

Factors Influencing Citizens' Satisfaction with Public Administrative Services at the Grassroots Level Case Study of Tay Ho District

Nguyen Phuong Mai^{1,*}, Hoang Van Hao², Nguyen Van Duy³

¹*VNU University of Economics and Business,*

144 Xuan Thuy Str., Cau Giay Dist., Hanoi, Vietnam

²*Institute of Training - Research on Administration and Organizations,*

Nguyen Chi Thanh Str., Dong Da Dist., Hanoi, Vietnam

³*Ha Tay Community College, Thuy Xuan Tien, Chuong My Dist., Hanoi, Vietnam*

Received 22 November 2016

Revised 15 December 2016, Accepted 22 December 2016

Abstract: Research on public administrative services in recent years in Vietnam has addressed both theoretical and practical concerns. As there is an increasing demand to measure the performance quality in State administrative agencies, surveys on citizens' satisfaction of public administrative services have been done in previous researches and by State agencies which have had the participation of social-political organizations. Based on the literature of customer satisfaction with private-sector services and citizen satisfaction with public administrative services, this study systematically investigates differentiated features of public administrative services and their effects on citizens' satisfaction with public administrative services. A direct questionnaire survey has been administered in Tay Ho district, Hanoi to gather information for the regression analysis. The measurement scales in this study are adapted from the SERVPERF model with 7 components of public administrative services. Four hundred and forty returned questionnaires have been used for analysis. Research results show that the capacity and public-duty ethics of public servants have the strongest effect on citizens' satisfaction, followed by time and cost for service delivery and facilities.

Keywords: Public administrative service, citizens' satisfaction, grassroots level.

1. Introduction

Citizens' satisfaction with public services has emerged as a focus of research and as a major subject of governmental interest in recent years, corresponding roughly to the increased focus on government providing "citizen-centric" public services. Thinking of citizens as

customers or consumers of government services was one of the core ideas of the New Public Management (NPM) reform movement. Although the NPM movement encompassed a broad range of public sector reforms, such as public-private partnerships in delivering public services and the massive use of new management techniques such as process re-engineering, a substantial portion of government reforms was targeted at making the public contact experience more efficient and

* Corresponding author. Tel.: 84-975642451
Email: mainp@vnu.edu.vn

holding officials accountable for their performance in delivering public services.

Citizen satisfaction with public services has arisen as a focus of research and as a major subject of governmental interest in recent years [1-6], corresponding roughly to the increased focus on government providing “citizen-centric” public services. These studies have been heavily based on some well-developed models or frameworks in the precedent marketing research [7, 8, 9]. Since customer satisfaction with private goods and services was the dominant concept in marketing research, it was not surprising to some degree that most of the public service studies tended to equate citizens with customers or used them interchangeably. In fact, equating citizens in the public sphere with customers in the marketplace had even deeper intellectual roots in the contemporary public administration or public management thinking.

Differentiating citizen satisfaction from customer satisfaction did not mean that the study of citizen satisfaction could not learn from the theoretical models that have been developed in the market research. In fact, some critical variables related to customer satisfaction have been borrowed from market research and have been applied to investigating the formation of citizen satisfaction with public services. Those studies shed light on the research into citizen satisfaction with public services. Researches in the world concentrate on citizens’ satisfaction with specific public services such as health service, education, transportation or e-government aspects, the One - Stop - Shop model (OSS) and so on.

Public administrative service is one of two basic kinds of public services in Vietnam. Besides the researches on citizens’ satisfaction with public services which have public characteristics to meet the common and necessary needs to serve the community and citizens, the number of studies on citizens’ satisfaction with the second type-public administrative services - has been quite a lot. Vo Nguyen Khanh (2011) has measured the

satisfaction of people with public administrative services when applying ISO in District No. 1, Ho Chi Minh City [10]. As there is an increasing demand to measure the performance quality in State administrative agencies, surveys on citizens’ satisfaction of public administrative services has been done in previous studies and done by State agencies that have had the participation of social-political organizations. However, such work often mentions a specific public administrative service or the scope of study refers to the service delivery at the province or district level. In fact, there have been no studies on evaluating citizens’ satisfaction at the communal level as well as citizens’ evaluation of the local authority - at the level regarded as the closest to the citizens. In this study, when using regression analysis to determine the relationship between the factors and citizens’ satisfaction, authors used personal characteristics of citizens as control variables. Besides, this research has covered the cultural factors, customs or history prejudices towards the state agencies or the frequency level of using public administrative services in affecting citizens’ satisfaction.

2. Theoretical background and hypotheses

This study mainly focuses on service quality and customer satisfaction. The concept of the SERVQUAL model is generally based on the gap theory of Parasuraman, Zeithaml and Berry (1985), which suggests that “the difference between customers’ assessment of the actual performance of a specific firm within a general class of service providers and their expectation about the performance of that class (P-E gap) drives the perception of service quality.” In 1988, Parasuraman, Berry and Zeithaml’s SERVQUAL instrument consisted of 22 attributes, which can be classified into 5 dimensions: assurance, tangibility, reliability, responsiveness, and empathy. The basis was on capturing the gap between customers’ expectations and experience which could be

negative or positive if the expectation is higher than experience or expectation is less than or equal to experience, respectively. These five dimensions are also known as the RATER model with the arrangement of Reliability, Assurance, Tangibles, Empathy, and Responsiveness.

Cronin and Taylor (1992) after their research on the SERVQUAL scale showed that it is better to discard the E component and let the P component alone be used. According to the authors, whenever a customer rates their satisfaction/dissatisfaction level (P), he or she implies a comparison with expectation of service attributes. As mentioned above, since the expectation component is discarded in the SERVPERF model, the survey questionnaire includes 22 questions designed to capture the perception of customers about service attributes. It has half of the number of questions that are in the SERVQUAL model.

Although service quality and satisfaction has a relationship [11, 12], there have been few studies investigating the explanation level of the service quality elements in relation to satisfaction, especially for each specific service [13]. Zeithaml and Bitner (2000) pointed out that customers' satisfaction is influenced by many factors such as the product/service quality, price, situation and personal elements [14].

The SERVPERF model can be suitably applied to investigate service quality in general and customer satisfaction in particular. Public administrative services have their own characteristics to distinguish them from other services. Public administrative services are made by state administrative agencies through their functions and the customers are citizens. Previous research results showed that the quality of services perceived by the customer could differ in each particular field. Moreover, public administrative services are quite unique due to the dealings between citizen and state administrative agencies. Besides, the provision of services that are made at the grassroots should be considered. Therefore, the author also

adjusted and supplemented some appropriate measurement scales. Referring to some aspects, including ethics on the state civil service and ensuring legal procedures, is very necessary. The prior studies concentrated on the components affecting citizens with public administrative services which are: Reliability, Capacity of civil servants, Serving attitude, Empathy, Facilities and the Process of delivery. In fact, citizens must pay a fee for using some public administrative services at the grassroots level (but some services require no payment). Citizens won't be satisfied if they have to wait for their turn or spend much time settling their documents. Therefore, the time and cost of using public administrative services should be considered. It is also possible that citizens' perception of time and cost of public administrative services would influence their satisfaction with the public administrative services. By qualitative research methods based on prior studies, combined with legal writings and the actual status of public administrative services delivery at the grassroots level, the author adjusted and customized the instrument to get components affecting the quality of public administrative services. They are: (1) Reliability, (2) Capacity of civil servants, (3) Civil servants' serving attitude, (4) Empathy, (5) Facilities, (6) Process of delivery and (7) Time and Cost.

The research framework and initial hypotheses in this study are stated as Figure 1.

3. Methodology

To collect the necessary data for this study, a two-part survey instrument about public administrative services, citizens' satisfaction and general information of respondents was developed and used.

The first part of the instrument included questions about the citizens' demographic characteristics such as gender, age, marital status, educational attainment, occupation and monthly income. Moreover, the instrument also contained

four questions to survey the respondents on the issues related to the use of public administrative services at the Ward People’s Committee, including: the frequency of using services, the relationship with the civil servants or officials working at the Ward People’s Committees, whether an extra fee has been paid or not, and the living places of the respondents.

In the second part, the respondents were asked to respond to the different items on public administrative services and the delivery of Ward People’s Committee using a five-point Likert scale, i.e.: (1) = Strongly disagree, (2) = Disagree, (3) = Neutral, (4) = Agree, (5) = Strongly agree. There are 33 items of five components of public services to which the respondents expressed their perception. It also included 03 questions on satisfaction which are also designed using a five-point Likert scale: (1) = Highly dissatisfied, (2) = Dissatisfied, (3) = Neutral, (4) = Satisfied, (5) = Highly satisfied. After finishing the survey instrument,

the authors of this study conducted the survey among the citizens using the public administrative services at the main offices of the Ward People’s Committees of Tay Ho District in July 2016. The survey questionnaires were then distributed directly to the randomly selected respondents. Four hundred and sixty-two questionnaires were collected of which 440 were accepted for analysis in SPSS 20.0 software.

4. Results and discussion

4.1. Sample characteristics

The data in Table 1 describes the characteristics of these 440 public administrative services users, specifically their gender, age, marital status, educational attainment, occupation and monthly income.

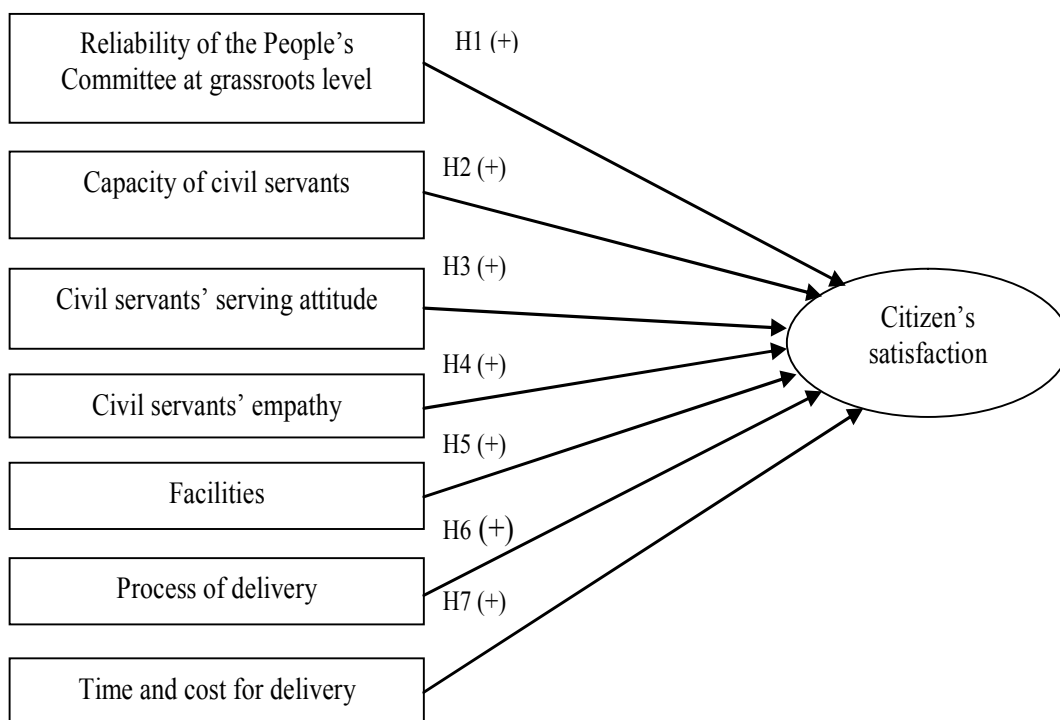


Figure 1. Research framework and hypotheses.

Table 1. Sample characteristics

Characteristics	Number	Percent
<i>Gender</i>		
Male	193	43.9
Female	247	56.1
<i>Age</i>		
30 and below	125	28.4
31-45	148	33.6
46-60	101	23.0
More than 60	66	15.0
<i>Marital status</i>		
Single	169	38.4
Married	237	53.9
Divorced	34	7.7
<i>Educational attainment</i>		
Under high school	18	4.1
High school	101	23.0
Intermediate education and college	108	24.5
University	193	43.9
Post-graduate	20	4.5
<i>Occupation</i>		
Student	51	11.6
Civil servant, official	82	18.6
Employee (all kinds of enterprises)	115	26.1
Freelance	93	21.1
Pensioner	69	15.7
Others	30	6.8
<i>Income</i>		
Below 3 million VND	124	28.2
From 3 million to 5 million VND	216	49.1
From 5 million to 8 million VND	68	15.5
From 8 million to 10 million VND	22	5.0
More than 10 million VND	10	2.3
Total	440	100.0

Source: Author's analysis.

The results of the survey pointed out that more than half of the respondents (56.1%) were females and 43.9% were males. In terms of their age, 62% were aged 45 years and below.

More than half of the respondents (53.9%) were married and more than one third (38.4%) were single. It can be seen from the survey results that the education level of the citizens using local public administrative services in Ho Tay District is higher than the average level because 48.4% of respondents have bachelor or master degrees, and 24.5% of them have Intermediate education and College qualification. Related to career, 26.1% of the participants are employees or staff working in enterprises (all kinds of enterprises), 21.1% of them are freelancers, and 18.6% of them are civil servants or officials working in state organizations. Regarding income, 77.3% of the survey respondents have a monthly salary of 5 million VND and below (including 49.1% of them with a salary of 3 to 5 million per month). Overall, the respondents can be generally described as females (56.1%), not more than 45 years of age (62%), married (53.9%), with University degrees (48.4%), employed (65.8%) and with an income of not more than 5 million VND (77.3%).

The data in Table 2 describe certain personal information related to the users of public administrative services. These include frequency of use of public administrative services, whether the respondent has acquaintances working in the Ward People's Committees, is paying an extra fee for the services offered, and is a resident of the ward where the administrative services are available.

Among the 440 public administrative services users at the Ward People's Committees, the majority (59.3%) used the services occasionally. About a third (30.5%) reported that they used public administrative services rarely, and a tenth (10.2%) of them always use the services. People who usually or sometimes use the public administrative services will get more knowledge about public administrative services than the ones who rarely use them. There are 53 respondents (12.0%) who have relatives working in Ward People's Committees. This ratio at the local level is generally higher, and it will normally be highest at the grassroots level. As a matter of fact, in the past most of the civil servants of Communal

People’s Committees were residents. However, this context has changed considerably, especially in wards in urban areas. Among the respondents, 46 people (equivalent to 10.5%) claimed that they have paid extra fees for the use of public administrative services at the Ward People’s Committee. According to the report about the satisfaction index of citizens and enterprises for the services of state administrative organizations (SIPAS) in 2015, citizens have to pay more money (other than the fee and charges to be paid or unpaid under the provisions of the Government) for all the surveyed procedures. For example, two public administrative services that are at no cost or free are: issuing a certificate of marriage registration and re-issuing a certificate of birth (provided by the People’s Committee). But almost 30% of respondents say that they still have to pay a cost to get these certificates. So, the rate in the above survey is considered to be higher than that paid by the people using the public administrative services at Tay Ho District People’s Committee. About three quarters (73.9%) of the respondents say that they use the public services right at their local place. This reflects the fact that the public administrative services at grassroots level are effectively providing for local citizens.

Table 2. Distribution of respondents as to information related to the use of public administrative services

Item	Number	Percent
<i>Frequency of using public administrative services</i>		
Rarely	134	30.5
Occasionally	261	59.3
Always	45	10.2
Total	440	100.0
<i>Acquaintances working at the Ward People’s Committee</i>		
No	387	88.0
Yes	53	12.0

Total	440	100.0
<i>Paid extra fee</i>		
No	394	89.5
Yes	46	10.5
Total	440	100.0
<i>Residents of Wards where public administrative services are offered</i>		
No	115	26.1
Yes	325	73.9
Total	440	100.0

Source: Author’s analysis.

Table 3. Results of reliability test of scales

Factors	Cronbach’s Alpha	Number of items
Reliability	0.836	4
Capacity of civil servants	0.856	5
Civil servants’ serving attitude	0.871	6
Empathy	0.853	4
Facilities	0.855	5
Process of delivery	0.864	4
Time and cost	0.852	5
Citizens’ satisfaction	0.801	3
Total		36

Source: Author’s analysis.

4.2. Exploratory Factor Analysis (EFA)

EFA with Scales of Independent Variables

The 33 items were subjected to EFA analysis to test the significance of the scales. Six items were removed from the scales as they failed to meet the standards of EFA analysis. The result from the seventh EFA analysis with the remaining 27 items pointed out that the observed factors are classified into 5 groups and each of them has a dependent relationship in comparison with the main factor being higher than 0.5.

The result of Bartlett’s test shows that the variables are generally in correlation with each other (Sig = .000; KMO coefficient = 0.935; Eigenvalue coefficient = 2.649; Sums of

Squared Loadings = 66.58%). This test proves that the scales are appropriate.

EFA with Scales of Dependent Variable

The scale of the dependent variable Citizens' Satisfaction including three items are used in EFA analysis. The results show that all of 3 items belong to a single element with a high coefficient value. Moreover, the Bartlett's test shows that the overall variation is in correlation with each other (Sig = .000; KMO coefficient = 0.666; Eigenvalue coefficient = 2.148; Sums of Squared Loadings = 71.61%). This proves that the scale of Citizen's Satisfaction is appropriate for further analysis.

Reliability Test of Scales with New Variables

Since the dependent variable, Citizens' Satisfaction, and the fifth independent variable have no changes in the composition of the scales, there was no need to test again for reliability. However, a reliability test of scales for the other four independent variables with adjusted items was done. All of the new variables have a Cronbach's Alpha coefficient

greater than 0.6. Thus, all of the variables and scales meet the reliability requirements for the regression analysis.

Five independent variables that are modified from the results of EFA analysis become: (1) Civil servants' capacity and public-duty ethics, (2) Transaction, (3) Process of delivery, (4) Facilities and (5) Time & Cost.

The adjusted hypotheses in this study are as follows:

Respondents' Perception of Satisfaction with Public Administrative Services

The results from Table 4 show that people seem to be well satisfied with the public administrative services (Mean = 3.4856). Among the items, they were most satisfied with the delivery of the public administrative service of the Ward People's Committee as appropriate according to the legal requirements (3.6045). The mean of Citizens' Satisfaction is on the "Satisfied" level. The values are in the middle of the range with levels 3.00 to 4.00. It means that the satisfaction of the citizens could still be further enhanced.

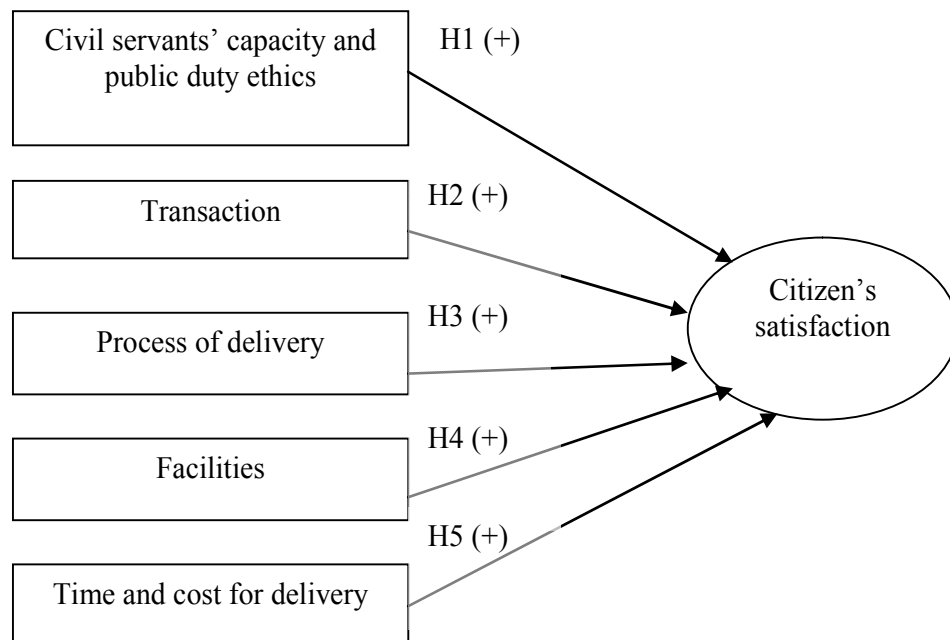


Figure 2. Adjusted research framework and hypotheses.

Table 4. Descriptive statistics of citizens' satisfaction

Items	N	Minimum	Maximum	Mean
Citizens' Satisfaction	440	2.00	5.00	3.4856
The results of following the administrative procedures meet the citizens' demands	440	1.00	5.00	3.4136
The delivery of public administrative services of the Ward People's Committee is appropriate according to the legal requirements	440	2.00	5.00	3.6045
Citizens are satisfied with the working method of the Ward People's Committee	440	2.00	5.00	3.4386

Among the components of public administrative services, Facilities has the highest score with a mean of 3.5041, followed by Process of delivery with a mean score of 3.5000. Civil servants' capacity and public-duty ethics get the mean score of 3.4620. With the same mean score of 3.4591, Transaction and Time & Cost have the lowest mean scores. With these scores, all of the components of the public administrative services at the Ward People's Committee can be aptly described as "Good". The innovation of the public administrative system has continuously improved the supervising effect of the State for society, among which the innovation of administrative procedure according to the OSS is a proper step. The implementation according to the OSS mechanism has created noticeable effects. Recently, some head offices of People's Committees of some wards have been rebuilt; some have been restored. Therefore, their facilities have been improved considerably and the head offices of all the Ward People's Committees of Tay Ho District have had a new face. Citizens appreciate the workplace with the basic equipment. The legal requirements of the delivery public administrative services at the ward People's Committees is convenient for citizens when public administrative agencies applied the OSS mechanism. The civil servants are performing their public duties within the standard rules and they have job relevant professional knowledge and skills. In the transactions, the documents are not faulty or lost. However, the behavior and attitude of the civil servants are underestimated, especially when they answer the problems or

complaints of the people. The Ward People's Committees could give documents back on time but citizens still have to wait for their turn because of the big number of users at the Ward People's Committees. Taking the number order has not been carried out; therefore, the later service users often feel reluctant and eager due to their waiting.

Relationship between Citizens' Perception of Public Administrative Services and their Satisfaction

To test the hypotheses, this part presents the results of multiple linear regression analysis for Citizens' Satisfaction. The dependent variable is Citizens' Satisfaction while the independent variables are the five components of public administrative services. However, respondents' personal characteristics also should be considered as control variables because they may have impact on their satisfaction.

Table A.3 of the Appendix presents the overall results of regression analysis in both scenarios. In the first scenario, the multiple linear regression model with control variables is in accordance with the Adjusted R square = 0.045, F value = 3.507 with sig. = 0.001. However, the Adjusted R square is very small, which indicates that the relevance of the model is not high. Among the ten control variables, only three of them have a statistical significance with satisfaction (sig. < 0.05) including Educational Attainment, Occupation and Frequency of using public administrative services.

When adding 5 more variables into the model, the full model becomes more significant and suitable for the results: Adjusted R square =

0.715, F value = 74.354 with sig. = 0.000. In this multiple linear regression model, all coefficients of ten control variables didn't reach a 0.05 significance level which means that the ten control variables had no statistical significance.

All the five main independent variables attain statistical significance with Satisfaction (sig. < 0.05). Standardized Coefficients (beta) in the model get lower results in turn: Civil servants' capacity and public-duty ethics with 0.325; Time and Cost with 0.248; Facilities with 0.163; Transaction with 0.141 and Process of delivery with 0.093. Five coefficients are all higher than zero which means that the five independent variables get a positive relationship with the dependent variable Citizens' Satisfaction (the higher the citizens' perception of components of public administrative services are, the greater their satisfaction and vice versa). Therefore, all hypotheses are accepted. The formula to show Citizens' satisfaction based on independent variables is:

$$\text{Citizens' Satisfaction} = 0.325 * (\text{Civil servants' capacity and public-duty ethics}) + 0.248 * (\text{Time and Cost}) + 0.163 * (\text{Facilities}) + 0.141 * (\text{Transaction}) + 0.093 * (\text{Process of delivery})$$

All 5 hypotheses are supported by the research data. The multiple linear regression model also shows that the factor Civil servants' capacity and public-duty ethics have the most considerable impact on the Citizens' satisfaction, followed by Time and Cost, and then Facilities. Transaction and Process of delivery have the least impact on satisfaction. The citizens all understand that civil servants are those who receive a salary from the state budget and have a responsibility to serve the citizens. The civil servants' capacity and morals have a direct influence on the delivery quality of the public administrative service and the citizens' trust. In the process of today's administrative innovation, the morals and capacity of the civil servants are very important factors is a very important factor because of the citizens' demand for the civil servants' service in general and the service of state administrative agencies in particular. This research result of public administrative services at Wards of Tay Ho District showed that the

civil servants' capacity and public-duty ethics are the biggest factor influencing the citizens' satisfaction.

The increasing demand for good public service quality requires the improvement of operational capacity of government at all levels and the civil servants' knowledge. It plays a vital role in the administrative reform in which Vietnam has just achieved some certain results in enhancing the knowledge level of the civil servants, especially the ones working at the grassroots level. In the market economy, people pay more attention to the ethical values of officials in order to gradually build up a new public institution to serve well the citizens. More and more people will be satisfied with public administrative services when moral principles and standards have been codified into the legal enforcement and observed strictly by the civil servants. In fact, citizens tend to appreciate the gained results from the public administrative services rather than the transaction and implementation process. People are often greatly concerned about the time and cost they must pay. This is a factor that considerably influences the citizens' satisfaction when they have to deal with public administrative agencies. The satisfaction level will not be very high if they spend too much time in waiting or results are not delivered as promised. Besides, when people's living conditions get better, the facility factors will influence the citizens' satisfaction with public administrative services to a certain extent (the third highest factor among the five ones in the model although it has the highest mean score). Transaction is the fourth factor in the model but it is one of two factors which have the lowest mean scores by respondents' perceptions. Its level of influence with satisfaction is lower than Civil servants' capacity and public-duty ethics, Time and Cost and Facilities. The process of delivery has the lowest level of influence because the citizens tend to suppose that it has been strictly legalized and directed according to the senior public administrative agencies. The Ward People's Committees are only the agencies that implement the policies in delivering the public administrative services to citizens.

5. Conclusion

This study develops a model and empirically tests its applicability in the delivery of services at a grassroots level. The study has tested the scales of the public administrative service quality based on the SERVPERF model and the scales of the previous studies. It also points out that there are five components when considering public administrative services as well as the satisfaction of citizens in the context of Vietnam. To compare with the previous studies, the factors and impact levels on the satisfaction of citizens have some differences. Thus, it can be concluded that the service quality commented on by customers is different in different fields. Hence, the previous judgment is right in saying that the elements of service quality are changeable due to the market and research sectors. Public administrative services have their own features, so it is necessary to adjust some scales in order to be suitable for the research.

The findings of the study help in understanding the relationship between citizens' perceptions of components of public administrative services and the citizens' satisfaction with the public administrative services at the Ward People's Committee of Tay Ho District. Five factors that affect citizens' satisfaction are Civil servants' capacity and public-duty ethics, Time and Cost, Facilities, Transaction and Process of delivery. The need to learn about the influence of these factors is an important part in further improving the satisfaction of the people. Civil servants' capacity and public-duty ethics are the factors having the most considerable impact on citizens' satisfaction. This trend requires the operational capacity of government at all levels and the civil servants' knowledge. It plays a vital role in the administrative reform that Vietnam has just achieved with some certain results in enhancing the knowledge quality of civil servants, especially for the ones working at the grassroots level. In the market economy, people pay more attention to the ethical values of the officials in order to gradually build up a new public institution to serve well the citizens. More and more people will be satisfied with public administrative services when moral principles and standards have been codified into

the legal enforcement and observed strictly by the civil servants.

This study provides helpful information for Communal People's Committees as the foundation in setting up policies and plans so as to enhance the satisfaction of citizens about the public administrative services at the grassroots level. Although government agencies traditionally focus on internal measures of performance, external performance measures from a citizen perspective have been increasingly employed. The latter approach generally takes the form of citizen satisfaction surveys or other relevant survey data measuring government performance perceived by citizens. Thus, the results from the survey at Tay Ho District have a practical significance when the country has initiated the reform of administrative procedures for a long time. The OSS model also has been confirmed as to its effectiveness in delivering public administrative services to the citizens. Government officials at all levels may also find some relevance in this study.

References

- [1] Callahan & Gilbert, "End-user satisfaction and design features of public agencies", *American Review of Public Administration*, 1 (2005), 1-17.
- [2] James, "Evaluating the expectations disconfirmation and expectations anchoring approaches to citizen satisfaction with local public services", *Journal of Public Administration Research and Theory Advances*, 2007, 1-17.
- [3] Morgeson FV III, "Comparing determinants of website satisfaction and loyalty across the e-government and e-business domains", *Electronic Government: An International Journal*, 8 (2011), 164-184.
- [4] Poister T.H, Henry G.T, "Citizen ratings of public and private service quality: A comparative perspective", *Public Administration Review*, 54 (1994), 155-160.
- [5] Van Ryzin GG, Muzzio D, Immerwahr S, Gulick L, Martinez E, "Drivers and consequences of citizen satisfaction: An application of the American customer satisfaction index model to New York city", *Public Administration Review*, 64 (2004), 331-341.
- [6] Jianchuan Zhang, "Citizen-centric e-government performance: Satisfaction with e-information",

- Electronic Government an International Journal, 9(2012):388 - 402
- [7] Parasuraman, A., Zeithaml, V. A., & Berry, L. L., "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, 64 (1988) 1, 12-40.
- [8] Westbrook, R, Reilly M., "Value-Percept Disparity: An alternative to the disconfirmation of expectations theory of consumer satisfaction", *Advance in Consumer Research*, 10 (1983), 256-261.
- [9] Anderson, E., Sullivan M.W., "The antecedents and consequences of customer satisfaction for firms", *Marketing Science*, 12 (1993), 125-143.
- [10] Vo Nguyen Khanh, *Measuring the satisfaction of the people for public administrative services when applying ISO in District No. 1 - Ho Chi Minh City*. Thesis at University of Economics Ho Chi Minh City, 2011.
- [11] Cronin, J.J.Jr., Taylor S.A, "Measuring service quality: A reexamination and extension", *Journal of Marketing*, 56 (1992), 55-68.
- [12] Spreng R. A., MacKoy, R. D., "An empirical examination of a model of perceived service quality and satisfaction, *Journal of Retailing*, 72(1996), 201-214.
- [13] Lassar W. M., Winsor R.D., "Service quality perspectives and satisfaction in private banking", *Journal of Services Marketing*, 14 (2000) 3, 244-271.
- [14] Zeithaml, V.A., Bitner, M.J., *Service marketing: Integrating customer focus across the firm*, 2nd edn. Boston, MA: McGraw-Hill, 2012.

APPENDIX

Table A.1. Results of EFA Test with Scales of Independent Variables Rotated Component Matrix

Items	Component				
	1	2	3	4	5
REL_1		0.734			
REL_2		0.665			
REL_4	0.522				
CAP_1	0.665				
CAP_2	0.775				
CAP_3	0.743				
CAP_4	0.510				
CAP_5		0.540			
ATT_1		0.762			
ATT_2		0.624			
ATT_3	0.572				
ATT_4	0.551				
EMP_2			0.621		
EMP_3			0.543		
FAC_1				0.554	
FAC_2				0.663	
FAC_3				0.670	
FAC_4				0.736	
FAC_5				0.731	
PRO_1			0.626		
PRO_2			0.724		
PRO_3			0.736		
PRO_4			0.671		
TAC_2					0.694
TAC_3					0.549
TAC_4					0.707
TAC_5					0.605

Source: Author's analysis.

Table A.2. Results of EFA for Citizens' Satisfaction Component Matrixa

	Component
	1
SAT_1	0.830
SAT_2	0.899
SAT_3	0.807

Source: Author's analysis.

Table A.3. Regression Results for Citizens' Satisfaction

	Model 1	Model 2
Constant	0	0
Gender of respondents	-0.004	-0.006
Age of respondents	-0.012	-0.023
Marital status of respondents	-0.022	-0.006
Educational attainment of respondents	0.127*	-0.010
Occupation of respondents	-0.140*	-0.020
Monthly income of respondents	-0.004	0.034
Frequency of use	0.122*	0.037
Acquaintances working at the Ward People's Committee	-0.011	-0.024
Extra fee payment	-0.009	-0.030
Residence of respondents	-0.090	-0.015
Civil servants' capacity and public-duty ethics		0.325***
Transaction		0.141**
Process of delivery		0.093*
Facilities		0.163***
Time and Cost		0.248***
R ²	0.258	0.851
Adjusted R ²	0.045	0.715
F	3.057**	74.294***

*Sig. < 0.05 **Sig. < 0.01 ***Sig. < 0.001

Source: Author's analysis.