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Research on the Use Intention of Intelligent Waste Recycling Facilities Under the Background of Smart City

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Abstract:

Under the background of smart city, the application of information technology in urban governance to promote waste information and resource management is of crucial practical importance to promote environmental sustainable development. Founded on the technology acceptance model and perceived risk theory, this paper establishes the research model of residents' willingness to use intelligent waste recycling facilities, furthermore, the key influencing equations of urban residents' willingness to use intelligent waste recycling facilities are analyzed by structural equation. The results show that perceived ease of use positively influences perceived usefulness and use attitude; Perceived usefulness' effect upon use attitude is positive; Perceived risk negatively affects use intention; the impact of use attitude upon use intention is positive.

***Keywords**: Waste management, Willingness to use, Smart city, Technology acceptance model, Structural equation.*

I. INTRODUCTION

Municipal solid waste management has become an important issue in the global urban ecological sustainable development. Urbanization makes urban waste and domestic waste increase day by day, and environmental governance is imminent [1]. Since 2005, the total amount of urban waste produced in China has been more than 100 million tons every year, and has always increased year by year in the proportion of 8% - 10% [2]. Based on this, China has had an environmental protection oriented domestic waste classification pilot policy since 1992. Marked by the promulgation and implementation of the implementation plan of domestic waste classification system in 2017, China has entered the era of compulsory classification of domestic waste. Due to the limitations of extensive classification standards, passive participants and segmentation of management system, domestic waste classification has little effect [3]. With the promotion and application of emerging information technologies , the intelligent waste recycling facilities constructed by using intelligent technology will break through the traditional recycling pattern [4], tighten the classification standards, improve the initiative of participants and integrate the management system through information technology support, so as to solve the problem of waste classification failure, Explore the establishment of waste resource management in the information age.

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So as to improve efficiency of waste classification, Xu Bo et al. [5] pointed out that the government guidance should be closely linked with the market, innovate the recycling transaction mode based on the Internet, and optimize the existing waste recycling network. Simon and John [6] point out smart sustainable cities are shaped by empowering utilities with IT technology. Nowakowski et al. [7] found that the application of artificial intelligence technology to basic recycling facilities improves the efficiency of secondary raw material collection after waste recycling, which belongs to the circular economy. Based on the above background, the demand for smart waste recycling facilities in China's urban management is increasing. Halfon et al. [8] argue that successful municipal solid waste management is based on infrastructure construction at the source, and that the difficulty in building and operating recycling infrastructure is the trust and use of residents. Therefore, studying the willingness of urban residents to use smart waste recycling facilities and exploring key influencing factors will help explore the development path of solid waste management under the construction of smart cities, break through the dilemma of garbage siege, and provide scientific reference for smart city construction.

The research on Residents' use of waste classification software is mainly reflected in the software design. Yu Dong et al. [9] Designed and developed intelligent waste classification software based on neural network to assist community residents in simple and efficient waste classification; Wang Yang [10] and others proposed a garbage classification system based on convolutional neural network to increase garbage classification efficiency and reduce high classification cost. Ayeleru [11] did cost benefit analysis of a municipal solid waste recycling facility, concluding that promoting the use of waste recycling facilities is feasible. However, the implementation of information software or facilities need to avoid being restricted by residents' weak willingness to use and low product recognition. Zeng Weiye et al. [12] found that the influencing factors of residents' willingness to use waste classification software are the interaction of age and education. Huang Zhiguo [13] believes that improving reward and punishment measures can improve residents' participation. At present, there is little research on the use intention of intelligent waste recycling facilities. The research on the role of urban residents' cognition and attitude on the use intention of intelligent waste recycling facilities, how the intention is transformed into behavior, and what kind of role mechanism is between them is relatively weak, It is difficult to provide strong theoretical support for the operation of resource-based system. What are the key factors affecting residents' use of intelligent waste recycling facilities? How to formulate effective policies to promote and guide urban residents' daily use of intelligent waste recycling facilities?

Based on the literature review, the research gaps are as follows. First, some scholars have designed and innovated waste recycling facilities, but few have conducted research on residents' willingness to use them. Under the background of smart city, this paper constructs a conceptual model of residents' willingness to use smart waste recycling facilities, and explores the key influencing factors, so as to deeply understand and predict the actual use behavior. Second, this paper combines the technology acceptance model and the theory of perceived risk, constructs a structural equation model for empirical research, accurately analyzes the key point of improving the efficiency of residents' waste recycling, then provides targeted suggestions and feasible paths for improving the efficiency of residential waste collection.

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II. MATERIALS AND METHODS

2.1 Technology Acceptance Model

The model, which was proposed by Davis [14], is relatively mature in the field of new information technology acceptance and use behavior, and is considered to be one of the most effective models to explain and predict users' new technology acceptance behavior. The model study users' acceptance of information system by using rational behavior theory. In addition, Davis believes the model has two decisive factors, one is perceived usefulness(PU), the other is perceived ease of use(PEU).

2.1.1 Perceived Risk Theory

Bauer [15] proposed that human behavior is uncertain and needs to bear risks. Perceived risk theory has been conceptualized into a two factor and multi-dimensional concept in many studies. It measures perceived risk(PR) by the product of uncertainty and result loss.

2.1.2 Structural Equation Model

SEM is a statistical analysis method, which is used to analyze the relationship between potential variables and observed variables through variable based covariance matrix. It has been widely used in linear modeling in the fields of economics, management, psychology and sociology [16]. In this paper, the parameters of SEM are estimated by maximum likelihood estimation method along with analyzed by AMOS software.

2.2 Research model

2.2.1 Assumptions about the relationships between PEU, PU, AT and BI

PU refers to the increase in job performance perceived by individuals after accepting and using information technology systems [17]. In this paper, PU means residents' perception of the intelligent waste recycling facilities’ value, which are daily necessity and environmental friendliness. In other words, residents believe that intelligent waste recycling facilities can improve the waste recycling efficiency in daily life, reduce the time cost of residents and the difficulty of distinguishing waste types, improve life happiness, and help protect the environment. In short, the more residents can perceive the usefulness and value of intelligent waste recycling facilities, the more likely they are to adopt and use the facilities.

PEU refers to the perceived ease of operation when residents use intelligent waste recycling facilities [18]. The stronger residents take ease of use into consideration, the stronger their acceptance of intelligent waste recycling facilities. The premise for residents to adopt new technology is to have a basic understanding of technology [19]. Therefore, whether residents are easy to access and further understand technical information is an important factor affecting their adoption behavior.

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Residents' PEU and PU will influence their use attitude. PEU is positively correlated with PU, which will have a positive effect on use attitude, and PU will positively promote use intention [20]. Therefore, we hypothesize that:

H1. Residents' PEU of intelligent waste recycling facilities has a positive impact on PU;
H2. Residents' PEU of intelligent waste recycling facilities positively impact on their use attitude;
H3. Residents' PU of intelligent waste recycling facilities impact their use attitude in a positive way;
H4. Residents' PU of intelligent waste recycling facilities has a positive impact on their use intention;

2.2.2 Hypothesis of the relationship between AT and BI

Willingness to use refers residents' judgment on the subjective probability of doing some specific behaviors [21]. This paper describes residents' willingness to use through two observation variables: their own behavior tendency and whether they are willing to publicize. Positive use attitude may positively promote the generation of use intention [22]. Therefore, the above justifies the hypothesis that:

H5. The impact of residents' attitude towards the use of intelligent waste recycling facilities upon their willingness to use is positive.

2.2.3 Assumptions on the relationships between PR, AT and BI

PR will affect users' willingness to continue to use and their trust in service providers [23]. The perceived risk in this paper refers to the residents' fear of disclosing their personal information and their trust in the service providers when using intelligent waste recycling facilities. When residents' perceived risk increases, it will affect their use attitude, and then affect intention. PR affects on residents' use attitude and intention in a significant negative way [24]. Thus, we hypothesize that:

H6. Residents' PR of intelligent waste recycling facilities influences their use attitude in a negative way;
H7. Residents' PR of intelligent waste recycling facilities negatively affect their use intention.

Based on the above discussion, a conceptual model of residents' willingness to use intelligent waste recycling facilities is preliminarily constructed (Fig 1).

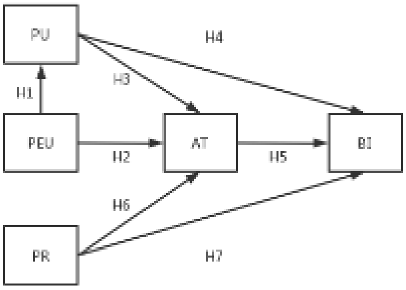

Fig 1: Conceptual model of residents' willingness to use intelligent waste recycling facilities.

As can be seen from Fig 1, there are three independent variables that directly affect use intention: PU, PR and AT. At the same time, PEU indirectly affects use intention by influencing attitude. The above four

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variables are latent variables [25], in which PEU and PR are exogenous latent variables; PU and AT are endogenous latent variables. Besides, these four core influencing factors are also affected by controlling variables such as gender, age, education and income.

2.3 Data collection and analysis

The characteristics are shown in TABLE I. The respondents are residents living in various districts of Shenyang. The regional distribution and the proportion of men and women are relatively balanced, and include different age groups, income and educational level. In general, the sample data are representative.

TABLE I. Sample characteristics N=214

CHARACTERISTIC		**PERCENT(%)**
GENDER	MALE	42.06
	FEMALE	57.94
INCOME	UNDER 1000	34.58
	1000-3000	15.89
	3000-5000	14.49
	5000-10000	21.5
	10000+	13.55
AGE	UNDER 18	1.4
	18-25	64.49
	26-40	21.96
	41-60	8.88
	60+	3.27
EDUCATION	UNDER JUNIOR	1.4
	JUNIOR AND SENIOR	1.4
	COLLEGE	42.99
	MASTER’S DEGREE	51.4

2.3.1 Current situation

Hunnan of Shenyang is one of the first pilot projects for smart city construction in 2012. In May 2015, Shenyang government issued the implementation plan for smart Shenyang construction (2015-2017), established the big data Bureau, and issued a number of policy documents such as the master plan and implementation plan for smart city and the development plan for smart industry, laying the foundation for the development of smart city in Shenyang. However, the informatization construction of intelligent waste management in urban planning is still insufficient. By 2020, the waste classification rate is still not ideal, which is far from the expected effect of waste reduction, recycling and harmlessness [26]. Smart waste management is an important part of smart city and a general program to guide the construction and operation of waste intelligent recycling platform under smart city [27].

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Therefore, it is very essential for Shenyang to study the residents' willingness to use intelligent waste recycling facilities and improve the level of waste information management. This paper studies the willingness of Shenyang residents to use intelligent products to recycle waste, and analyzes the influencing factors of urban residents' participation in waste recycling under the construction of smart city, in order to improve the waste management level and living environment, promote the implementation and development of Shenyang smart city construction.

2.3.2 Variable description

The measurement variables refer to the mature index measurement table in foreign literature, and are appropriately modified semantically according to the characteristics of intelligent waste recycling facilities, so as for ensure the high reliability of the model. Combined with the research conceptual model in Fig I, the index variables and references in the model are designed, as shown in TABLE II.

TABLE II. Description of residents' willingness to use intelligent waste recycling facilities

ITEM			REFERENCE
PU	PU1	Using intelligent waste recycling facilities can improve waste classification efficiency	Kwon［22］
	PU2	Using intelligent waste recycling facilities can reduce environmental pollution and resource waste	
PEU	PEU1	I have easy access to and understand information about intelligent waste recycling facilities	Davis［14］
	PEU2	I can easily master the use method and operation process of intelligent waste recycling facilities	
PR	PR1	Using intelligent waste recycling facilities may reveal my personal information	Luo Changli et al.［21］
	PR2	The functions, supporting facilities and services of intelligent waste recycling facilities are not perfect, which will bring me trouble	
AT	AT1	Intelligent waste recycling facility is good	Shi Shiying et al.［22］ Ajzer［26］
	AT2	In the future garbage classification and delivery, I will support intelligent waste recycling facilities to replace traditional dustbins	
BI	BI1	I am willing to use intelligent waste treatment facilities when putting garbage in daily life	Shi Shiying et al.［22］ Ajzer［28］
	BI2	I will encourage relatives, friends and community residents to use intelligent waste treatment facilities	

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2.3.3 Reliability, validity and factor analysis

In this research, Cronbach's α coefficient is employed as an index to measure each factor's reliability. According to SPSS 22.0, the total α is 0.867 (TABLE III), and the internal consistency of each variable is good, meeting the reliability requirements. The α value of each latent variable meeting the standards as well, means the observation variables designed in the research questionnaire can well represent each latent variable, the research design is reasonable, and the test results of each dimension are consistent, stable and reliable.

It can be found from TABLE III that the factor load and AVE are greater than the judgment standard value of 0.5; The CR is greater than the judgment standard of 0.7, which meets the standard requirements of aggregate validity, indicating that each measurement problem has a high correlation with the corresponding factors.

The observed value of Bartlett's sphericity test statistic and the p value are reaching the significance levels (TABLE IV). The KMO value is 0.842, refers that it is suitable for factor analysis.

TABLE III. Reliability and convergent validity

ITEM		UNSTD	S.E.	Z	P	STD.	α	AVE	CR
PU	PU1	1.000				0.852	0.851	0.691	0.8172
	PU2	1.013	0.076	13.250	***	0.810			
PEU	PEU1	1.000				0.848	0.772	0.663	0.797
	PEU2	0.877	0.087	10.087	***	0.779			
PR	PR1	1.000				0.883	0.777	0.8021	0.8902
	PR2	1.054	0.247	4.266	***	0.908			
AT	AT1	1.000				0.835	0.853	0.7279	0.8425
	AT2	1.156	0.074	15.568	***	0.871			
BI	BI1	1.000				0.810	0.868	0.6377	0.7788
	BI2	0.907	0.053	17.076	***	0.787			

TABLE IV. KMO and Bartlett

KMO	BARTLETT		
	X^2	DF	P
0.842	1277.067	45	0.000

2.3.4 Model fitting analysis

The SEM can test the relationship between observed variables and latent variables, in addition, the next analysis can be carried out only through the goodness of fit test [28-30]. Amos is used to test the proposed model (TABLE V).

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TABLE V. Calculation results of model fitting index

ITEM	**X²/DF**	**RMR**	**GFI**	**NFI**
STANDARD	＜3	＜0.05	＞0.9	＞0.9
RESULT	2.119	0.032	0.951	0.958
ITEM	**RFI**	**TLI**	**CFI**	**RMSEA**
STANDARD	＞0.9	＞0.9	＞0.9	＜0.08
RESULT	0.927	0.960	0.977	0.072

Among the model adaptation test indexes, the test results all meet the reference standard. It shows that the theoretical model proposed in this study fits well with the sample data. This paper's model is in great agreement with the sample data model measured by questionnaire. Based on the fitting and modification of the hypothetical model of use intention of intelligent waste recycling facilities, this research's SEM is shown in Fig 2.

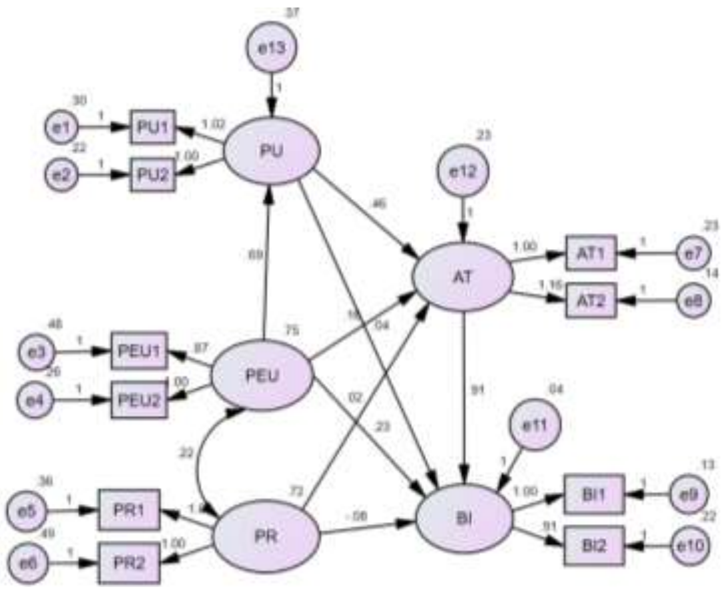

Fig 2 : Research model with unstd.

2.4 Results

According to the operation results of Amos, the standardized path coefficient of the model and the p value under non standardization are tested. TABLE VI lists the standardized path coefficients of the model and the establishment of each hypothesis, assuming that H1, H2, H3, H5 and H7 pass the test.

TABLE VI. Hypothesis testing

HYP	**RELATIONSHIP**	**STD.**	**S.E.**	**C.R.**	**P**	**SUPPORTED?**
H1	PU←PEU	0.701	0.082	8.378	***	YES
H2	AT←PEU	0.196	0.102	1.785	*	YES
H3	AT←PU	0.559	0.101	5.227	***	YES

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H4	BI←PU	0.038	0.079	0.454	0.650	NO
H5	BI←AT	0.782	0.080	9.818	***	YES
H6	AT←PR	0.024	0.063	0.345	0.730	NO
H7	BI←PR	-0.085	0.044	-1.758	*	YES

The results in TABLE VI shows that residents' attitude towards intelligent waste recycling facilities impact their use intention in a significant positive way. PEU significantly positive impacts their PU and attitude. PU's effect upon their attitude is significant positive. Moreover, the influence of PR upon their use intention is significant negative. The reason why the positive impact of PU on the willingness to use is not significant may be that although residents recognize their usefulness, there are restrictions on their behavior due to objective factors, such as the location of facilities is inconvenient for residents to use, the lack of popular science of relevant technical information makes it difficult for residents to operate the facilities, etc., so that residents' willingness to use and PU have no significant impact. The reason why PR has no significant negative impact on attitude may be that residents live in the community as rational social people, and the PR is acceptable or understandable, which is not enough to significantly cause a negative attitude towards intelligent waste recycling facilities.

III. CONCLUSION

Intelligent waste recycling facility is an important tool to shorten residents' participation in waste classification and recycling path and improve recycling convenience. Based on the perceived risk theory and technology acceptance theory model, on the basis of the field investigation of the willingness of Shenyang residents to use intelligent waste recycling facilities, this paper analyzes the impact of various factors of urban residents on their willingness to use intelligent waste treatment facilities, and draws the following conclusions.

Urban residents' PEU has a significant positive affect on PU, PEU and PU significantly positive influence on attitude, and attitude impacts their willingness to use in a significant positive way;

Urban residents' risk perception of intelligent waste treatment facilities has a negative significant impact on their willingness to use.

According to the above study conclusions and the core influencing factors, relevant suggestions are provided to effectively improve residents' willingness to use intelligent waste recycling facilities. The specific contents are as follows.

Suppliers or relevant R&D platforms shall improve the functions of intelligent waste recycling facilities. At this stage, there are still some problems in the practical application of relevant intelligent technologies;

Interpret the relevant knowledge and use specifications of intelligent waste treatment facilities in detail, refine their use behavior guidance;

Local governments can try to link the use of smart facilities with rewards such as points exchange or red envelopes [31], and encourage price sensitive residents to actively participate in smart waste recycling through economic incentives;

Through the Internet, combine the use of intelligent waste recycling facilities with the publicity of environmental protection and healthy lifestyle, create a better social use atmosphere, attract more residents to follow the crowd.

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REFERENCES

[1] Chang Yanqing, Cai Jingjing, Chang zhonglong (2021) On the current situation of garbage classification in typical cities at home and abroad. Shanxi architecture 47:1-3
[2] Liu Shengyi (2019) Waste classification to improve the living standard of green economy. Theoretical research on urban construction (electronic version) 10:126-128
[3] Fan Wenyu, Xue Liqiang (2019) Why the previous domestic waste classification has little effect. Exploration and contention 8:150-200
[4] Li Tong, Lin Linan, Cai Yuehua (2019) Research on the construction of smart city waste classification and treatment platform and standard system. Standard science 9:126-130
[5] Xu Bo, Gao Yu, Wang Kaiwei, et al (2017) Research based on Xi'an residents' domestic waste classification and recycling network. Renewable resources and circular economy, 10: 26-32
[6] Simon Elias Bibri, John Krogstie (2016) On the social shaping dimensions of smart sustainable cities: A study in science, technology, and society. Sustainable Cities and Society 29:219-246
[7] Nowakowski Piotr, Szwarc Krzysztof, Boryczka Urszula (2020) Combining an artificial intelligence algorithm and a novel vehicle for sustainable e-waste collection. Science of the Total Environment 730(C): 138726
[8] Cohen Chen, Halfon Einat, Schwartz Moshe (2021) Trust between municipality and residents: A game-theory model for municipal solid-waste recycling efficiency. Waste Management 127:30-36
[9] Yu Dong, Jing Chao (2020) Design and implementation of intelligent waste classification software based on neural network. Science and technology innovation 26:120-122
[10] Wang Yang, Wang Xiaoni, Wang Yuxin, et al (2020) Research on garbage classification system based on convolutional neural network. Sensor world 26:19-25
[11] Ayeleru O.O.,Okonta F.N.,Ntuli F.(2021) Cost benefit analysis of a municipal solid waste recycling facility in Soweto, South Africa. Waste Management 134:263-269
[12] Zeng Weiye, Zhou Tingting, Meng feirong (2021) Influencing factors and empirical analysis of willingness to use waste classification software. Office automation 440:56-59
[13] Huang Zhiguo (2021) Implementation strategy of intelligent classification of municipal solid waste under the background of circular economy. Science, technology and economy guide 29 (19): 128-129
[14] DAVIS F D (1989) Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly 13(3):318-340

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[15] Bauer (1964) Consumer Behavior as Risk Taking: Dynamic Marketing For Changing World. Hancock: Proceeding of the 43rd Conference of the American Marketing Association 389-398
[16] Wang Yixin, Li Huiqin, Gou Wenjuan, et al (2020) Study on the use intention of recycled products of construction waste under the background of waste free city. Resources and environment in arid areas 34 (12) 86-90
[17] Wang Yanling, Zhang Guangsheng, Li Quanhai (2020) Adoption behavior and influencing factors of e-commerce platform based on Technology Acceptance Model. Enterprise economy (3): 132-137
[18] Wei Ling, Guo Xinyue (2020) Research on the willingness of continuous use of knowledge payment platform based on Technology Acceptance Model. Science and technology and management 22 (2): 83-90
[19] Chang Huayi, Zhang Junbiao, He Ke (2019) Study on the impact of technology perception on Farmers' biopesticide adoption behavior. Resources and environment of the Yangtze River Basin 28 (1): 202-209
[20] Kim H W, Chan H C,Gupta S (2007) Value-based adoption of mobile internet: an empirical investigation. Decision Support Systems 43(1):111-126
[21] Luo Changli, Zhu Xiaodong (2015) Empirical Study on Influencing Factors of yu'e Bao use intention based on TAM / TPB and perceived risk. Modern intelligence (2): 143-149
[22] Shi Shiying, Hu Mingming (2020) Study on the intention of garbage classification decision-making of project managers under the background of waste free city - based on the theoretical framework of planned behavior. Resources and environment in arid areas34 (4):22-26
[23] Zhang Lijuan (2019) Research on the impact of product recall based on perceived risk on consumers' shopping behavior. Modern marketing (10): 84-85
[24] KWON O, WEN Y (2010) An empirical study of the factors affecting social network service use. Computers in human behavior (26):254
[25] Wu Minglong (2010) Structural equation model: operation and application of Amos. Chongqing: Chongqing University Press
[26] Sun Xuejiao (2020) Current situation and Development Countermeasures of smart city construction in Liaoning Province. Journal of Wuhan Metallurgical Management Cadre College, 30 (2): 18-20
[27] Xue Chenyang, Shao Chao Feng (2019) Design ideas and Countermeasures of intelligent management of MSW classification based on Internet plus city. sustainable development(02): 270-279
[28] AJZEN I, SHEIKH S (2013) Action versus inaction: anticipated affect in the theory of planned behavior. Journal of Applied Social Psychology 43(1): 155-162
[29] Xu Peng (2018) Research on financial risk prevention of agricultural product supply chain based on structural equation model. Journal of Southwest University of political science and law 20 (6): 128-135
[30] Shi Yufang, song Pingping (2019) Research on key influencing factors for the success of urban rail transit PPP project. Construction economy 40 (8): 42-47
[31] Fan Weijie (2019) Discussion on the strategy of promoting intelligent classification of municipal solid waste based on circular economy. Electronic world (19): 54-55