

## **Brand Personality, Brand Loyalty and Brand Quality Rating in the Contact Lens Perspective**

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### **ABSTRACT**

Contact lenses provide the best visual ergonomics after eye glasses. More than 5 million Malaysians wear some type of contact lenses and many of these individuals take into consideration the brand that is associated with the product. This paper seeks to determine the interrelationship between brand personality, brand loyalty and brand quality ratings in the contact lenses perspective. The measurement of brand personality was based on Aaker's Brand Personality Scale, attitudinal and behavioural loyalties were used to measure brand loyalty and a scale was used to determine brand quality rating based on the work of Sethuraman and Cole. The primary data was gathered from 238 management students in a Malaysian public university using stratified random sampling method. The result indicated that the most important brand personality dimension associated with the contact lens was competence/modernity. It was found that Sincerity, Excitement, and Competence/Modernity of brand personality significantly affects brand loyalty. Competence/modernity and sincerity of brand personality were found to have significant effect on brand quality rating. The significant means differences were observed in the brand personality according to users, non-users and users of other brands of the contact lens. Implication of the findings were highlighted and discussed based on the research findings.

**Keywords** –Brand Personality, Brand Loyalty, Brand Quality Rating, Contact Lens

### **1.0 INTRODUCTION**

The success and failure of a brand was examined by a number of researchers. Nevertheless, brand personality is one area of branding strategy that has always been overlooked by researchers, particularly in contact lens industry. When consumers view a brand as having human characteristics, the brand is said to have a personality. There were many brands been found to have strong personality such as Campbell's (Sincerity), Porsche

(Excitement), IBM (Competence), Revlon (Sophistication) and Levi's (Ruggedness). However, what kind of personality traits would a contact lens brand have?

Contact lens industry exhibits favourable growth in regions across the world. From the statistic by Gfk Asia Ptd Ltd (2011), Malaysia retail sales of contact lens bring the value of the industry to USD 52.2 million. It is apparent that Malaysian consumers are becoming more receptive towards contact lens in spite of its higher pricing compare to eyeglasses. The contact lens industry in Malaysia is facing intense competition among many different contact lens brands from around the world such as Bausch & Lomb, Johnson & Johnson, Cooper Vision, CIBA Vision and many more. This pool of aggressive competition becomes trickier for contact lens companies to differentiate themselves respectively to become outstanding in the marketplace. Brand personality therefore becomes a priority in creating better communication with customers by developing a unique and distinct personality. Thus, creating brands with personalities similar to those of a target group of consumers will be an effective marketing strategy.

According to Ivens and Valta (2012), customer preferences and loyalty for a brand can be the result of various factors. Brand personality is recognized as an important factor that helps to increase the levels of trust and loyalty (Aaker, 1997). A well established brand personality can stimulate stronger emotional bond on consumers and enhance greater trust and loyalty. In addition, consumers tend to give better rating to a brand which exhibits a stronger personality. Besides, students of tertiary education are young intellectual and they occupied a vast proportion of the society, thus providing huge market segment for contact lens. Thus, three research questions related to brand personality arise to be examined in contact lens perspective among tertiary education students; i.e. (i) What is the brand personality dimensions associated with a contact lens; (ii) How the brand personality of the contact lens effect brand loyalty and brand quality rating; and (iii) Is there any difference in the brand personality according to users of the contact lens, non-users and users of other brand.

## **2.0 LITERATURE REVIEW**

### **2.1 Concept and Definition of Brand**

According to American Marketing Association (in Keller, 2003), a brand is a "name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition." Brand can be defined in terms of three different classes of characteristics: physical attributes, functional characteristics, and brand personality (Plummer, 1985). Kotler and Armstrong (2008) defined brand as a key element in the organization's relationship with customers that represents consumers' perceptions about a product and everything that the product means to consumers. A consistent use of a brand name, logo or symbol makes the brand instantly recognizable to consumers and can bring to mind the personality of the brand and its associations (Temporal, 2001).

### **2.2 Concept and Measure of Brand Personality**

As broadly defined by Aaker (1997), a brand personality is the set of human characteristics associated with a given brand. However, according to Hee Jung and Myung Soo (2013), brand personality and human personality are not identical. It is "a personification of a brand or brand character, which describes the inner characteristics of a brand" (Punyatoya, 2011). Lin (2010) indicates that brand personality generally come from three sources. The first source is the association of brand with the consumers. The image a

company tries to create is the second source, for example creating a corporate image by the use of advertising spokesperson. The third source is about product attributes such as distribution channels and product categories. Brand personality defines how an organization relates a brand with human personality traits for the purpose to create symbolic relations that are strong, unique, distinct and consistent to the consumers (Freling and Forbes, 2005). A successful brand will have a distinct brand personality that enable customer to distinguish it from competitors' brands. Thus, effective marketing strategies can be developed by associating the brand personality attached to the brand.

### 2.2.1 Big Five Personality Dimensions

The one of the most used models to form personality traits for people is the Big Five model by McCrae (2002). It is a more descriptive model for research by capturing the shared factors among most of the existing personality traits. Besides, Alsajjan (2010) also suggested that the Big Five model can successfully predict significant and actual results based on personality. Consumers also appear to practice without problems in conveying human characteristics to brands or in building relationship with brands (Aaker, 1997). Hence, it is possible that the Big Five model extends to brand personality. Table 1 shows the Big Five factors and components of each factor.

**Table 1:** Big Five factor model of personality traits (McCrae, 2002)

| Neuroticism  | Extraversion   | Openness to experience  | Agreeableness  | Conscientiousness   |
|--|--|---|--|---|
| <ul style="list-style-type: none"> <li>- Anxiety</li> <li>- Angry hostility</li> <li>- Depression</li> <li>- Self-consciousness</li> <li>- Impulsiveness</li> <li>- Vulnerability</li> </ul> | <ul style="list-style-type: none"> <li>- Warmth</li> <li>- Gregariousness</li> <li>- Assertiveness</li> <li>- Activity</li> <li>- Excitement seeking</li> <li>- Positive emotions</li> </ul> | <ul style="list-style-type: none"> <li>- Fantasy</li> <li>- Aesthetics</li> <li>- Feelings</li> <li>- Actions</li> <li>- Ideas</li> <li>- Values</li> </ul> | <ul style="list-style-type: none"> <li>- Trust</li> <li>- Straightforwardness</li> <li>- Altruism</li> <li>- Compliance</li> <li>- Modesty</li> <li>- Tender-mindedness</li> </ul> | <ul style="list-style-type: none"> <li>- Competence</li> <li>- Order</li> <li>- Dutifulness</li> <li>- Achievement striving</li> <li>- Self-discipline</li> <li>- Deliberation</li> </ul> |

### 2.2.2 Aaker's Brand Personality Scale

A brand personality scale is proposed by Aaker (1997) in order to generate a content-valid brand personality associated by consumers to a brand. In order to measure brand personality, Aaker (1997) had established a 42 item scale by eliminating redundancy from trait list optioned from three sources - personality scales from psychologists, personality scales used by marketers (academics and practitioners), and original qualitative researches. Aaker (1997) proposed a Brand Personality Scale (BPS) to describe and measure the "personality" of a brand in five core dimensions – sincerity, excitement, competence, sophistication and ruggedness; each of them is divided into a set of facets. Aaker's findings suggest that although the connection between brand and human personality is not exactly similar, consumers are tend to associate themselves with a product by closely matching the brand personality with their own. As advised by Aaker (1997), the brand personality scale explains nearly 93 percent of the observed differences between the brands. The BPS study also measured the degree of positive or negative attitude toward each brand in comparison to other brands in the product category. Figure 1 indicates the brand personality dimension and its facets.

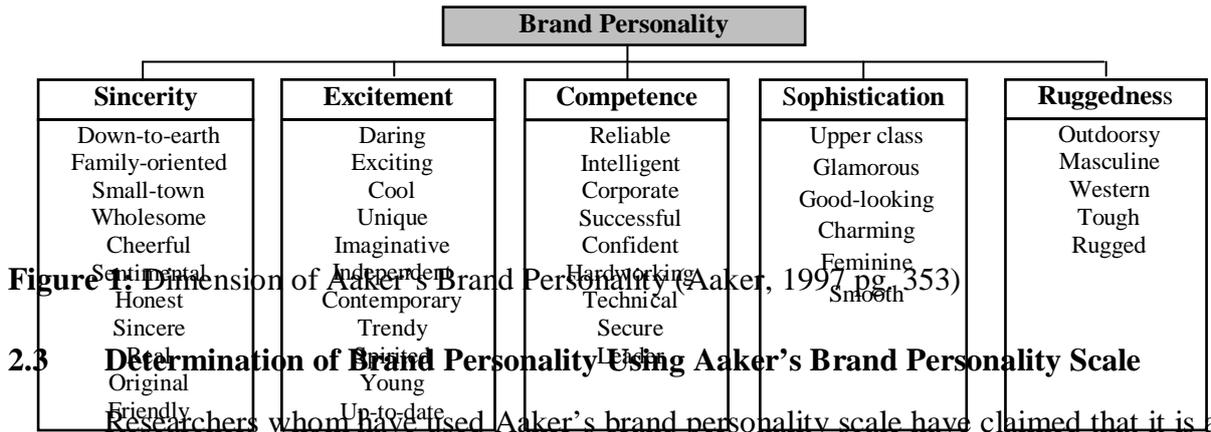


Figure 1: Dimension of Aaker's Brand Personality (Aaker, 1997, pg. 353)

2.3 Determination of Brand Personality Using Aaker's Brand Personality Scale

Researchers whom have used Aaker's brand personality scale have claimed that it is a useful instrument for identifying brand personality that subsequently improved the alignment between consumer's perception and desired image (Siguawet *al.*, 1999). Since, Aaker's (1997) pioneering scale development, brand personality has received considerable attention from recent researchers. Thus, Aaker's Brand Personality scale will be adopted in this study as it covers most of the human-like character of personality, and it explains more than 90 percent of the observed differences between the brands. It also addresses dimensions of personality proposed in the Big Five Theory, as shown in Figure 2.

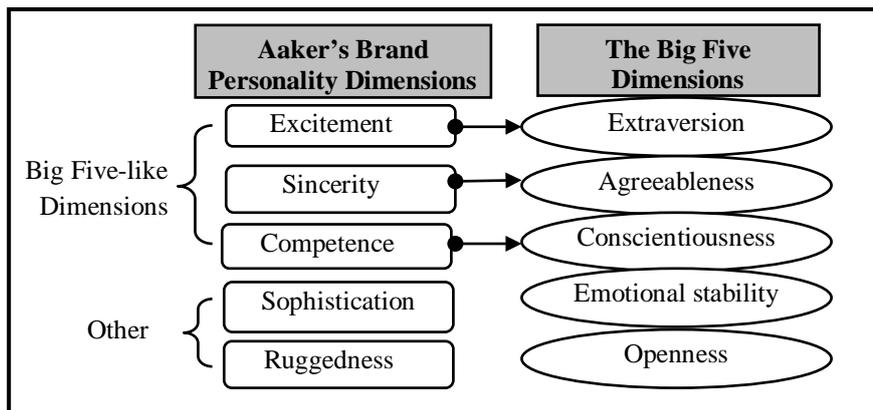


Figure 2: Comparison Model of Aaker's Brand Personality Dimensions with The Big Five Dimensions (Source: Geuens *et al.*, 2009)

2.4 Brand Loyalty

Building and maintaining loyalty has been a central theme for many companies (Mosavi & Kenarehfar, 2013). According to Hsin, Huery and Ya (2009), brand loyalty comes from consumers' satisfaction through their past experiences in using the same brand in which will lead to repurchase behaviour. Oliver (1999) suggested that brand loyalty represents consumers' repurchase commitment in the future purchase and they will not change their brand loyalty no matter in what situations. Therefore, brand loyalty can be defined as the degree of consumer's attachment to a specific brand (Hee Jung & Myung Soo, 2012).

Based on research of Uncles, Dowling and Hammond (2003), brand loyalty can be measured using attitudinal loyalty and behavioural loyalty. Attitudinal loyalty exists when there is a strong attitude commitment to a brand, whereas behavioural loyalty comes from the

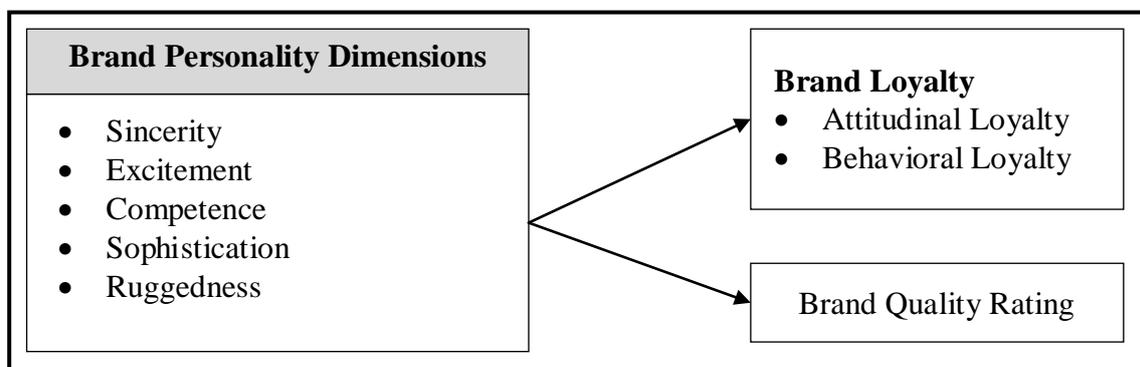
accumulation of the past purchases with only minor regard to underlying consumer commitment to the brand. Many researchers emphasize that attitudinal loyalty and behavioral loyalty should be simultaneously measured in order to identify consumer's real brand loyalty (Chiou and Droge, 2006; Kuenzel and Halliday, 2008).

## 2.5 Brand Quality Rating

Based on Keller (2003), brand quality rating is defined as customers' perception of the overall quality or superiority of a product or service with respect to its intended purpose. It is a global assessment of a consumer's judgment about the superiority of a product (Zeithaml, 1988). Trott (2011) defined perceived quality rating as the opinion or judgment that customer forms about the product's added value and ability to fulfil customer's expectations. Sethuraman and Cole (1999) found that perceived brand quality differential results in consumers willing to pay more for the overall quality or superiority of a brand. Hsin, Huery and Ya (2009) concluded brand quality rating as the consumer's subjective judgment on product quality, and the assessment of product quality was based on previous experiences. Richardson, Dick and Jain (1994) stated that consumers are more likely to rate a brand with a stronger brand identity as having better quality. According to Beldona and Wysong (2007), the closer the personality of brand match to consumers' personality, the higher the quality rating for the brand.

## 2.6 Conceptual Framework and Hypotheses Development

The conceptual framework of the study has been designed based on the literature review, discussed in this Section, and research questions, elaborated in Section 1. Generally, it is adopted from Aaker's Brand Personality Scale. Figure 3 shows the conceptual framework of this research.



**Figure 3:** Proposed Conceptual framework of the research

In the research by Kim, Han and Park (2001), the hypothesis of the attractiveness of brand personality which indirectly affects brand loyalty is positively supported. Furthermore, Kumar *et al.* (2006) found out that consumer' brand loyalty in consumable products was influenced by brand personality. In his recent study, Basu (n.d.), provides evidence that brand personality have significant influence on brand loyalty. He added that the brand personality for a company has plays a very important role and to some extent it also leads to customer loyalty. A brand with the right personality can result in the consumers feeling that the brand is significant and that they should remain loyal to its (Aaker 1996; Keller 2003). Thus, the second hypothesis (H1) constructed for the study is:

*H1. Brand Personality has a significant positive effect on brand loyalty.*

According to Temporal (2001), distinct brand personality of a product will lead to a remarkable impact on a brand quality rating. Based on the study of Richardson *et al.* (1994), consumers' rating is form based on the brand personality or identity. If a brand have stronger brand identity than others, customers are likely to rate the brand as having better quality than others. In Beldona and Wysong (2007) research, they have proven that brand personality of a brand was positively correlated with the brand perceived quality. It is thereby hypothesized (H2) that:

*H2. Brand Personality has a significant positive effect on Brand Quality Rating.*

In a research carried out by Varaprasdreddy and Ramesh (2006), it was found that users and non-users have different perceptions with respect to brand personality and the attachment of personality to the brand. Besides, Aaker (1996) suggested that differences between groups (users and non-users) are often reasonable and provide useful insights. The users of a brand were found to hold stronger brand knowledge than non-users (Castleberry and Ehrenberg, 1990) and mostly they were more satisfied with the brand. Therefore, they can be expected to hold positive brand personality beliefs. Hence, it is thereby hypothesized (H3) that:

*H3. There are differences in the brand personality dimensions of a contact lens according to users, non-users and users of other brand.*

### **3.0 METHODOLOGY**

#### **3.1 Instrument Development and Sampling Procedure**

A paper-based questionnaire was chosen as the research instrument to gather the primary data of brand personality dimensions, brand loyalty and brand quality rating of a contact. The questionnaire was divided into four sections:

- Section A was designed to obtain the information about the profile of the respondents including users of a brand of contact lens, non-users and users of other brands.
- In Section B, respondents were asked to indicate the extent to which of the personality traits, as proposed by Aaker (1997), to describe the contact lens brand personality. The questions cover the five dimensions of the BPS with 42-items of the brand personality traits. A five-point Likert scale (1=*extremely not descriptive* to 5=*extremely descriptive*) was applied.
- In section C, three items were used to determine attitudinal loyalty towards the contact lens, as proposed by Chiou & Droge (2006) and five items were used to determine behavioral loyalty, as proposed by Kuenzel & Halliday(2008). Brand loyalty in this section was measured by five-point Likert scale (1= *Strongly Disagree* to 5= *Strongly Agree*).
- Section D, respondents were asked to rate the quality of the contact lens on a scale of 0 and 200 (with 200 the highest quality rating and 100 the average of all brands). This methodology was used by Sethuraman and Cole (1999) and they suggested that it is a relatively easy way for respondents to quantify quality of a brand or product.

As suggested by Krejcie and Morgan (1970), a total of 278 questionnaires were distributed to the management undergraduate students of a Malaysian public university. The Stratified Random Sampling technique was used in order to increase the accuracy of the data and the representativeness of the population of the study. In this research, the students were divided to 5 stratum according to academic program which were - Bachelor of Management (Marketing)/(SHF), Bachelor of Science (Human Resource Development)/(SHR), Bachelor of Accountancy/(SHC), Bachelor of Management (Technology)/(SHD) and Bachelor of Psychology (Industrial and Organizational Psychology)/(SHY). The questionnaires were distributed directly to the students and the researchers collected the completed questionnaires immediately. It took 3 weeks to distribute and collect the questionnaire.

## 4.0 DATA ANALYSIS

### 4.1 Profile of Respondents

A total of 278 sets of questionnaires were collected and only 238 sets of questionnaire were fully answered, indicating response rate of 85.61%. The profile of the respondents involved in the study indicated that:

- 30.7% respondents were male and the rest were female respondents (69.3%);
- 105 of the respondents were Malay, 115 were Chinese, 13 were Indian and 5 were others races;
- Year 1 students constituted 19.3%, 26.9% students are in Year 2 and 53.8% are in Year 3;
- 26.1% students are pursuing their degree in Human Resources Development, Management (Technology) (21%), Management (Marketing)(20.6%), Accountancy(19.3%) and Psychology (Industrial and Organizational Psychology) (13%);
- 53.4% of respondents were users of a contact lens, 31.5% of respondents were using other brands and 15.1 % of respondents did not own any contact lens brand; and
- In terms of brand quality rating, the respondents rated the brand as follows:
  - 0-49 (2.1%), 50- 99 (14.3%), 100(27.3%), 101- 150 (41.2%), and 151-200 (15.1%).

### 4.2 Validity and Reliability of the Instrument

A Kaiser-Meyer-Olkin test and Bartlett's test of Sphericity were conducted to determine sampling adequacy and whether it is suitable to carry out factor analysis for the data. For brand personality dimensions, it was found that Kaiser-Meyer-Olkin score was more than 0.6 (KMO=0.865) and Bartlett's Test of Sphericity was significant (Sig = 0.000). The KMO score for brand loyalty was 0.844 and Bartlett's Test of Sphericity was significant (Sig = 0.000). Based on the Confirmatory Factor Analysis of the brand personality dimensions, the Varimax rotation has extracted 6 components with 67.045% of total variance explained. Component 6 was neglected due to non-descriptive variable of the brand personality. There were five dimensions left and only 38 personality traits (Factor loading of more than 0.5) instead of 42 personality traits were used for further analyses. As can be seen in Table 2, two original dimensions of the BPS were retained in the new brand personality dimensions for the contact lens, i.e. Sincerity and Excitement. Three new dimensions of brand personality that have been modified and renamed were Competence/Modernity, Sophistication/Joyous and Ruggedness/Diligence. Three items (down-to-earth, daring and hardworking) were neglected due to the factors loading for the items were less than 0.5 or not descriptive.

**Table 2:** Aaker's Brand Personality Dimensions and New Research Brand Personality Dimensions Extracted from Confirmatory Factor Analysis

| Aaker's Brand Personality Dimensions  |             | New Research Brand Personality Dimensions   |             |
|---|-------------|---|-------------|
| Dimension & Original Traits   | Total Items | Dimension & Original Traits   | Total Items |
| <b>Sincerity</b><br>Down-to-earth, Family-oriented, Small-town, Honest, Sincere, Real, Wholesome, Original, Cheerful, Sentimental, Friendly | 11          | <b>Sincerity</b><br>Family-oriented, Small-town, Honest, Sincere, Original, Sentimental, Friendly                   | 7           |
| <b>Excitement</b><br>Daring, Trendy, Exciting, Spirited, Cool, Young, Unique, Imaginative, Up-to-date, Independent, Contemporary            | 11          | <b>Excitement</b><br>Trendy, Exciting, Spirited, Cool, Young, Imaginative, Unique, Independent, Contemporary        | 9           |
| <b>Competence</b><br>Reliable, Hardworking, Secure, Intelligent, Leader, Technical, Corporate, Successful, Confident                        | 9           | <b>Competence/Modernity</b><br>Reliable, Secure, Technical, Successful, Leader, Confident, Smooth, Up-to-date, Real | 9           |
| <b>Sophistication</b><br>Upper-class, Glamorous, Good-looking, Charming, Feminine, Smooth   | 6           | <b>Sophistication/Joyous</b><br>Upper-class, Glamorous, Good-looking, Charming, Feminine, Cheerful                  | 6           |
| <b>Ruggedness</b><br>Outdoorsy, Masculine, Western, Tough, Rugged   | 5           | <b>Ruggedness/Diligence</b><br>Outdoorsy, Masculine, Western, Tough, Rugged, Wholesome, Corporate                   | 7           |
| Total   | 42          | Total   | 38          |

Some of the items in other dimensions of BPS were combined with dimension of Competence to form a new dimension called Competence/Modernity. The implication of reorganizing the items and rename the dimension to Competence/Modernity to the brand personality of the contact lens is shown in Table 3. The new Sophistication/Joyous dimension came from the combination of the items in Sincerity and Sophistication dimensions of the BPS. The implication of renaming of Sophistication/Joyous to the brand personality of the contact lens is shown in Table 4. Moreover, some items of Sincerity and Competence dimensions of the BPS were merged and regrouped into Ruggedness dimension, and were renaming as Ruggedness/Diligence. The implication of renaming of Ruggedness/Diligence to the brand personality of the contact lens is shown in Table 5.

**Table 3:** Implication of “Competence/Modernity” dimension to the brand personality of the contact lens

| New Dimension               | Dimension of BPS | Personality Traits                              | Implication   |
|-----------------------------|------------------|---|---|
| <b>Competence/Modernity</b> | Competence       | Reliable  | <b>Competence</b> to provide trusted contact lens     |
|                             |                  | Secure  | <b>Competence</b> to provide safety to its user       |
|                             |                  | Technical                                       | <b>Competence</b> in providing advance contact lens   |
|                             |                  | Successful                                      | <b>Competence</b> in its successfulness               |
|                             |                  | Leader  | <b>Competence</b> in leading the contact lens market  |
|                             |                  | Confident                                       | <b>Competence</b> in convincing the customer          |
|                             | Sophistication   | Smooth  | <b>Modernity</b> in providing innovative contact lens |
|                             | Excitement       | Up-to-date                                      | <b>Modernity</b> in following the latest trend        |
| Sincerity                   | Real             | <b>Modernity</b> in providing real contact lens |   |

The Confirmatory Factor Analysis performed for brand loyalty indicated that only one dimension was extracted by the Varimax rotation and the total variance explained is 56.703%. All item of brand loyalty were retained as the factors loading scores for the items are above 0.5. All of the items from attitudinal loyalty and behavioral loyalty were combined into one main dimension called brand loyalty. Behavioral loyalty measures make no difference between brand loyalty and repeat buying, and therefore may not be a valid loyalty (Day,

1996). Attitudinal measures are not based on actual purchases (behavioral loyalty) and it might not be a right representation of reality. Hence, the validity of attitudinal measures depends on the strength of the attitude-behavior relationship (Mellens, 1996) which means that there was a reciprocal relation between them. The implication of combining all items of attitudinal and behavioral loyalty to the brand loyalty is shown in Table 6.

**Table 4:** Implication of “Sophistication/Joyous” dimension to the brand personality of the contact lens

| New Dimension             | Previous Dimension | Personality Traits | Implication  |
|---------------------------|--------------------|--------------------|--|
| Sophistication/<br>Joyous | Sophistication     | Upper Class        | <b>Sophistication</b> in representing upper social class |
|                           |                    | Glamorous          | <b>Sophistication</b> in having glamorous look           |
|                           |                    | Good Looking       | <b>Sophistication</b> in having attractive appearance    |
|                           |                    | Charming           | <b>Sophistication</b> in giving a lovely looks           |
|                           |                    | Feminine           | <b>Sophistication</b> in a polite and feminine way       |
|                           | Sincerity          | Cheerful           | <b>Joyous</b> in giving happiness and joy                |

**Table 5:** Implication of “Ruggedness/Diligence” dimension to the brand personality of the contact lens

| New Dimension            | Previous Dimension | Personality Traits | Implication   |
|--------------------------|--------------------|--------------------|---|
| Ruggedness/<br>Diligence | Ruggedness         | Outdoorsy          | <b>Ruggedness</b> in outdoor activities             |
|                          |                    | Masculine          | <b>Ruggedness</b> in showing the tough side.        |
|                          |                    | Western            | <b>Ruggedness</b> in portraying western personality |
|                          |                    | Tough              | <b>Ruggedness</b> in its strong durability product  |
|                          |                    | Rugged             | <b>Ruggedness</b> in its own image                  |
|                          | Sincerity          | Wholesome          | <b>Diligence</b> in caring consumers’ health        |
|                          | Competence         | Corporate          | <b>Diligence</b> in doing the business              |

**Table 6:** Original Proposed Brand Loyalty Items and Dimensions; and New Brand Loyalty Items and Dimensions Extracted from Confirmatory Factor Analysis

| Original Proposed Brand Loyalty |   |     | New Research Brand Loyalty         |   |     |
|---------------------------------|---|-----|------------------------------------|---|-----|
| Dimension                       | Items                                   |     | Dimension                          | Items                                   |     |
| Attitudinal Loyalty             | I will choose this brand again          | AL1 | Brand Loyalty                      | I will choose this brand again          | AL1 |
|                                 | This brand is the best choice           | AL2 |                                    | This brand is the best choice           | AL2 |
|                                 | Loyal patron of this brand              | AL3 |                                    | Loyal patron of this brand              | AL3 |
| Behavioral Loyalty              | Recommend this brand to others          | BL1 |                                    | Recommend this brand to others          | BL1 |
|                                 | Intention to purchase this brand again  | BL2 |                                    | Intention to purchase this brand again  | BL2 |
|                                 | This brand is the first & prefer choice | BL3 |                                    | This brand is the first & prefer choice | BL3 |
|                                 | Speak positively about this brand       | BL4 |                                    | Speak positively about this brand       | BL4 |
|                                 | Encourage others to buy this brand      | BL5 | Encourage others to buy this brand | BL5                                     |     |
| Total                           |   | 8   | Total                              |   | 8   |

### 4.3 Reliability Tests

Results of reliability test for the brand personality dimensions and brand loyalty were shown in Table 7. Reliability results indicated that the data that was gathered from the questionnaires were reliable. The Cronbach’s alpha value for the entire brand personality dimension was 0.925 and brand loyalty was 0.890, which is consistent with George and Mallery’s suggestion (2001), alpha which are over 0.7 are reliable and acceptable.

**Table 7:** Reliability Coefficients for Brand Personality Dimensions and Brand Loyalty

| Variables         | Dimension             | No. of Items | Cronbach's $\alpha$ for Dimension | Cronbach's $\alpha$ for Variable |
|-------------------|-----------------------|--------------|-----------------------------------|----------------------------------|
| Brand Personality | Sincerity             | 7            | 0.906                             | 0.925                            |
|                   | Excitement            | 9            | 0.925                             |                                  |
|                   | Competence/Modernity  | 9            | 0.886                             |                                  |
|                   | Sophistication/Joyous | 6            | 0.905                             |                                  |
|                   | Ruggedness/Diligence  | 7            | 0.893                             |                                  |
| Brand Loyalty     |                       | 8            |                                   | 0.890                            |

#### 4.4 Descriptive analysis of brand personality between users of the contact lens, non-users and users of other contact lens brand

Table 8 shows the results of mean scores and standard deviation for brand personality associated with the contact lens between users, non-users and users of other brands. The results indicated that the "Competence/Modernity" dimension has the highest mean scores from all three groups of respondents. All of the respondents agreed that this contact lens brand is associated with "Competence/Modernity" dimension. For this dimension of the brand personality, users of the contact lens exerted higher mean score (3.89) as compared to that of users of other brands (3.72) and non-users (3.51).

**Table 8:** Overall Analysis of Brand Personality for Brand of Contact Lens Owned

| Brand Owned                       | Brand Personality Dimension | Mean | Standard Deviation | Descriptive Level |
|-----------------------------------|-----------------------------|------|--------------------|-------------------|
| User of the contact lens          | Sincerity                   | 3.50 | 0.459              | High              |
|                                   | Excitement                  | 3.37 | 0.629              | Moderate          |
|                                   | Competence/Modernity        | 3.89 | 0.505              | High              |
|                                   | Sophistication/Joyous       | 3.45 | 0.566              | High              |
|                                   | Ruggedness/Diligence        | 2.88 | 0.712              | Moderate          |
| User of other contact lens brands | Sincerity                   | 3.34 | 0.527              | Moderate          |
|                                   | Excitement                  | 3.32 | 0.550              | Moderate          |
|                                   | Competence/Modernity        | 3.72 | 0.520              | High              |
|                                   | Sophistication/Joyous       | 3.48 | 0.540              | High              |
|                                   | Ruggedness/Diligence        | 2.81 | 0.576              | Moderate          |
| Non-user of contact lens          | Sincerity                   | 3.25 | 0.592              | Moderate          |
|                                   | Excitement                  | 3.45 | 0.637              | High              |
|                                   | Competence/Modernity        | 3.51 | 0.596              | High              |
|                                   | Sophistication/Joyous       | 3.42 | 0.781              | High              |
|                                   | Ruggedness/Diligence        | 2.93 | 0.531              | Moderate          |

#### 4.5 The Effects of Brand Personality Dimensions on Brand Loyalty

In order to identify the relationship between brand personality dimension and brand loyalty, Pearson's correlation analysis was performed only on the users of this brand of contact lens. This is because brand loyalty can only happen on those who had used the brand before. Hence, the groups of respondents such as users of other contact lens brands and non-user of contact lens were excluded from this analysis. Based on Table 9, four out of five dimensions of brand personality: sincerity, excitement, competence/modernity and sophistication/joyous were positively correlated to brand loyalty with the significant values that were less than 0.01. There is no relationship between ruggedness/diligence with brand loyalty. Competence/modernity has the highest correlation coefficient (0.681), followed by sincerity (0.437), and excitement (0.380). The weakest correlation is sophistication/joyous

(0.237). Overall, moderate correlation and substantial relationship exists between brand personality and brand loyalty.

**Table 9:** Pearson's Correlation Analysis between Brand Personality and Brand Loyalty

| Brand Personality Dimensions |  | Brand Loyalty  | Interpretation                                      |
|------------------------------|--|----------------|---|
| Sincerity                    | Pearson Correlation<br>Sig. (2-tailed) | .437**<br>.000 | Moderate correlation;<br>substantial relationship   |
| Excitement                   | Pearson Correlation<br>Sig. (2-tailed) | .380**<br>.000 | Low correlation;<br>definite but small relationship |
| Competence/<br>Modernity     | Pearson Correlation<br>Sig. (2-tailed) | .681**<br>.000 | Moderate correlation;<br>substantial relationship   |
| Sophistication/<br>Joyous    | Pearson Correlation<br>Sig. (2-tailed) | .237**<br>.007 | Low correlation;<br>definite but small relationship |
| Ruggedness/<br>Diligence     | Pearson Correlation<br>Sig. (2-tailed) | .146<br>.102   | -   |
| Brand<br>Personality         | Pearson Correlation<br>Sig. (2-tailed) | .522**<br>.000 | Moderate correlation; substantial<br>relationship   |

The multiple regression analysis was then performed to examine the impact of brand personality dimensions towards brand loyalty. According to Table 10, the R-square value shows that the average of 61.1% of the variation can be explained by the variation in all the five independent variables. Results also indicated that three dimensions—Sincerity ( $\beta$ .220,  $t$ 3.409,  $p < 0.05$ ), Excitement ( $\beta$ .193,  $t$ 2.593,  $p < 0.05$ ) and Competence/Modernity ( $\beta$ .663,  $t$ 10.304,  $p < 0.01$ ) – were statistically significant with the brand loyalty at 0.05 significant levels. Therefore, the level of Sincerity, Excitement, and Competence/Modernity of the contact lens were positively influencing the brand loyalty. Competence/Modernity ( $\beta$ .663,  $t$ 10.304,  $p < 0.01$ ) had the highest impact towards brand loyalty compared to that of Sincerity ( $\beta$ .220,  $t$ 3.409,  $p < 0.05$ ) and Excitement ( $\beta$ .193,  $t$ 2.593,  $p < 0.05$ ).

**Table 10:** Multiple Regression Result of Brand Personality Dimensions and Brand Loyalty in the contact lens perspective

| Brand Personality Dimensions | Brand Loyalty (N=127)       |            |                           |        |      |                         |       |
|------------------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
|                              | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. | Collinearity Statistics |       |
|                              | B                           | Std. Error | $\beta$                   |        |      | Tolerance               | VIF   |
| (Constant)                   | .632                        | .238       |                           | 2.654  | .009 |                         |       |
| Sincerity                    | .184                        | .054       | .220                      | 3.409  | .001 | .769                    | 1.301 |
| Excitement                   | .126                        | .048       | .193                      | 2.593  | .011 | .581                    | 1.721 |
| Competence/Modernity         | .480                        | .047       | .633                      | 10.304 | .000 | .852                    | 1.173 |
| Sophistication/Joyous        | .003                        | .052       | .004                      | .049   | .961 | .542                    | 1.844 |
| Ruggedness/Diligence         | .030                        | .043       | .060                      | .707   | .481 | .442                    | 2.260 |

$R^2 = 0.611$ ; Adjusted  $R^2 = 0.595$ ; F-value = 37.963 \*\*; Sig=0.000

#### 4.6 The Effects of Brand Personality Dimensions on Brand Quality Rating

In order to identify the relationship between brand personality dimension and brand quality rating, Pearson's correlation analysis was performed only on the user of the contact lens brand. This is because the researchers assumed that only those who had used the brand before can rate the brand more accurately. Hence, the groups of users of other contact lens

brands and non-user of contact lens were excluded from this analysis. Before proceeding to correlation analysis, a recoding was done on data of quality rating within interval 0 to 200 into 5 categorical variables: category 1(0-49 scores), category 2 (50-99 scores), category 3(100 scores), category 4 (101-150 scores) and category 5 (151-200 scores) in order to meet the requirements to transform the interval variable into a categorical variable. Table 11 shows four out of five dimensions of brand personality: sincerity, excitement, competence/modernity and sophistication/joyous were positively correlated to brand quality rating. Besides, competence/modernity has the highest correlation coefficient (0.444), followed by sincerity (0.417), and excitement (0.257). This means that there was a stronger relationship between brand quality rating and competence/modernity compared to other dimensions. In contrast, there is no relationship and correlation between ruggedness/diligence with brand quality rating. Overall, moderate correlation and substantial relationship exists between brand personality dimension and brand quality rating.

**Table 11:** Pearson's Correlation Analysis for Brand Personality Dimensions and Brand Quality Rating

| Brand Personality Dimension |  | Brand Quality Rating | Interpretation                                      |
|-----------------------------|--|----------------------|---|
| Sincerity                   | Pearson Correlation<br>Sig. (2-tailed) | .417**<br>.000       | Moderate correlation;<br>substantial relationship   |
| Excitement                  | Pearson Correlation<br>Sig. (2-tailed) | .257**<br>.004       | Low correlation;<br>definite but small relationship |
| Competence/<br>Modernity    | Pearson Correlation<br>Sig. (2-tailed) | .444**<br>.000       | Moderate correlation;<br>substantial relationship   |
| Sophistication/<br>Joyous   | Pearson Correlation<br>Sig. (2-tailed) | .222*<br>.012        | Low correlation;<br>definite but small relationship |
| Ruggedness/<br>Diligence    | Pearson Correlation<br>Sig. (2-tailed) | .146<br>.101         | -   |
| Brand<br>Personality        | Pearson Correlation<br>Sig. (2-tailed) | .414**<br>.000       | Moderate correlation;<br>substantial relationship   |

Multiple regression analysis was performed to examine the effect of brand personality dimensions towards brand quality rating. As can be seen in Table 12, the results indicated that the R-square value shows that the average of 32.9% of the variation can be explained by the variation in all the five independent variables. The results also indicated that there were only two dimensions - Sincerity ( $\beta$ .297,  $t$ 3.501,  $p < 0.05$ ) and Competence/Modernity ( $\beta$ .388,  $t$ 4.814,  $p < 0.01$ ) – were statistically significant at 0.05 significant levels. Therefore, sincerity and competence/modernity dimensions were positively influencing the brand quality rating. Competence/modernity dimension ( $\beta$ .388,  $t$ 4.814,  $p < 0.01$ ) had the largest impact towards brand quality rating compared to that of sincerity. In other words, competence/modernity was the most dominant predictor of brand quality rating of the contact lens.

#### 4.8 Examining significant Mean Differences in the Brand Personality Dimensions of the Contact Lens According to User, User of Other Brands and Non-user

One-way ANOVA was performed to examine the significant differences of the brand personality dimensions associated with the contact lens brand according to users, users of other brand and non-users. Table 13 shows that brand of contact lens owned had significant impact on two dimensions and there was a difference between them which were Sincerity ( $F = 4.615$ ; Sig. = 0.011) and Competence/Modernity ( $F = 7.879$ ; Sig. = 0.000). This means that the respondents had shown differences in term of brand experience through difference contact

lens owned which lead to difference perception on Sincerity and Competence/Modernity brand personality of the contact lens. However, the other dimensions of brand personality were found to have no significant differences according to users, users of other brand and non-users.

**Table 12:** Multiple Regression Result of Brand Personality Dimensions and Brand Quality Rating in the contact lens perspective

| Brand Personality Dimensions   | Brand Quality Rating (N=127) |            |                           |       |      |                         |       |
|--|------------------------------|------------|---------------------------|-------|------|-------------------------|-------|
|  | Unstandardized Coefficients  |            | Standardized Coefficients | t     | Sig. | Collinearity Statistics |       |
|  | B                            | Std. Error | Beta                      |       |      | Tolerance               | VIF   |
| (Constant)   | 1.143                        | .381       |                           | 3.000 | .003 |                         |       |
| Sincerity  | .302                         | .086       | .297                      | 3.501 | .001 | .769                    | 1.301 |
| Excitement   | .031                         | .077       | .039                      | .397  | .692 | .581                    | 1.721 |
| Competence/Modernity   | .358                         | .074       | .388                      | 4.814 | .000 | .852                    | 1.173 |
| Sophistication/Joyous  | .064                         | .083       | .077                      | .765  | .446 | .542                    | 1.844 |
| Ruggedness/Diligence   | .020                         | .069       | .033                      | .291  | .771 | .442                    | 2.260 |
| R <sup>2</sup> = 0.329; Adjusted R <sup>2</sup> = 0.301; F-value = 11.846 **; Sig. = 0.000 |                              |            |                           |       |      |                         |       |

**Table 13:** Significant Mean Differences in the Brand Personality Dimensions of the contact lens among Users, Users of other brands and Non-users

| Dimensions            | Brand of Contact Lens Owned       | Mean | F     | Sig.  |
|-----------------------|-----------------------------------|------|-------|-------|
| Sincerity             | User of the leading contact lens  | 3.50 | 4.615 | .011* |
|                       | User of other contact lens brands | 3.34 |       |       |
|                       | Non-user of contact lens          | 3.25 |       |       |
| Excitement            | User of the leading contact lens  | 3.37 | .571  | .566  |
|                       | User of other contact lens brands | 3.32 |       |       |
|                       | Non-user of contact lens          | 3.45 |       |       |
| Competence/Modernity  | User of the leading contact lens  | 3.89 | 7.879 | .000* |
|                       | User of other contact lens brands | 3.72 |       |       |
|                       | Non-user of contact lens          | 3.51 |       |       |
| Sophistication/Joyous | User of the leading contact lens  | 3.45 | .170  | .843  |
|                       | User of other contact lens brands | 3.48 |       |       |
|                       | Non-user of contact lens          | 3.42 |       |       |
| Ruggedness/Diligence  | User of the leading contact lens  | 2.88 | .441  | .644  |
|                       | User of other contact lens brands | 2.81 |       |       |
|                       | Non-user of contact lens          | 2.93 |       |       |

The result of LSD test performed, as presented in Table 14, shows that the user of this contact lens brand had a statistically and significantly higher score in the sincerity dimension compared to user of others brand and non-user. Moreover, user of this contact lens brand also had statistically significant higher score on competence/modernity dimension than user of others brand owned and non-user.

**Table 14:**LSD Test of Brand of Contact Lens Owned

| Dependent Variable   | (I) Brand of contact lens owned | (J) Brand of contact lens owned | Mean Difference (I-J) | Sig. |
|----------------------|---------------------------------|---------------------------------|-----------------------|------|
| Sincerity            | This contact lens               | Others                          | .16004*               | .030 |
|                      |                                 | No brand owned                  | .25116*               | .009 |
| Competence/Modernity | This contact lens               | Others                          | .16801*               | .029 |
|                      |                                 | No brand owned                  | .37567*               | .000 |

## 5.0 DISCUSSION

The results showed that there were five dimensions - Sincerity, Excitement, Competence/Modernity, Sophistication/Joyous, and Ruggedness/Diligence - with 38 proposed items of the BPS associated with the brand personality of this contact lens. The findings revealed that Competence/Modernity dimension was most associated with this brand of contact lens. This finding is consistent with the work of Guthrie *et al.* (2007), highlighting that the brand personality of competence emerged as a common characteristic found across all the cosmetics brand types. Contact lens is considered as a cosmetic type of product, and this result calls marketer of this contact lens to focus on successfulness, convincing, trendy and innovative in their promotional plan.

Pearson's Correlation results indicated that there was a positive correlation and marked relationship occurs between the brand personality and brand loyalty. Moreover, the Multiple Regression result shows that the brand personality dimension with the largest impact on brand loyalty was Competence/Modernity. This finding was supported by Lee, Back and Kim (2009) which indicated that the brand personality dimensions were one of the important factors influencing brand loyalty. The result encourages the contact lens company to focus on improving and enhancing the image of competence/modernity of their contact lens in order to achieve high level of consumer brand loyalty. The result of multiple regressions highlighted that the Competence/Modernity dimension of brand personality had the largest impact on brand quality rating in the context of contact lens. Therefore, improvement and keeping the contact lens modern and up-to-date to achieve high level of customer brand quality rating should be considered by this brand of contact lens. There are several recommendations for the contact lens company to execute effective promotional strategies via brand personality. The company needs to emphasize more on Competence/Modernity personality dimensions and its traits (reliable, secure, technical, successful, leader, confident, smooth, up-to-date and real) by highly associating it with promotional strategies such as the use of experienced and spirited spokesperson in its advertisement. Furthermore, contact lens companies have to invest more in research and development so that it can keep track in the contact lens industry and producing latest products that fulfils consumer's expectations.

## 6.0 CONCLUSION

This study used the BPS of Aaker (1997) and it suggested that this scale can be used to determine brand personality associated with a brand. Further, it was found that brand personality dimensions are significantly affected brand loyalty and brand quality rating. However, the BPS must be further examined in term of consumers' perceived the 42 traits as this may change as a result different environment and context. Due to the different cultural context between the United States and others countries, the brand personality scale might not be suitable to be applied in other countries (Aaker *et al.*, 2001), thus it requires some modification to the traits proposed. For future research, researchers are recommended to

conduct research in this area in a larger sample size in order to improve the reliability of the result. Further study can also be carried out to validate this finding by involving different contexts of respondents, such as employees or secondary school students.

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