

# Antecedents of Duty Free Shop Willingness to Pay\*

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## Abstract

**Purpose** - This study aims to examine the antecedents of willingness to pay in the domain of duty free shop.

**Design/methodology/approach** - This study chooses willingness to pay as explained variable. The candidates of explanatory variables are price fairness, brand awareness, employee service, product diversity, and crowding. This study uses survey to explore the linear relation between variables. This research collected data using online panel data collection service. The number of valid observation is 265. The research target is Lotte duty free store. Statistical analysis was for statistical inference. To attain the information of survey respondents, frequency analysis is employed. Next, this study implemented exploratory factor analysis and reliability to ensure both validity and reliability of measurement items. This study executed multiple regression analysis to test research hypotheses

**Findings** - Regrading results, brand awareness, employee service, and product diversity are positively associated with willingness to pay of duty free shop product. Moreover, the results of regression analysis suggest the inverted-U shape association between crowding and willingness to pay. However, price fairness appeared as non-significant variable to account for willingness to pay in the multiple regression analysis.

**Originality** - This study contributes to the literature by examining duty free shop customers more.

**Keywords:** Duty free shop, Willingness to pay, Brand awareness, Employee service, Product diversity, Crowding

**JEL Classifications:** M3, L8, L83

## I. Introduction

Duty free business is a profitable area in tourism related business domain. For instance, Lotte duty free store, which is domestic market leader in duty free business, recorded large amount of sales in 2018 (7,500 million KRW) (Korea Duty Free News, 2019). However, its sales could be jeopardized by the external condition such as more intense competition and fluctuated tourism demand (Korea Economy, 2017). Under this circumstance, it is critical to understand the consumers characteristics because they could determine the fate of business. Therefore, offering customer characteristics information might lead duty free businesses to stabi-

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lize their sales more. Despite of the necessity, scant studies have been implemented to scrutinize the characteristics of duty free shop customers. Moreover, extant literature documented the determinants of satisfaction; its explanatory attributes have been limited to the elements related to physical atmosphere (Kim & Yang, 2008; Kim, Kim, and Hong, 2018). It can be inferred studies exploring the purchase decision attributes have been rarely investigated in the domain of duty free shop business. All things considered, the purpose of this research is to figure out consumer characteristics in duty free business domain. This study thus contributes to the literature by informing duty free shop customers purchase decision more.

In current research, willingness to pay is selected as the outcome variable because not only the attribute is directly connected with the revenue growth of business but also scholars claimed that willingness to pay appear as varied manners depending on the context (Krystallis and Chryssohoidis, 2005; Potoglou and Kanaroglou, 2007). In duty free shop, willingness to pay is worthwhile to investigate because the product range of duty is very wide from daily life goods to luxury goods as well as duty free shop could become the business sector which records relatively large sales as compare to other tourism related business sector (e.g., hotel, airline, and restaurant). Next, this study chooses five explanatory variables to account for willingness to pay of duty free business. These are price fairness, brand awareness, employee service, product diversity, and crowding. Five attributes are employed by considering the results of extant literature (Oh, 2000; Thiele and Weiss, 2003; Noone and Mattila, 2009; Wang and Yang, 2010; Xia and Monroe, 2010; Yuen and Chan, 2010; Tuan, 2012; Fonner and Berrens, 2014; Garg and Dhar, 2017; Moon and Song, 2019). Regarding price fairness, the element is selected because the price of duty free shop is tax free. This study also adopts brand awareness as another variable because this study is implemented using specific duty free store brand. The reason for employee service is that duty free business depends on labor for product selling. Also, this work chooses product diversity because duty free business deals with various products (e.g., liquor, cosmetic, tobacco, and accessory). Lastly, this study selects crowding because duty free shop is congested by shoppers. By examining various elements, this study provides duty free business with the information to decide the priority for business resource allocation.

As mentioned earlier, this study chooses Lotte duty free store as the subject by regarding its market share. Namely, this study designates Lotte duty free store as the domain given the market share, which can become the representative business entity of duty free businesses. This research employed domestic customers as the research subject because the demand of tourists for international travel has been grown (Dong-A.com, 2015). It suggests that domestic customers traveling international area are likely to become a crucial target for duty free business. To accomplish the goal, this study adopted survey and online panel data collection service. Then, this study performed statistical analysis to examine the causal relation between variables. Based on the results, this study is to present the practical implication for the management of duty free shop better.

## II. Literature Review and Hypotheses Development

### 1. Willingness to pay

Willingness to pay is defined as the degree of individual perception with regard to the spending on certain product or service (Knetsch and Sinden, 1984; Hanemann, 1991; Wertenbroch and Skiera, 2002). Scholars claim that willingness to pay appeared variedly depending on the context (Wertenbroch and Skiera, 2002; Simonson and Drolet, 2004; Plott and Zeiler, 2005). Willingness to pay has been researched in numerous studies because it is directly linked with the sales growth (Haab and McConnell, 1997; Simonson and Drolet, 2004; Plott and Zeiler, 2005). For instance, Krystallis and Chrysohoidis (2005) used willingness to pay as the outcome variable using organic food consumers as the study participants. Also, Potoglou and Kanaroglou (2007) examined clean vehicle consumers and identified the determinants of willingness to pay. Lusk (2003) presented the explanatory variables to willingness to pay of golden rice consumers. In addition, Jurado-Rivas and Sánchez-Rivero (2019) employed willingness to pay to investigate the characteristics of Spain world heritage tourist. As a similar vein, Beckman (2018) explored rural tourist regarding willingness to pay as the main element. Review of literature indicates that willingness to pay has been studied in various context including tourism. Even though willingness to pay has been investigated in diverse tourism related areas, research has sparsely explored willingness to pay in duty free domain. Thus, we choose the attribute as the explained variable of current research.

### 2. Price Fairness

Price fairness is consumer perception toward the price of goods and service; it is how consumers perceive the price as reasonable manners (Campbell, 2007; Xia and Monroe, 2010; Tuan, 2012). Price fairness has worked as the determinants of consumer decision making in previous studies because price is a direct communication channel (Xia and Monroe, 2010; Chung and Petrick, 2013; Homburg, Totzek, and Krämer, 2014). As an example, Konuk (2018) documented that customer purchase intention to organic food is positively influenced by price fairness. Regarding price fairness in tourism associated sectors, Chung and Petrick (2013) examined impact of price fairness on the decision making using airline customers. Gumussoy and Koseoglu (2016) demonstrated the positive effect of price fairness on the loyalty of hotel customers. Moreover, Han and Hyun (2015) presented a significant accountability of price fairness for medical tourist retention. Also, Moon, Song, and Lee (2018) unveiled the positive association between price fairness and willingness to pay in the area of sandwich business which could be regarded as tourism related service business. Given the review of literature, price fairness is likely to become an influential antecedents of willingness to pay. Therefore, we propose the following research hypothesis:

**H1:** Price fairness positively affects willingness to pay.

### 3. Brand awareness

Brand awareness is how consumers perceive and recall a certain brand in a certain product and service domain and brand awareness functions as a cue which minimizes customers uncertainty (Hoyer and Brown, 1990; Percy and Rossiter, 1992; Huang and Sarigöllü, 2014). Previous studies argued that as consumers possess information more about a certain brand; it causes fewer hesitation for the decision making (Macdonald and Sharp, 2000; Oh, 2000; Wang and Yang, 2010). In fact, prior research presented the empirical evidence between brand awareness and customer decision making. For instance, Lee (2017) demonstrated positive effect of brand awareness on customer decision making (e.g. purchase intention) by investigating cosmetic product consumers. In addition, Moon, Park, and Cha (2006) showed the empirical evidence that apartment purchase decision making is positively influenced by brand awareness. Such results appeared as a similar manner at Ko and Kim (2015) which noted a positive association between brand awareness and purchase intention in the context of coffee service. Park and Song (2015) also revealed the positive impact of brand awareness on tourist willingness to pay. Based upon the literature review, this study proposes the research hypothesis as follows:

**H2:** Brand awareness positively affects willingness to pay.

### 4. Employee service

A representative characteristic of service business is labor intensiveness, and employee capability of service operations builds customer perception toward a brand or entity, and it suggests that employee service is influential attribute to consumer decision making because businesses rely on man power (Lemmink and Mattsson, 2002; Liao and Chuang, 2004; Kim, Tavitiyaman, and Kim, 2009; Garg and Dhar, 2017). Extant literature reported empirical evidence in terms of employee service. For example, Dean, Morgan, and Tan (2002) showed positive effect of employee service on willingness to pay of travel service. Moreover, Yuen and Chan (2010) found the positive relation between employee service quality and loyalty in the area of retail service. Also, Kandampully, Juwaheer, and Hu (2011) revealed positive association between employee service and customer loyalty in the area of hotel business. Kim and Lee (2010) uncovered positive effect of employee service on willingness to pay of exhibition service. Kim (2019) adopted city tourists and found the positive impact of employee service on behavioral intention. Given the research review of literature, this research proposes the following hypothesis:

**H3:** Employee service positively affects willingness to pay.

### 5. Product diversity

The needs of consumers have become more diverse, and it is critical to offer diverse product options for consumers (Anerson and Renault, 1999; Brynjolfsson, Hu, and Smith, 2003; Thiele and Weiss, 2003). Previous studies disclosed the effect of product diversity on consumer behavior. To be specific, Jeon (2017) demonstrated positive effect of product variety on consumer behavior in the area of desert cafe management. As a similar vein, Moon and Song (2019) employed coffee shop customers and found the positive association between product diversity and revisit intention. Also, Kim (2018) noted positive relation between food service

product variety and behavioral intention. Lee (2016) discovered that product variety is essential attribute to account for the purchase intention of online shopping consumers. Similarly, Jung and Kim (2020) found that product diversity exerted positive effect on customer purchasing behavior by researching meal-kit customers. All in all, product diversity might be influential on the consumer choice for product and service. However, the effect of product diversity has been insufficiently scrutinized by scholars in the domain of offline shopping as well as duty free shop. Hence, this research proposes research hypothesis as follows:

**H4:** Product diversity positively affects willingness to pay.

## 6. Crowding

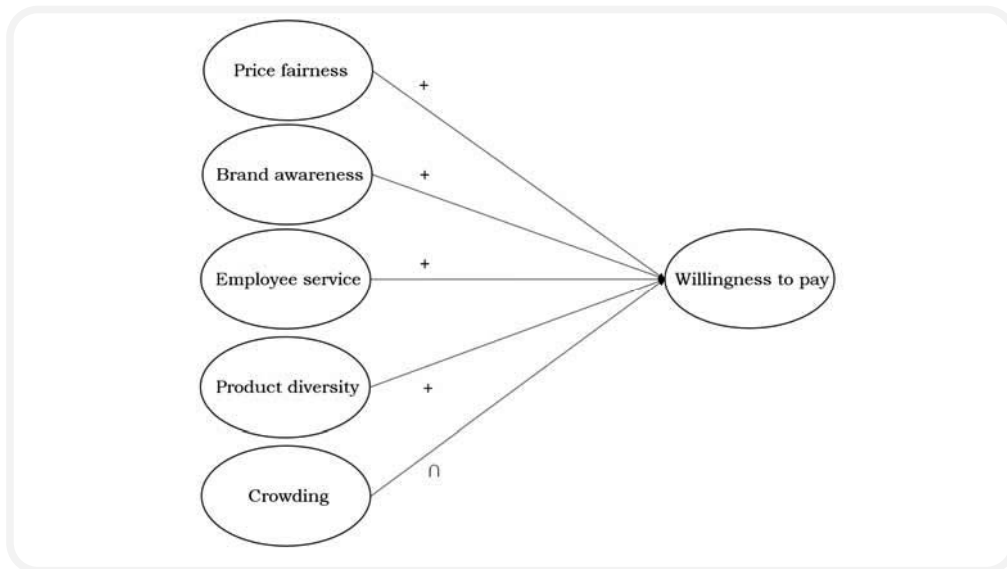
Service place is shared by other customers; other customers affect the appraisal of service experience (Mehta, 2013; Tirachini, Hensher, and Rose, 2014). In detail, extant literature argues that optimal level of crowding is imperative to positive decision making and behavioral intention (Pan and Siemens, 2011; Mehta, 2013). In other words, either too few customers or too much crowding plays a role to build negative customer perception because the social cue could become evidence for potential customers (Mehta, 2013; Jacobsen, Iversen, and Hem, 2019). Empirical studies present the evidence. For instance, Mehta, Sharma, and Swami (2013) examined retail area customers; the study found that appropriate level of crowding is essential element to account for the store patronage intention. Empirical studies also exhibited the importance of adequate level of crowding for favorable customer reaction. For instance, Fonner and Berrens (2014) noted that crowding in the area of ski resort has inverted-U shape relation to the willingness to pay. In addition, Noone and Mattila (2009) alluded the importance of optimal level of crowding in tourism service encounter. Based on prior studies, adequate level of crowding is likely to maximize positive customer decision making. This study thus proposes the following research hypothesis:

**H5:** Crowding has curve-linear effect on willingness to pay.

## III. Method

### 1. Research Model and Data Collection

Figure 1 presents the research model. This study has five explanatory variables, and single explained attribute. Explanatory variables are price fairness, brand awareness, employee service, product diversity, and crowding, while dependent variable is willingness to pay. price fairness, brand awareness, employee service, and product diversity are positively associated with willingness to pay. Crowding shows curve-linear (inverted-U shape) relation to willingness to pay.

**Fig 1.** Research Model

This study implemented data collection during January, 2020. This study employed online panel data collection service. The survey participants were the customers who experienced in the use of Lotte duty free store. This study considered that the responses of field survey is likely to be poor because shoppers might concentrate on their shopping rather than survey. Also, it was anticipated that online survey responses based on their experience are likely to reach higher response rate. Moreover, this research chose Lotte brand because the business has possessed large market share in the area of duty free business, which indicates that the business is popular to the customers. Such a popularity might enable this research to attain the responses based on their concrete shopping experience. Also, the survey participants of this research is selected to offline shoppers because employee service and crowding could be assessed by offline shopping experience. The survey participants were Korean because local resident could become the main target of duty free shop. That is, native residents are more likely to look around duty free shop before their international trip; they could devote to the sales of duty free shop as the main business target. Furthermore, they guarantee more stable income as compare to tourists from other countries because they are not influenced by political condition. This study initially collected 278 responses. Then, this study eliminated 13 observations due to the poor response quality. Finally, this study used 265 observations for the data analysis.

## 2. Illustration of Survey Questions and Data Analysis

This study incorporated demographic information questions into the survey, which include age, gender, monthly income, marital status, and level of education. Five-point Likert scale (1 = strongly disagree, 5 = Strongly agree) was adopted in this research. Current study employed previous studies to attain survey items. Then, it was adjusted to fit the aim of research. Regarding definition, willingness to pay is the degree of consumers to pay for the product

of duty free shop (Simonson and Drolet, 2004; Plott and Zeiler, 2005; Jurado-Rivas and Sánchez-Rivero, 2019). Price fairness is defined as how consumers recognize the price of duty free shop product as reasonable manners (Campbell, 2007; Xia and Monroe, 2010; Tuan, 2012). The definition of brand awareness is to know and recall the duty free shop brand (Macdonald and Sharp, 2000; Oh, 2000; Wang and Yang, 2010). Employee service is defined the perceived positive employee attitude level (Yuen and Chan, 2010; Garg and Dhar, 2017). Moreover, this study defines product diversity as how consumers perceive the variety of goods in the duty free shop (Thiele and Weiss, 2003; Jeon, 2017; Moon and Song, 2019). Lastly, crowding is defined as how consumers feel the crowdedness inside of duty free shop (Noone and Mattila, 2009; Fonner and Berrens, 2014; Jacobsen et al., 2019).

This study performed data analysis using statistical instrument. This study implemented frequency analysis to attain the information of survey respondents, which include frequency and percentage. Additionally, this study executed exploratory factor analysis using 0.6 as the cut-off values of factor loading as well as 1 as the threshold of eigen values regarding the claim of extant literature(Hair, Black, Babin, and Anderson, 2010). Also, this study used Cronbach's  $\alpha$  to test the reliability using 0.7 as the threshold(Hair et al., 2010). This research also carried out correlation analysis and the computation of descriptive statistics toward the main attribute. Moreover, this study performed multiple regression analysis to examine the research hypotheses. The regression analysis was performed two times to check the robustness. Model 1 contains only main attributes, while model 2 include both main and control variables. Furthermore, this study implemented quadratic regression analysis to identify the curvilinear effect of crowding, which incorporates square variable into the regression model(Hair et al., 2010). In case of negative coefficient, it presents the inverted-U shape relation between variables, whereas U-shape relation appears in case of positive coefficient in square variable(Hair et al., 2010).

## IV. Results

### 1. Depiction of Survey Participants

Table 1 describes the results of frequency analysis for the survey participants. The number of male participants is 121, while the number of female participants is 144. Regarding monthly income, the frequency of under 2 million KRW is 74, and the frequency of between 2-3 million KRW 88, which is approximately 61 percent of respondents. For the age, the numbers of 20s, 30s, 40s, 50s, and older than 60s are 81, 83, 64, 27, and 10 respectively. Considering education 62.6 percent of participants are university graduate. Lastly, Table 1 shows that the rate of married participants is 51.3 percent.

**Table 1.** Demographic Information of Survey Respondents

Item	N(%)	Item	N (%)
<b>Gender</b>		<b>Age</b>	
Male	121(45.7)	20s	81(30.6)
Female	144(54.3)	30s	83(31.3)
		40s	64(24.2)
<b>Monthly income</b>		50s	27(10.2)
Under 2 million KRW	74(27.9)	Older than 60	10(3.8)
2-3 million KRW	88(33.2)	<b>Education</b>	
3-4 million KRW	50(18.9)	High school graduate or less	78(29.4)
4-5 million KRW	25(9.4)	University graduate	166(62.6)
5-6 million KRW	14(5.3)	More than graduate school	21(7.9)
6-7 million KRW	7(2.6)	<b>Marital status</b>	
Over 7 million KRW	7(2.6)	Single	129(48.7)
		Married	136(51.3)
Total	265(100)	Total	265(100)

Note: KRW stands for Korean won

## 2. Exploratory Factor Analysis and Reliability Test

Table 2 is the results of exploratory factor analysis and reliability test. The results of factor analysis is statistically significant given the statistics of Bartlett's  $\chi^2$  ( $\chi^2 = 4719.964$ ,  $p < .01$ ). The values of Cronbach's alpha for all construct are larger than 0.7, indicating the acceptable level of reliability for the measurement items. Moreover, all of the factor loadings are greater than 0.6, which suggests the validity of measurement items. Based on the values of eigen value which uses 1 as the cutoff value, six constructs are derived, and each construct is composed of four items. This study names for each construct as willingness to pay, brand awareness, price fairness, product diversity, crowding, and employee service respectively.

**Table 2.** Exploratory Factor Analysis and Reliability Test

Factor	Item	Loading	Eigen (Var%)
Willingness to pay $\alpha = .900$	I have an intention to pay for Lotte duty free product.	.832	9.454 (39.392)
	I am going to pay for Lotte duty free product.	.840	
	I am willing to pay for Lotte duty free product.	.884	
	I will pay cost toward the product of Lotte duty free product	.824	
Brand awareness $\alpha = .899$	I am aware of Lotte duty free brand.	.777	2.726 (11.359)
	I can recall Lotte duty free brand for duty free product.	.826	
	I have an awareness of Lotte duty free brand.	.807	
Price fairness $\alpha = .942$	I remember Lotte duty free brand.	.809	2.375 (9.895)
	The price of Lotte duty free product is fair.	.796	
	The price of Lotte duty free product is acceptable.	.839	
	The price of Lotte duty free product is rational.	.796	
Product diversity $\alpha = .906$	The price of Lotte duty free product is adequate.	.789	1.703 (7.097)
	Lotte duty free offers various product.	.824	
	I can purchase diverse product at Lotte duty free store.	.772	



	Lotte duty free sells various product.	.807	
	I can buy diverse sort of product at Lotte duty free store.	.779	
	Many customers use Lotte duty free store.	.724	
Crowding $\alpha = .951$	Lotte duty free store is crowding.	.840	1.250
	Lotte duty free store is congested.	.840	(5.208)
	There are many customers at Lotte duty free store.	.847	
	Lotte duty free employees are kind.	.739	
Employee service $\alpha = .980$	Lotte duty free employees are courtesy.	.805	1.106
	Lotte duty free employees are cooperative.	.765	(4.608)
	Lotte duty free employees are benign.	.733	

Note: Kaiser-Meyer-Olkin(KMO) = .900 Bartlett's Test Chi-square = 4719.964  $p < .001$  Total variance explained: 77.560%

### 3. Correlation Matrix and Descriptive Statistics

Table 3 shows the descriptive statistics for constructs derivations (Willingness to pay (Mean = 3.38, SD = 0.77), Price fairness (Mean = 2.95, SD = 0.63), Brand awareness (Mean = 3.47, SD = 0.74), Employee service (Mean = 3.38, SD = 0.69), Product variety (Mean = 3.49, SD = 0.69), Crowding (Mean = 3.63, SD = 0.65)). It indicates that customers are not only little bit skeptical for the price level of duty free shop but also perceived the duty free shop as quite crowding area. Willingness to pay positively correlates with price fairness ( $r = .328$ ,  $p < .05$ ), brand awareness ( $r = .410$ ,  $p < .05$ ), employee service ( $r = .563$ ,  $p < .05$ ), product variety ( $r = .520$ ,  $p < .05$ ), and crowding ( $r = .155$ ,  $p < .05$ ). Also, price fairness positively correlates with brand awareness ( $r = .475$ ,  $p < .05$ ), employee service ( $r = .450$ ,  $p < .05$ ), product diversity ( $r = .384$ ,  $p < .05$ ), and crowding ( $r = .198$ ,  $p < .05$ ). It can be inferred that customers regarding their price value more when they are aware of brand, and perceived product variety and better employee service.

**Table 3.** Correlation Matrix

	Mean	SD	1	2	3	4	5
1. Willingness to pay	3.38	0.77	1				
2. Price fairness	2.95	0.63	.328*	1			
3. Brand awareness	3.47	0.74	.410*	.475*	1		
4. Employee service	3.38	0.69	.563*	.450*	.525*	1	
5. Product diversity	3.49	0.69	.520*	.384*	.349*	.559*	1
6. Crowding	3.63	0.65	.155*	.198*	.282*	.272*	.443*

Note: \* $p < .05$

### 4. Results of Multiple Regression Analysis

Table 4 presents the results of hypotheses testing. The adjusted R-squares of model 1 and model 2 are .4231 and .4450 respectively. With regard to the F-values, both models are statistically significant ( $p < .05$ ). Regarding the results of hypotheses testing, brand awareness positively affects willingness to pay ( $\beta = 0.142$ ;  $p < .05$ ). Moreover, employee

service ( $\beta = 0.316$ ;  $p < .05$ ), product diversity ( $\beta = 0.352$ ;  $p < .05$ ) are positively associated with willingness to pay. For the crowding shows the inverted-U shape relation with willingness to pay given the significance of square crowding ( $\beta = -0.226$ ;  $p < .05$ ). With respect to control variables, age is negatively associated with willingness to pay, whereas marital status is positively related to willingness to pay. It can be inferred that older customers shows lower willingness to pay, and married customers presented higher willingness to pay. In sum, H2, H3, H4, and H5 are supported.

**Table 4.** Results of Multiple Regression Analysis

Attribute	Model1 $\beta$ (t-value)	Model2 $\beta$ (t-value)	Results
Intercept	-1.880(-2.47)*	-1.729(-2.26)*	
Price Fairness	-.021(-0.30)	-.039(-0.57)	H1: Not supported
Brand awareness	.142(2.35)*	.191(3.12)*	H2: Supported
Employee service	.316(4.33)*	.324(4.50)*	H3: Supported
Product diversity	.352(5.13)*	.353(5.23)*	H4: Supported
Crowding	1.543(3.42)*	1.401(3.15)*	H5: Supported
Crowding <sup>2</sup>	-.226(-3.80)*	-.208(-3.56)*	
Age		-.104(-2.80)*	
Gender		.055(0.76)	
Education		-.051(-0.92)	
Marital status		.226(2.82)*	
Monthly income		-.026(-0.95)	
F-value	33.27*	20.24*	
Adjusted R <sup>2</sup>	.4231	.4450	

Note: \* $p < .05$  Dependent variable: Willingness to pay

## V. Discussion and Conclusion

This study aimed to examine the antecedents of willingness to pay in the domain of duty free shop. This study used five attributes to account for willingness to pay, which are price fairness, brand awareness, employee service, product diversity, and crowding. With regard to the results, other than price fairness, all attributes presented significant to explain willingness to pay. The price level of duty free product could explain non-significance. In detail, most duty free products (e.g., accessory and cosmetics) has been sold with high level of price. Namely, the consumers could become either insensitive to the price level or perceive the product as still expensive in duty free shopping. Moreover, this research showed the positive effect of brand awareness, employee service, and product diversity. It can be inferred that the three attributes are regarded as crucial element to establish customer perception and decision making. With respect to the magnitude of coefficients, product diversity appeared as the strongest motivation for individual decision making. Employee service and brand awareness appeared as the second and third most critical element for customer decision making respectively. Besides, the results of analysis presented

the significant inverted-U shape effect of crowding. To be specific, certain level of crowding maximizes the positive customer perception, meaning that appropriate level of crowding could work as the evidence which is associated with positive decisions making for consumers. The results also revealed that price fairness was not essential to determine willingness to pay in case of duty free shop. Browsing the mean value of price fairness, customers might be cynical to the price level of duty free shop. Hence, customers appraise the price level of duty free shop goods still expensive, although the tax is deducted in the shopping mall. Regarding control variables, it can be inferred that older customers have lower level of willingness to pay, while married customers have higher level of willingness to pay. It could be explained that younger customers who relatively fewer assets than seniors value more the efficiency, which leads them to obtain the product as tax free price.

This study has theoretical contributions. First of all, this study expanded the area of willingness to pay into the duty free business area, which affiliate the research gap within the sparse extant literature. Second, external validity appeared in this research. As extant literature addressed, this study confirmed the accountability of brand awareness in the area of duty free shop business (Macdonald and Sharp, 2000; Wang and Yang, 2010). Also, the results of this study revealed significant accountability of employee service in the duty free shop management domain like extant literature addressed (Yuen and Chan, 2010; Garg and Dhar, 2017). Additionally, this study substantiated the effect of product diversity in duty free service area (Thiele and Weiss, 2003; Jeon, 2017). Finally, this study supports the results of prior literature by assuring the inverted-U shape relation between crowding and willingness to pay of duty free service usage (Mehta et al., 2013; Fonner and Berrens, 2014; Jacobsen et al., 2019).

Current study presents practical implications for the duty free shop management. Above all, the managers invest in the advertising to make higher level of duty free shop brand because brand awareness gives rise to the more spending of customer. In addition, the managers need to allot their resources into the employee training, which improves positive employee attitude toward customers given the results of multiple regression analysis. That is, duty free businesses need to invest more in employee training such as place location, complaint handing, and selling procedure. Moreover, managers of duty free business might dedicate their resources into offering more diverse product for customers. The area could become the new product searching and marketing departments. Namely, they need to keep the market research and bring new product and best selling product at duty free shop. However, managers need to recognize that excessive product diversification might cause poor product quality. Furthermore, managers could concentrate more on the crowding management. To be specific, the adequate level of crowding would be maintained because excessive crowding establishes negative perception and lower the intention to pay for duty free shop product. Lastly, managers might perform the marketing to attract younger customers and married customers because their level of willingness to pay is higher (more spending).

This study has limitations. Above all, the sample of this research was limited to domestic customers. Future research thus needs to consider international customers because duty free

stores consumers have varied nationality. Moreover, this study has the limitation in that it examines simple linear relation. So as to make the research more fertile, future research needs to investigate moderating variables. It could become an avenue to enhance the accountability of duty free customers. Lastly, future studies would investigate specific product to examine duty free shopping customers because the range of duty free shop product is very wide (daily life goods, masstige product, and luxury goods).

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