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MCGP study on e-bikes in integrated community management-Shijiazhuang as an example

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Abstract: With the progress of science and technology, e-bikes have rapidly entered thousands of households with their advantages of high efficiency, convenience and cost-effectiveness. However, with the popularity of e-bikes, some problems have emerged. The rapidly growing e-bikes bring about increasingly prominent problems such as chaotic parking order, illegal access to lifts, speeding, etc., which are especially obvious in the comprehensive community management. As the capital of Hebei Province and an important part of the Beijing-Tianjin-Hebei synergistic development, Shijiazhuang City, how to effectively govern its social problems is an important issue. Therefore, taking Shijiazhuang City as an example, this paper analyzes and reflects on the operation of electric bicycles in communities under MCGP, and explores the optimization and management research on the practical problems existing in electric vehicles in communities in Shijiazhuang, from the perspective of collaborative governance, aiming to further enrich the research materials and theories in the field of comprehensive governance of electric vehicles communities. It provides some ideas for the comprehensive management of electric vehicle community in Shijiazhuang city and even the whole country.

1. Introduction

With the development of the times, electric vehicles, as an environmentally friendly and energy-saving means of transport, are favoured by more and more people. However, with the rapid growth in the number of EVs, the problems of traffic congestion and safety accidents brought about by EVs are becoming more and more serious. Generally speaking, e-vehicle drivers get on the road without learning traffic regulations, which leads to many illegal behaviours such as running red lights, driving against the traffic direction, not wearing helmets, driving in the motorway, minors riding, and two or more people riding in a shared e-vehicle. Therefore, since 2011, the state has vigorously promoted the rectification of electric bicycles, requiring local people's governments at all levels to formulate and introduce regulations to strengthen the management of electric bicycles, and clearly regulate the production management, market access, registration management, and road management of electric bicycles[1]. At the same time, it requires relevant functional departments of local people's governments at all levels to earnestly fulfill their regulatory responsibilities.

Enterprises are required to make rectification plans and stop producing and selling illegal products[2].In addition, the "Motorcycle and electric Bicycle Occupant Helmet" regulations implemented by the state since 2023 further standardize electric bicycles. Hebei Province actively responded to the national policy, formulated the "Hebei Province Electric Bicycle Management Regulations", and strictly managed the use of electric bicycles in the society, and achieved good results. Hebei Province has responded positively to the national policy by enacting the Hebei Electric Bicycle Management Regulations, which strictly regulates the use of electric bicycles in the society and has achieved good results.

However, in recent years, the comprehensive community management of electric bicycles has become a major problem in social governance, and from 2016 to 2020, there were 364 electric bicycle fires in all of Hebei Province, with four deaths and three injuries, and the number of fires increased by 35.1 per cent over the previous five years. Since 2021 alone, there have been 118 e-bike fires in Hebei province, with property losses of 651,000 yuan[3] . The study shows that most of these accidents arise in communities and a large proportion of them are caused by e-bikes entering lifts and homes illegally. In community governance, the governance problems brought about by the random parking of e-bikes have attracted extensive attention from all walks of life. The root cause of the above problems is that e-bikes are not in place, not comprehensive, and incomplete in the community governance. In the face of the many problems of e-bike community governance, the traditional governance model has been difficult to adapt. Therefore, the author tries to use Multi-dimensional collaborative governance Perspective (MCGP) to take Shijiazhuang City as an example, in order to play a positive effect on the solution of the problems of comprehensive community governance of e-bikes.

2. Conceptual definition and rationale

According to Badakh, synergy is the process by which multiple agents enhance public value through common action[4]. The so-called collaborative governance concept is derived from public management theory. The concept advocates the identification of governance subjects, the creation of good synergistic relationships, and the realisation of multi-stakeholder co-governance in order to enhance the overall effectiveness of governance, improve the operability of governance solutions, and thus ensure the maximisation of the public interest[5] . Specifically, synergistic governance contains two terms, namely synergy and governance. Synergy represents synchronous coordination, in which multiple parties need to co-operate, maintain common agreement and work together to solve problems. In a way, the term "collaborative governance" refers to "joint action, coupled structures and resource sharing through the coordination of interrelationships in the joint handling of complex social and public affairs"[6] .

Multidimensional Collaborative Governance Perspective (MCGP), on the other hand, is a further development of collaborative governance, which emphasises the need to go beyond the traditional single governance subject and linear management method to adopt a multidimensional and multi-level collaborative and cooperative approach in order to jointly exert governance effectiveness when solving complex social problems and achieving public goals. At the same time, multi-dimensional governance subjects should have clear responsibilities, complement each other, and work together to achieve governance goals, so as to form a governance synergy. The core elements of the multidimensional synergistic governance perspective include:

1) Multi-subject participation: It includes not only government agencies, but also enterprises, social organizations, individual citizens and other multi-subject governance entities to form cooperation between multi-subjects.

2) Cross-field integration: Cross the boundaries of traditional fields, adopt comprehensive

governance strategies, and diversify research perspectives. The existing traditional research perspective is improved and innovated. Instead of sticking to an isolated research field, divergent thinking is used to find out the correlation between research objects and different solutions, and multi-field and multi-dimensional methods are creatively applied to research, so as to avoid the narrowness of research on problems from a single perspective as much as possible.

3) Construction of collaborative mechanism: Establish and improve collaborative mechanisms such as information sharing, interest coordination, supervision and evaluation, use modern information technology means to improve the effectiveness and efficiency of governance, and ensure the smooth operation of collaborative governance.

The multi-dimensional collaborative governance vision reflects the system thinking and the whole concept, and emphasizes the use of multi-dimensional vision and collaborative cooperation to improve the efficiency of governance, which is an effective way to study and solve social problems. The multidimensional collaborative governance perspective embodies systems thinking and holistic concepts, emphasising the use of multidimensional perspectives and collaborative cooperation to improve the effectiveness of governance, and is an effective way of studying and solving social problems.

In addition, by the community theory, from the community, the object of comprehensive community management, the American scholar Robert Parekr defines "community" as follows, he thinks that the community is a collection of people living in the same piece of land within a limited area. According to Robert Parekr, a community is a collection of people living in a limited area of land. A community has the following characteristics: a certain number of people in the same geographical area; these people have different degrees of connection with this area; the people in the community have a certain relationship with each other[7]. Therefore, the community is not only a geographical location concept, but also contains a large number of residents living and working in it, and the residents are not isolated from each other, they will form a certain relationship of interest between them, both mutual co-operation and exchanges, as well as conflicts and contradictions in the needs. So governance community integrated management related issues need to stand in a high perspective, to take a holistic view, accurately grasp the community of each subject between all people and things intertwined interests[8]. In addition, due to the large population size and high population density in China, the number of communities is also relatively large, and any small problem in community governance may produce a big problem with a large impact on the society, which affects the whole body in one go. Therefore, it is of great practical significance to adopt the MCGP methodology to carry out research on the problems in comprehensive community governance.

3. Exploring the current situation and causes using a multidimensional and collaborative governance perspective

Some scholars have explored the phenomenon of collaborative failure from the perspective of "whole government", and concluded that there is collaborative failure in Chinese public management; by changing the traditional system and innovating the collaborative mechanism, it is possible to establish a modern governance system to improve the government's governance capacity and complete the goal of modernising the country's governance capacity[9]. Therefore, this explains the lack of MCGP method in social application from a certain perspective. The following research will be carried out based on the MCGP method:

Taking Shijiazhuang City as an example, the author found through the investigation of 126 communities in Shijiazhuang that there are many problems in these communities, such as illegal entry of electric vehicles into elevators, indiscriminate parking of electric vehicles, speeding of

electric vehicles in electric communities, disorderly wiring and charging of electric vehicles. Among these problems, the occurrence rate of electric vehicles illegally entering the floor and disorderly parking of electric vehicles in the community reached 100%. According to Article 28 of the Regulations on the Administration of Electric Bicycles in Hebei Province, electric bicycles are prohibited from entering the manned elevator; Article 29: Charging electric bicycles shall comply with fire safety regulations, and no private wire or private seat shall be used to charge electric bicycles. It is prohibited to park or charge electric bicycles in public areas such as public foyers, evacuation passages, stairwells, safety exits and crowded places of buildings. It is prohibited to charge electric bicycles in non-centralized indoor places such as homes, dormitories, and office buildings in violation of fire safety regulations[10]. Therefore, the major problems in the comprehensive governance of the community are multiple and complex, and the factors affecting its current situation are multi-dimensional. If the problem is analyzed from a single policy perspective and then solved, it can play a positive effect, but it cannot solve the problem from the root cause. Therefore, how to trace back to the source and analyze the root cause of the problems caused by electric bicycles in the comprehensive management of communities is the key to optimize the comprehensive management of electric vehicles in communities and promote social governance. Therefore, from the perspective of MCGP, combined with the survey results, the author will introduce statistics, psychology, social practice and other contents to analyze the causes of the problems of electric bicycles in the comprehensive management of communities with multidimensional research methods:

To address the above issues, the author selected residents of different ages and occupations as the research object, and took the online distribution of questionnaires to conduct research, a total of 1,693 questionnaires were recovered, and 1,531 valid questionnaires were recovered after removing invalid questionnaires, with a validity rate of 90.43%. In order to reflect the results of the research, the author introduces the binary Logit model to analyse the data under ideal conditions:

Table 1: Variable Assignment Table

variable name		assign a value to something
	distinguishing between the sexes	Male = 1; Female = 2
	(a person's) age	Under 20 years = 1, 20-40 years = 2. 40-60 years = 3; over 60 years = 4
	academic qualifications	High school and below = 1; specialised = 2; Bachelor's degree = 3; Bachelor's degree or higher = 4
Variables influencing residents' willingness to enter the household with electric vehicles	Number of community charging posts	Almost no impact = 1; less impact = 2; Average impact = 3, high impact = 4; Very high impact =5
	Strength of community inspectors	Almost no impact = 1; less impact = 2; Average impact = 3, high impact = 4; Very high impact =5
	Legal awareness of the population	Almost no impact = 1; less impact = 2; Average impact = 3, high impact = 4; Very high impact =5
	Number of such phenomena in the community	Almost no impact = 1; less impact = 2; Average impact = 3, high impact = 4; Very high impact =5

(1) Explained variables

In this study, the residents' willingness to have electric vehicles in their homes was selected as an explanatory variable, assigning a value of 1 to those who have a willingness to have electric vehicles in their homes, and a value of 0 to those who do not have a willingness to have electric vehicles in their homes

(2) Explanatory variables

There are four explanatory variables selected for this experiment, namely the four explanatory variables of the number of community charging posts, the strength of community inspectors, the legal awareness of residents, and the number of such phenomena in the community.

(3) Control variables

Considering that residents' basic personal information may affect residents' willingness to enter the household with an electric vehicle, this paper adds it as a control variable so as to enhance the robustness of the results. See Table 1:

(4) Modelling

The probability of EV household willingness is Pi and the probability of EV non-household willingness is 1- Pi. The probability of EV willingness to enter the household divided by the logarithm of the probability of EV willingness not to enter the household is used as the explanatory variable L, which denotes the logarithmic incidence ratio of EV willingness to enter the household, from which the expression[11] is obtained:

$$L = \log\left(\frac{P_i(Y=1)}{1-P_i(Y=1)} \right) \tag{1}$$

The regression equation for the Logit binary choice model can be established, where m is the number of explanatory variables.

$$L=\beta 0 +\beta X11 +\beta X22 +...+\beta m Xm \tag{2}$$

(5) Benchmark regression results

The results were analysed using spss. The results of the comprehensive test of the model are shown in Table 2, p=0.000<0.05, this model construction is meaningful.

Table 2: Test results

Likelihood ratio test results for binary logit regression models						
modelling	-2x log-likelihood	chi-square value	*df*	*p*	AIC value	BIC value
intercept only	1907.346					
final model	1472.142	435.204	7	0.000	1488.142	1530.811

As can be seen from Table 3, gender, age, community supervision intensity, education background, number of community charging piles, legal awareness of residents, and number of community phenomena are taken as independent variables, while the intention to enter the household is taken as dependent variable for binary Logit regression analysis. As can be seen from the above table, it means gender, age, community supervision intensity, education background, number of community charging piles. The number of residents' legal consciousness and community such phenomena can explain 0.23 reasons for the change of household intention. It can be seen from the above table that the formula of the model is: ln(p/1-p)=6.475 + 0.188* gender -0.016* age -0.488* Community supervision intensity -0.006* education -2.183* Number of community charging pile -0.247* legal awareness of residents + 1.438* Number of such phenomena in the community (p represents the probability that the intention to enter the household is 1, 1-p represents the probability that the intention to enter the household is 0).

Table 3: Summary of results of regression analyses

Summary of results from binary logit regression analyses							
term (in a mathematical formula)	regression coefficient	standard error	z Value	Wald $\chi 2$	p-value	OR value	OR 95% CI
distinguishing between the sexes	0.188	0.127	1.478	2.183	0.140	1.207	0.941 ~ 1.548
(a person's) age	-0.016	0.045	-0.352	0.124	0.725	0.984	0.901 ~ 1.075
Strength of community inspectors	-0.488	0.062	-7.910	62.575	0.000	0.614	0.544 ~ 0.693
academic qualifications	-0.006	0.044	-0.130	0.017	0.897	0.994	0.913 ~ 1.083
Number of community charging posts	-2.183	0.590	-3.703	13.711	0.000	0.113	0.035 ~ 0.358
Legal awareness of the population	-0.247	0.046	-5.412	29.286	0.000	0.782	0.715 ~ 0.854
Number of such phenomena in the community	1.438	0.172	8.360	69.898	0.000	4.213	3.007 ~ 5.903
intercept (the point at which a line crosses the x- or y-axis)	6.475	2.770	2.338	5.465	0.019	648.660	2.847 ~ 147806.892
Dependent Variable: Willingness to Enter Household							
McFadden R-square: 0.228							
Cox & Snell R-square: 1.000							
Nagelkerke R-square: 1.000							

(6) Specific analyses

It is clear from the final specific analyses:

The value of the regression coefficient for gender is 0.188, but it does not show significance ($z=1.478$, $p=0.140>0.05$), implying that gender does not have an influential relationship on the willingness to enter the household.

The regression coefficient value of age is -0.016, but it does not show significance ($z=-0.352$, $p=0.725>0.05$), implying that age does not have an influential relationship on the willingness to enter the household.

The regression coefficient value of community inspector strength is -0.488 and shows significance at the 0.01 level ($z=-7.910$, $p=0.000<0.01$), implying that the community inspector strength will have a significant negative relationship on the willingness to enter the household. As well as the dominance ratio (OR value) is 0.614, which means that when the intensity of community inspectors increases by one unit, the change (decrease) in the willingness to enter the household is 0.614 times; the value of the regression coefficient of educational qualifications is -0.006, but it does not show significance ($z=-0.130$, $p=0.897>0.05$), which means that the educational qualifications will not have an influential relationship on the willingness to enter the household.

The regression coefficient value of the number of charging piles in the community is -2.183, and shows a significance level of 0.01 ($z=-3.703$, $p=0.000<0.01$), which means that the number of charging piles in the community will have a significant negative impact on the intention to enter the household. And the odds ratio (OR value) is 0.113, which means that when the number of charging piles in the community increases by one unit, the change (reduction) of the intention to enter the household is 0.113 times.

The regression coefficient value of residents' legal awareness is -0.247, and shows a significance

level of 0.01 (z=-5.412, p=0.000<0.01), which means that residents' legal awareness will have a significant negative impact on the intention to enter the household. And the odds ratio (OR value) is 0.782, which means that the change (reduction) of the intention to enter the household is 0.782 times when the legal awareness of residents is increased by one unit.

The value of the regression coefficient of the number of such phenomena in the community is 1.438 and shows significance at the level of 0.01 (z=8.360, p=0.000<0.01), which means that the number of such phenomena in the community will have a significant positive relationship on the willingness to enter the household. As well as the dominance ratio (OR value) is 4.213, meaning that the change (increase) in willingness to enter the household is 4.213 times when the number of such phenomena in the community increases by one unit.

To summarise, it can be seen that the number of such phenomena in the community has a significant positive effect on the willingness to move in, while the intensity of community inspection, the number of charging posts in the community, and the legal awareness of the residents have a significant negative effect on the willingness to move in. However, gender, age, and education do not affect the willingness to move in. It can be seen that, if the number of illegal EVs in the community is higher, the residents' willingness to enter the household is stronger; if the number of community charging piles is higher, the residents' legal awareness is stronger, and the community supervision is stronger, the residents' willingness to enter the household with EVs is lower. In response to the above findings, an attempt is made to explain and analyse them from the psychological perspective:

According to Bandura's theory of observational learning, when observing, the individual is only in the capacity of a bystander, observing the behavioural performance of other people, so as to obtain the course of learning; imitation (modeling), refers to the individual in the observation of learning, to the social situation of a person or a group of people's behaviour of the course of learning. The object of imitation is called model (or role model); in addition, according to the interactive determinism, behaviour is not the result of the interaction between the individual and the environment, but is a sympathetic and interactive relationship between the behaviour, the individual and the environment[12]. In other words, behaviour is not determined by the individual or the environment alone, but by the interaction of behaviour, individual and environment. Thus, the above findings can be reasonably explained:

Taking the example of the illegal entry of electric vehicles into the home, the first residents to develop the willingness to enter the home and to enter electric vehicles into the home illegally are the "role models", and according to the results of the study, the existence of the role models leads to the phenomenon of entering the home with an electric vehicle. Some residents, as observers, have discovered this phenomenon and learnt from it. Therefore, it can be seen from the above findings that the number of such phenomena in the community has a significant positive impact on the willingness to move into a home, which gradually creates an environment of strong willingness to move into a home. On the other hand, due to the objective existence of a small number of charging piles in the community, many residents are unable to charge on the ground below the community, resulting in residents being forced to push their trams into lifts and into their homes for charging, which leads to the problem of illegal entry of trams into homes, which results in the number of charging piles in the community generating a significant negative influence relationship on the willingness to enter a home. This leads to further analyses from the community environment (i.e., the community subject):

In comprehensive community management, the two most obvious subjects are property companies and community residents. From the perspective of property companies, property companies, as community housekeepers hired by owners' committees, should be responsible for the day-to-day management of community properties, but in actual operation, they are often faced with

the dilemma of unequal powers and responsibilities. On the one hand, the property company needs to undertake community safety, environmental protection, conflict mediation and many other responsibilities, but on the other hand, its management authority is relatively limited, unable to effectively manage all the affairs in the community. This phenomenon, on the one hand, exacerbates the binary conflict between residents and property, on the other hand, makes some properties in the community management of the phenomenon of inaction, inaction, focusing on the collection of property fees, but not pay attention to how to improve the quality of life of residents in the community, and do not pay attention to the implementation of the relevant provisions of the state and local.

From the residents' point of view, the fact that the personal qualities of some residents are in need of urgent improvement is a key point in the creation of problems in comprehensive community management. In addition many residents do not care enough about community affairs, on the one hand, they hope that the property company will improve the living environment of the community, and they are indifferent to certain calls of the property company, and they are indifferent to the relevant national policies and regulations posted in the community, which leads to the fact that it is difficult for many property-developed community governance projects to gain the support and co-operation of the residents, which in turn affects the governance effect. In addition, in community governance, if residents and property owners are unable to form an effective communication and coordination mechanism because of disagreements, it will be difficult to form a consensus, and it will be impossible to form a joint effort to promote comprehensive community governance.

As a result, the current state of the problem of integrated EV community management is the result of multiple factors, the causes of which are complex and require the use of the MCGP to provide a detailed response.

4. Responses and recommendations

At present, the issue of comprehensive community management of electric bicycles has become the focus of attention of the whole society, through the case study and objective summary of thinking, based on the MCGP, the path to solve the reality of electric bicycles in Shijiazhuang City, the comprehensive community management of the problems arising from the following aspects:

First of all, it is necessary to further introduce and strengthen more diversified subjects for community co-governance: the constructive role of grass-roots self-governing organisations in comprehensive community governance should be further brought into play, and neighbourhood committees should play the role of a bridge, actively communicating with residents in the community, listening to the voices of the residents, and actively publicising the relevant provisions of the State concerning electric bicycles, so as to guide the residents to participate in community affairs positively and correctly; and at the same time, it is necessary to actively consult with property companies.

At the same time, we should actively discuss with the property company the problems arising from the comprehensive community management of electric vehicles, and supervise the property company to perform its duties and safeguard the rights and interests of residents; introduce the Nth party (i.e., multi-dimensional aspects), such as the power of enterprises to carry out efficient comprehensive community management : looking for enterprises to install anti-electric vehicle into the lift device, so that the electric vehicle will be alarmed when entering the lift, and the lift will stop running; in addition, there are many colleges and universities in Hebei Province, and special student volunteer detachments can be formed. In addition, there are many colleges and universities in Hebei province, so they can set up special student volunteer teams to conduct research in the community after school hours to assess the situation of e-bike management in the community and

reflect the situation to the relevant communities; at the same time, the government departments play an important role in the comprehensive management of the community, and they can organise the "Traffic Management Department in the Community" activities on a regular basis, so that the relevant government departments in Hebei province can actively enter the community to educate community residents about e-bikes.In addition, the majority of community residents are the real owners of the community, and it is necessary to encourage residents to participate in community life, improve community residents' participation in and support for electric vehicle management, and stimulate residents' internal drive to participate in community governance. Multi-pronged, multi-dimensional vision of collaborative governance, the formation of government, enterprises, residents, property, organizations and other parties to participate in the co-governance and sharing pattern, encourage community governance subjects to establish and improve long-term comprehensive governance mechanism, forming a joint force; At the same time, it is also necessary to clarify the responsibilities and tasks of each subject, ensure that each subject clearly defines its specific responsibilities in the comprehensive governance of the electric bicycle community, avoid ambiguity and crossover of responsibilities, further ensure that the governance method is effective, and jointly promote the comprehensive governance of the electric bicycle community.

Secondly, to further strengthen the construction of community infrastructure and promote the comprehensive management of intelligent communities: for general communities, electric bicycle parking lots can be set up, and intelligent charging equipment is installed, and electric bicycles are automatically powered off after being fully charged. At the same time, video surveillance and fire sprinkler system are installed to facilitate timely detection and treatment of fire. Due to the existence of a large number of old residential areas in Hebei Province, therefore, in rental houses, old residential areas and other places, it is impossible to build intelligent charging equipment on a large scale, you can install a small electric bicycle intelligent charging station that can be operated by coin and paid by mobile phone at the parking point according to the actual situation, to meet the charging needs of residents. In terms of electricity costs, you can negotiate with the fire department and the power supply department, and the electric bicycle parking charging point is charged according to the electricity cost of residents. Strengthen the transformation of community infrastructure, gradually eliminate the old facilities that are not conducive to the comprehensive management of electric vehicles in the community, for example, turn the old single shed into a smart charging shed; Further develop and utilize some open areas in the community, and set up standardized parking areas for electric bicycles according to local conditions. Develop software on community comprehensive governance, so that community residents in the province can generally download the software, and use the software to establish an information system including electric bicycle registration information (license plate number, owner, etc.) illegal behavior records, so as to improve management efficiency and accuracy. At the same time, it is convenient for residents to report, inquire about governance, and carry out activities such as answering questions and popularizing knowledge. Different communities can use the software to exchange experience and learn, and relevant parties can also use the software to use big data analysis technology to conduct big data analysis of governance data, find hidden problems and governance bottlenecks, and take the overall situation of comprehensive community governance from a macro level to provide scientific basis and reference for government decision-making. Make full use of modern information technology and MCGP method theory to achieve fine governance.

Finally, to further improve the relevant rules and regulations, strengthen the supervision of electric vehicle governance issues: in terms of government, Hebei provincial government departments should further improve the methods and regulations on the comprehensive management of electric bicycle communities, and guide the comprehensive management of electric vehicles in communities; Check and evaluate the management of electric bicycles in the community

regularly; Hebei Province has established a comprehensive management and supervision mechanism for electric bicycle communities, strengthened assessment, rewards and punishments, incorporated the comprehensive management work of electric bicycle communities into the community work assessment system, commended and rewarded communities with remarkable management results, and notified and criticized communities with poor management. In terms of community and organization, the floor leader and unit leader system, set up a number of lists of yuan leaders in each unit, set up a floor leader on each floor, the floor leader needs to check whether there is any irregularities in the management of electric vehicles in the floor every day, and report to the unit leader regularly; The head of the unit shall summarize the situation in the unit according to the report of the head of the building, and hold a regular meeting of the head of the unit (which can be used online) to discuss the improvement plan of the community electric vehicle governance. At the same time, organize regular selection activities to reward excellent unit leaders; Set up a special governance office in the community, responsible for coordinating and supervising the relevant work of community comprehensive governance, jointly formulate and promote the implementation of community comprehensive governance plans with the property, and carry out active docking with other governance subjects; Recruit resident volunteers (especially young volunteers) to form a service team, carry out regular inspections and publicity activities, and promptly discover and urge correction of wrong behaviors related to electric bicycles. Each community according to their own actual situation, formulate electric bicycle charging management regulations, prohibit private wiring, entering the building charging and other unsafe behavior. At the same time, strengthen the daily maintenance and inspection of charging facilities to ensure charging safety; Establish an intelligent supervision mechanism, set up cameras on the main roads in the community, monitor speeding behavior and other violations in real time, record license plates and drivers, so as to criticize and educate the relevant personnel; If it repeatedly violates the relevant policies and community norms, it can be publicized in the community; Serious cases can be dealt with by relevant government departments. Reduce or eliminate the motivation, needs, and environment for integrated community governance problems at their root.

5. Conclusion

Community governance is the cornerstone of national governance, how to promote comprehensive community governance, promote the benign development of our society, has become an important issue facing our society. The issue of comprehensive community governance of e-bikes is the focus of comprehensive community governance, therefore, how to analyse the causes from the current situation, and then really promote the solution of comprehensive community governance of e-bikes from the root is the core issue of concern in this paper. Residents, properties, organisations, government, Nth party and other parties should consider together, weigh the pros and cons, grasp the whole, use MCGP creatively, introduce multiple perspectives and more subjects, and solve the problems one by one in a multi-dimensional way. In the use of MCGP, how to accurately grasp the core issues, coordinate the work between the various subjects, enhance the effectiveness of governance, and avoid procrastination and shirking of responsibilities, is also worthy of serious study by the main body of integrated community governance. It is worth paying attention to, Hebei Province in late May to mid-June in the province focused on the organisation of the electric bicycle community night investigation action[13], further emphasis on the electric bicycle "into the building into the home" "flying wire charging" and other acts of repeated persuasion, repeated changes and repeated offenders of the relevant individual.The relevant departments will investigate and deal with the illegal modification and other problems strictly according to the law. Through similar actions, we can see the determination of Hebei Province to

solve the problem of comprehensive community management of electric bicycles. It is foreseeable that Hebei Province will further bring more and more results in the comprehensive community management of e-bikes after applying the MCGP method.

References

[1] Notice on Strengthening the Management of Electric Bicycles [S]. Gong Tong Zi [2011] No. 10

[2] Ministry of Industry and Information Technology, Development and Reform Commission, Ministry of Science and Technology, Ministry of Public Security, Ministry of Transport and General Administration of Market Regulation Notice on Strengthening the Management of Low-speed Electric Vehicles. Ministry of Industry and Information Technology Joint Installation [S] [2018] No. 227.

[3] Cui Congcong, Zhou Jie. Electric bicycle legislation, the geometry of the impact on the people [N] Hebei Daily, 2022-5-13

[4] Xiao zihua, Lin hongjing, High-quality development path of student management in colleges and universities under the perspective of collaborative governance [J]. Journal of Hunan Post and Telecommunication Vocational and Technical College 2023, 22(04), 103-106

[5] V. Bogdanor, Joined-up Government [M].UK: Oxford University Press, 2006:175.

[6] Guo Peng, Lin Xiangzhi, Huang Yi, et al. Bicycle Sharing: Internet Technology and Public Service Internet Technology and Collaborative Governance in Public Service [J]. Journal of Public Administration, 2017:3

[7] Pan Xiaojuan. Research on Community Governance for Reconstruction of China's Grassroots Society [M]. Beijing: China Law Press, 2004:4.

[8] Brown. Social anthropological methods [M]. Shandong: Shandong People's Publishing House, 1988:32.

[9] Wang Dongyuan. A book of community construction and management practices in China in the new era [M]. Beijing: Xueyuan Press, 2001:27-28.

[10] Regulations on the Management of Electric Bicycles in Hebei Province. Announcement of the Standing Committee of the Thirteenth People's Congress of Hebei Province No. 107 [S].2021-11-23

[11] Peterson J. Regression Analysis of Count Data[J]. Technometrics, 1999,41(4):1

[12] Bandura, A. Social foundations of thought and action: A social cognitive theory [M]. 1986. Prentice-Hall, Inc.

[13] Protection Incendie Hebei, Announcement on the Concentrated Night Inspection Operation on the Safety Hazards of Electric Bicycles [N] Hebei Daily, 2024-5-23