urban life, the open and pluralistic living system of Muslim migrants is forming. They live in a common space with groups of different ethnics, cultures, and religions. The internal competition and influence, coupled with the radiation of external urban society, making their lives increasingly diversified. Their leisure activities are more colorful and the scope of their interaction has become more extensive. Whether Muslim migrants can adapt well to urban life not only needs to improve their own adaptability, but also needs to formulate policies that are conducive to promoting the integration of Muslim migrants into urban life, which will provide a good environment for the effective service and management of urban ethnic minority migrants.

The conclusion of this study is basically consistent with the results of similar studies by some scholars（Zhen Xianzhe,2014; Hou Haikun,2013; Gong Jian,2007）, and is also an extension of the author's early research（Gao Xiang, Song Xiangkui, 2013）. The merit of this paper lies in clarifying the urban adaptation of the Muslim migrants from four aspects (natural, economic, social, cultural psychology) recognized by most scholars, and the accurate analysis of urban adaptation by quantitative mothed.

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