PURCHASE INTENTION OF ELDERLY IN A PANDEMIC COVID-19 SITUATION BASED ON ANALYSIS OF CUSTOMER-BASED BRAND EQUITY

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ABSTRACT

Background: During an unpredictable situation (uncertain environment), high purchase intentions for better and quality services results providers need an extraordinary level of expertise in the healthcare market. Purpose: To determine the effect of customer-based brand equity on purchase intention. Method: observational study with cross-sectional design. The population was all elderly in the East Lombok Regency, samples that fulfilled the criteria; not experience chronic diseases such as stroke, cataracts, chronic kidney disease (CKD), severe diabetes mellitus, and coronary heart disease. Measurement of independence used the ADL Bartle Index instrument. The cognitive level used the MMSE instrument and respondents were willing to fill in the questionnaire. Results: the characteristics of respondents and customer-based brand equity on purchase intention used the chi-square test and fisher’s exact test. Risk estimates and 95% confidence intervals of customer-based brand equity, namely brand awareness 1,243 (1,000 to 1,546), brand association 1,245 (1,014 to 1,527), perceived quality 1,229 (1,014 to 1,488), and brand loyalty 1,240 (1,039 to 1,479), the test results showed a significant relationship and had a prevalence ratio (PR)> 1 to the purchase intention.
of outpatient health centers. **Conclusion:** the majority of respondents who have an elderly purchase intention for outpatient services at the public health center.

**Keywords:** Customer, Covid-19, Brand Equity, Purchase Intention

**INTRODUCTION**

Peril is a situation/event that can cause loss, such as fire, flood, earthquake, accident, blasting, theft, and disease. Subjective uncertainty is an individual's assessment of the risk situation based on the knowledge and attitudes of the individual concerned about human uncertainties, that is, uncertainties caused by human behavior (Almaida, Setiawan, & Ramadhani, 2019; Susilawati et al., 2018). That environmental uncertainty is a condition where a person aims to predict the surrounding situation that results in him taking an action separately to deal with such uncertainty.

Defines the environment as a whole of physical and social factors that can directly influence consideration in the behavior of individual decision making (Erna Mustafa, Arman, Sirajuddin, & Saudi, 2019; Sopianah, Sabilillah, & Fadilah, 2017). Environmental uncertainty is perceived as an important prediction factor, whether the prediction can occur thus the prediction can make the planning and control process more difficult or not.

Circumstances that can cause harm now such as coronavirus outbreaks. According to the WHO (2019), coronavirus is a virus that causes the common cold to more severe illnesses such as the Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). Finally, it spread to other countries one of them is Indonesia.

Cases of Covid-19 death based on age in Indonesia, at age 0-5 years by 0.70%, ages 6-17 years by 0.60%, ages 18-30 years by 3.60%, ages 31-45 years by 10.80%, age 45-59 years at 39.60% and age 60 years and over at 44.70% so it can be concluded that the elderly are the vulnerable population and the highest risk of death in the case of COVID-19 (World Health Organization, 2020).

In humans, aging is associated with degenerative changes in the skin, bones, heart, blood vessels, lungs, nerves, and other body tissues. They are more susceptible to various diseases with limited regenerative abilities, syndromes, and illness compared to other adults. The elderly will experience the process of loss of tissue's ability to repair itself slowly thus it cannot defend the body from infection and unable to repair damaged tissue.

Stanhope and Lancaster (2016) say the elderly as at-risk populations have three characteristics of health risks namely, biological risks including risks related to age, social risks, and the environment as well as behavioral or lifestyle risks.
Lancaster (2016) reveal that biological risks include risks related to age in the elderly, namely the occurrence of various declines in biological function due to aging. Social and environmental risk in the elderly is the presence of an environment that triggers stress. The economic aspect of the elderly is the decline in income due to retirement. Behavioral or lifestyle risks such as patterns of lack of physical activity and consumption of unhealthy foods can lead to illness and death.

The development of health services will become a competition between health service provider institutions that will prioritize brand dominance because the brand will become a valuable corporate asset. Therefore, it needs to be managed, developed, strengthened and improved in quality thus it can provide sustainable competitive advantage (Rangkuti, 2009).

The perceived quality (brand quality perception) referred to in the following discussion is the customer's perception of the quality of a product brand. This perceived quality will shape the perception of the quality of a product in the eyes of the customer. Perceptions of the overall quality of a product or service can determine the value of the product or service and directly influence consumer purchasing decisions and their loyalty to the brand. Positive perceived quality will drive purchasing decisions and create loyalty for the product. Since perceived quality is consumer perception, it can be predicted. If the perceived quality of the customer is negative, the product will not be liked and last long in the market. Conversely, if positive customer perceived quality, the product will be liked (Durianto, 2001).

Developing brand equity is important to increase elderly visits because by having strong brand equity, the health service provider will have good benefits that impact the organization and customers. The impact on health service organizations is efficiency in marketing programs, strengthening customer loyalty, price insensitivity, brand expansion, customer improvement, and competitive advantage. Customers give value to customer satisfaction, confidence in using services, and give a positive impression on health services.

Individual buying intention is related to behavior and can be classified as a cognitive component of individual behavior about how individuals wish to purchase specific products (Zulkarnain, Novliadi, Zahreni, & Iskandar, 2018; Zulkarnain, Ginting, Novliadi, & Siahaan, 2019). That consumers’ purchase intention is the desire and tendency of consumers to buy the advertised product because there is a possibility that consumers will buy the product in the future (Fawzeea, Sofiyah, Sudardjat, & Muda, 2019). According to Kotler and Keller (2009) argue that marketing and environmental stimuli enter consumer awareness and a psychological group combined with certain consumer characteristics results in the decision-making process and the final purchase decision.
According to Kotler and Keller (2012), the consumer purchasing decision process consists of five stages performed by a consumer, namely problem recognition, information research, evaluation of alternatives, purchase decision, and post-purchase decision. Problem recognition means consumers know some problems or needs must be resolved or fulfilled. Information research means consumers looking for as much information on choices of goods or services needed and desired. Evaluation of alternatives means consumers will evaluate the benefits of the product or service to be purchased from various available alternatives. A purchase decision means the customer has made a choice on an alternative and made a purchase. Then, the post-purchase decision means the stage after the purchase, the consumer will experience a level of satisfaction and dissatisfaction.

Based on the description above, there is a positive significant effect of customer-based brand equity on the purchase intention of elderly consumers in outpatient services at the East Lombok District Health Center.

METHOD

This study was an observational study with a cross-sectional design. The study location in East Lombok Regency consisted of 25 districts, 254 villages, and divided into fostered areas by 34 public health centers. The study period started from March to April 2020.

The population of this study was the elderly who were in the area of the Community Health Center. The sample of this study was elderly who meet the criteria of not experiencing chronic diseases such as stroke, cataracts, chronic kidney disease (CKD), diabetes mellitus, and heart disease, independence with the ADL Barthel Index instrument, normal cognitive level with the instrument MMSE, elderly who were above 70 years of age, were assisted by family or relatives, and respondents were willing to fill out a research questionnaire. Samples were calculated by using the cluster sampling formula and proportional stratified random sampling ($\alpha = 0.05$).

Primary data collection was by distributing questionnaires and interviews to respondents. The questionnaire instrument was tested for validity and reliability. Questionnaires distributed include the characteristics of respondents, brand equity consisting of brand awareness, brand association, perceived quality, and brand loyalty and purchase intention questionnaires. Before filling out the questionnaire, respondents were asked to provide by signing the Informed Consent.

Data were processed by conducting statistical tests. Characteristics of respondents and customer-based brand equity on purchase intentions were performed chi-square test and
fisher's exact test and calculate prevalence ratio (PR). The test results were used to determine the relationship and how much the intention to buy the elderly toward outpatient services at the district health center East Lombok.

RESULTS AND DISCUSSION

Characteristics of respondents by age, sex, education, occupation, homeownership, income, expenditure, and health insurance.

Table 1. Characteristics of respondents by Age, Gender, Education, Employment, Home Ownership, Income, Expenditures, and Health Insurance for Purchase Intention (n = 396).

<table>
<thead>
<tr>
<th>Respondent Characteristic</th>
<th>Purchase Intention</th>
<th>n (%)</th>
<th>PR (CI 95%)</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-69 Years old</td>
<td>331 (83.6)</td>
<td>1.389</td>
<td>(1.026 to 1.880)</td>
<td>.020</td>
</tr>
<tr>
<td>&gt;70 Years old</td>
<td>65 (16.4)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>153 (38.6)</td>
<td>0.816</td>
<td>(0.672 to 0.991)</td>
<td>.038</td>
</tr>
<tr>
<td>Female</td>
<td>243 (61.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ Senior High School</td>
<td>251 (63.4)</td>
<td>1.221</td>
<td>(1.002 to 1.488)</td>
<td>.046</td>
</tr>
<tr>
<td>≥ Diploma</td>
<td>145 (36.6)</td>
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<td></td>
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</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>250 (63.1)</td>
<td>1.261</td>
<td>(1.033 to 1.539)</td>
<td>.021</td>
</tr>
<tr>
<td>Unemployed</td>
<td>146 (36.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>House</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>314 (79.3)</td>
<td>1.413</td>
<td>(1.075 to 1.858)</td>
<td>.006</td>
</tr>
<tr>
<td>Others</td>
<td>82 (20.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤Rp. 3.000.000</td>
<td>240 (60.6)</td>
<td>1.239</td>
<td>(1.021 to 1.504)</td>
<td>.030</td>
</tr>
<tr>
<td>&gt;Rp. 3.000.000</td>
<td>156 (39.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤Rp. 50.000</td>
<td>231 (58.3)</td>
<td>1.282</td>
<td>(1.058 to 1.553)</td>
<td>.010</td>
</tr>
<tr>
<td>&gt;Rp. 50.000</td>
<td>165 (41.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Insurance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPJS</td>
<td>308 (77.8)</td>
<td>1.311</td>
<td>(1.019 to 1.688)</td>
<td>.028</td>
</tr>
<tr>
<td>Public</td>
<td>88 (22.2)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Based on Table 1, the majority of respondents were aged 60-69 years as many as 331 respondents (83.6%) and more than 70 years of age as many as 65 respondents (16.4%), and the intention to buy outpatient health services at 1,389 (1,026 to 1,880). Age affects someone in thinking, changes in physical and psychological aspects make a person have experience in life thus they were able to decide the best in health.

Female respondents were higher than males, 243 respondents (61.4%), and 153 respondents were 38.6% and the intention to buy outpatient health services at the public health center was 0.816 (0.672 to 0.991). Sex refers to individual self-awareness as male or female. The role of gender refers to the cultural behavior that was prevalent, in general women used more health services than men(Nelson, Hudspeth, & Russell, 2013). Females
were more susceptible to infectious diseases caused by life stages they experience from adolescence (menstruation), adulthood (pregnancy and childbirth) to old age (menopause).

The education level of respondents from senior high school and below was higher than the diploma level and above which was 251 respondents (63.4%) and diploma and above was 145 respondents (36.6%), and has the intention to buy outpatient health services at the public health center for 1,221 (1,002 to 1,488). Respondents who worked as many as 250 respondents (63.1%) and did not work as many as 146 respondents (36.9%), and had the intention to buy outpatient health services at the public health center amounted to 1,261 (1,033 to 1,539).

Culture is given meaning as a combination of lifestyle, beliefs, values, knowledge of rules, and objects that guide followers, tangible thoughts and actions, and sustainable, cumulative, and progressive. If a person has a culture that is contrary to and detrimental to health, then that will be prohibited by the health worker who inspects it. This will make someone reluctant to return to take advantage of these health services (Asmuji & Diyan, 2014).

The respondent's income is Rp. 3,000,000 and below more as 240 (60.6%) of respondents and respondents' income of Rp. 3,000,000 and above as many as 156 respondents (39.4%), and have the intention of buying outpatient health services at the public health center 1,239 (1,021 to 1,504). A person's income level greatly influences the use of health services. A person who does not have sufficient income and expenses will find it very difficult to obtain health services even in conditions of extreme need for these services. This results in the absence of a match between the needs and demands of health services (Ilyas, 2006).

Expenditures (cost, distance, transportation) of the respondent Rp. 50,000 and below more as many as 231 respondents (58.3%) and expenditure of respondents Rp. 50,000 and above as many as 165 respondents (41.7%), and have the intention of buying outpatient health services at the public health center for 1,282 (1,058 to 1,553). Health insurance respondents used Social Security Administratoras many as 308 respondents (77.8%), general as 88 respondents (22.2%), and had the intention of buying outpatient health services at the health center by 1,311 (1,019 to 1,688). The utilization of health facilities is influenced by the price or cost charged to users of these services. Several studies have shown that the obligation to pay for health care greatly influences the use of health services.

Health costs are expensive and relatively unaffordable for most Indonesians. The tendency of increasing health care costs complicates people's access to the health services.
they need. This situation occurs mainly in circumstances where the financing must be borne alone (out of pocket) in the cash system (free for service).

**Relationship between Customs Base Brand Equity and Purchase Intention**

Table 2. Relationship of Customs Base Brand Equity to Purchase Intention

<table>
<thead>
<tr>
<th>Customer-Based Brand Equity</th>
<th>Purchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Brand Awareness</td>
<td>Brand recall</td>
</tr>
<tr>
<td></td>
<td>Unaware</td>
</tr>
<tr>
<td>Brand Association</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
</tr>
<tr>
<td>Perceived Quality</td>
<td>More expectation</td>
</tr>
<tr>
<td></td>
<td>Less expectation</td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>Linking the brand</td>
</tr>
<tr>
<td></td>
<td>Switcher</td>
</tr>
</tbody>
</table>

Based on Table 2, explaining the relationship between customer-based brand equity and purchase intention using the chi-square test and fisher's exact test, risk estimate and 95% confidence interval obtained brand awareness 1,243 (1,000 to 1,546), brand association 1,245 (1,014 to 1,527), perceived quality 1,229 (1,014 to 1,488), and brand loyalty 1,240 (1,039 to 1,479) so that it can be concluded that there is a significant relationship between customer-based brand equity and elderly purchase intentions in outpatient health centers in East Lombok Regency.

The concept of marketing has an outside-in perspective. The concept starts from a well-defined market, focuses on customer needs, coordinates all activities that will affect customers, and generates profits by satisfying customers. A brand is a name, term, sign, symbol, or combination of these things, intended to identify the goods or services of a person or group of sellers to distinguish them from competing products (Kotler & Keller, 2009).
Purchase Intention (PI) in Figure 1 explains that PI 1 is a customer with brand recall, positive association, more than expected, and linking the brand has purchase intention. PI 2 is a customer with unaware of the brand, negative association, less than expectation, and switcher but has purchase intention. PI 3 is a customer with brand recall, positive association, more than expected, and linking the brand but has unpurchased intention. PI 4 is a customer with unaware of the brand, negative association, less than expected and the switcher has unpurchased intention.

Individual buying intention is related to behavior and can be classified as a cognitive component of individual behavior about how individuals wish to purchase specific products (Ling, Chai, & Piew, 2010). Consumers' purchase intention is the desire and tendency of consumers to buy the advertised product because there is a possibility that consumers will buy the product in the future.

Services are any actions or activities that can be offered by one party to another party, which are intangible and do not result in ownership of something. Building perceptions can be conducted through the brand channel because a very valuable brand can influence consumer choices or preferences that help consumers in making purchasing decisions.

Customer-Based Brand Equity (CBBE) seen in cognitive psychology. CBBE occurs when consumers are familiar with a brand and have a favorable, strong, and unique brand association in their memory. A positive CBBE will be beneficial because consumers will try
to find such branded products, are willing to pay more, and make effective marketing communications (D. A. Aaker, 1991).

Figure 2 Models and Research Results

Individual needs can be stimulated from within or outside the individual's self. According to Aaker (1990), it can increase critical thinking, increase social, and life knowledge with an increase in awareness of a product. Improved quality of life can be controlled by making changes in choosing and consuming certain goods (Martin & Simintiras, 1995).

The experience aspect is a combination of all experience points interacting with the often called brand experience. Psychological aspects often referred to as a brand image, are images that are built in the subconscious of consumers through information and expectations expected through products or services. A comprehensive approach to building brands includes the brand structure, business, and people involved in the product (Kotler & Keller, 2012).

The quality dimension proposed, affects customer expectations and the reality that is received. If the customer receives the service exceeds his expectations, the customer will say the service is quality and if the customer receives the service that is less or equal to his expectations, then the customer will say the service is not quality or unsatisfactory.

Griffin (1995) argues that a customer is said to be loyal or loyal if the customer shows a buying behavior regularly or there is a condition that requires customers to buy at least twice in a certain time interval.
That customer satisfaction is a full evaluation where the alternative is chosen is at least the same or exceeds customer expectations, while dissatisfaction arises when the results do not fulfill the expectations (Almaida et al., 2019). The attributes forming satisfaction include the suitability of expectations, the ease of obtaining, and the willingness to recommend.

Data of this study is categorized or nominal data thus it uses a chi-square statistical test and fisher exact test. Factors that influence elderly answers such as depression rates are not measured. The study was conducted in one district with elderly respondents in the village area under the guidance of the Public Health Center in East Lombok Regency.

CONCLUSION
Most of the respondents are aged 60-69 years, the number of females more than males, the level of high school education, and below, respondents are still working, homeownership, income under Rp. 3,000,000, expenses under Rp. 50,000 / day and health insurance is the majority of respondents who have an elderly purchase intention for outpatient services at the public health center.

Customer-based brand equity consisting of brand awareness, brand association, perceived quality, and strong brand loyalty will affect purchase intention. Recommendation: paying attention to consumer preferences and buying intentions, public health center must improve the quality of health services in the community by remaining committed to implementing health protocols during the Covid-19 pandemic.

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