Affect or cognition: which is more influencing older adult consumers’ loyalty?

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Abstract

In studies on consumer behavior science, it is argued that brand affect, consumer satisfaction, and disconfirmation influence brand loyalty. This study aims to investigate whether the interaction of brand affect and cognition predicts brand loyalty in older adult consumers if consumer satisfaction is considered. A group of 344 older adult consumers participated and a mediated moderation analysis of the data was used to test our hypotheses. The results showed that consumer satisfaction increased the relationship between brand affect and brand loyalty in older adult consumers. However, disconfirmation did not influence that relationship. It can be concluded that the loyalty of older adult consumers toward a brand was more likely to be influenced by their affection than their cognition. Therefore, marketers should design products that better satisfy this population group and create loyalty to the product through enhancing affect connections.

Keywords: Business, Psychology

1. Introduction

The need for studies related to the consumer behavior of older adult was first identified by marketers in the early 2000s, when the terms “aging” and “mature marketing” began to emerge, along with increasing life expectancy (Moschis, 2012). Although research on the behavior of older adult consumers remains rare, some empirical research on
older adult consumers has been carried out. However, these studies focused on differences in behavior based on demographic factors, with no further explanation of other reasons, such as affect or cognition, for older adult consumers’ behavior (Moschis, 2012). It is known from previous research into general consumer behavior that both affection and cognition have important roles in generating customer satisfaction and brand loyalty (Oliver, 1980, 2010). Therefore, in this article, we are interested in how affection and cognition influence older adult consumers’ behavior. As our study is based on empirical research on older adult consumers, not general consumers, it will assist marketers to better design products that suit older adult consumers’ needs and expectations. In addition, it provides an understanding of ways to retain satisfaction for older adult consumers such that they continue to buy a certain product.

This study attempts to fill a gap created by the lack of empirical research on older adult consumers, particularly in Southeast Asian countries, by focusing on Indonesia. Indonesia has one of the largest populations in both Southeastern Asia and the world, with a population predicted to reach 300.2 million people in 2050 (United States Census Bureau, 2018). Indonesia’s older adult population is predicted to reach more than 80 million people in 2050, which accounts for around 26 percent of its total population (Haryanto, 2017). It is important to understand how Indonesian older adults think and behave as potential consumers for products that appeal to older adults. Therefore, consumer research in Indonesia provides valuable information for manufacturers around the world in developing prospective products for older adult consumers.

Marketers prefer that consumers are loyal and continuously use their products, that is, that they feel a sense of brand loyalty (Gwinner et al., 1998). There are a number of advantages for marketers when customers have high brand loyalty, including stronger resistance to attacks from competitors and reduced opportunities for competitors to capture the market (Delgado-Ballester and Munuera-Aleman, 2001). In addition, brand loyalty can increase the sales and revenue of a company (Delgado-Ballester and Munuera-Aleman, 2001). Brand loyalty is indicative of the consumers’ creative mind-set in relation to a brand, in that consumers make purchases continuously over time (Aaker, 1991). It indicates that there is a commitment to consistently buying and redistributing favored products or services in the future, resulting in repeat purchases of the same brand without customers being influenced by situational factors or marketing of competitors’ products (Oliver, 1999). Brand loyalty can be measured in behavioral and attitudinal terms (Chaudhuri and Holbrook, 2001). Behavioral loyalty relates to actual repurchasing behavior, whereas attitudinal loyalty relates to the intention to repurchase and it affects commitment to a specific product (Quester and Lim, 2003). In this study, both behavioral and attitudinal loyalty will be measured because we argue that brand loyalty is not limited to repeat purchasing behavior but also relates to consumers who already have a commitment to the product (Oliver, 1999). Comprehending older
adult consumers’ loyalty and its antecedents is important so that marketers understand what makes older adult consumers keep buying their products.

Three known antecedents of brand loyalty are affection, cognition, and customer satisfaction (Chaudhuri and Holbrook, 2001; Frank et al., 2014; Homburg et al., 2006; Oliver, 2010). These antecedents have been investigated in previous studies focusing on predicting brand loyalty. Our study attempts to explore how these antecedents relate to each other and how they can predict brand loyalty. First, the level of affection for a product increases brand loyalty (Oliver, 2010). Affection is an emotional and mental interpretation of perception, information, or knowledge that is generally associated with positive or negative feelings toward people, objects, or ideas (Huit and Cain, 2005). The process of emergence of individual behavior can be described, predicted, understood, and even influenced when we understand the mental processes that occur (Lahey, 2007). In marketing, positive affection is viewed as important in influencing judgment and decision-making with regard to the use and purchase of a product (Cohen et al., 2008; Dick and Basu, 1994). The concept of brand affect is introduced to measure affection toward a product. Brand affect is the overall evaluation of the potential of a brand to generate a positive emotional response in the consumer as a result of using the brand (Chaudhuri and Holbrook, 2001; Keller, 1993). Previous studies have suggested that there is a positive relationship between brand affect and brand loyalty (see, for example, Lee and Goudeau, 2014; Chaudhuri and Holbrook, 2001; Ranganathan et al., 2013). We argue that older adult consumers’ affect predicts their loyalty toward a product. Continuously using and having positive experiences with a product may result in older adult consumers developing positive affection, which then makes them committed to buying the product continuously in the future.

Second, cognition factors have an important role in generating brand loyalty (Oliver, 1980, 2010). There is a continuing debate regarding cognitive aging and whether older adults experience a decline in their basic mechanisms, main mental functions, and fluidity (Moschis, 2012), adding to the interest of studying this topic. Cognition is the mental activity or process that describes the acquisition, storage, transformation, and use of knowledge (Huit and Cain, 2005; Reed, 2012). Several studies have found that cognition factors have a relationship with behavioral and attitudinal loyalty (Lee and Goudeau, 2014; Smith and Reynolds, 2009; Wijaithammarit and Taechamaneestit, 2012). It has also been found that a higher level of product knowledge (that is, cognition) tends to increase consumers’ satisfaction and loyalty (Homburg et al., 2006; Wijaithammarit and Taechamaneestit, 2012). In consumer behavior studies, cognitive factors can be measured using the concept of disconfirmation (Homburg et al., 2006). Normally, disconfirmation is used to predict consumer satisfaction by making comparisons between a consumer’s expectations with a product or service and consumers’ actual performance of that product or service (Homburg et al., 2006). In our study, however, disconfirmation will be investigated in terms of its ability to influence brand loyalty in older adult consumers.
Several previous studies have investigated the relationship between affection and cognition (Frank et al., 2014; Homburg et al., 2006; Söderlund and Rosengren, 2004; Zajonc, 1980). Affection and cognition are considered two separate systems but both can affect brand loyalty and they interact with each other to influence behavior (Forgas, 2012; Forgas and George, 2001; Frank et al., 2014; Nyer, 1997; Zajonc, 1980). We argue that affection can interact with cognition (that is, disconfirmation) in improving the relationship between brand affect and brand loyalty. We suggest that an older adult consumer who has a high level of cognition of a product will tend to have higher level of loyalty.

Finally, we consider consumer satisfaction as the third antecedent of brand loyalty (Delgado-Ballester and Munuera-Aleman, 2001). Consumer satisfaction relates to consumer responses to marketing and an assessment of the features of the product or service offered. Consumer responses relate to the fulfillment of their expectations, that is, whether they are happy or unhappy with the product, and whether they consider it to be pleasant or unpleasant (Oliver, 1997, 2010). In a wide range of literature discussing how to increase brand loyalty, customer satisfaction has been regarded as one of the best mediator variables for predicting brand loyalty (Frank et al., 2014; Johnson and Fornell, 1991). Current consumer satisfaction research emphasizes that affective factors, both positive and negative, represent the subjective mental feelings that can influence the emotions (joy, pleasure, and disgust), moods, and components of consumer attitudes that is, consumer satisfaction (Homburg et al., 2006; Jani and Han, 2011; Koenig-Lewis and Palmer, 2014; Westbrook and Oliver, 1991; Wirtz and Lee, 2003). Affection in the form of emotions has a crucial role in improving consumer satisfaction, which then influences whether there is a commitment by consumers to remain faithful to these products (Ranganathan et al., 2013). In addition, some studies have found a positive relationship between consumer satisfaction and brand loyalty (Dölarslan, 2014; Kuikka and Laukkanen, 2012; Olsen et al., 2005). Thus, in our context, we argue that older adult consumers who have positive affection toward a product will have a high level of consumer satisfaction, which will then influence their commitment to keep buying the product in the future. Therefore, we suggest the following hypotheses, illustrated in Fig. 1.

![Fig. 1. The proposed relationship between brand affect and brand loyalty.](https://doi.org/10.1016/j.heliyon.2018.e00610)
H1: Consumers’ cognition influences the relationship between consumers’ affection and brand loyalty, and this relationship is stronger in consumers with high levels of cognition.

H2: Consumer satisfaction mediates the relationship between brand affect and brand loyalty for older adult consumers.

2. Contribution statement

Research involving older adult consumers has rarely been conducted, particularly in Indonesia. Research that involves Indonesian older adult consumers is important to understanding their behavior. Indonesia is a country with one of the highest populations in the world and, therefore, it represents a large and valuable market. Thus, our study provides valuable information for marketers, both nationally and internationally, in promoting their products to suit Indonesian older adults. We focused on how the affection and cognition of Indonesian older adult consumers influenced their loyalty. In summary, this article contributes to the literature on older adult consumers, brand affect, and brand loyalty.

3. Methods

The data for this study were collected by the first author and a group of students during the course of a project conducted between February and May 2017 in Indonesia.

3.1. Participants and procedures

We used convenience sampling techniques to collect data from older adult communities and/or prayer groups across cities in Indonesia, namely, Jakarta, Bekasi, Makasar, Padang, Kendari, Manado, Riau, Maluku, Papua, and Medan. We distributed a survey with all necessary questions, research information, including informed consent forms, to all potential participants. In total, 559 older adults participated in the study. However, only the responses of those who signed the informed consent forms and completed all questions were used in this study. Consequently, after exclusions, the study involved 344 older adult consumers (over 55 years of age), with the product being bottled water. The median age of the group ($M_{\text{Age}}$) was 63.94 years and the standard deviation of age ($SD_{\text{Age}}$) was 5.98.

We used a cutoff age of 56 years for older adults for two reasons. First, because Indonesia is a developing country, life expectancy at birth remains around 67 years for males and 71 years for females, whereas females in developed countries reach 83 years (World Health Organization [WHO], n.d.). Second, following the practice of
the WHO, we used the pensionable age limit for Indonesia, which is currently set at 56 years (Humas, 2015; WHO, 2002).

In regard to the product, we used a well-known brand of bottled water, which has been available in Indonesia since the 1970s. Many people in Indonesia tend to consume bottled water since clean tap water is not available across Indonesia. Although there are other bottled water brands in Indonesia, the main reason for choosing this brand was that we expected older adult consumers to have a good cognition of the product because it has a positive long reputation. Our assumption was that if consumers have good disconfirmation toward a product, their loyalty tends to increase.

Ethical clearance was given by Ethical Committee of Faculty of Psychology, Universitas Indonesia No. 74/FPsi.Komite Etik/PDP.04.00/2017.

3.2. Measurements

Four measurements were used in this study. Brand loyalty was assessed using four items from Chaudhuri and Holbrook (2001), which measure both behavioral loyalty and attitudinal loyalty. Items comprised “I will buy this brand the next time I buy”, “I intend to keep purchasing this brand,” “I am committed to this brand,” and “I would be willing to pay a higher price for this brand over other brands.” Three items from the Chaudhuri and Holbrook (2001) questionnaire were used to measure brand affect. The items were “I feel good when I use this brand,” “This brand makes me happy,” and “This brand gives me pleasure.”

To assess consumer satisfaction, we used three items from a questionnaire by Aaker et al. (2004). The items were “I am completely satisfied with this product,” “I am completely pleased with the product,” and “This product is turning out better than I expected.”

One item from Homburg et al. (2006) was used to assess cognition (disconfirmation). The item was “The performance of the product meets my expectations.” The item was used previously to measure disconfirmation based on Oliver’s disconfirmation paradigm (1999, 2010), which focuses on consumers’ expectations of a product (Homburg et al., 2006).

A seven-point Likert-style scale was used for scoring for all items, ranging from one (strongly disagree) to seven (strongly agree). All items were translated into Bahasa Indonesian, using back-to-back translation procedures from Sousa and Rojjanasrirat (2011). A pilot test was conducted to ensure that all measurements had a good reliability, and Cronbach alpha scores ranged between 0.76 and 0.96. The pilot test also assessed validity in the Bahasa Indonesian version and the results of Cronbach Alpha tests were similar to the original version in English.
3.3. Data analysis

Conditional direct effect analysis (mediated moderation) was used to answer all hypotheses using the PROCESS macro for IBM SPSS Statistics Version 23 developed by Hayes (2013). We used centered scores for all data to reduce collinearity and improve interpretation of the main effect (Dawson, 2014). We also used procedures from both Edwards and Lambert (2007) and Preacher et al. (2007) to interpret the mediated moderation analysis. To interpret the open-ended question, we used a content analysis and intercoder agreement to ensure that the results were reliable (Robins et al., 2009).

4. Results

Table 1 illustrates the means, standard deviations, correlations, and scale reliabilities for all variables. The scale reliabilities were satisfactory for all questionnaires. Three items of brand affect had $\alpha = 0.90$. The Cronbach alphas for brand loyalty and consumer satisfaction were both $\alpha = 0.89$. All correlation results, which ranged from $r = 0.55$ to $r = 0.77, p < 0.01$, indicated that all variables were moderately and positively correlated to each other.

Table 2 shows the standardized regression coefficients of the model. A positive and significant relationship existed between brand affect and consumer satisfaction ($\beta = 0.785, SE = 0.051, t = 15.416, p < 0.001, LLCI = 0.685, ULCI = 0.885$) and between consumer satisfaction and brand loyalty ($\beta = 0.770, SE = 0.085, t = 9.060, p < 0.001, LLCI = 0.603, ULCI = 0.937$). The interaction (moderation analysis) between brand affect and cognition did not predict brand loyalty in older adult consumers ($\beta = 0.061, SE = 0.040, t = 1.520, p = ns, LLCI = -0.018, ULCI = 0.140$) for consumers with either higher or lower levels of cognition. Therefore, our first hypothesis was rejected.

The indirect effect of brand affect on brand loyalty through consumer satisfaction was significantly different from zero ($\beta = 0.604, SE = 0.075, LLCI = 0.474, ULCI = 0.770$). The Sobel test was also significant ($\beta = 0.604, SE = 0.078$,

| Mean | SD  | BA  | D   | CS  | BL  |
|------|-----|-----|-----|-----|-----|
| BA   | 15.11 | 2.50 | 0.90 |     |     |
| D    | 5.03  | 0.92 | 0.55**|     |     |
| CS   | 14.79 | 2.60 | 0.75**| 0.64**| 0.89 |
| BL   | 18.92 | 3.57 | 0.63**| 0.64**| 0.77**| 0.89 |

Note. Diagonal entries in bold are scale reliabilities (Cronbach alpha). BA = brand affect; D = disconfirmation; CS = consumer satisfaction; and BL = brand loyalty. The symbols ** indicate that the correlation is significant at the 0.01 level (two-tailed).
z = 7.799, p < 0.001). These results showed that consumer satisfaction influenced the relationship between brand affect and brand loyalty in older adult consumers. Therefore, our second hypothesis was supported.

### 5. Discussion

In this paper, we argued that the interaction between affection and cognition in older adult consumers increased their consumer loyalty. In addition, we contended that consumer satisfaction influences the affection of older adult consumers such that it increases their loyalty toward a product. These two hypotheses were tested using a conditional direct effect analysis, which demonstrated that our first hypothesis was not supported, whereas our second hypothesis was supported. The results showed that the satisfaction of older adult consumers did influence their affection for and their commitment to buying the product in question. However, our results did not suggest that the older adult consumers’ cognition played a substantial role in predicting their loyalty. Consequently, the results indicated that consumer satisfaction influenced older adult consumers’ affection, such that it predicted their loyalty toward a product, but that cognition did not have a significant effect on the relationship.

Our first hypothesis was not supported. The results of the mediated moderation analysis showed that brand affect was not triggered by either high or low cognition capacity in predicting older adult consumers’ loyalty. Therefore, the idea that the interaction between affection and cognition may predict expected behavior, that is, brand loyalty, cannot be supported (Forgas, 2012; Forgas and George, 2001). Moschis (2012) argued that a decrease in older adult consumers’ cognitive skills, mental functions, and fluid abilities may influence the way they choose a product. Older adult consumers are more likely to choose a product based on their affection
toward a product rather than as a result of cognitive evaluation (Cole and Houston, 1987; Drolet et al., 2011; Jayanti et al., 2004). Thus, for older adult consumers, the positive affections that occur collectively play a greater role in determining buying decisions. This result indicates that older adult consumers tend to use affection (brand affect) rather than cognition (disconfirmation) in evaluating the quality of a product, their level of satisfaction with it, and their degree of faithfulness toward the product. It is possible that older adults form a bond with a product over a long period of use and, therefore, tend to trust their past experiences rather than new, factual, cognitive information in evaluating products. Another possible explanation is that we used a generic product instead of utilitarian product. In testing cognition effects, asking whether a bottled water product ‘met my expectations’ could be an issue since participants may not able to differentiate a given brand from other brands in terms of its contaminants, flavor and price.

Our second hypothesis was that brand affect predicted brand loyalty when consumer satisfaction was considered. Previous studies found that positive affection tends to increase consumer satisfaction (Homburg et al., 2006), and consumer loyalty (Chaudhuri and Holbrook, 2001). In addition, consumer satisfaction influences consumer loyalty toward a brand (Döllerslan, 2014; Kuikka and Laukkanen, 2012; Olsen et al., 2005). Our results suggested that consumer satisfaction does play a major role in influencing the relationship between brand affect and brand loyalty. A similar result was presented by Ranganathan et al. (2013), who found that the role of positive affection can affect consumer satisfaction, thereby creating loyalty to a product. Thus, our study indicated that older adult consumers’ need to have a positive affection and be satisfied with a product before they are willing to commit to buying the product in the future.

We conducted a further analysis to investigate whether affection and cognition interact to influence an expected behavior. We found that the interaction existed in relation to attitudinal loyalty, but not behavioral loyalty. This finding was similar to Ranganathan et al.’s study (2013), which found that a deep commitment to the use of a product will increase if the evaluation of the product involves affection and cognition. Therefore, we assume that both affection and cognition are more likely to influence intentions to buy the product again in the future, but not the actual purchase behavior.

This study indicates the importance of understanding the effect of both affection and cognition in older adult consumers in predicting their satisfaction and loyalty. We consider that the results of this study can certainly be generalized to all older adult consumers throughout Southeast Asia. Although the results cannot be generalized to all older adult consumers worldwide, this research may help marketers improve the way they promote and produce their products to suit the needs and expectations of Indonesian older adult consumers. Marketers are advised to prioritize aspects of
affection in marketing their products in the form of advertising or product design to attract the positive affection of elderly consumers. In addition, marketers can carry out activities that promote positive emotions in the elderly, using useful and fun products and services, so that elderly consumers do not feel that any decline in cognitive function is a problem. In addition, older adult consumers should be informed of the importance of evaluating the product both affectively and cognitively so that they can choose wisely.

The limitations of this study are the use of self-report questions and the cross-sectional methodology. The use of questionnaires in the form of Likert scales, with concurrent data retrieval timing, can lead to common method bias (Podsakoff et al., 2003). In addition, although we attempted to limit the number of items in one survey, some older participants found it difficult to answer all the questions. As we had anticipated this issue, we permitted them to obtain help from their relatives in answering the questionnaire. Next, the cross-sectional methodology that we utilized did not allow us to explain the causality of the variables. For future research, collecting data from different age groups should be considered to allow for comparison and a better understanding of the differences between young, middle-aged, and older consumers.

In future research, the following issues should be considered. First, our study focused on a utilitarian, somewhat generic product, namely bottled water, which may have affected the cognitive evaluation of older adult consumers (Chaudhuri and Holbrook, 2001). Therefore, a subsequent study should examine products that are utilitarian and hedonic so that the results regarding potential interactions between affection and cognition for both types of products can be compared. Second, to clearly illustrate relationships of causality between variables, the use of experiments is suggested (Cozby and Bates, 2015), although we emphasize that the ethics of conducting experimental research involving older adult participants must be considered. Finally, the use of objective measurements is promoted to effectively measure the older adult participants’ affection and cognition toward the product. Finally, we suggest that similar studies should be conducted in other Southeast Asian countries, such as Malaysia, Thailand, the Philippines, and Singapore, to determine whether our result can be generalized to all Southeast Asian consumers. This would assist marketers in obtaining more certain knowledge of Southeast Asian consumers and to determine how they can promote their products effectively and efficiently in this market.

To conclude, this study provided further empirical results regarding affect and cognition in older adult consumers, particularly in Indonesia. Two primary results were provided. First, the study indicated that customer satisfaction was a good mediator between brand affect and brand loyalty. This means that the more positive affection that elderly Indonesian consumers have toward a product, the higher their satisfaction will be in using the product, resulting in greater commitment to repeat purchases and consumption. Second, we discovered that cognitive skills (disconfirmation) did
not influence the relationship between brand affect and brand loyalty through customer satisfaction. This indicates that older adult consumers tend to use their affection instead of their cognitive skills to evaluate their buying decisions.

**Declarations**

**Author contribution statement**

Deepraj Kaur: Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Martina Mustika: Conceived and designed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Bertina Sjabadhyni: Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data.

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**Competing interest statement**

The authors declare no conflict of interest.

**Additional information**

No additional information is available for this paper.

**References**

Aaker, D., 1991. Managing Brand Equity: Capitalizing on the Value of a Brand Name. Free Press, New York, New York.

Aaker, J., Fournier, S., Brasel, S.A., 2004. When good brands do bad. J. Consum. Res. 31 (1), 1–16.

Chaudhuri, A., Holbrook, M., 2001. The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. J. Market. 65 (2), 81–93.

Cohen, J.B., Pham, M.T., Andrade, E.B., 2008. The Nature and Role of Affect in Consumer Behavior.
Cole, C.A., Houston, M.J., 1987. Encoding and media effects on consumer learning deficiencies in the elderly. J. Market. Res. 55–63.

Cozby, P.C.B., Bates, 2015. Methods in Behavioral Research. McGraw-Hill, Australia.

Dawson, J.F., 2014. Moderation in management research: what, why, when, and how. J. Bus. Psychol. 29 (1), 1–19.

Delgado-Ballester, E., Munuera-Aleman, J.L., 2001. Brand trust in the context of consumer loyalty. Eur. J. Market. 35 (11/12), 1238–1258.

Dick, A.S., Basu, K., 1994. Customer loyalty: toward an integrated conceptual framework. J. Acad. Market. Sci. 22 (2), 99–113.

Döllarslan, E.S., 2014. Assessing the effects of satisfaction and value on customer loyalty behaviors in service environments: high-speed railway in Turkey as a case study. Manag. Res. Rev. 37 (8), 706–727.

Drolet, A., Schwarz, N., Yoon, C. (Eds.), 2011. The Aging Consumer: Perspectives from Psychology and Economics. Routledge.

Edwards, J.R., Lambert, L.S., 2007. Methods for integrating moderation and mediation: a general analytical framework using moderated path analysis. Psychol. Meth. 12 (1), 1–22.

Forgas, J.P. (Ed.), 2012. Handbook of Affect and Social Cognition. Psychology Press.

Forgas, J.P., George, J.M., 2001. Affective influences on judgments and behavior in organizations: an information processing perspective. Organ. Behav. Hum. Decis. Process. 86 (1), 3–34.

Frank, B., Torrico, B.H., Enkawa, T., Schvaneveldt, S.J., 2014. Affect versus cognition in the chain from perceived quality to customer loyalty: the roles of product beliefs and experience. J. Retailing 90 (4), 567–886.

Gwinner, K.P., Gremler, D.D., Bitner, M.J., 1998. Relational benefits in services industries: the customer’s perspective. J. Acad. Market. Sci. 26 (2), 101–114.

Haryanto, J.T., 2017, October 31. Penduduk lansia dan bonus demografi kedua (Elderly Population and Second Demographic Bonus). Retrieved from Kementerian Keuangan Republik Indonesia webpage: https://www.kemenkeu.go.id/publikasi/artikel-dan-opini/penduduk-lansia-dan-bonus-demografi-kedua/.

Hayes, A.F., 2013. Introduction to Mediation, Moderation, and Conditional Process Analysis: a Regression-based Approach. Guilford Press.
Homburg, C., Koschate, N., Hoyer, W.D., 2006. The role of cognition and affect in the formation of customer satisfaction: a dynamic perspective. J. Market. 70 (3), 21–31.

Huitt, W., Cain, S.C., 2005. An Overview of the Conative Domain. Educational Psychology Interactive. Valdosta State University, Valdosta GA. Retrieved 14 June, 2011 from: http://www.edpsycinteractive.org/brilstar/chapters/conative.pdf.

Humas, 2015, July 8. Inilah Peraturan Pemerintah No. 45/2015 Tentang Penyelenggaraan Program Jaminan Pensiun (This Is the Government Rules No. 45/2015 about Pensioner Program). Retrieved from: http://setkab.go.id/inilah-perpres-no-452015-tentang-penyelenggaraan-program-jaminan-pensiun/.

Jani, D., Han, H., 2011. Investigating the key factors affecting behavioral intentions: evidence from a full-service restaurant setting. Int. J. Contemp. Hospit. Manag. 23 (7), 1000–1018.

Jayanti, R.K., McManamon, M.K., Whipple, T.W., 2004. The effects of aging on brand attitude measurement. J. Consum. Market. 21 (4), 264–273.

Johnson, Michael D., Fornell, Claes, 1991. A framework for comparing customer satisfaction across individuals and product categories. J. Econ. Psychol. 12, 267–286.

Keller, K.L., 1993. Conceptualizing, measuring, and managing customer-based brand equity. J. Market. 57 (1), 1–22 (January).

Koenig-Lewis, N., Palmer, A., 2014. The effects of anticipatory emotions on service satisfaction and behavioral intention. J. Serv. Market. 28 (6), 437–451.

Kuikka, A., Laukkanen, T., 2012. Brand loyalty and the role of hedonic value. J. Prod. Brand Manag. 21 (7), 529–537.

Lahey, B.B., 2007. Psychology: an Introduction, ninth ed. McGraw-Hill, New York, New York.

Lee, H.J., Goudeau, C., 2014. Consumers' beliefs, attitudes, and loyalty in purchasing organic foods: the standard learning hierarchy approach. Br. Food J. 116 (6), 918–930.

Moschis, G.P., 2012. Consumer behavior in later life: current knowledge, issues, and new directions for research. Psychol. Market. 29 (2), 57–75.

Nyer, P.U., 1997. A study of the relationships between cognitive appraisals and consumption emotions. J. Acad. Market. Sci. 25 (4), 296–304.

Oliver, R.L., 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. J. Market. Res. 17 (4), 495–507.
Oliver, R.L., 1997. Satisfaction: a Behavioral Perspective on the Consumer. Irwin/McGraw-Hill, New York, New York.

Oliver, R.L., 1999. Whence consumer loyalty? J. Market. 63 (Special Issue 1999), 33–44.

Oliver, R.L., 2010. Satisfaction: a Behavioral Perspective on the Consumer. Routledge, London, UK.

Olsen, S.O., Wilcox, J., Olsson, U., 2005. Consequences of ambivalence on satisfaction and loyalty. Psychol. Market. 22 (3), 247–269.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., Podsakoff, N.P., 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. J. Appl. Psychol. 88 (5), 879.

Preacher, K.J., Rucker, D.D., Hayes, A.F., 2007. Addressing moderated mediation hypotheses: theory, methods, and prescriptions. Multivariate Behav. Res. 42 (1), 185–227.

Quester, P., Lim, A., 2003. Product involvement/brand loyalty: is there a link? J. Prod. Brand Manag. 12 (1), 22–38.

Ranganathan, S.K., Madupu, V., Sen, S., Brooks, J.R., 2013. Affective and cognitive antecedents of customer loyalty towards e-mail service providers. J. Serv. Market. 27 (3), 195–206. Emerald Group Publishing Limited.

Reed, S.K., 2012. Cognition: Theories and Applications. CENGAGE Learning, Boston, Massachusetts.

Robins, R.W., Fraley, R.C., Krueger, R.F. (Eds.), 2009. Handbook of Research Methods in Personality Psychology. Guilford Press, New York, New York.

Smith, A., Reynolds, N., 2009. Affect and cognition as predictors of behavioral intentions towards services. Int. Market. Rev. 26 (6), 580–600.

Söderlund, M., Rosengren, S., 2004. Dismantling “positive affect” and its effects on customer satisfaction: an empirical examination of customer joy in a service encounter. J. Consumer Satisfaction, Dissatisfaction Complain. Behav. 17, 27.

Sousa, V.D., Rojjanasrirat, W., 2011. Translation, adaptation and validation of instruments or scales for use in cross-cultural health care research: a clear and user-friendly guideline. J. Eval. Clin. Pract. 17 (2), 268–274.

United States Census Bureau, 2018. US and World Population Clock: Indonesia. Retrieved from https://www.census.gov/popclock/world/id.

https://doi.org/10.1016/j.heliyon.2018.e00610

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Westbrook, R.A., Oliver, R.L., 1991. The dimensionality of consumption emotion pattern and consumer satisfaction. J. Consum. Res. 18 (1), 84–91.

Wijaithammarit, S., Taechamaneestit, T., 2012. The impact of customer experience management on customer loyalty of supercenter’s shopper in Thailand. Int. J. e-Educ. e-Bus. e-Manag. e-Learn 2 (6), 473.

Wirtz, J., Lee, M.C., 2003. An examination of the quality and context-specific applicability of commonly used customer satisfaction measures. J. Serv. Res. 5 (4), 345–355.

World Health Organization (WHO). (n.d.). Country Profiles: Indonesia. Retrieved from http://www.who.int/countries/idn/en/.

World Health Organization (WHO), 2002. Proposed Working Definition of an Older Person in Africa for the MDS Project. Retrieved from http://www.who.int/healthinfo/survey/ageingdefnolder/en/.

Zajonc, R.B., 1980. Feeling and thinking: preferences need no inferences. Am. Psychol. 35 (2), 151–175.