Postprint of Urban Dislocation Effect in the Urbanization Process

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Abstract

Understanding and effectively evaluating China' s urbanization is crucial for advancing the nation' s long-term sustainable development. However, evaluation outcomes appear to be associated with the assessment methods employed (objective versus subjective indicators). Through a review of previous studies, this research finds that while objective indicators (e.g., illiteracy rates) in evaluated regions exhibit stepwise improvement with increasing urbanization levels, public subjective indicators have not correspondingly risen with China' s urbanization advancement. Urban and rural residents demonstrate roughly equivalent place attachment scores, whereas town residents—expected to score intermediately—exhibit the lowest place attachment scores. This "V-shaped" phenomenon is termed the "urban dislocation effect." Further literature review and survey analysis indicate that public place attachment is primarily influenced by demographic indicators, interpersonal relationships, and physical environment. The study recommends integrating objective and subjective indicators in urbanization assessments.

Full Text

Town Dislocation Effect in Chinese Urbanization

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Abstract

Understanding and effectively evaluating China' s urbanization is crucial for promoting long-term sustainable development. However, assessment outcomes appear to depend on the measurement approach employed (objective versus subjective indicators). Through a review of previous studies, this research found

that while objective indicators (e.g., illiteracy rates) in evaluated regions improved stepwise with increasing urbanization, subjective indicators did not rise correspondingly with China' s urbanization level. Urban and rural residents scored similarly on place attachment, while town residents—whose scores were expected to fall between these two groups—scored the lowest. This study terms this V-shaped phenomenon the "town dislocation effect." Further literature review and survey analysis revealed that place attachment is primarily influenced by demographic variables, interpersonal relationships, and physical environment. We recommend integrating both objective and subjective indicators in urbanization assessments.

Keywords: town dislocation effect, urbanization, place attachment, subjective & objective indicators, social support

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Urbanization development marks significant progress in human science and technology and enhanced capacity to transform nature. China is currently undergoing rapid urbanization. Between 1978 and 2013, China' s urban permanent population grew rapidly from 170 million to 730 million, with the urbanization rate increasing from 17.9% to 53.7%—an average annual increase of 1.02 percentage points. The number of cities rose from 193 to 658, and the number of towns increased from 2,173 to 20,113. By the end of 2014, China' s urbanization rate reached 54.77%, exceeding the global average of 53%. This demonstrates the characteristics of low starting point and rapid development speed. As urban construction continues to advance and urbanization levels rise, urban residents have also shown improvement in various objective social indicators such as education, healthcare, and economy.

Statistical data show that from rural to town to city, people' s objective indicators exhibit a stepwise improvement trend. For example, survey data from 2014 indicate that illiteracy rates among those aged 15 and above in rural, town, and city areas were 7.88%, 3.79%, and 1.88%, respectively; mortality rates for rural, town, and city populations were 8.18%, 5.05%, and 3.83%, respectively [1] [Figure 1: see original paper]. These results suggest that urbanization has become the necessary path to China' s modernization, bringing opportunities for maintaining rapid economic development, accelerating industrial structure transformation and upgrading, solving agricultural, rural, and farmer issues, promoting coordinated regional development, and fostering comprehensive social progress.

However, can we naturally infer that people' s subjective mentality has also gradually improved with the pace of urbanization, just like various social indicators? In fact, urbanization is a comprehensive social change, manifested socially as cities or towns replacing traditional rural communities, and at the social subject level as the transformation of farmers' identity to citizens. It embodies not only the transition of economic systems, social structures, and cultural pat-

terns but also the evolution and transformation of people' s psychological states [2]. Easterlin [3] proposed and demonstrated the famous "Easterlin Paradox" as early as 1974, arguing that residents' happiness does not increase with economic growth. Easterlin [4] validated this theory through empirical research in 2012: China' s economic growth over the past 20 years has not brought a corresponding improvement in people' s life satisfaction.

The above analysis indicates that in evaluating China' s urbanization development, the indicators we adopt seem to yield different answers. If we use objective social indicators, urbanization has clearly brought people higher incomes and better living environments. However, if we use subjective psychological indicators, we find that urbanization does not seem to have made urban residents have higher levels of happiness. An ancient story from Aesop' s Fables illustrates this point precisely: the city mouse and the country mouse admired each other' s lives, so they visited each other and discovered huge environmental differences caused by changing residences. After experiencing the wealthy life of the city mouse, the country mouse lamented: "Better to live peacefully in the countryside than to enjoy fine food in the city with tension and anxiety." This story tells us that spiritual comfort may be more important than material abundance, a revelation that seems particularly important for China in the process of rapid urbanization. Given that new urbanization adheres to a people-centered principle, improving residents' well-being is the fundamental goal of urbanization development. Thus, in urbanization assessment, neither subjective nor objective indicators can be neglected; local residents' evaluation of their place is also an important indicator for assessing urbanization development.

1. Subjective Indicators and Place Attachment

Previous researchers generally used objective indicators to evaluate regional urbanization development. For example, China' s statistical yearbooks commonly use the population proportion method to measure urbanization levels, i.e., the proportion of urban population to total population. Some studies have also shown that population urbanization is an important indicator reflecting urbanization levels [5]. Given that this indicator is too singular and cannot comprehensively and accurately reflect the multidimensional characteristics of urbanization, some researchers have included population size and density, land size and density, government investment, economy, culture and education, lifestyle, and environment in the assessment of urbanization levels [6-8], pointing out that urbanization should include three dimensions: economic urbanization, population urbanization, and social urbanization. Thus, current assessments of China' s urbanization development status mainly focus on hard indicators dominated by objective economy, while paying less attention to people' s psychological issues. However, focusing on people' s psychological issues is the key embodiment of the people-oriented principle upheld by China' s new urbanization path.

World development history shows that continuous economic growth does not necessarily bring equivalent happiness to people. Researchers have increasingly

realized that using only economic indicators cannot comprehensively reflect the real state of society. Therefore, Campbell [9], Andrews and Withey [10] and others were the first to introduce the investigation of people' s subjective mentality into the evaluation of social development, naming it "subjective indicator" relative to "objective indicator" that studies objective things. Veenhoven [11] believes that the differences between subjective and objective indicators mainly lie in two aspects: (1) They measure different things. Objective indicators measure objective things unaffected by people' s subjective feelings, while subjective indicators measure people' s feelings themselves. (2) They adopt different evaluation methods. Objective indicators come from objective and concrete observation statistics, while subjective indicators mainly come from people' s self-reports. In comparison, objective indicators are more suitable for describing specific details, and their results are often limited to objective observation results. However, if we want to provide comprehensive suggestions for policy formulation itself, we should consider the combined use of both objective and subjective indicators. In public management policy formulation, subjective indicators that focus on social psychology have irreplaceable important value [11]. In fact, researchers all recognize that subjective indicators have outstanding important value in measuring social development, and doubts about their validity mainly focus on questioning the self-report method itself.

Among the indicators evaluating the subjective psychological feelings caused by changes in the social environment, researchers have long paid attention to the psychological connection between regions and individuals, and have used multiple concepts to describe this connection, such as sense of place [12], place dependence [13], community sentiment [14], place attachment [15-19], and place identity [20-22]. Among them, place attachment has gained recognition from many researchers since its proposal and has been used as a core concept to describe the connection between individuals and regions. Scannell and Gifford [23] systematically reviewed the definition of place attachment and proposed the PPP (Person, Process, Place) model. They believe that place attachment refers to "an individual's emotional connection to a special place,"which includes three dimensions: person, process, and place. The person is the subject of attachment, the place is the object of attachment, and the interaction between the person and the special place is the process of attachment generation.

Scannell and Gifford [23] point out that researchers have high research enthusiasm for place attachment because this variable has great application value in policy formulation and other fields. First, place attachment can affect people' s sense of security [15,24-27]. Researchers believe that the connection between individuals and their region is positive, which can reduce their risk perception and make them more willing to live there [23]. Second, place attachment can bring people a sense of belonging [15]. This home-like feeling can improve people' s overall life satisfaction. Finally, place attachment can predict whether people are willing to contribute to the locality. That is, it can predict people' s enthusiasm for participating in activities related to the region [18,28,29], their use of local public areas [30-32], and their protective behaviors toward the local

environment [33-35].

It should be noted that although most current measurements of place attachment use self-report questionnaires, some researchers believe that in daily life, people' s sense of place attachment generally exists in the subconscious and is only expressed when individuals leave their location. Therefore, implicit methods should be considered for measuring place attachment [20,36,37]. In existing studies, Hidalgo and Hernández [37] used scenario simulation to measure place attachment by asking subjects to imagine leaving their location. Boğaç [38] used drawing projection to measure individuals' regional identity. Chinese scholar Lian Shufang [39] used IAT (Implicit Association Test) to measure Shanghai residents' cognitive status toward locals and outsiders. In our research [40], we used projection to measure people' s place attachment level, i.e., instead of directly asking respondents about their views and attitudes toward their place, we asked them to make decisions on events of great importance to their lives: choice of lifelong partner, choice of rebirth location, dialect they hope their children master, and emotional reactions to outsiders insulting locals. If respondents have strong place attachment, they can endorse their place in these major life issues (projected endorsement), i.e., hope to choose locals as partners, be locals in the next life, let children master the local dialect, and express strong emotional reactions to outsiders insulting locals.

2. Town Dislocation Effect

Using the above place attachment assessment scale, we measured urban, town, and rural residents in China's rapid urbanization development process [40]. This study used stratified multi-stage random sampling and conducted two rounds of household surveys nationwide on residents in different urbanization processes. The first round of sampling involved 7 cities, 7 towns, and 10 rural areas, with a sample size of 3,716. The second round selected completely different 3 cities, 3 towns, and 3 rural areas, with a sample size of 1,452. The total sample size for the two rounds was 5,168.

The two surveys obtained very consistent results: after controlling for the effects of gender, age, and education level, residents in the three stages of urbanization showed significant differences in place attachment [Round 1: $F(2,3609) = 62.65$, $MSE = 0.44$, $p < 0.001$, $^2 = 0.03$; Round 2: $F(2,1446) = 15.00$, $MSE = 0.47$, $p < 0.001$, $^2 = 0.02$]. Post-hoc tests found that town residents' place attachment was significantly lower than that of city and rural residents (LSD test, both rounds $ps < 0.001$), while the difference in place attachment between city and rural residents was not significant (Round 1, $p = 0.76$; Round 2, $p = 0.85$).

According to hard indicators such as education, healthcare, and economic income, from rural to town to city, 各项指标 should show stepwise improvement (Figure 1). Results from our questionnaire survey also confirmed this point: residents' self-rated average monthly income level showed a stepwise upward trend from rural to town to city [40]. Based on common sense or intuition,

we might naturally infer that city residents' place attachment should be higher than town residents, and town residents' place attachment should be higher than rural residents. However, according to projection test results, town residents' place attachment illogically "dropped" [Figure 2: see original paper], significantly lower than the other two regions, presenting a dislocation between "hard" and "soft" indicators and between "common sense expectations" and "actual measurements." We term this phenomenon the "town dislocation effect."

In fact, our research is not an isolated case. Previous studies on Chinese people' s mentality in the urbanization development process have obtained similar results. For example, some studies show that rural residents' subjective well-being is higher than urban residents' [41-43]. Rural economic development is relatively low, and farmers have lower expectations for future income and life compared to urban residents, making them easier to satisfy. When urban economic development reaches a certain level, residents' happiness mainly comes from comparison with others. As economic development progresses, the income gap between residents gradually increases, which is also the main reason for lower happiness among urban residents [43]. Additionally, reports on mass incidents indicate that town residents participated in mass incidents at a slightly higher proportion than farmers in 2012, suggesting that the urbanization process is also accompanied by various contradictions and social problems [44]. These results can provide a unique evaluation perspective for assessing the urbanization process and may help us understand and confirm many real issues related to regions.

3. Factors Influencing Place Attachment

To further explore how to improve people' s place attachment level, we sorted out relevant factors influencing place attachment, hoping to provide insights for cultivating place attachment and improving residents' well-being in China' s urbanization process. Although systematic research on factors influencing place attachment is still relatively rare [45], we believe that current researchers focus on influencing factors in three aspects.

3.1 Demographic Variables (1) Birthplace. Many studies believe that whether an individual' s region is their birthplace significantly affects their place attachment level. For example, Lalli [46] showed that residents born locally have higher local identity than those born in other regions, and this relationship is independent of residence time. Huang Fei et al. [47] also found that locals have higher place identity levels than outsiders, and this difference between locals and outsiders is more obvious in China' s western border region samples. Casal et al. [48] surveyed Paris and Madrid residents' willingness to choose where to spend their later years and found that 20.8% of individuals chose their birthplace as their later-year location. The possible reason why birthplace affects place attachment is that positive emotional experiences of the residence during childhood internalize into subconscious patterns, helping to develop long-

term positive subjective emotional connections to the residence, i.e., forming place attachment [49].

(2) Residence Time. The influence of residence time on place attachment is the most undisputed variable: the longer the residence time, the higher the place attachment [28,45]. Previous studies show that an individual' s age itself cannot predict their place attachment level; what affects individual place attachment is residence time. Residence time also affects individuals' establishment of place attachment to their second hometown [50], while owning property in the second hometown has no significant correlation with place attachment [51]. Some researchers have found that individuals do not need long residence time to establish emotional connections with regions [52,53], but this is required for establishing identity [45].

(3) Socioeconomic Status. Studies have found that individuals with low education levels have higher place attachment [18]. Researchers point out that this may be because individuals with low education levels also have lower socioeconomic status and are less likely to be accepted by other social groups [28,54,55], so place attachment is more important for them. The influence of high socioeconomic status (including high education level) on individual place attachment is multiple: stronger mobility and more social relationships outside the community weaken place attachment, while owning a house increases place attachment [45].

3.2 Social Support Variables Researchers believe that social support is a key factor for individuals to develop place attachment. A good interpersonal environment can help individuals establish identity with their circle of friends' location. The more friends an individual makes in the region, the less willing they are to leave [28,45,56]. Hidalgo and Hernández [37] also point out that individuals' social connections to regions are more important than their geographical connections, and this is particularly important for women [37,57,58]. For young migrants, the number of friends and emotional connections in the new location are the main influencing factors for their place attachment to the new location [45]. Lorenza et al. [59] surveyed adolescents from 13 countries on the relationship between place attachment, community safety perception, and social capital, finding that higher place attachment led to perceptions of more harmonious neighborhoods and greater community safety.

In our research on the town dislocation effect, we also demonstrated the important role of social support. At the beginning of the research, we thought that town residents' low place attachment level was because the huge changes triggered by urbanization made town residents more afraid of risks and losses. However, mediation analysis showed that the real reason for town residents' low place attachment scores was the decline in social support levels, i.e., the degree of urbanization development affects people' s social support level, which in turn affects people' s place attachment level [40]. Difference tests showed that town residents' social support scores were significantly lower than those of city and

rural residents (F(2,1446) = 27.72, MSE = 0.30, p < 0.001, ^{2} = 0.11, by ANCOVA) [Figure 3: see original paper]. Previous researchers have also pointed out that urbanization caused by high-speed industrialization destroys the original social relationship networks in rural areas, causing more alienation behaviors among urban residents, thus affecting their place attachment [46,60,61].

3.3 Physical Environment Variables Demographic variables and social relationships are person-type factors affecting place attachment. Among the factors affecting place attachment, there are also place-type factors called physical/environment predictors. Numerous studies have found that physical environmental factors such as public green space, community quietness and crowding, and gated communities affect place attachment. Regardless of how frequently people use public areas, public open areas and shops in communities are conducive to establishing community sense [62]. The quietness, crowding, and perceived danger of the community affect residents' place attachment [63,64]. For older migrants, the improvement of the physical environment in the current residence compared to the original residence is the main factor affecting their attachment to the current residence [45]. Factors such as building characteristics, roads, green spaces, transportation services, and environmental health affect urban residents' Perceived Residential Environment Quality (PREQ), thus affecting place attachment [65]. Providing a leisure and beloved café [66] or convenient service facilities in the community environment also increases residents' place attachment [64].

On the other hand, changes in urban physical environment during urbanization need to be treated with special care because such changes also affect residents' subjective well-being and place attachment [23]. von Wirth et al. [67] found that when facing changes in urban physical environment, if residents feel that the change is an improvement to the environment and does not affect their familiarity, their place attachment will be stronger. Therefore, in urban construction, the impact of physical environment changes on residents' place attachment needs to be considered.

It should be noted that physical environmental factors affect place attachment, and place attachment also affects residents' subjective evaluation of the physical environment. There is a correlation between the two, but the specific causal relationship needs further verification [45].

4. Policy Recommendations

4.1 Integrating Objective and Subjective Indicators in Urbanization Assessment The above analysis shows that subjective indicators represented by place attachment play an irreplaceable important role in evaluating urbanization development that objective indicators cannot replace. Therefore, we recommend incorporating the level of people' s psychological urbanization into urbanization assessment (e.g., using place attachment as a key factor in evaluating regional urbanization development status) and suggest increasing public

opinion surveys on people' s mentality at the regional level. Through long-term monitoring and evaluation of people' s place attachment status, we can accurately reflect the effectiveness of government policies and people' s confidence in social development, grasp the fluctuations and patterns of people' s social mentality, and provide scientific basis for governments at all levels to adjust policies, thereby better meeting people' s needs and promoting social harmony.

Town residents enjoy various social welfare and security benefits like general urban residents, but the changes in lifestyle and living environment brought by urbanization break the original large-family living interaction pattern, leading to the reconstruction of residents' original social networks and a corresponding decrease in place attachment. To expand residents' social support systems, community service personnel can not only enhance family cohesion and neighborhood interaction through traditional methods such as holding regular lectures and various cultural activities but also use new media technologies, such as creating virtual community interaction platforms in communities through WeChat groups, and establish functional WeChat groups covering all aspects of people' s daily life (such as sea-cucumber-purchasing groups, photography groups, financial management groups, walking groups, parenting groups, square-dance groups, health-preservation groups, etc.) to promote offline interpersonal interactions, thereby avoiding spatial barriers and interpersonal alienation caused by changes in living patterns.

A popular online saying goes: "Because of one person, love or hate a city." Although a folk saying, it precisely points out the important influence of social network support systems on people' s place attachment. What makes people attached to a region is not only its socio-economic development but also the interpersonal support network living in it. Therefore, we recommend improving people' s social support networks from both physical and psychological space aspects to enhance people' s place attachment levels.

Establish real (face-to-face) interaction platforms to enhance "social support." Lalli [46] points out that if people' s comfort can be set as an important development goal in town construction, then people can also develop more positive identity with urbanization. Previous studies show that besides various hardware constructions in cities, the construction of community public spaces (such as public green spaces, small public gardens, and community activity centers) can increase opportunities for people to interact with each other, thereby improving people' s place attachment. Therefore, we recommend respecting original village divisions and enhancing public space construction in the urbanization process, thereby promoting the transition from the original traditional large-family living environment to the core small-family living environment in cities.

Create virtual community interaction platforms to enhance "social support." In the urbanization process, although farmers have transformed into urban residents in terms of household registration and enjoy the various social welfare and security benefits of urban residents, the changes in lifestyle

and living environment break the original large-family living interaction pattern, leading to the reconstruction of residents' original social networks and a corresponding decrease in place attachment. To expand residents' social support systems, community service personnel can not only enhance family cohesion and neighborhood interaction through traditional methods such as holding regular lectures and various cultural activities but also use new media technologies, such as creating virtual community interaction platforms in communities through WeChat groups, and establish functional WeChat groups covering all aspects of people's daily life (such as sea-cucumber-purchasing groups, photography groups, financial management groups, walking groups, parenting groups, square-dance groups, health-preservation groups, etc.) to promote offline interpersonal interactions, thereby avoiding spatial barriers and interpersonal alienation caused by changes in living patterns.

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Note: Figure translations are in progress. See original paper for figures.