# INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2023, Vol. 4, No. 1, 38 – 47 http://dx.doi.org/10.11594/ijmaber.04.01.05

#### **Research Article**

## **Concessionaires' Satisfaction on General Santos City Water District Services**

Jennica P. Anoche<sup>1</sup>, Kevin J. Ante<sup>1</sup>, Chez Anne P. Dolor<sup>1</sup>, Jannene G. Ferolino<sup>1</sup>, Jason Roy T. Ferolino<sup>1</sup>, Bernandino P. Malang<sup>2\*</sup>, Florinda G. Vigonte<sup>2</sup>

<sup>1</sup>General Santos City Water District, General Santos City, 9500, Philippines <sup>2</sup>World City College, Cubao, Quezon City, Philippines Bulacan State University, Bustos Campus, Philippines

Article history: Submission October 2022 Revised January 2023 Accepted January 2023

\*Corresponding author: E-mail: vellaanggresta@gmail.com

#### ABSTRACT

This research entitled Concessionaires Satisfaction on General Santos City Water District Services focuses on determining the level of satisfaction of their active members with the quality services provided by GSCWD. In addition, the researchers conducted this study to know the relevance and relationship of concessionaires' level of satisfaction when grouped according to demographics and the improvements that the active members recommended to GSCWD services. Furthermore, this is a descriptive correlational study with a quantitative approach. Using a customer feedback survey, the researchers gathered the necessary data for this study. The researchers utilized an online sampling calculator to determine the total number of respondents from the active members of this study. A total of three hundred eighty-two (382) respondents were intended for the sample size from different barangays with active connections in General Santos City. Feedback survey questionnaires were distributed randomly to residents and business owners in different barangays until the researchers reached the quota. Upon completing the survey, the researchers found out that the GSCWD has a high level of customer satisfaction, as a result of which they strongly agree that the services provided are of high quality.

Moreover, the relationship between a concessionaire's employment status and customer satisfaction level is insignificant, implying that it has no direct influence on customer satisfaction. However, age, sex, and classification of concessionaire's service connection have a significant relationship with the level of customer satisfaction, indicating that it directly impacts customer satisfaction. In line with these, the researchers, therefore, conclude that the concessionaires are greatly satisfied and that GSCWD can provide high-quality water services. Fur-

How to cite:

Anoche, J. P., Ante, K. J., Dolor, C. A. P, Ferolino, J. G., Ferolino, J. R. T., Malang, B. P., & Vigonte, F. G. (2023). Concessionaires' Satisfaction on General Santos City Water District Services. *International Journal of Multidisciplinary: Applied Business and Education Research*. 4(1), 38 – 47. doi: 10.11594/ijmaber.04.01.05

thermore, age, sex, and classification of a concessionaire's service connection are essential factors in determining concessionaires' expectations and perceptions of GSCWD's various services.

**Keywords**: Concessionaires' Satisfaction, Customer, Philippines, Services, Water District

## Introduction

Water is essential for all forms of life on Earth. Although water is everywhere, it is considered scarce since our planet's life and its inhabitants depend on it. It is limited because we cannot renew it and must use it with extreme caution. Furthermore, we must recognize that while there is plenty of water, not all are safe to consume.

Access to safe water and sanitation is a human right, as recognized in 2010 by the United Nations General Assembly, resolution 64/292 (United Nations General Assembly 2010). However, in 2015, only 91% of the global population used an improved drinking water source (96% of the global urban population). In other words, more than 660 million people worldwide use unimproved drinking water sources, nearly half of them in sub-Saharan Africa, because of low coverage and rapid population growth (UNICEF and World Health Organization 2015).

In the Philippines, the country's estimated 100.7 million residents, or 91% of the population, have access to at least basic water services. However, availability varies significantly by location, from 62% to 100%. Only 80% of homes in the poorest quintile have access to essential water services, compared to almost 99% of one-fifth wealthiest households. (UNICEF, 2017)

Water supply, or the provision of water by public utilities, commercial organizations, or even individuals, acts as a point of access for customers to use clean water for daily tasks like laundry, washing dishes, cooking, and other similar activities. For a community to function, there must be a reliable water supply. It makes it possible for the neighborhood to exist and grow (RAGMA et al., 2017).

In the Philippines, the biggest issue facing water supply systems is the consistency of the water supply. In the country, two industrieswater districts and private operators—provide water supply services. The Philippines' water supply is kept clean thanks to these two industries. Access to a better water source increased from 85% in 1990 to 92% in 2010, according to the joint WHO/UNICEF monitoring report. Although more individuals have access to a better water supply, water continuity is still challenging (RAGMA et al., 2017).

One water district that provides water supply is the General Santos City Water District (GSCWD). As the city's primary water service provider, it has 55,917 active service connections as of August 2022. It is committed to the highest standards in furthering its mission to provide public safe, potable, and reliable water service. Two of General Santos City Water District's Quality Policies are first to adopt new systems and procedures for continuous, efficient, and innovative services to obtain the highest customer satisfaction possible. Second, conscientiously adhere to service standards and strive for excellence towards operational efficiency in customer service (Gensan Water District, 2022).

In line with this, customer satisfaction, as a definition, is a measurement determining how happy customers are with a company's products, services, and capabilities. Customer satisfaction information, including surveys and ratings, can help a company determine how to improve best or change its products and services. An organization's primary focus must be to satisfy its customers, which applies to industrial firms, retail and wholesale businesses, government bodies, service companies, nonprofit organizations, and every subgroup within an organization ("What is Customer Satisfaction? | ASQ", 2022).

Thus, this study aims to determine the satisfaction of concessionaires with the services offered by General Santos City Water District.

#### **Methods**

This study is quantitative research. A quantitative research method is employed since the researchers want to evaluate the satisfaction level of General Santos City Water District concessionaires in the City of General Santos.

#### **Research Design**

Quantitative research investigates phenomena systematically by collecting quantifiable data and employing statistical, mathematical, or computational techniques. Quantitative research, for example, collects data from current and prospective customers via sampling techniques and the dissemination of online polls, surveys, and questionnaires. The results presented are numerically done. Following a thorough understanding of these numbers, one can forecast the future of a product or service and make changes accordingly. An example of quantitative research is a survey conducted to determine how much time a physician takes to take care of a client when the patient walks into the hospital. A patient satisfaction survey template could be used to ask questions such as how long it takes a doctor to see a patient, how frequently a patient walks into a hospital, and other similar concerns.

Feedback surveys were employed to acquire the information that was needed. According to social research, the "most often utilized mode of observation in the social sciences" is the survey approach to data collecting (Babbie: 1993; Hamayun: 2014). Questionnaires have the potential to be used in survey research since they enable the researcher to gather all types of information and provide answers to all of the topic's inquiries (Hamayun: 2014).

#### Population and Sampling

This study was conducted among the residents and commercial establishments in the City of General Santos, specifically in nineteen (19) out of twenty-six (26) barangays. The focus of the study is the active service connection of GSCWD, which is 55 917. The selected participants were the residents and business owners that the researchers randomly selected from the list of concessionaires provided by General Santos City Water District. Out of Fifty-five thousand nine hundred seventeen (55,917) active service connections, three hundred eightytwo (382) were selected. The researchers used an online calculator to find the sample size.

Calculator. net	FINANCIAL FITNESS & HEALTH
home / math / sample size calculator	
Sample Size Calculator	
Find Out The Sample Size This calculator computes the minimum number of n constraints.	ecessary samples to meet the desired statistical
Result	
Sample size: 382	
This means 382 or more measurements/surveys are the real value is within $\pm 5\%$ of the measured/survey	
Confidence Level: ⑦  95% ❤ Margin of Error: ⑦  5%	
Population Proportion: 70% Use 50% if	not sure
Population Size: 7 55917 Leave blan	k if unlimited population size.
Calculate () Clear	

Figure 1. Sample Size Calculator

The researchers categorized the respondents' profiles according to age, sex, employment status, and classification of water service connection. The respondents will be randomly chosen from 19 barangays of General Santos City.

### **Research Instrument**

For data gathering, the researchers conducted feedback surveys with the research participants. The researchers used one set of feedback questionnaires with three parts as instruments for gathering data. The three-part survey contains sets of questions for the respondents, which answer the questions in the statement of the problem.

The questionnaire was verified by submitting it for checking and approval to one of the agency's Assistant General Managers and our research professors to ensure the questions were valid. All their comments and ideas were considered in the final version of the questionnaire. After that, copies of the updated questionnaire were made and given to the study's intended respondents. Additionally, the internal reliability of the questionnaire and instruments was examined in this study using Cronbach's alpha. Twenty respondents were provided with the questionnaire for the pilot test via Google Forms. The reliability test indicated that the questionnaire was acceptable because Cronbach's alpha result for the 15 items was .829 (greater than the permitted value of 0.7).

The researchers guaranteed the respondents that the data gathered be kept confidential and that no names will appear in this paper. The informants were encouraged to converse freely and share their honest views and opinions. The respondents were assured that there were no right or wrong answers.

#### Data Gathering Procedure

A request letter was submitted to the General Manager of the GSCWD to allow us to gather information and conduct our research on their concessionaires. The respondents were interviewed by asking them questions in the survey sheets. The researcher also took note of the demographic profile of the respondents, and the interview started with the researcher briefly introducing the purpose and process of the survey. The survey lasted for about 2-5 minutes for every respondent. The survey lasted for one week. The questionnaires were collected right after the survey. The collected data were tallied to determine the frequency of information gathered. The results were totaled and tabulated using MS Excel 2013. Statistical methods such as frequency counts, percentages, means, spearman's rho, and chi-square test were used to describe and interpret the data gathered clearly. Finally, IBM SPSS Version 25 was used to compute statistical data treatment.

## **Results and Discussion**

In order to determine whether the participants in a given study are a representative sample of the desired population for generalization purposes, demographic information about the participants in the study was required. Furthermore, understanding the distribution of the respondents' demographic features can help the researchers assess how closely the sample replicates the population if the goal is to obtain a representative sample of that community. Moreover, age, gender, employment status, and classification of concessionaire's service connections are the demographics used in this study.

Age Range	Frequency	Percent
Below 21 years old	30	7.9
21-30 years old	154	40.3
31-40 years old	96	25.1
41-50 years old	44	11.5
51-60 years old	36	9.4
Above 60 years old	22	5.8
Total	382	100.0

#### Table 1. Age Range of Respondents

Table 1 depicts the demographics of respondents by age range. From a total of 382 respondents from various barangays, 40.3% (154 respondents) were between the ages of 21 and 30. At the same time, the lowest percentage is 5.8%, with a total of 22 respondents who are ages above 60 years old.

Table 2. Sex of Respondents				
Sex	Frequency	Percent		
Male	157	41.1		
Female	225	58.9		
Total	382	100.0		

having a job. In comparison, the percentages of self-employed and unemployed are 28% (107) and 17.5% (67), respectively.

### Table 3. Employment Status

Table 2 shows the sex distribution of respondents. With 225 responders, females make up the majority of the sample (58.9%), compared to males at 41.1%. (157 respondents).

Table 3 shows that 54.5% (208) of all respondents, the highest percentage, reported

Employment Status	Frequency	Percent
Employed	208	54.5
Self-employed	107	28.0
Unemployed	67	17.5
Total	382	100.0

Table 4. Classification of Concessionaires' Service Connection

Classification of Concessionaires' Service Connection	Frequency	Percent
Residential	310	81.2
Commercial	72	18.8
Total	382	100.0

Table 4 demonstrates that the respondents were more likely to have residential than commercial service connections. Commercial respondents comprised 20.7% of the respondents, or 72 in numbers, while residential respondents had a total number of 310, or 81.2%.

Customer satisfaction is the second problem considered in the study. As an agency that provides utility services, customer satisfaction is vital in improving the GSCWD services.

Table 5. Likert Scale	
-----------------------	--

Scale	Interval Range	Descriptive Equivalent	
5	4.20-5.00	Strongly Agree	
4	3.40-4.19	Agree	
3	2.60-3.39	Neither Agree or Disagree	
2	1.80-2.59	Disagree	
1	1.00-1.79	Strongly Disagree	

Table 5 depicts the scale used to interpret the survey results.

Water Quality Services	Mean	Standard Deviation	Descriptive Equivalent
1. The water supply is clean and clear - e.g., no foreign body can be seen.	4.45	0.63	Strongly Agree
2. The water has no nasty taste.	4.30	0.72	Strongly Agree
3. The water has no unpleasant odor/smell.	4.38	0.69	Strongly Agree
4. The water supply in your area has strong pressure.	4.25	0.85	Strongly Agree

Anoche et al., 2023 / Concessionaires' Satisfaction on General Santos City Water District Services

Water Quality Services	Mean	Standard Deviation	Descriptive Equivalent
5. The water in your area is available throughout the day.	4.44	0.74	Strongly Agree
Average Mean	4.36	0.73	Strongly Agree

As shown in Table 6, water quality services have a mean average of 4.36, which indicates that the respondents "strongly agree" that these services are of quality. The result signifies that the GSCWD provides a clean, clear, and has no nasty taste and smell water supply to its consumers. Furthermore, the water provided is continuous and has a high pressure which satisfies the members' needs for water even at different places. Therefore, these services provided by GSCWD result in high satisfaction from their consumers.

#### Table 7. Business Services

	Business Services	Mean	Standard Deviation	Descriptive Equivalent
1.	The queuing system at the office is orga- nized.	4.44	0.64	Strongly Agree
2.	The alternative payment methods offered by GSCWD are reliable - e.g., through a bank, payment centers, and online payments.	4.43	0.68	Strongly Agree
3.	The disconnected water meter is promptly reconnected.	4.14	0.82	Agree
4.	The distribution of the water bill in your area is on time.	4.33	0.75	Strongly Agree
5.	The request for service line leak's repair was fixed appropriately and quickly.	4.08	0.86	Agree
Av	verage Mean	4.28	0.75	Strongly Agree

As displayed in table 7, business services have an average mean of 4.28, indicating that respondents "strongly agree" that these services satisfy them. The results imply that GSCWD's operations are at their peak. The GSCWD's queuing system, payment methods, operations, and equipment are fully functional. Moreover, they ensure that their promised services are delivered and that their members receive the highest quality of these services.

#### Table 8. Customer Services

	Customer Services	Mean	Standard Deviation	Descriptive Equivalent
1.	The staff were courteous and professional.	4.39	0.66	Strongly Agree
2.	The staff strictly and fairly implemented the policies, rules, and regulations -e.g., no dis- crimination, no "palakasan" system)	4.37	0.69	Strongly Agree
3.	The staff provided clear and sufficient infor- mation - i.e., solutions to problems, answers to inquiries, and information on products and services	4.35	0.69	Strongly Agree

Anoche et al., 2023 / Concessionaires' Satisfaction on General Santos City Water District Services

	Customer Services	Mean	Standard Deviation	Descriptive Equivalent
4.	The staff addressed the queries/concerns in a prompt manner	4.33	0.72	Strongly Agree
5.	The staff demonstrated willingness to assist customers	4.37	0.67	Strongly Agree
Ave	rage Mean	4.36	0.69	Strongly Agree

As presented in table 8, customer services have a mean average of 4.36. The results signify that the concessionaires strongly agree that the staff is responsive, flexible, and understanding when handling the concessionaires. Furthermore, this indicates that customers are pleased with how GSCWD employees treat them.

## Recommendations, Comments, and Commendations by the Concessionaire's

This part of the study includes the recommendations, comments, and commendations offered by the respondents to improve the services of the Water District.

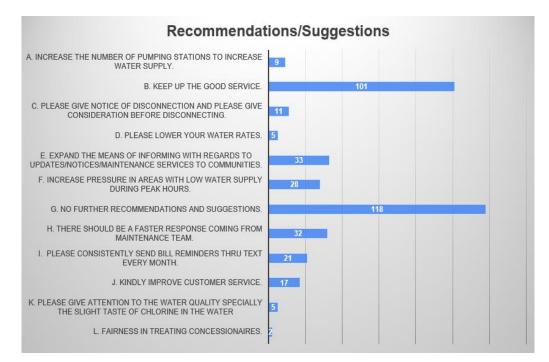


Figure 2. Recommendations/Suggestions

The chart shows that most consumers are satisfied with GSCWD's services, with 118 "No further recommendations and suggestions" responses and 101 "Keep up the good service" out of the 382 overall recommendations. The results mean that most respondents have no additional suggestions for improvement because they are already pleased with the services provided. Following that are 33 proposals for "expanding the means of informing with regards to updates/notices/maintenance services to communities," including delivering bill advisory and water interruption notices by SMS, posting advertisements on different social media platforms, and enhancing telephone efficiency. Next are 32 recommendations for there should be a faster response coming from the maintenance team for repairs of leakages. Increase pressure in areas with low water supply during peak hours, followed by 28 counts. Consistently send bill reminders thru text every month with 27 tallies. Also, 17 recommendations say to "kindly improve customer service."

Regarding disconnection, 11 respondents said to give notice of disconnection and give consideration before disconnecting the water connection. In connection to water supply, nine (9) respondents said to add more pumping stations to accommodate more concessionaires in the city. When it comes to water rates, five (5) suggested lowering the fees implemented. Also, five (5) recommended giving attention to the water quality, especially the slight taste of chlorine. Lastly, two (2) respondents said to treat all concessionaires fairly.

## Significant Relationship of Customer Satisfaction between Demographics

The fourth problem considered in the study is the hypothesis of the study.

			Age Range	Customer Satisfaction (Mean)
Spearman's	Age Range	<b>Correlation Coefficient</b>	1.000	.184**
rho		Sig. (2-tailed)		.000
		Ν	382	382
	<b>Customer Satisfaction</b>	<b>Correlation Coefficient</b>	.184**	1.000
	(Mean)	Sig. (2-tailed)	.000	
		Ν	382	382

Table 9. Spearman's Correlation Test between Age Range and Customer Satisfaction

Table 9 shows the correlation coefficient of 0.18, which denotes a positive correlation between the age range and customer satisfaction. Also, the p-value = 0.000, less than the 0.05 significance level, thereby rejecting the null hypothesis. Moreover, this signifies a direct relationship between age range and level of

customer satisfaction, which means that the age range of concessionaires directly affects customer satisfaction. Furthermore, the age of a concessionaire plays an essential role in determining the expectation and perceptions of customers regarding various aspects of service quality offered by GSCWD.

Table 10. Chi-Square Test betw	een Sex and Customer Satisfaction
--------------------------------	-----------------------------------

	Value	df	Asymptotic Significance (2-sided)
Linear-by-Linear Association	9.556	1	.002

As presented in table 10, the result shows that Chi-Square p-value = 0.002, which is lower than the 0.05 level of significance, thereby rejecting the null hypothesis. In addition, this implies that there is a significant relationship between sex and level of customer satisfaction level. This result means that it has a direct effect on the level of customer satisfaction.

Table 11. Chi-Square Test between Employment Status and Customer Satisfaction

	Value	df	Asymptotic Significance (2-sided)
Linear-by-Linear Association	2.991	1	.084

As presented in table 11, the result shows that p-value = 0.084, which is higher than the 0.05 level of significance, thus accepting the null hypothesis. Moreover, this implies that

employment status has no significant relationship with customer satisfaction. This implication means that the employment status of concessionaires has no direct impact on customer satisfaction.

ValuedfAsymptotic Significance (2-sided)Linear-by-Linear Association6.2131.013

As shown in table 13, the result shows that p-value = 0.013, which is lower than 0.05 significance, thereby rejecting the null hypothesis. Additionally, this indicates a significant relationship between the classifications of a concessionaire's service connection and customer satisfaction. This indication implies that the classification of a concessionaire's service connection directly impacts customer satisfaction. Furthermore, the concessionaires' service connection classification influences the concessionaires' approval of the various services offered by GSCWD.

## Conclusion

This section provides the conclusions based on the analyses and findings of the study. The researchers, therefore, had the following conclusions:

- 1. The GSCWD is capable of providing highquality water services to their concessionaires.
- 2. The concessionaires of the GSCWD are delighted with the services provided by the agency.
- 3. Age, sex, and classification of concessionaire's service connection play an essential role in determining the expectation and perception of concessionaires regarding various services offered by GSCWD.

## Acknowledgment

First and foremost, the researchers would like to thank the Almighty God for the blessings and protection He endowed us in completing this study. Our sincerest gratitude to the people who supported this research study entitled: Concessionaires' Satisfaction on General Santos City Water District Services making this possible and successful. Moreover, the researchers would like to express their gratitude to the following individuals: Dr. Bernandino P. Malang, for his thorough evaluation, well-critiqued, enormous help in finishing the study, and for nurturing us from the beginning to the end of our research. Dr. Florinda Garcia-Vigonte, for assisting us in using SPSS to calculate and interpret the statistical results of our collected data. Furthermore, to boost our self-esteem until this study is published. General Manager Arn B. Gellangarin, PME, for allowing us to conduct this research and collect information from the office. Assistant General Manager Francisco R. Alolod Jr., CPA, CESE, the Asst. General Manager for Finance of GSCWD, for ensuring and validating the feedback survey to be utilized in gathering data without reservation. Division Manager Samcelle B. Valenzuela, MPA - Billing and Accounts Division, for providing us with data on GSCWD active members for the respondents of this research. In addition, we would like to express our heartfelt appreciation to Community Relations Division for assisting us with the FOI and giving references related to the study, our Managers and colleagues for their support and assistance during the survey, our families for their unending love and encouragement, and finally, the respondents for sharing their time, sentiments, and knowledge. This research would not be able to proceed and be completed without the assistance of these individuals.

## References

- Abboodi, M. (2014). A FRAMEWORK FOR MEASURING AND ANALYZING CUSTOMER SATISFACTION AT COMPUTER SERVICE COMPANIES USING LEAN SIX SIGMA. Stars.library.ucf.edu. Retrieved 12 September 2022, from <u>https://stars.library.ucf.edu/cgi/viewcontent.cgi?article=5616&context=etd</u>.
- Borgave, S. (2012). Service Quality Management: A Literature Review. <u>https://www.re-</u> <u>searchgate.net</u> . Retrieved 12 September 2022, from <u>https://www.researchgate.net</u>
- Gensan Water District. Gensan Water District. (2022). Retrieved 8 September 2022, from https://gensanwater.gov.ph.

- Quantitative Research: What it is, Tips & Examples | QuestionPro. (2018). Retrieved 13 September 2022, from <u>https://www.questionpro.com/blog/quantitative-research/</u>
- RAGMA, F., DEL ROSARIO, H., GALICIA, J., GARNACE, B., MARTINEZ, E., & RUBANG, A. et al. (2017). MEMBERS' SATISFACTION TO-WARDS CANDON CITY WATER DISTRICT SERVICES. www.researchgate.net/. Retrieved 12 September 2022, from <u>https://www.researchgate.net/publication/324137139 MEMBERS' SATISFAC-TION TOWARDS CANDON CITY WA-TER DISTRICT SERVICES.</u>
- Rathour, S. (2021). Best Essay On The Importance Of Water [With Headings]. TheNextSkill. Retrieved 12 September 2022, from https://thenextskill.com/essay-on-the-importance-of-water
- Tangaja, A., Arceo, A., Centino, A., & Camello, M.(2021). Level of User Satisfaction and ServiceQuality of Mantalongon Water System Coop-erativeforImprovedServices.https://www.researchgate.net.Retrieved 12September2022,fromhttps://www.researchgate.netServices.
- Tijjang, B., Nurfadhilah, N., & Putra, P. (2020). Product and Service Quality Towards Customer Satisfaction Refilled Drinking Water in Indonesia. www.researchgate.net. Retrieved 12 September 2022, from <u>https://www.researchgate.net/publication/348040010 Product and Service Quality Towards Customer Satisfaction Refilled Drinking Water in Indonesia.</u>

- Two billion people lack safe drinking water, more than twice lack safe sanitation. Unicef.org. (2017). Retrieved 12 September 2022, from <u>https://www.unicef.org/philippines/press-</u> <u>releases/two-billion-people-lack-safe-drink-</u> <u>ing-water-more-twice-lack-safe-sanita-</u> <u>tion?fbclid=IwAR0LNx87jPxXSK-</u> <u>7wsnjoBMk4S2GpQFjSo7diT3b4-f3k\_sJfcAN-</u> <u>herTxWw</u>.
- What is Customer Satisfaction? | ASQ. Asq.org. (2022). Retrieved 8 September 2022, from <u>https://asq.org/quality-resources/cus-</u> <u>tomer-satisfaction</u>.
- What is a Water District | Local Water Utilities Administration. Lwua.gov.ph. (2022). Retrieved 12 September 2022, from <u>https://lwua.gov.ph/water-districts/whatis-a-water-district</u>.
- Ohwo, O. & Agusomu, T. (2018). Residential Customers Satisfaction with Public Water Provision in Ojota, Nigeria. European Scientific Journal, ESJ, 14(23), 119–120.
- Rustinsyah, R., 2019. Determining the satisfaction level of water user association service quality for supporting sustainable rural development. Development Studies Research, 6(1), pp.118-128.
- Suciptawati, N., Paramita, N. and Aristayasa, I., 2019. Customer satisfaction analysis based on service quality: case of local credit provider in Bali. Journal of Physics: Conference Series, 1321(2), p.1.