

Function and Limitation of Volunteer Organization -- Reflection on Dormitory Environment Construction Based on Game Theory

Ruixia Zhang¹, Haishan Wu^{2,Corresponding Author}, Wang Tian¹

1.School of Government Administration, Inner Mongolia Normal University,Hohhot 010000, Inner Mongolia Autonomous Region,China

2.School of Marxism, Inner Mongolia Normal University,Hohhot 010000, Inner Mongolia Autonomous Region,China

Abstract: As we all know, college life is a buffer station for one to change from the role of a student to a socialized person. College students spend at least half of their school time in dormitories, so dormitory environment has a huge impact on one's physical and mental health. The dormitory environment of most universities in China is not optimistic. On the one hand, some students do not flush the toilet and throw rubbish into the washroom. Secondly, some students talk loudly during the break, which affects other students' rest. Thirdly, dormitory garbage is not thrown out in time, and the sorting trash can at the gate of school dormitory is arranged. This paper mainly studies through the use of cooperative game theory to attract college students fall over each other to participate in the volunteer organization, and then influence other students with poor self-restraint ability to change their behavior, so as to improve the campus environment, and college students a healthy, clean and hygienic dormitory environment.

Keywords: Volunteer organization ; College dormitory ;Environment cooperation ;Game theory

These negative emotions sometimes produce hatred for the society, will have a strong sense of revenge, to the criminal mind formed up to promote the role. In recent years, the dormitory environment of colleges and universities in China is frequently malignant, resulting in bad social influence. On the contrary, dormitory environment is clean, neat, comfortable, sense of happiness and happiness naturally increase. Therefore, it is urgent to improve the dormitory environment in Chinese universities.^[1] The fifth Plenary Session of the 19th Central Committee of the COMMUNIST Party of China (CPC) on October 29, 2020 proposed that China has a long way to go in ecological and environmental protection, strengthening basic research, focusing on original innovation, and promoting interdisciplinary integration. We will deepen reform of the talent development mechanism and implement a more open talent policy. This provides the author with great inspiration for this research.

This study through the network questionnaire randomly on the different sections of the Chinese college students of different schools to investigate and interview method to get the related data, then USES the cooperation game theory and the empirical study method, case method analysis volunteer organizations in colleges and universities in university dormitory environment how can maximum full play the role. Study the countermeasures to improve the dormitory environment of Chinese universities.

1. Current situation of college dormitory environment

Since reform and opening up China's volunteer service unceasing development, xi jinping, general secretary of the association of volunteer service in China in the second session of the member representative assembly "congratulations" proposed "the party committees and governments at all levels should strengthen volunteer service platform construction, increase the intensity of support, to promote voluntary service institutionalization, regularization and unite the people, To realize the two centenary goals of "working together" for the great rejuvenation of the Chinese nation and the Chinese Dream "^[2]. Volunteer organization is the most important part of volunteer service. In the face of major disasters, Chinese people have a stronger sense of participating in social volunteer services, such as the 5.12 Wenchuan earthquake, the outbreak of COVID-19 in early 2020, and the special rainstorm disaster in Zhengzhou in 2021. We can see the shadow of volunteers, which cannot be left without the efforts of volunteer organizations.

1.1 Universities are mainly composed of undergraduates

There is no doubt that there are more college students than graduate students in every university, most of which exist in a ratio of 1:10. Most college students are born after 1995 or even 2000. There are quite a number of students are the only child, and after China's reform and opening up people's living standards gradually improved, parents dote on their children, all on demand. Over time, these students get used to going their own way, are less tolerant and find it difficult to adapt to group life.

College student dormitory management is an important part of campus culture construction, but also a long-term complex and constantly changing project. The vast majority of students hope to have a clean and hygienic dormitory environment and have a good man-machine relationship in the dormitory. However, according to the actual situation, the dormitory environment of many colleges and universities in China is not optimistic. Especially, "Mengxin" will get to know the school through various Post bars and Zhihu before the new semester starts, and pay more attention to the dormitory environment. There are a lot of jokes on the Internet, and even a lot of questions about why this is happening. There are some students who choose not to speak out.

1.2 Campus garbage classification

On the one hand, at present, almost all colleges and universities in China have sorted garbage cans. In Inner Mongolia Normal

University, where the author works, there are different colors of garbage cans in front of each dormitory building, but for students, they are just garbage cans, and it is very difficult to take out garbage from the dormitory. Let alone categorize. And unattended. Over time. Garbage classification is just a noun existing in people's consciousness. Different from traditional garbage, campus garbage is mainly concentrated in (1) take-away lunch boxes (2) plastic bags (3) household garbage (4) old books and express delivery boxes. The fourth category is almost all the aunt cleaning dormitory cleaning up to change money.

On the other hand, no one takes the lead in garbage classification, and there are not many lectures on garbage classification, with insufficient attention and weak awareness among students. Jamie Bo bear says; Nature doesn't need man, man needs nature. On June 8, 2021, the 14th World Oceans Day, we are familiar with the keywords of the ocean, including ups and downs, surging and deep, but many people do not know that 150 million tons of plastic waste is floating in the Marine environment, and tens of millions of tons of household garbage is discharged into the sea every year. Garbage sorting helps us save resources and build a resource-friendly environment. For our own healthy environment, for the ecology of the whole Chinese people, for the sustainable development of the global ecology. Garbage classification in colleges and universities is of great significance. In the process of research, 336 people threw garbage by category, accounting for 38.93%; There are 339 people, accounting for 39.28%, who display various colors many times and never look at them. 182 people, accounting for 21.09%, need relevant departments to introduce corresponding management measures; 115 people, accounting for 13.33%, are required to give lectures on morality regularly.

1.3 College dormitory environment

Students live a three-point life, classroom, canteen and then dormitory. A few people go to a library and then a dorm. At present, during the epidemic, domestic colleges and universities implement closed management, and students' shopping time is almost zero. This means that students spend most of their time in the dormitory. There is a famous saying in the movie "The swordsman of the East undefeated" "where there are people, there are rivers and lakes" various problems come, summarized as the following aspects (1) do not flush after going to the toilet. Especially after taking a dump. This was the thing that aroused the most indignation among all the students. According to statistics, three years of a person's life is spent in the toilet. When urine accumulates, it is easy to decompose into ammonia, which is a poisonous gas. When inhaled, only a small part of ammonia will decompose into carbon dioxide and water, while most of it will enter the study and combine with hemoglobin, destroying the function of oxygen transport in the study. In the short term inhalation of a large number of ammonia regret tears, sore throat, cough, chest distress, dyspnea, dizziness, vomiting, examples, such as inhaled ammonia too much will lead to too high ammonia concentration in the blood, will pass the trigeminal nerve terminal reflex action and cause cardiac arrest and respiratory arrest, crisis of life. There are bacteria in stool, if not rushed down in time, bacteria will float into the air, e. coli is one of them. When inhaled into the lungs, it can cause sepsis. The United Nations General Assembly adopted a landmark resolution in 2013 after rounds of deliberations to designate November 19 as World Toilet Day. (2) All kinds of rubbish (instant noodles, tea and other residues) are poured into the washbasin of the toilet. The one shown in Figure 1 is already a little better. Especially in the southern humid environment, bacteria are more likely to breed and harm people's health, which also increases the workload for cleaning aunt. One person, two people, three people on a floor have two bathrooms and the bathroom is almost always connected. One bathroom and toilet will serve nearly 20 dorms of students, that is, nearly a hundred people. The random actions of a few people will cost the health of nearly a hundred people insulation effect is poor, the upstairs students and the students next door are loud to hear clearly, and the students have been staying in bed until 11 o'clock in the evening before they are willing to move the body to the water room to wash, but also kept chatting on so a few words, laughter echoed in the whole bathroom. Then the students next to the bathroom are very depressed. Sometimes it goes on until one o'clock in the morning. This is why hairlines are often discussed on the Internet. Staying up late for a long time not only affects your body's immune system, but also affects the sleep quality of others. Things that do harm to others do no good. But it didn't help that the dorms kept talking. The most let a person laughable is the dormitory of the students talk a lot of is "today the toilet has not rushed of, tell give up a friend to observe" then talk about shape, color and so on this normal?

(FIG. 1 Investigation on the influence of rest time on others)

can	242 people	More than 28.04%
Can't	377 people	More than 43.68%
It is good to give up the noise	244 people	More than 28.27%

Lack of communication. Many students in colleges and universities only know the students of this major after graduation, and do not know the students of other colleges of other majors. A building or even a floor or do three to miss the neighbor after graduation is also do not know each other. People are impersonal to each other. If some salon activities can be held in the dormitory, students can communicate with each other, which will help to establish a good friendship between each other and promote mutual learning between different subjects. General Secretary Xi encouraged us to try more interdisciplinary research. In 2021, 14 interdisciplinary disciplines were added across the country, which is also a strategic measure to strengthen national security capacity building, enhance the recognition of interdisciplinary disciplines among academia, industries, enterprises and the public, and provide a better channel and platform for the development of interdisciplinary disciplines. (4) The jarring environment of the dormitory. Students because of their different outlook on life, values and the previous living environment, so many times now living habits are not the same, some students do not sleep at night, the light, even if the voice and movement as low as possible is also a lot of gentle. But in the quiet environment to sleep light students can still clearly hear, so it is difficult to fall asleep, after the night to go to sleep is difficult to enter the state of sleep. So there is no doubt in my mind that I will resent the classmate who does not sleep at night. Some students rhinitis serious, constantly wash nose, a meal down are eating while washing. And in a cramped dorm room. I feel indifferent. But other people

are eating something or think it's disgusting. Several interviewees indicate that there is such a situation. It's just the adult world doesn't say it out loud. Over time, these are all foreshadowing the unstable relationship in the dormitory. Just one day a classmate happened around a little bad things, bad mood, unbearable. I just opened my mouth and said it. You can imagine the consequences of a bad tone. Plus the lack of timely psychological counseling. Revenge heart aggravation, the relationship is further bad. In the course of the survey, female students accounted for 66.28%. Male students accounted for 33.72%

The above five points are almost universal problems in most college dormitories in China, and are also the daily puzzles that puzzle college students. It is even a topic of discussion among students in various universities. Talented students everywhere, all kinds of descriptions, all kinds of metaphors make people laugh and cry.

2. Discussion

Many people know how clean the toilets are in Japan. Many CEOs clean the toilet first when they go to work. And many public restrooms in Japan have posted signs forbidding eating in restrooms or fines. Why is that? In my country it's the complete opposite. The average Chinese may laugh at this for the first time, but in China toilets are filthy places. People don't want to go to the bathroom to eat even if they are paid, let alone go. China's reform and opening up has not lasted long and it is still in the early stage of socialism. There is still a gap between people's civilization consciousness and that of developed countries. So in colleges and universities is the birthplace of the motherland's culture, first of all, we should only start from the dormitory environment of colleges and universities. Next, we will discuss how to change the dormitory environment through college volunteer organization.

2.1 Attach importance to model learning culture. General Secretary Xi Jinping said that only when heroes are respected will there be many heroes.

China's Liaoning province has not only the Spirit of Lei Feng but also the spirit of Guo Mingyi. In particular, Anshan city of Liaoning province has widely publicized and popularized the volunteer spirit and concept, and constantly promoted the standardized construction of volunteer organizations. There was even the rumor that "people from the Northeast are living Lei Feng". It is suggested that colleges and universities carry out regular lectures on exemplary moral learning in each dormitory building. Enhance students' moral cultivation and ideological and political education.

2.2 Strengthen rewards and punishments for schools.

Although the dormitory administrator aunt group kept reminding to take out the garbage in time, but also because of the epidemic, sent upstairs three times a day to urge each dormitory to take out the garbage. But most people do not implement, some dormitories put the garbage on the door of the dormitory, aunt in the past to check, quickly get back, aunt. Throw it out. It's all a cat-and-mouse game. She turned a deaf ear to her aunt's good intentions. Most students can not see the bacteria, think it is a storm in a teacup. Interviewee Xiaoyu's roommate thinks so. I have rhinitis, I like to solve it in the dormitory whether others are eating or not, the noise is also loud. She is very helpless to say that try to avoid roommates eat in the dormitory. And her roommate waited for a bag of toilet paper before throwing it out. In general, garbage is cleaned every 4 days. Finally, under her repeated persuasion, although she was not happy, she changed it to clean every 2 days. This phenomenon also exists through interviews with other dorms.

2.3 The school issued a clear reward and punishment system.

There is a school principal on the Internet who waits in the cafeteria to eat leftovers from students so that students do not waste food every day. This is a temporary relief. Why is there so little waste in cafeterias, when people eat in moderation? Because there's a penalty for waste. In view of the uneven quality levels of college students in Our country, a high degree does not represent high quality. The most direct and effective way is to increase the severity of punishment. Specific can draw lessons from the following policy (1) fine. If you are caught not flushing the toilet, you will be fined 50 yuan.

Garbage not classified found a fine of 20. Throw garbage to the washbasin fine of 10 yuan. 5 yuan fine for making noise during rest time. Dormitory garbage not kicked out in time fine 5 yuan. Although the money is not much, people do not pay attention because the cost of the action is too low. The reason why there are so few thieves in Singapore is because the cost of being a thief is so high that people don't dare. (2) Reward system, reward found not to flush the toilet school reward 100 yuan, and in order to protect their personal privacy or not to be retaliated against in the future, the school should protect their personal information. Other behaviors are rewarded differently in turn. (3) The whole school notified and given punishment according to the serious circumstances. Found this situation in the public account of the school and the official website to give notice of criticism. (4) Establish personal civilization archives. I have heard of the integrity of the archives before, but with the continuous development of the society now, the degree of civilization feel that the requirements of improving, it is necessary to establish civilized archives for students in school. This will be the most severe blow to the uncivilized behavior of students. And reward those who volunteer for volunteer organizations.

2.4 Application of cooperative game theory model in university volunteer organization's environmental governance of university dormitory

Through the questionnaire survey, most people are willing to participate in volunteer organizations for volunteer activities. As an old Chinese saying goes, there are no permanent friends in the world, only permanent interests. Only when there is a certain interest relationship, people will have a strong desire to participate in the volunteer organization and will pay attention to it. According to the survey, 37.89% of students believe that they will participate in a volunteer organization only after they have obtained the volunteer organization. 38.01% of the students said they would participate as long as they had time. 20.16 percent of students think it is a waste of time to participate in volunteer organizations. In addition, 15.41% of the students said that they did not know how to participate and believed that the organization lacked regular publicity. While investigating the question that would most move you to volunteer. 25.38% think that a certain reward should be given. 53.07 students think that they need no other encouragement to participate when they have time. 15.69% of the students were most attracted by the opportunity given to Liu Xiao to participate in the volunteer organization. 17.96 students think that giving certificates or credits is the most attractive thing to them. All these show that most of the students are caring.

However, the operation of volunteer organizations will involve costs, and volunteers will first consider their own work in the process of participation. Volunteer organizations play a role as a bridge and link in the process of volunteers' participation in activities, which involves the interest relationship between university volunteer organizations and schools, as well as students (students are the main influent of university dormitory environment). This kind of cooperative relationship seeks to achieve a balance on the basis of certain interests. They coordinate with each other and form an alliance with certain binding force to seek the maximum interests within the alliance, and then share the total benefits of the cooperative alliance with this cooperation agreement. This theory emphasizes rationality between groups, and aims at efficiency, fairness and justice. In the process of cooperation, it discusses how groups can achieve benefit distribution and maximum under the interaction, so that everyone acts together for the same goal and forms a good and sustainable relationship^[3-4] Cooperative game theory was formally proposed by John Von Neumann and Osker Morgenstern in 1944^[5]. Volunteer and volunteer organization, so we only need to study the characteristics of cooperative game between volunteer organization and university. Cooperation itself has certain particularity. See Table 9 below

University volunteer organization (Table 2)^[6]

Choose not to cooperate
Not cooperating 1, 1, 1,0
Cooperation 0, 1, 2,2

In the matrix of this table, there are two pure selection equilibria $\{1,1\}$ and $\{2,2\}$ and a mixed selection equilibrium (both university volunteer organizations and schools choose cooperation or non-cooperation with a probability of 1/2). University volunteer organizations and schools will not actively choose to cooperate during the game. A cooperative relationship in an environment of incomplete trust is not the best for either. In general, the volunteer organizations of colleges and universities are the leaders and the led, and usually the volunteers formed by the students in these colleges and universities do not give money. Very few colleges make reference to scholarships. The general dormitory environment of the university is outsourced to a third party, which also requires certain economic expenditure. Sometimes for various reasons, volunteer organizations do not take the initiative to talk about cooperation and interests with the school. Only $\{2,2\}$ equilibrium is the most ideal effect in the game between college volunteer organization and school, which is pareto optimal Nash equilibrium in economics. All other equilibrium options can be improved, which is called cooperative failure.

Analysis of cooperative game between volunteer organization and university. Both sides have the characteristics of public welfare and non-profit. At present, most universities in China either out of incomplete trust or lack of communication, both sides will make favorable non-cooperation choices with the perspective of brokers. Both sides seem to be in a prisoner's dilemma. In fact, the principle of cooperation is different between the non-profit nature of schools and the non-non-profit nature of volunteer organizations. This leads to different levels of participation in the collaboration. In fact, the cooperation of university volunteer organizations in dormitory environment is not a simple game, but a process. Members of volunteer organizations in colleges and universities have already lived on campus and have a certain understanding of the dormitory environment, which may be better than teachers to know their classmates. Only when you have a complete understanding of a matter can you have a better say. Let the volunteer organization participate in the dormitory section. You can have a lot of expenses left over. If the money donated to the third party is used to support the volunteer organization, then there are some students from poor families who are particularly diligent. These students can join the volunteer organization, and then they can get some remuneration through their spare time to reduce the economic burden of their families. At the same time, I grew up. If the fire does not cooperate unilaterally, it will only reduce its own profits. Like word of mouth and civility. Because most of the people employed by third parties are middle-aged, they have little energy, drive and generally lack knowledge. However, in the cooperation, the two sides do not match, it will lead to the decline of each other's income and the overall income; But if you put less resources on the side, you make a little adjustment and you get a little bit more revenue overall. Take a dormitory building as the unit for cooperation. Assume that each floor is 6 floors high, and each floor is equipped with 4 volunteers to clean in turn, so that 24 students are needed. Then, each floor is equipped with an administrator. That makes a crew of six. There are two chief managers in a building. It takes 31 people to finish a building. Because everyone can work for 2 hours a day, so the salary is set at 1000 yuan a month, which is 31,000 yuan a month, and 400,000 yuan a year is more than wrong in this aspect. The school invested \$400,000 based on past experience and current contract. At the same time, the financial situation of the students has been improved. By participating in the process of improving the dormitory environment, they have become more aware of the difficulties of life. Other students also see students in the answer, sometimes will be embarrassed. Will be less granted, students often hold some activities in the dormitory. The emotional exchange under the dormitory building and downstairs was reciprocated by mutual conversation. People comity harmony, civilized dormitory wind established, students in a good mood, good learning atmosphere. Such university reputation is the name card of the university. Based on the prisoner's dilemma, the game relationship between the volunteer organization and the lower school believes that if one party does not fully cooperate, its return on investment can be improved. The school invests 200,000 yuan and the volunteer organization invests 15 people, which increases the burden of these students and reduces the participation of long-term volunteers to some extent. Not conducive to the stable development of the organization. The inconsistent investment ratio, the mismatch between variable cost and fixed cost, and then neither side gets a higher rate of return on investment, but on the contrary, both sides get lower returns, and the high investment ratio leads to serious losses. If the cooperation environment is good, the two sides will not take the initiative to reduce investment. The benefits between volunteer organizations and schools conform to the short board effect, that is, the degree of mutual investment determines the level of cooperation benefits. The overall benefit of cooperation depends on the former participation or less investment of both sides. There is a game between schools and enterprises.^[7]

Based on the discussion, the game of conscience between the school and the volunteers can be determined, and both sides act in

accordance with certain principles and rules. It can be considered that a special teacher is responsible for this section in the early stage. Make full use of the advantages of volunteer organizations, break the previous simple leadership relationship, grant certain rights, further optimize the mechanism of cooperation, and achieve a win-win situation.

3. Conclusion

In the United States, volunteer organizations have roots at the grassroots level and are a convenient means for people to express their wishes. And the service scope and involves a wide range of fields, including education, culture, medical care, health, social and family assistance, environmental protection and so on. They also have more money. Volunteer organization of rigid system and soft constraints of this aspect of experience value of China's study and combined with the actual situation of our country for reference. This paper mainly through the university volunteer organization and the university reached a cooperative game, students from poor families can go to school at the same time by participating in their favorite things to reduce their economic pressure, the university volunteer organization has been further developed and attention. Accumulate experience for entering society in the future. At the same time, the establishment of some rigid reward and punishment system, from the school level to pay attention to the college dormitory environment more concerned about the physical and mental health of students. Maintain good dormitory culture and dormitory environment. Every college student can have an unforgettable college or graduate life, and provide strong logistics support for their study and scientific research. At the same time, it also contributes to the civilized level of the school.

The sample in this paper cannot represent the whole university environment in China, and my own theoretical learning is not rich enough, so I may not be rigorous enough. In a word, the author will further study and explore volunteer organizations in his favorite field.

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