

# Investigation Report on Problems in the Usage of Blue Bicycles in Campus

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**Abstract:** In order to advocate the concept of green economy and environmental protection, bicycle sharing has entered people's lives in China. In Qujing, Yunnan Province, many college students ride shared bicycles in campuses. Some problems emerge in this process, which exposes many defects in management and human nature, and should be studied and solved.

## 1. Introduction

Bicycle sharing has been a popular trend since a few years ago. Qujing Normal University also introduced shared bicycles in this semester, which facilitated people's transportation to a certain extent. But after a period of trial, some problems emerge and cannot be ignored.

## 2. Brief Introduction to the Investigation

Time of the investigation: May the 31st to June the 10th, 2018

Purpose of the investigation: this survey aims to find out college students' opinions on bicycle sharing and problems they encounter in the process of using these bicycles; the summary and analysis are provided afterwards

Objectives of the investigation: all students at the Qujing Normal College.

Methods of the investigation: random interview, questionnaire survey and actual investigation.

## 3. Analysis of Survey Results

Question 1: Are you a teacher or a student? (Figure 1)

item	subtotal	proportion
teacher	4	3.36%
student	115	96.64%
the number of valid answers	119	

Figure 1 Question one

Analysis: The majority of shared bicycles are used by students. More than 80% students in the school use shared bicycles. It can be seen that the sharing bicycle is more and more deeply connected with the daily life in the school.

Question 2: How well do you know about the types of shared bicycles in the market? (Figure 2)

item	subtotal	proportion
one or two types	65	54.62%
three to six types	50	42.02%
above six types	4	3.36%
the number of valid answers	119	

Figure 2 Question two

Analysis: The vast majority of people have a high degree of understanding about sharing bicycles. All objects in this survey can know above 1-2 brands of sharing bicycles which are commonly seen. Shared economy represented by shared bicycle is the trend of future social development.

Question 3: How often do you use shared bicycles? (Figure 3)

item	subtotal	proportion
never	20	16.81%
occasionally	79	66.39%
often	18	15.13%
everyday	2	1.68%
the number of valid answers	119	

Figure 3 Question three

Analysis: Only a small proportion of people use shared bicycles with high frequencies; most people only use shared bicycles occasionally.

Question 4: What aspects of sharing bicycles attract you? (Figure 4)

item	subtotal	proportion
large quantity and easy to find	74	62.18%
less guarantee deposit and low price	71	59.66%
easy to unlock	32	26.89%
pretty appearance	5	4.2%
others	23	19.33%
the number of valid answers	119	

Figure 4 Question four

Analysis: Most people choose this kind of transportation because of the convenience and affordability of shared bicycles. Few people care about the appearances of bikes.

Question 5: Under what circumstances would you use a shared bicycle? (Figure 5)

item	subtotal	proportion
traffic jam	21	17.65%
short distance	72	60.5%
inconvenient traffic	52	43.7%
trip for fun	80	67.23%
curiosity	25	21.01%
others	20	16.81%
the number of valid answers	119	

Figure 5 Question five

Analysis: When going for a near destination for a trip, most people choose shared bicycles. The numbers of people who use shared bicycles due to traffic congestion or traffic inconvenience also increase, which shows the advantages of shared bicycles.

Question 6: What circumstances will prevent you from using shared bicycles? (Figure 6)

item	subtotal	proportion
need to download the application	54	45.38%
complex certification procedure	76	63.87%
high guarantee deposit	77	64.71%
easy to pay but hard to get the money back	53	44.54%
complex using procedures	46	38.66%
errors in the backstage data and mistakes in the cost	57	47.9%
others	24	20.17%
the number of valid answers	119	

Figure 6 Question six

Analysis: The complex sharing bicycle application download procedure has become the main reason which prevents people from using these vehicles. In addition, the deposit needs to be paid in advance and calculation errors also make some people stay away from shared bicycles.

Question 7: What do you think are the main problems in the shared bicycle market? (Figure 7)

item	subtotal	proportion
Users are in low quality and destroy bicycles	111	93.28%
appropriate the shared bicycle to oneself	101	84.87%
use other methods to unlock the bicycle	74	62.18%
parking bicycles randomly	95	79.83%
carry a person in the bicycle	68	57.14%
add child seats	35	29.41%
others	19	15.97%
the number of valid answers	119	

Figure 7 Question seven

Analysis: This problem is pertinent. At present, the main problem of shared bicycles is the serious damage, followed by possession, fancy unlocking and random parking. The problem of carry persons through bicycles also occurs from time to time.

In our school, a lot of small blue bicycles are destroyed, locked or maliciously damaged. The problem of fewer vehicles in rush hours is also serious. Two-thirds of the total population has encountered such problems, while the remaining one-third students have been unable to find bicycle parking places or encountered APP problems.

71% of the students think that the damage rate of shared bicycles reflects people's moral quality, while 27% think that the damage of shared bicycle cannot become the standard of judging people's moral quality.

Question 8: What suggestions do you have for regulating the order of the bicycle sharing market? (Figure 8)

item	subtotal	proportion
Users must be over 12 years old and establish a real-name system	58	48.74%
No parking in closed units or residential districts	78	65.55%
Setting up maintenance points and requiring people to repair bicycles consciously	84	70.59%
Restricting people who steal shared bicycles through economic methods	82	68.91%
Others	11	9.24%
the number of valid answers	119	

Figure 8 Question eight

Analysis: To standardize the chaotic management of shared bicycles, most people think that

maintenance points should be set up while the fined system should be adopted. Secondly, the privatization of shared bicycles should be prohibited. A small number of people think that cyclists need to be over 12 years old and the real-name certification mechanism needs to be applied.

Question 9: What do you want to say or complain about the situation after shared bicycles enter the campus? The following chart is the statistics of keywords. (Figure 9)

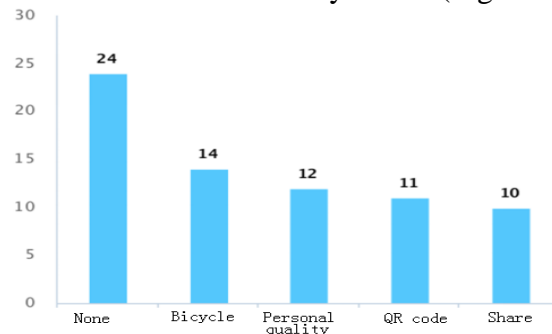


Figure 9 Question nine

Analysis: According to answers and the statistics of Keywords, we can draw following conclusions. Firstly, most people think that cyclists should improve their personal qualities and care for shared bicycles. Secondly, some people believe that bicycles should be parked correctly after using. Thirdly, a small number of people resent the behavior of modifying the QR code, and believe that these behaviors are criminal acts.

## 4. Managements and Reflections

### 4.1 Existing problems

1) The security of deposit and QR code scanning are public concerns, accounting for 61% and 77% respectively. Teachers and students are worried that some people with malicious intentions may make profits through sharing the QR codes of bicycles.

2) 84% of the students think that shared bicycles should be managed independently in order to facilitate the traffic in campus. This shows that there are some hidden dangers in the use of shared bicycles in campus.

3) 69% research objects believe that the lack of behavior monitoring system would affect social order; 62% objects hold that random parking of bicycles would lead to disorderly occupancy of public space.

4) 74% thought that the distribution and quantity of shared bicycles needed to be optimized.

5) 38% of teachers and students surveyed hold that in order to achieve the orderly development, the cooperation between the government and the public is needed.

6) Most people oppose the reservation of shared bicycles, which will not only affect the use of the needy, but also fail to realize the idea of sharing. Some people think that the reservation of sharing bicycles should be treated dialectically. A few people think that the reservation link should be cancelled or the reservation time should be adjusted automatically. For those who do not use bicycles for a long time, their reservation should be cancelled automatically.

7) 75% of people think that the malicious destruction of bicycles will influence their usage afterwards, which not only affects the mood of users, but also spoils the cityscape.

8) In the construction of a low-carbon transportation system, 76% of people think that shared bicycles play a significant role; only 23% think the bicycle sharing is not important.

## 4.2 Reflection



Figure 10 Photos

Above photos are taken in Qujing Normal University (Figure 10). Although these phenomena cannot represent the overall quality of students in our school, they bring bad influence to our college. People who notice these phenomena may have a bad impression on our students. As the saying goes, “a rat’s excrement can spoil a pot of soup.” After all, Qujing Normal University is the only undergraduate college in Qujing; these uncivilized behaviors really make people feel ashamed.

Above is the data analysis on the collected questionnaires about bicycles. We can see that there are many problems in the usage sharing bicycles. The most serious problem is the phenomenon of destroying and privatization of shared bicycles. Some students’ actions are even worse than you ever thought.

If you find a problem, you must solve it. The experience of Zhejiang Province can be taken as reference. In the past few years, the sharing bicycle pilot started in Zhejiang. At first bad behaviors occur from time to time. Some people lock the bike and take it home; some people park the bicycle at will; a number of citizens even detached the parts and components of bicycles... But then, the government introduced a policy: the credit card, the bus card, the health insurance card and the shared bicycle card of one citizen were combined into one card. Parking stations were established. If you don’t return the bike on time, the credit score in your card will be deducted, which lead to the decrease of credit scores in your bank account and even your online shopping account. In addition, a lot of parking places were added, which made it more convenient for people to use bicycles. After the implementation of these policies, the phenomena of destroying and possessing vehicles disappeared immediately. This method can be used for reference by the administration department of the Municipal Government of Qujing.

Some students park shared bicycles in secret places, like the grass clusters downstairs their dormitories for their own convenience. Under that situation, other people who want to use bicycles cannot find them. So in the evening, the school authority organizes staff to move bikes scattered around to the front of the canteen, but this is not a long-term plan. After all, that move is too time-consuming and laborious. It is suggested that the school should specify some parking places and arrange the number of bicycles reasonably. In view of the needs of students in our school, there are too few bicycles at present. It is necessary to improve this APP to ensure that all shared bicycles can be found easily, and that there no bikes are parked in the road, so as to avoid traffic jams.

The issue of reservations for shared bicycles is also a tricky problem. Sometimes the student is in a hurry to go to class, but he cannot use the bicycle he found since it has been booked. It is unreasonable to transform shared bicycles into private goods. It is suggested that the bicycle reservation should be cancelled, or the reservation time should be shortened. The usage of bicycles should follow the principle of “first come, first served”; vehicles should be provided for people who really need it. Otherwise, some people will “hold on to a post without doing any work and not let anyone else take over”, which make others feel anxious.

There are other problems. For example, some people use the baskets to carry a person, which can cause great damage to the bicycle. It is suggested that a rear seat could be added to the back of the bicycle so as to protect the service life of the bicycle.

Thus, to solve these problems thoroughly, the management of schools and the society is necessary. At the same time, the goal cannot be achieved without the improvement of bicycles’ software and hardware. However, students’ public welfare awareness and the idea of sharing need to be improved; their own literacy should be strengthened. This is also a factor which decides whether

bicycles can be used civilly in schools. After all, schools cannot manage everyone at any time. Self-discipline is particularly important at some moments.

## **5. Conclusion**

In short, in order to promote the concept of low-carbon life and green consumption, China has developed a shared economy. The existence of shared bicycles is inevitable; its future prospects are broad. Only by the joint efforts of individuals, enterprises, governments and society can we ensure the better development of shared bicycles and enable people to truly enjoy the fruits of scientific and technological progress. Let us take action, start from small things and build the big civilization. Let the shared economy develop to its maximum potential.

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