

The Correlation between Loneliness and Community Third Space for Young People Living Alone in Shenzhen

A case study of youth community in Shenzhen

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Abstract

Youth are pivotal in urban development, with youth-friendly city construction gaining traction. Yet, research frequently neglects urban space construction linked to youth. Shenzhen, a city oriented towards youth development, has a population where young people constitute a majority. Many of them are solitary "drifters," facing loneliness due to their fast-paced lifestyle and limited social opportunities. Based on this background, this study takes Shenzhen's solitary youth group as the research object to carry out specific research. The research content mainly includes four aspects: First, using the methods of crowd interview and field observation, to define and classify the third space in the research area; Second, through questionnaire survey and in depth interview, the preference information of young people living alone in the use of third space was collected; Third, the UCLA scale was used to quantitatively assess the loneliness of them. Fourth, SPSS was used to analyse the correlation between loneliness and community preference for using third space. Results indicate: (1) High levels of loneliness among solitary youth; (2) Regular and prolonged engagement with third spaces significantly reduces loneliness; (3) Social leisure spaces exhibit the strongest influence in mitigating loneliness among solitary youth.

Keywords

Young people living alone, Loneliness, The third space, Preference for using third space

1. Introduction

In today's context of globalization and rapid urbanization, the policy orientation of building a youth-friendly society at the national level has not only provided an unprecedented opportunity for the growth and development of youth groups, but also spawned a series of new policies aimed at promoting youth integration into society and stimulating innovation. "Youth" has become a frequent word in Shenzhen's "14th Five- Year Plan" outline. Shenzhen Youth League Committee will always adhere to "youth-centered" and take "youth development-oriented city" as a major strategy Shenzhen, as the frontier of China's reform and opening up and a special economic zone, has a large youth population, which is quite representative in the whole country and even the world. As a well-known "City of youth" in China, Shenzhen has a permanent population of 8.019 million young people aged 14-35, accounting for 45.66% of the city's

permanent population. The average age of the permanent population is 325 years old, which highlights the significance of building a developing-oriented city for youth.

With the development of urbanization and the increase of housing costs, young people are facing more and more housing pressure, and young people have made great changes in their working and living styles^{[1][2]}. Under this background, the rental housing market in Shenzhen has developed rapidly, and a number of brand apartments for young people have appeared. Compared with traditional housing, youth apartments provide a public space for youth groups to meet their diverse living needs.

With the continuous gathering of youth population in Shenzhen, social problems concerning youth groups have gradually surfaced, among which the phenomenon of "empty-nest youth" is particularly concerning^[3]. According to the preliminary prediction, in 2030, the number of young people living alone may reach 40 million to 70million. Among them, Dongguan and Shenzhen have a solo rate of nearly 40 percent. "Empty-nest" young people come to a foreign land alone, their life focus on work, lack of opportunities to participate in social activities, lack of face-to-face communication with people, resulting in a certain sense of loneliness^[4]. According to the survey report on the Health of Young Men and Women 2021, 71.2 percent of Chinese young men and women (aged 18-35) feel lonely.

Based on this, this study connects loneliness of young people living alone with community third space, explores the correlation between loneliness degree and preference for using community third space, and takes Shenzhen youth community as an example to conduct investigation and research, in order to further enrich the theory of building youth-friendly cities and provide references for the construction of youth-friendly cities.

2. Framework and methods

2.1. The study area

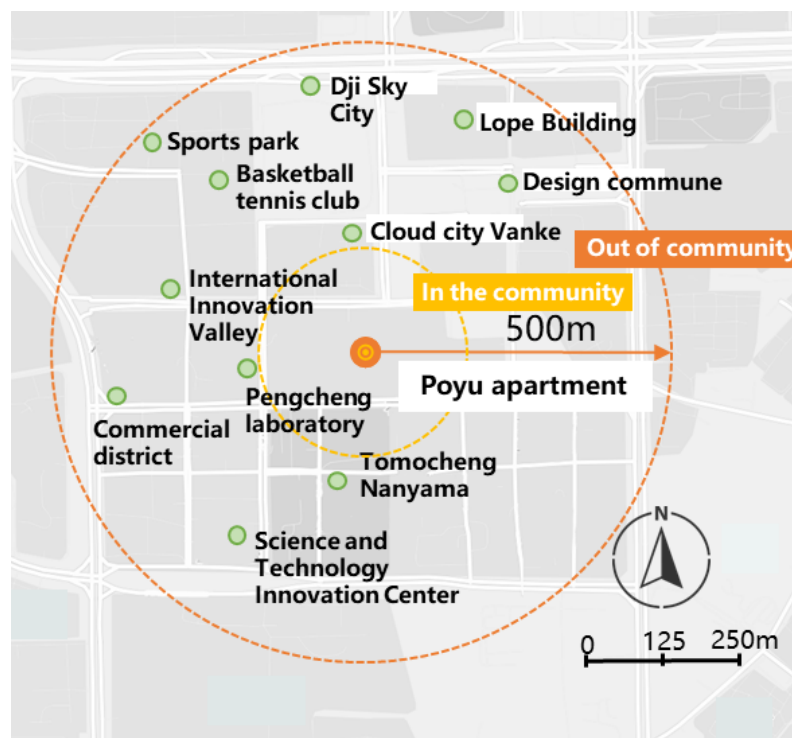


Figure 1 Study area. Source: drawn by authors.

The research area should be centered on the flagship store of Cloud City of Poyu Apartments with a radius of 500 meters. Cloud City Flagship Store is a typical youth community. It is the largest long-term rental apartment in Shenzhen, with more than 6,000 young people gathering here. There are many types and quantities of third space in this area(Figure 1).

2.2. Study objects

At present, there is no clear definition on the meaning of "empty-nest youth". The people studied in this study are single young people in the study area, aged 18-35 years old, working in Shenzhen, living alone or sharing an apartment with strangers, far away from home.

2.3. Data sources

The data needed for this research comes from questionnaire survey, including field survey and network survey. The research time is concentrated on the weekend from June 22 to June 30, 2024 which is the time when a large number of youth in the community are located in the community, and also the time when a large number of them use the third space, so it is more representative to conduct the survey during this period. A total of 211 questionnaires were issued in this survey, of which 205 were valid, with an effective rate of 97%.

2.4 Research methods

(1) Field observation method

According to the characteristics of the third space proposed by Oldenburg, from the five dimensions of sociability, fairness, accessibility, stability and comfort, through field observation and interviews with young people living alone and community managers, the third space is identified within a 500-meter radius centered on the Porto apartment.

(2) Questionnaire survey method

Through the questionnaire survey, the basic information of the subjects, the degree of loneliness and the preference of using the third space were collected.

The questionnaire mainly includes three parts:① The first part is to collect basic information about the young people living alone. Eight questions are used to collect the age, sex, length of living alone, education level, work industry, disposable income, reasons for living alone and reasons for limiting the expansion of social circle of the youth. ②The second part is to collect the third space use preference. Four questions are used to collect the types of third space often used by the youth, the frequency, the duration of each use, and the types and quantities of the third space used. ③The third part is to investigate the degree of loneliness. The third edition of the UCLA Loneliness Scale, developed by Russell et al., was used to evaluate loneliness, consisting of 20 items

Quality control was applied to the questionnaire, the purpose and significance of the study was explained in writing to the respondents, the confidentiality of the data was emphasized and only used for scientific research, and informed consent was obtained before answering the questions. Short answer time and obvious random answers were deleted before data analysis.

(3) Statistical methods

Quantitative analysis was carried out on the research data, and SPSS 24.0 software was used for statistical analysis. Firstly, the sample characteristics were statistically analysed, then the loneliness and their

preference for using the third space were statistically analysed, and finally, the correlation between the degree of loneliness of the respondents and their preference for using the third space was analysed.

2.5 Research framework

The first step is to analyze the basic characteristics of the the respondents in Shenzhen, and clarify the characteristics of them.

The second step is to analyze the degree of loneliness of them. The UCLA scale is used to evaluate and analyze the loneliness.



Figure 2 Learning entrepreneurship space. Source: Self-portrait by the author.



Figure 3 Social and leisure space. Source: Self-portrait by the author.

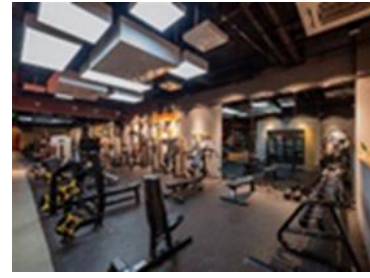


Figure 4 Sports and fitness space. Source: Self-portrait by the author.



Figure 5 Public service space. Source: Self-portrait by the author.



Figure 6 Outdoor leisure space. Source: Self-portrait by the author.

The third step is to classify the identified third space into different levels and types. In terms of hierarchy, according to the applicable population and distance, the third space is divided into two levels. The first level is the third space configured in the Pu apartment community, which is only open to community residents; The second level is the commercial supporting facilities around the community, the users include not only the residents of the Pu apartment, but also other users. According to the interviewee's preference types and functions on the use of the third space, the identified third space is subdivided into five types: ① learning entrepreneurship space, including the Goethe library, business incubation center and self-study room in the community; Bookstores in shopping malls, paid study rooms around them, etc (Figure 2). ② social and leisure Spaces, including video and audio rooms and game and entertainment areas in the community; Surrounding coffee shops (Figure 3). ③ Sports and fitness Spaces, including gymnasiums, badminton courts, billiards rooms and other sports venues inside and outside the community; Dance studio, gym, etc.in shopping malls (Figure 4). ④ public service Spaces, including service desks, express delivery points, public kitchens, meeting rooms in the community; Party and mass service centers and other community service facilities outside the community (Figure 5). ⑤ Outdoor leisure Spaces, including atriums and terraces within the community; Street parks, small squares, etc., outside the community. At the same

time the third space use preference of young people living alone was investigated, including: duration of use, frequency of use, type of use and number of types of use (Figure 6).

The fourth step is to analyze the correlation between the degree of loneliness of the respondents and their preference for using third space by using SPSS24.0 statistical software tool.

The fifth step is to explore the problem, from three aspects, the first is to analyze the source of loneliness from the internal and external causes; Then analyze the shortage of the third space; And to understand the third space needs through interviews.

The sixth step is based on the above analysis, to put forward the third space optimization strategy to alleviate the loneliness of young people living alone (Figure 7).

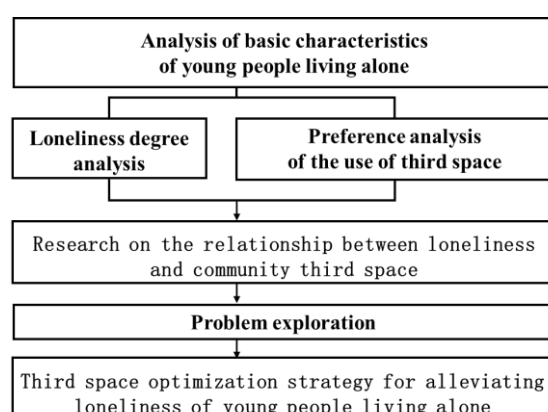


Figure 7 Research framework. Source: drawn by authors.

3. Results

3.1. Sample characteristics

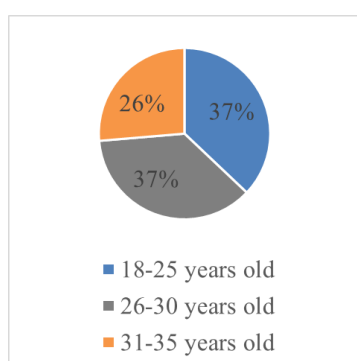


Figure 8 Age proportion. Source: drawn by authors.

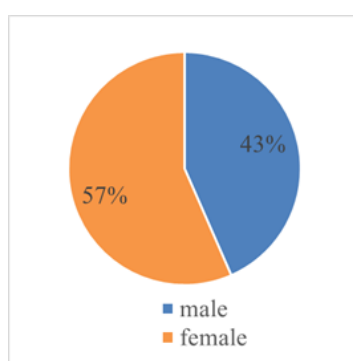


Figure 9 Gender proportion. Source: drawn by authors.

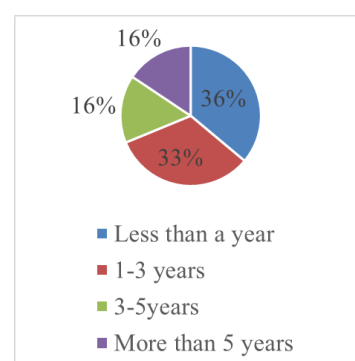


Figure 10 The proportion of time spent living alone. Source: drawn by authors.

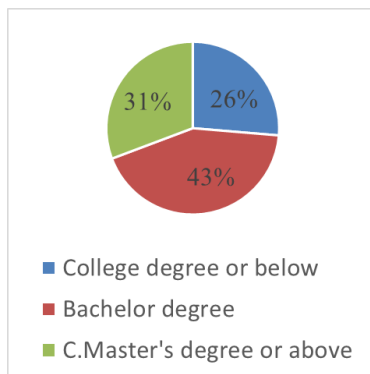


Figure 11 Educational background. Source: drawn by authors.

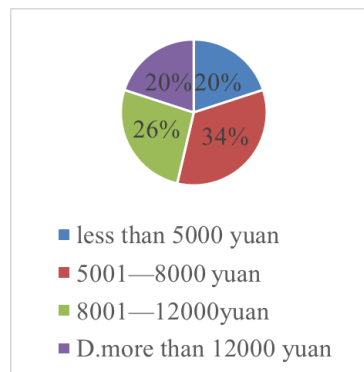


Figure 12 Proportion of disposable income. Source: drawn by authors.

In terms of age, young people living alone are mainly aged 18-25 and 26-30. In terms of gender, the proportion of female respondents is slightly higher than that of male respondents; Respondents lived alone for less than 3 years; Nearly 74% of the respondents had a bachelor's degree or above, indicating a high level of overall education. In terms of individual disposable income, people with a disposable income of 5,001 to 12,000 yuan are the main group. From the perspective of working industries, the number of people engaged in education, service industry and financial securities industry is relatively high(Figure 8-12).

3.2 Analysis on the degree of loneliness

In order to clarify the degree of loneliness of the respondents, the general situation of loneliness of them was analysed. The full score of loneliness is 80 points the higher the score, the higher the level of loneliness. In this study, the total score of them ranges from 24 to 73 points, with an average score of 44.48, higher than the threshold of 44 points for high loneliness, indicating that the overall loneliness is relatively high.

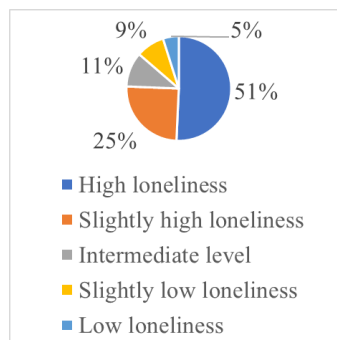


Figure 13 The proportion of loneliness. Source: drawn by authors.

The distribution of different levels of loneliness in this study is shown in the table below. 51% experienced high levels of loneliness, and 25% experienced average loneliness. High loneliness accounted for 76% of the total sample, indicating that most have a high degree of loneliness (Figure 13).

3.3 Analysis of third space use preference

In the survey of the third space preference of the respondents, the duration of third space use, the frequency and the type were respectively used to measure the third space use preference of young people living alone.

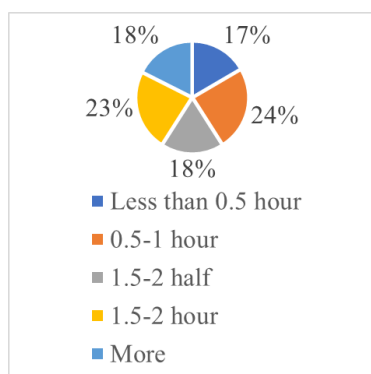


Figure 14 The usage time. Source: drawn by authors.

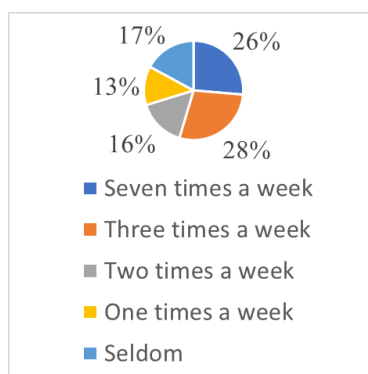


Figure 15 The use frequency. Source: drawn by authors.

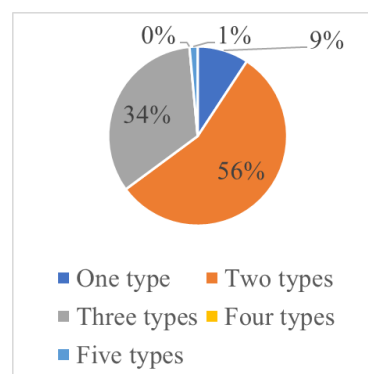


Figure 16 The number of types. Source: drawn by authors.

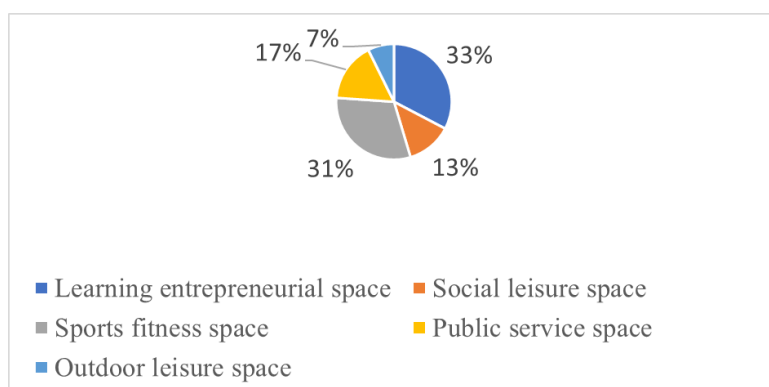


Figure 17 The type. Source: drawn by authors.

(1) Third space use duration

From the perspective of the duration, the proportion of the third space use time of young people living alone is relatively uniform, among which "half an hour to one hour" and "half an hour to two hours" account for a slightly higher proportion, accounting for 24% and 23% of the total number respectively (Figure 14).

(2) Third space use frequency

From the perspective of the frequency of using the third space, the frequency of young people living alone using the third space is mainly concentrated in "once a day" and "three times a week" (Figure 15).

(3) The types of third space use of

In terms of the number of third space use types, only few people use only one type, and most people choose to use two or three third Spaces (Figure 16). From the perspective of the third space use type, young people living alone prefer to use the space for learning and entrepreneurship and the space for sports and fitness, accounting for 33% and 31% of the total samples respectively (Figure 17).

3.4 Correlation between degree of loneliness and preference for the use of third space

In order to explore whether there is a correlation between the degree of loneliness of the respondents preference for using the third space in the community, a correlation analysis was conducted between the degree of loneliness and "duration of use of the third space", "frequency of use of the third space", "type of use of the third space" and "quantity of type of use of the third space", and the following results were obtained (Table 1).

Table 1 The results of the Pearson correlation analysis between loneliness degree and various dimensions

dimension	use time	frequency of use	usage type	number of types
Pearson correlation				
loneliness degree	0.335**	0.343**	0.282**	0.183**

** . At the 0.01 level (two-tailed), the correlation is significant.

(1) Correlation analysis between the degree of loneliness and the duration of using the third space

In order to test the relationship between the degree of loneliness of the respondents and the duration of using the third space, a correlation analysis was made between the duration of using the third space of "them" and the degree of loneliness of them. The results show that the correlation is between the duration of using the third space and the degree of loneliness is significant, And the two showed a negative correlation, the longer the use of the third space, the lower the loneliness.

(2) Correlation analysis between the degree of loneliness and the frequency of using the third space

In order to test the relationship between the frequency and the degree of loneliness, a correlation analysis was made. The results showed that there was a significant correlation. And the two showed a negative correlation, the higher the frequency of using the third space, the lower the loneliness.

(3) Analysis of the correlation between the degree of loneliness and the use type of the third space

In order to test the relationship between the type of using the third space and the degree of loneliness, a correlation analysis was made between the type of "solitary youth" using the third space and the degree of loneliness. The results showed that there was a significant correlation. Among them, the loneliness who use social leisure space and outdoor leisure space is generally low, mainly because the community will hold various social activities in the social leisure space and outdoor leisure space such as music festival, "parking reading party" and "parking outdoors", which promote the social interaction of young people living alone and provide rich opportunities for making friends.

(4) Analysis of the correlation between the degree of loneliness and the number of types of third space use

In order to test the relationship between the number of types of "solitary youth" using the third space and the degree of loneliness, a correlation analysis was made. The results showed that there was a significant correlation. And the more types of third places used, the lower the loneliness.

4. Question exploration

4.1 Analysis from the perspective of population

Because of the two characteristics of living alone and being single, their loneliness is easily amplified. This study analyses the sources of loneliness from the aspects of internal and external factors that restrict their social circle.

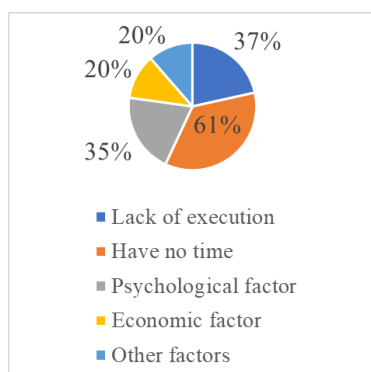


Figure 18 Reasons for limiting social interaction among young people living alone. Source: drawn by authors.



Figure 19. The proportion of reasons for choosing to live alone. Source: drawn by authors.

(1) The internal causes of limiting the social circle

According to the results of the questionnaire, the main reason for restricting the social circle of the respondents is lack of time (Figure 18). Due to the high work pressure, crowding out the time. There is also a situation that the third space is far from the working place and the living place, resulting in a longer time to go to the third space, there is also a lack of "shallow social" in the third space, the current situation of the third space to socialize needs to invest a long time cost. Secondly, the internal factors that restrict the social interaction of young people living alone include their own lack of executive power and arrangement, as well as psychological factors (such as shyness, fear of embarrassment, disinterest and inferiority). This shows that the existing third space is used passively, with low inclusiveness and lack of activities and facilities to actively guide young people living alone to use the third space.

(2) The external causes that restrict the social circle

Through the interview, it is concluded that the external reasons limiting the social circle of the respondents mainly include: lack of inheritance of the relationship of the father; The space cannot meet the social needs of them in the fast-paced society; Life shows a monotonous work.

Under the background of modernization transformation, the change of social structure promotes the evolution of social relations, and the traditional social communication faces the double barrier of time and space. From the perspective of space barrier, the traditional Chinese society has the characteristics of stable land relocation and generation stability. In the daily production and work an acquaintance society based on the pattern of difference has been formed. With the deepening of modernization, the social division of labour tends to be refined, the whole society is filled with a variety of occupational types, the pace of modern life has a large heterogeneity, and it is precisely the heterogeneity of this, which restricts the formation of contemporary youth deep social relations. Even if they are not far away from their friends, the pace of life is different. When they finish their work and enjoy socializing, their friends are working overtime, and the rest day happens to be their working day. It is difficult to have friends with them every time they fall into loneliness. Most of the youth in Shenzhen are divorced from their native growth environment, and cannot quickly integrate into the new environment, unable to get a sense of belonging, thus extending the sense of loneliness.

The existing third space cannot meet the needs of young people in the fast-paced society. Compared with the traditional third space of restaurants and physical stores, young people living alone prefer to use

takeout and express delivery to meet their eating and shopping needs, which reduces a lot of face-to-face socializing and is also one of the sources of loneliness for young people living alone.

The main reason why they choose to live alone in big cities is to get better job opportunities. However, long working hours and long commuting time result in a single, work-based life for most young people (Figure 19).

4.2 Analysis from the perspective of third spaces

Through the interview, it is found that young people living alone have a higher utilization rate in the community, but a lower utilization rate around the community, mainly due to the serious homogeneity of the third space outside the community and random service groups. However, the third space in the community is designed for the respondents and meets their needs. At the same time, the community is closed management, and the service group is relatively fixed, which is more conducive to forming a fixed social relationship network and promoting the use of the third space by young people living alone.

(1) The third space outside the community is seriously homogenized and has a single function

Through the interview, it is found that the dissatisfaction factors are mainly concentrated in the aspects of "single function", "single type of facilities" and "unattractive", indicating that the existing third space cannot fully meet the them for the use of the third space. Through field observation, it is found that the existing third space follows the traditional community setting and configuration standards, is equipped with template facilities and equipment, is seriously homogenized, lacks innovation and characteristics, and runs contrary to the interests of them. It is difficult to meet the needs of them for diversified and personalized space, and it is difficult to stimulate the interest and enthusiasm of them, resulting in a decrease in the frequency of use. Which further aggravates their loneliness and lack of social interaction.

(2) The third space outside the community serves the population randomly

Field observation shows that the third space outside the community, such as shopping malls, parks, etc., serves people of all ages, including the elderly, middle-aged, young people, etc. At the same time, people appear in the form of families or other groups, which has a strong randomness. Young people living alone cannot have effective social behaviours in such third space, which enhances the sense of isolation of young people living alone. Therefore, young people prefer to meet their needs by online shopping and take-out rather than offline physical space.

4.3 Analysis of the needs for the third space

(1) Targeting the need of young people

Through the interview, it is found that young people living alone frequently use words such as "minority treasure", "concert", "slow space", "coffee" and "socializing" in their expectations for the improvement of the third space. Young people living alone hope to relax in the fast-paced life through the third space; They hope to take their own interests as the starting point, find a suitable third space, and carry out social activities based on interests.

(2) Forming a relatively stable social relationship

Through the interview, it is found that young people living alone generally hope to have a "partner" when using the third space. They have the same interests and needs, and can accompany each other when using the third space. Similarity plays an important role at the beginning of interpersonal relationship, and interests and hobbies are the main sources of similarity between people. A "partner" is formed based on

precise personal interests or needs, meeting the diverse needs of interpersonal relationships and enabling young people to be accompanied in different areas of work and life.

5. Discussion

Based on the analysis of respondents' needs at the population level, spatial level, and third-space level, the author proposes strategies to improve the design and construction of third spaces in youth communities and surrounding areas:

(1) Policy formulation level

Introduce policies supporting youth community construction and third-space development. These policies should emphasize the importance of third spaces in community planning and encourage developers and managers to provide more diverse, high-quality third spaces^[5].

Improve youth community construction guidelines and standards. These should fully address young people's needs, clarify the positioning and goals of youth communities, and provide direction for third-space development.

Establish incentive mechanisms, such as tax benefits or rewards, for communities and businesses that create outstanding third spaces, thereby encouraging broader societal participation.

(2) Planning and design level

Enhance spatial functionality and facilities to accommodate social events of varying scales and types. Within limited spaces, adopt the "spatial compounding principle" or the "multi-scene adaptability principle", allowing flexible adjustments to meet different functional and activity needs.

Create an atmosphere that fulfills emotional needs, fostering psychological cues that promote social interaction. Incorporate unique design elements aligned with young people's preferences, such as distinctive colours and materials, to establish memorable spaces that attract engagement.

(3) Community management level

Beyond maintaining third-space facilities, organize diverse social activities, including interest groups, outdoor adventures, cultural exchanges, and volunteer services—not just traditional gatherings. Regular events can provide platforms for young people to connect, share experiences, and grow together, reducing loneliness and strengthening community bonds.

6. Funding

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