Relationship Between the Big Five Personalities Traits and Customer Loyalty in the Retail Industry

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Review of Integrative Business & Economics Research

ABSTRACT

The inspiration of the development of this research is due to the increasing demands from the firms to develop suitable marketing strategies. Having the right strategy can not only make the company more efficient and profitable, but also increase customer loyalty in contributing to the long term stability. One of the most critical aspects of marketing strategies is customer relationship management (CRM). In order to keep a strong relationship, acknowledging the customer's behavior and personalities would be fundamental. In this study, the direct correlation will be established between customer loyalty in terms of their repurchase behavior and the Big Five Personalities Traits. 9 countries around the world are selected as the sample and their mean score of each traits are also provided. Then, Pearson product-moment correlation and Spearman correlation are both used to predict the correlation, which would be more accurate. The result demonstrates a positive relationship between extraversion and Openness and a negative relationship between Neuroticism, Agreeableness and Conscientiousness. In sum, our analyses show that personality traits correlate with customer loyalty in different degrees.

Keywords: The Big Five Personality Traits, Customer Loyalty.

1. INTRODUCTION

Along with the rapid development of the society, brand diversities could be more obviously noticed that the mutual competition in every industry is getting more intense and drastic. However, to find a way to maintain and continue the profit for one's company will be more challenging. As a result, customer relationship management (CRM) is becoming more critical in helping sustain the company in the long term. In regard to CRM, there are many types and categories that could be studied while customer loyalty should be considered one of the most crucial one in maintaining customer stability and long term profitability. This was emphasized by Reichheld and Teal (2001) who pointed to a study of Bain and Co. which showed that a 5% increase in customer loyalty could increase the firm's profitability by 40 to 95%; and a 1% increase would amount to a 10% reduction in cost. In addition to that, there are many more advantages that could be brought by acquiring customer loyalty. For example, loyal customers allocate proportionally more of their budget to their "first choice" store than customers who switch Knox and Denison.(2000). Further, loyalty translates into increased customer retention and repurchase which is reflected in a retailer's economic returns Reichheld and Sasser.(1990). Evidently, all the evidence has proven that customer loyalty can have a direct impact on the success of a company. On the other hand, it also demonstrates the potential value and importance for opening up further research.

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In general, our result will focus on the link between the repurchase behavior and the big five traits model in measuring the customer loyalty as It has been shown that the loyalty and repurchase behavior has a strong relationship. Curtis, T., Abratt, R., Rhoades, D. L., & Dion, P. (2011). Big Five Personality Dimensions are considered important to understand how consumers behave and tend to prioritize aspects in a retail business environment Javier Castillo.(2017). By analyzing the correlation between big five traits and repurchase behavior which is the number of times purchased by a customer, we can generate an assumption between customer's loyalty and personality traits. "It is well-known that personality impacts customer satisfaction and post-purchase behavior, such as loyalty and word of mouth." Mooradian & Olver.(1994) Though there are numbers of research done based on the relationship between personality traits and customer loyalty, the specific relationship that has been done in relation to action loyalty in terms of the repurchase behavior is still relatively scarce. In addition, "most studies have been performed in piecemeal format with little attempt to consider how networks of personality traits may combine to influence consumer response." Mowen and Harris. (2003).Thus, this particular research will study the correlation between the Big Five Traits(Openness, Conscientiousness, Agreeableness, Extraversion, and Neuroticism) and the customer loyalty in respect to the repurchase behavior.

2. **LITERATURE REVIEW**

2.1 Brand Loyalty and repurchase behavior:

Under the development of the society, there are much more diversities and options of different products for consumers to choose from. Nevertheless the benefits are provided for the customers, suppliers which are the firms on the other hand suffer from the drastic competition within an industry. "In this way, having a precise and long-term implementation of customer relationship management will be quite important and vital for the survival of the company." Kermani.(2011). One of the most potential but also debated tactics is customer's retention and loyalty to a brand which is considered more maintainable and profitable than working on attracting new customers since there are many uncertainties in the market that could possibly influence the new customer when they are choosing a brand such as product similarities, service quality. However, for the loyal customer, they will be more likely to be lasting and consistent in contributing to the growth of a firm. "Creating a strong tight connection to customers is the dream of any marketer and often the key to long-term marketing success." Kotler and Keller. (2009). For companies, customer loyalty enhances brand equity by lowering vulnerability to competitive marketing actions, increasing margins, increasing marketing communication effectiveness, and possibly generating more brand licensing or extension opportunities. Keller.(1998). However, since the definition for brand loyalty is very abstract, a clear and specific direction should be made before starting the research. As indicated by Baldinger and Rubinson.(1996), brand loyalty covers affective loyalty and action loyalty. Affective loyalty refers to the consumer's preference and affinity for a specific brand but the actual purchase behavior has not yet to be developed while action loyalty is the actual purchase behavior conducted by consumers for a specific brand. On the other hand, the analysis of the repurchase behavior could demonstrate the customer's loyalty. It has been proved that loyalty and repurchase indicated the strongest positive relationship (0.71) of all the relationships studied. Curtis, T., Abratt, R., Rhoades, D. L., & Dion, P. (2011)

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2.2 Big Five Personality Traits:

The history of debating on the personality trait is not rare with substantial theories arguing on the most ideal and appropriate one. Eventually, this resurgence was facilitated in part by the emergence of a consensus understanding that traits are well organized within five broad domains. The "FiveFactor Model" or "Big Five" Goldberg.(1990). Along with many research that has been conducted related to personality, The Big Five Personality traits is always the most optimal option due to its inclusiveness and accuracy. The Five Factor model (FFM) or "Big Five" offers a parsimonious way of describing the full range of personality traits Costa and McCrae.(1995). More importantly, it is the most comprehensive and parsimonious model of personality descriptors available, Goldberg and Saucier, (1995). As a result, we can utilize the personality traits under different circumstances including consumer behavior. As everyone has a different personality, their correspondent personality traits could be different as well. However, If there are any specific patterns between personality traits and repurchase behavior which contribute to one's loyalty in a brand is still uncertain. In marketing research, personality traits have been adopted to study a variety of emotional responses, such as emotions and customer satisfaction e.g. Matzler et al., (2005); Mooradian and Olver, (1997). So for this research, personality traits will be used in predicting customer loyalty.

Openness: Person's willingness to try new things and be open to new experiences.

Conscientiousness: A person's organization and motivation.

Extraversion: outgoing and sociable.

Agreeableness: Basic emotional style of a person.

Neuroticism: Emotional instability and stability.

(JBRMR, 2017)

3. **METHODOLOGY**

3.1 Conceptual Background:

Big Five Personality Traits is broadly accepted as a practical and reliable tool cross-cultural for psychologists in measuring the personality in a specific group of people which is composed of extroversion, agreeableness, conscientiousness, neuroticism and openness. In the past, many similar studies were conducted to predict the potential difference of the personality trait in influencing one's behavior across many different realms. Among the diverse areas of study, marketing strategy especially in establishing customer loyalty is one of the most prevalent topics that have been studied for a long time while people are trying to find the similarities of personality traits in loyal customers in keeping their long-term profit from them. For example, a famous study that has been performed by Long-Yi Lin illustrated that agreeableness and openness both have positive relationships with loyalty while the other three don't. Long-Yi Lin.(2010)

However, as purchasing behavior contributes to a firm's income to the most degree, action loyalty which is the repurchase behavior can have a direct impact on the development of a company. Instead of focusing on any other types of loyalty, this study will demonstrate a direct relationship between personality traits and customer loyalty in terms of the repurchase behavior. More specifically, this study will be a global research that compares the retail marketing information and the personality traits among different countries to predict the

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validity and inclusiveness of this model and see whether there is a direct correlation between a specific trait and repurchase behavior in the global scale.

3.2 Data collection and sampling:

Due to the limitation and capability, having a global research could not perform easily by using the traditional way by doing a survey. However, an authoritative analysis and measurement that was revealed by Professor Kajonius provided a reliable reference for the database of personality traits with mean differences across the world. Kajonius.(2017) In the personality traits data, it included more than 20 countries with not only the mean difference in general but also the sexual difference for each personality trait which we can extrapolate the integration and preciseness of the data. While having the data of personality traits, the lack of the retail database is complemented by the UCI machine learning repository. Similarly, the integrity also manifests in the retail data. It has very detailed descriptions of different information including InvoiceDate, StockCode, Description, Quantity, InvoiceDate, Unit Price, Country and Customer ID, which can aid in categorizing different customers. Besides, more than 541910 purchases information from all over the world are recorded. After the database is established, the next step will be sampling. While some countries appear in one data while not in the other, we only select the countries that overlap in both the data sets. In addition, in the retail detail set, we eliminate any data with any missing or vague information and the one which does not correspond to the requirement. For example, even Hong Kong appears in both the databases, the lack of the record of the repurchase behavior does not help the measurement as it only records one customer with a single time purchase even many items were purchased at the same time. Eventually, through the filtration, the sample only left 9 countries that fit the criteria which are(Australia, Canada, France, Germany, Netherlands, Norway, Singapore, UK, USA)

3.3 Analyze method and procedure:

In terms of the large retail database, this research combines the utilization of the R studio in giving efficiency and accuracy to compare and calculate the value between two data sets. To calculate the correlation between the personality traits and customer loyalty, we have to first find the value for the repurchase value. This step could be the most challenging part as the original dataset does not classify everything in the right order by showing individual customers in a country with only repurchase behavior, instead, all rows represent the purchase of a specific item regardless of the fact that they were purchased at the same time . In this way, while there are many purchases from a single customer, it does not mean this customer reflects the repurchase behavior since he or she might buy different items on the same date. So, purchase data is very significant in revealing the repurchase behavior. Finally, via applying the Rstudio, the number of repurchase behavior could be measured for all the customers in different countries and the mean could be calculated. In Australia, the mean repurchase behavior is 6.3 per person among 9 customers. In Canada, the mean repurchase behavior is 1.5 per person among 4 customers. France is 4.7 under 88 customers; Germany is 5.7 among 95 observed samples; Netherlands is relatively higher with 7.8 under 9 customers; Norway is 3.3 among 10 customers. While Singapore only records 1 customer, its repurchase times are 6; Britain is 4.4 among 3951 customers; USA is 1.75 under 4 customers. The mean could clearly demonstrate a general pattern of repurchase behavior in different countries which account for the customer loyalty. Then from the traits research that was done by Professor Kajonius, we can derive the mean score of the Personality traits for different countries.Kajonius.(2017) Then

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After having both independent variables which are the mean(z-score)of the personality traits and the repurchase pattern in all the samples, our dependent variable which is 'customer loyalty in relation to personality traits' can be calculated by using correlation formula. For the accuracy and validity of the research, two correlation methods are used. The first one is Pearson product-moment correlation which measures the strength of the linear relationship between two variables. The second one is Spearman correlation which assesses how well the relationship between two variables can be described using a monotonic function.

3.3.1 Data summary of the Pearson and Spearman correlation between the Big Five Personality Traits and the Customer Loyalty:

Coefficients of Correlation (Pearson, Spearman)	**Independent Variable**	**Dependent Variable**
-0.2585776 -0.25	Neuroticism, Mean Purchases	Customer Loyalty
0.04728013 -0.09205101	Extraversion, Mean Purchases	Customer Loyalty
0.2069584 0.15	Openness, Mean Purchases	Customer Loyalty
-0.268602 -0.2184951	Agreeableness, Mean Purchases	Customer Loyalty
-0.3711795 -0.2	Conscientiousness, Mean Purchases	Customer Loyalty

4. CONCLUSION AND DISCUSSION

Throughout this paper, the relationship between personality traits and customer loyalty is valid. Via the analysis of the relation between the personality traits and the repurchase pattern globally, a clear correlation could be observed. Although the correlation can not be considered significant as the rate is relatively lower, the general trend is presented as reasonable and logical. The result indicates both a positive relationship between extraversion and Openness with the approximate coefficients of correlation (0.05, 0.09) and (0.2, 0.15) while a negative relationship between Neuroticism, Agreeableness and Conscientiousness under the value of (-0.26, 0.25) (-0.27, -0.22) and (-0.37, -0.2). The positive relationship could be partially explained by the fact that people who are more open and extroverted will be more willing to explore and try the new products in a store while the opposite could due to either their instability of emotion and lack of being strong-minded that they could be easily influence and convinced by the others in choosing another brand. On the other hand, customers whose personalities have extraversion and Openness tends to be more loyal through repurchasing in a

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single store while customers who are under the traits of Neuroticism, Agreeableness and Conscientiousness will be less likely to be loyal to only one store. In addition, both the correlation methods yield the similar results which could demonstrate validity and preciseness of the research. However, this study indirectly contradicts with the former study between personality traits and customer loyalty. For example, a research that was carried out by Trevor has developed a positive relationship between agreeableness and conscientiousness. Trevor.(2015). However, as brand loyalty is a board term that covers many specific aspects which are hard to define, by only analyzing the action loyalty could be overgeneral or spurious. Measuring only one facet, that is, attitudinal or behavioral aspects, of brand loyalty, therefore, would result in measuring a spurious attitude (unstable attitudes that do not influence the subsequent behaviors) or a spurious behavior (inertial behaviors that are unstable and unpredictable). Jooyoung Kim, Jon D. Morris, and Joffre Swai.(2008). Regardless of the disparity and an inaccuracy of the measurement, the result is not surprising in roughly providing a basic concept for a business management strategy that focuses on the relationship between customer characters and the brand loyalty in terms of the repurchase behavior for the retail industry in a global perspective.

5. LIMITATIONS AND FUTURE RESEARCH

Even though the research produced a remarkable correlation analysis of the relationship between personality traits and brand loyalty, there are many limitations in this research that become the confounding factors in restraining and deviating its implementation. In general, there are few points that are emphasised and improve for the future application. Firstly, the sample is a critical issue in this study. Though it was analyzed on a global scale, the limited source of the retail and personality traits dataset merely matched up with 9 countries, causing generalizations difficult to be totally supported around the world. Besides, the connection between personality traits and brand loyalty is vague and less prudent. While personality traits data measured the mean score of a country, the retail data set recorded the repurchase behavior based on the comparison of each individual in different countries. In other words, if cultural mean scores represent little other than a response style or bias, it would be unlikely for their cross-cultural correlational manifold and exact structure to be equivalent to that derived from individual data. David P. Schmitt, Jüri Allik, Robert R. McCrae and Verónica Benet-Martínez.(2007). More importantly, repurchase behavior does not equal customer loyalty. Repurchase behavior in regard to the action loyalty can attribute to different factors as well. Consumers can repeatedly purchase from the same store, either actively due to their trust and commitment to the store, or it would appear passively, due to consumer inertia. liliana.(2007). While we are trying to develop a theoretical framework to measure the correlation, the actual relationship could be intersected with many other moderating effects of relational characteristics. For instance, the one who repurchases in a single store might result from its geographic, preferential, and financial restriction that he or she doesn't have many choices. Lastly, even though it has been tested and claimed positively that the culture-level (i.e., average) personality data and its convergent validity seem to make sense McCrae, R. R. (2002), it might not be permanent and creditable in the long term. As once been measured, it is important to notice that such personality traits may tend to change over the life course and such changes might be related to social demands and experiences Specht, Egloff & Schmukle.(2011). For the following limitations, future work should be more detailed and refined in developing a framework that includes other types of customer loyalty, more inclusive, integrated data and taking into consideration the moderating effects of relational characteristics. In general, the terminal goal for the model is to extrapolate and understand the

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particular characters of the customers so that the company could better orientate their position and develop a more efficient and profitable management strategy. By only analyzing the correlation between personality traits and the action customer loyalty in the retail industry is insufficient to put in practical utilization. Other similar models should be developed in regard to not only combining other types of customer loyalty such as attitudinal loyalty and also a more extensive realm beside retail industry so that the relationship could be more full-sided and inclusive. Despite our limitations, we believe the paper makes a pioneering contribution to knowledge by underlining the importance of the customer personality traits and the customer loyalty with the prudent analytical method and reliable result.

ACKNOWLEDGEMENT

I would like to pay my special regards to Mr. Bradford, who is my mentor and helped me through the way. He taught me many important and useful things that are critical to the success of this paper such as programming and data analysis. It is whole-heartedly appreciated that your great advice for my study proved monumental towards the success of this study. Besides, I would also wish to express my deepest gratitude to the organization of ViaX. They are always being responsible and effective in providing me with much help and advice. I really do appreciate this opportunity and this platform for me to acquire such a huge accomplishment. Again, I want to thank all the people, including the teachers and the faculties whose assistance was a milestone in the completion of this project.

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