

## **CITIZEN ASSESSMENT ON EXPECTATION AND PERFORMANCE AMONG FRONTLINERS BEFORE AND DURING THE FIRST WAVE OF COVID-19 CATASTROPHE**

Amin, S. H. M<sup>1\*</sup>, Abdullah, A<sup>2</sup>, Ali, A. J. M<sup>3</sup>, Shafie, S. A. M<sup>4</sup>, & Wahid, S. D. M<sup>5</sup>

<sup>1,2</sup>Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA (UiTM), Shah Alam, Selangor, Malaysia

<sup>4</sup>Faculty of Computer Science and Mathematics, Universiti Teknologi MARA (UiTM), Seremban, Negeri Sembilan, Malaysia

<sup>5</sup>Faculty of Business Management, Universiti Teknologi MARA (UiTM), Alor Gajah, Melaka, Malaysia

\*E-mail: [hajjar@uitm.edu.my](mailto:hajjar@uitm.edu.my)

### **1. INTRODUCTION**

Numerous studies have characterised citizen happiness in various ways. Citizens' satisfaction has long been disputed in numerous situations, which might impact government and public service providers (Elrehail et al., 2019; Jilke, 2018; Li et al., 2013; Suchánek & Králová, 2018; Wang, 2010; Zenker & Rütter, 2014). Citizens may evaluate services purely for their advantage or the benefit of all users (Song et al., 2020). Expectations, experiences, and prior attitudes all play a part in citizen satisfaction. A crisis is one factor that influences citizen satisfaction (Lakovic, 2021; Venetoklis, 2021). A crisis underlines the need for comprehensive crisis preparedness and management in the public sector. Amid great uncertainty, political and administrative authorities perceive a threat to society's fundamental ideals and/or life-sustaining institutions (Rosenthal et al., 1989). Malaysia has been in shock for about two years due to political and epidemic events, with severe socio-political repercussions.

The Malaysian government has implemented various humanitarian and economic stimulus packages costing hundreds of billions, demonstrating that it listens and acts to support citizens and the economy. The country took unpopular steps to stop the spread of COVID-19 in Malaysia (MOF, 2020). A government's response to and communication about a crisis directly impacts public well-being and creates government expectations. Any perceived or actual failures would damage the government's legitimacy (Bowie, March 16, 2020). With citizens upset with the government's handling of the Covid-19, policymaking and societal stability are crumbling (Faiez & Rao, 2019). Despite several studies on the expectation-performance link in public administration, this relationship has not been extensively investigated under crises and requires further research (Mung, 2021, June 8). Thus, this article compares citizens' expectations, perceived performance, and satisfaction toward Malaysian frontliners during the early Covid-19 epidemic. This paper uses Oliver's (1997) Expectancy-disconfirmation Model (EDM) to compare citizens' perceived performance-expectation relationship.

## **2. METHODOLOGY**

### **2.1 Descriptive Data**

This study population was composed of Malaysian citizens who volunteered to participate in the study. The responders came from a variety of different backgrounds. This study surveys 346 Malaysian citizens. After data cleaning, a total of 345 samples were received and used in the study. This study used Google Form to create an online questionnaire and emailed it to the authors' contacts and required participants to answer the survey and further distribute the online questionnaires to as many people as possible via the WhatsApp platform until the sample size is reached. The data collection period began on 15 June 2020 and ended two weeks later. The current study used a non-probability sampling technique called snowball sampling to target citizens subject to movement restrictions imposed by the Malaysian government during the pandemic outbreak. We chose both users and non-users of public services for our study because both groups have varying perspectives on public services (Van de Walle, 2018). In terms of sample size, previous researchers have given a few criteria (Hair et al., 2018; Jackson, 2003; Kline, 2016; Tabachnick & Fidell, 2013). We considered 300 examples after considering the scholars' recommendations.

### **2.2 Paired Comparison Tests for Two Related Samples of Measurement**

In general, a study performed a t-test to compare paired data when a parametric inferential condition was fulfilled (Daniel, 1990) and was interested in knowing whether the mean difference is significantly different from zero. The primary assumption for conducting parametric statistics was that the data follows a normal distribution, and if the assumption was violated, the t-test paired comparison was not generally valid (Das & Imon, 2016). Thus, there was essential to assess the normality assumption before proceeding with any formal statistical analysis. According to Öztuna et al. (2006), the general test for normality assumption was Kolmogorov-Smirnov, and it supports the null hypothesis for normality assumption as the p-value of the test more than 0.05. The study aimed to investigate the gap between expectation and perceived performance of frontliner before and after the pandemic occurred. In the nonparametric statistical test, Wilcoxon's signed-rank test for matched pairs was used to compares the median for two distributions. A characteristic of these nonparametric tests was the median rather than mean as its considerable interest of parameter testing for non-normal distribution (Daniel, 1990). Wilcoxon's signed-rank test also allows determining not only the difference but also the magnitude of any difference. As the null hypothesis of the median for the population, the difference is equal to, or less than zero was rejected, it can be concluded that one treatment is more effective than the other. In the context of this study, the perceived performance of the overall frontliner services meets the respondents' expectations, as the null hypothesis was rejected.

## **3. RESULTS AND DISCUSSION**

### **3.1 Demographic Profile**

Table 1 shows that majority of the respondent that contributed to this study were female, with 70.4 %, while only 29.6% were male. Most of the respondents were single, with 73.3%, 26.4% were married, and only 0.3% were others, such as widowed or divorced. Most of the respondents had STPM/Matriculation/Diploma as their education level with 58.6%, followed by SPM and Degree level with 17.1% and 16.8%, respectively. Lastly, 69.8% of the

respondents came from the other sector, 18.3% public sector, 7.8% private sector, and 4.3% were self-employed.

**Table 1: Respondent’s Demographic Profile**

Variable	Category	Frequency	Percentage (%)
Gender	Female	243	70.4
	Male	102	29.6
Marital Status	Single	253	73.3
	Married	91	26.4
	Others	1	0.3
Education Level	SPM	59	17.1
	STPM/Matriculation/Diploma	202	58.6
	Degree	58	16.8
	Master’s Degree	24	7.0
	PhD	2	0.6
Sector	Public	63	18.3
	Private	27	7.8
	Self-employed	15	4.3
	Others (includes those who are not working or those who are still studying	240	69.8

### 3.2 Kolmogorov-Smirnov Test of Normality for the Differences Perceived Performance and Expectation

In this study, there were five services of frontliner interested in investigating: healthcare, police, armed, immigration, and maritime service. The respondents gave a rating to frontliner services based on expectation before the pandemic and their perception of the performance of the frontliners during the pandemic using a 7-point Likert scale of measurement. Table 2 shows the result of the normality assumption for the difference between perceived performance and expectation using the Kolmogorov-Smirnov test. The significant value for all the services differences in Table 2 was less than 0.05, indicating that the normality assumptions did not fulfill as the null hypothesis was rejected. Thus, non-parametric statistical testing should be conducted for further analysis (Fitzgerald et al., 2001).

**Table 2: Results of Kolmogorov-Smirnov**

Variable	N	Mean	Median	Min	Max	Statistics	df	Sig.
Diff_Healthcare	345	0.800	1.00	-5.00	5.00	0.224	345	.000
Diff_Police	345	0.8754	1.00	-2.00	5.00	0.217	345	.000
Diff_Armed	345	0.8580	1.00	-3.00	5.00	0.244	345	.000
Diff_Immigration	345	0.8464	1.00	-3.00	6.00	0.226	345	.000
Diff_Maritime	345	0.7942	1.00	-2.00	5.00	0.245	345	.000

### 3.3 Wilcoxon’s Signed-rank Test for Matched Pairs

Table 3 shows the results of Wilcoxon’s signed-rank test for matched pair of perceived performance and expectation of frontliner services for healthcare, police, armed, immigration, and maritime. The negative ranks indicate the value of the perceived performance level less than the expected level, while positive ranks were more than the expected level for the perceived performance level value. The total of ties value was for an equal perceived performance and expectation level, which indicated the differences were zero value. The ties for zero value will eliminate from the analysis and reducing the samples accordingly (Daniel, 1990). The significant value based on Table 3 for all pairs of differences frontliner services was less than 0.05 and the null hypothesis was rejected. Therefore, the perceived performance

of all the frontliner services during the Covid-19 outbreak for healthcare, police, armed, immigration, and maritime exceed the expectation level of the respondents before the Covid-19 outbreak happen.

**Table 3: Results of Wilcoxon's Signed-rank Test**

Variables (Perceived -Expectation)		N	Mean Rank	Sums of Ranks	Z value	Sig (1-tailed)
Diff_Healthcare	Negative Ranks	30	77.53	2326.00	-9.869	0.000
	Positive Ranks	175	107.37	18789.00		
	Ties	140				
	Total	345				
Diff_Police	Negative Ranks	22	81.14	1785.00	-10.812	0.000
	Positive Ranks	189	108.89	20581.00		
	Ties	134				
	Total	345				
Diff_Armed	Negative Ranks	20	69.80	1396.00	-10.584	0.000
	Positive Ranks	176	101.76	17910.00		
	Ties	149				
	Total	345				
Diff_Immigration	Negative Ranks	27	70.00	1890.00	-10.475	0.000
	Positive Ranks	179	108.55	19431.00		
	Ties	139				
	Total	345				
Diff_Maritime	Negative Ranks	21	70.40	1478.50	-10.539	0.000
	Positive Ranks	175	101.87	17827.50		
	Ties	149				
	Total	345				

This study compares the impact of expectation and perceived performance before and after the Covid-19 pandemic. This study used a well-known consumer satisfaction marketing theory, although public sector studies on this relationship are new and limited in developing countries (Chatterjee & Suy, 2019). The model indicated that expectations, particularly disconfirmation, play a significant role in the formation of satisfaction. High-performance ratings lead to positive disconfirmation and increases satisfaction, but higher expectations lower lead to negative disconfirmation chances to lowering satisfaction (Oliver, 1997). The result shows that citizens perceive frontliners' effectively perform their duties and exceed their expectations before and during the Covid-19 pandemic outbreak, and it is in line with past studies by (Filtenborg et al., 2017; Morgeson, 2012; Van Ryzin, 2006). This paper offers empirical results from citizens' satisfaction during pandemic crises by validating and generalizing EDM in a developing country context. Besides, this study enables researchers, public managers, and others to better understand citizen satisfaction in this situation and continuously improve public information provision and service delivery.

#### 4. CONCLUSION

This paper is driven by the literature gap in terms of the impact of the crisis among citizens on what they perceived compared to their expectations. The literature for the perceived performance-expectation relationship based on Expectancy-disconfirmation Model that origin from the marketing field showed there is an existing theoretical and empirical support to stimulate public service satisfaction. Although empirical evidence on this relationship is relatively new in public sector studies and was limited in developing countries, thus inclining us to study how citizen has perceived performance-expectation relationship on governments' operation during the pandemic in the Malaysia context. This study discovered that all frontliners' performances met the citizens' expectations during the crisis. Thus, it shows the frontliners of our country had done their best in carrying their duties to serve the community.

The value of these links in supporting governments in making decisions about how to respond to a pandemic, on the other hand, is unclear. We anticipate that gaining a better knowledge of this process will also provide us with fresh and more detailed insights into the overall governance of crisis management. The result of this study cannot be generalized because it used a non-parametric sampling technique; thus, the sample was limited and did not represent the whole Malaysian population. As a recommendation, future studies might consider using probability sampling to extend the result to the population. As the sample size increases, hopefully, more analysis on parametric can be conducted.

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