
Measuring Brand Trust Using Brand Equity Model in Oral Care Product Category

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ABSTRACT:

The market today is highly cluttered and ever-alternating with innumerable brands trying to lure customers. But the true survivor and champion is a brand that changes its strategies not only to achieve a high recall value but also scores a deep and intimate connect with customers. The purpose of this research paper is to assess the various brand management models developed and their application in practice. The key question that arises is could brand equity be quantified? Or is this only a comparative ranking within each product category? What are the chief brand equity models? What are the concerns on which communication & or GTM for brands should vary: loyalty, advocacy, service viz. others. How does the equity model influence the brand trust factors, which are principal to building a deep connect with the customers. Hence, this report tries and analyses one such model, Young & Rubicam brand Asset Valuator and evaluates it with the brand trust factors in answering these mind boggling doubt that each and every brand manager grapples in today's scenario!

INTRODUCTION

Brand – Meaning & Definition

In today's era, branding as a marketer's tool is widely acceptable and regarded as a long term intangible edge over the competitors. Especially in today's market where clutter is converting into chaos with supremacy of media industry, need for a specific mind share with customers is what concerns the marketers.

A brand is a distinguishing name and/or symbol (such as logo, trademark, or package design) that identifies the goods or services of seller/s, and differentiates those goods or services from those of competitors. Ambler (1992) provided a distinct way of understanding 'brand': the promise of the bundles of attributes that someone buys and provide satisfaction . . . The attributes that make up a brand may be real or illusory, rational or emotional, tangible or invisible.

The prime concern for a marketer is to generate an intense bond between the consumer and the brand, and the plank of this bond is trust (Hiscock 2001 p.1). The notion that there exists a relationship between a person and his/her possessions is not something new (Blackston 1992). However, there's been a dearth of an application mechanism for relationship notion at brand level, despite the thrust it draws in both theory and practice (Fournier 1998). Amidst all the work available on consumer-object interaction, Fournier's research (Fournier 1995,

1998; Fournier and Yao 1997) is a valuable exception. Fournier describes the relationship between a consumer and the brands as a multifaceted construct that describes the essence of the bond (Fournier 1998). The aspects that describe the consumer-brand bonds are commitment, intimacy, love/passion, interdependence, self-connection, and brand partner quality. In order to understand this consumer-brand relationship, an analysis of the consumer's trust in the brand is required, which was missing in Fournier's work.

Thus, for companies to sustain a substantial competitive and economic advantage from long term relationships with consumers, the activities focusing building brand trust should complement its customer satisfaction programs. This same insight derived from a number of studies on consumer's relationships with corporate brands (Blackstone 1992). All studies have pointed out two components for a successful and positive relationships: first, satisfaction with the brand and second, trust in the brand. As trust is a signal of relationship quality between consumers and brands, developing a trust scale can contribute greatly towards the management of the relationship.

Thus, to sum it all, if brand trust governs brand loyalty, which in turn impacts the outcome-linked facets of brand equity such as market-share and relative price, then brand trust might be considered as another brand evaluation technique. Then, future studies are needed to compare and analyze the convergent validity of the brand trust scale with other measures of brand value.

Design Methodology and Approach

- Brand
 - Necessity or a Choice
- Brand Equity
 - Theories in practice
 - Measurement Models
- Young & Rubicam
 - Brand Asset Valuator
- Secondary Research
 - Journals
 - Case Studies
- Primary Research
 - Questionnaire development
 - a. Survey from Customers (Pune Households)
 - b. SEC A/B/C
 - c. Age 20-45
- Data Analysis
 - Cross-tabulation on SPSS
 - Correlation with existing reports/surveys
- Results Interpretation

Brand Equity – Theory & Measurement Models

PCDL MODEL

Brand building is a continuous evolving process. This process is gradual and begins with expressing the identity of producer (Label). The second level will be creating a functional

superiority (Differentiation). While the third level is would be to bring emotional touch, the fourth level pertains to the Power of self-expression. At the top of the pyramid, the highest level (i.e. fifth level) is known as cult. This model is a conceptual framework for building a brand and has four elements to it namely, positioning the brand, communicating the brand message, delivering the brand performance, and leveraging the brand.

Positioning the Brand: It is related with creating the perception in the customer's mind and of achieving differentiation that sets apart the brand from competitors' along with meeting the consumer's needs/expectations. The positioning act by brand can be on eight alternatives, namely— feature-driven; problem/solution based; competitor-driven; emotional/psychological; benefit driven; aspirational; and value driven.

Communicating the brand message: It acts as an enabler for the company to meet their communication objectives. The major channel of communication would be advertising, internet, sales promotion, public relation, endorsements, direct marketing etc.

Delivering the brand promise: This refers to meeting the customers' expectation and delivering what you promised. The performance of the brand could be tracked on following aspects: product performance, service performance, customer care, customer satisfaction, customer delight.

Leveraging the brand equity: Leveraging process refers to using the brand to some other entity and creating new set of associations to the entity as well as affecting the existing brand associations. A brand may use different strategies in leveraging namely through line extensions; brand extensions; ingredient branding; co-branding, brand alliances; and social integration.

KELLER'S BRAND PYRAMID

Scholars have developed various models to help marketer's promote their brand trust and in effect drive organization towards incremental Share of Mind and Share of voice.

The highly talked about model is from Keller's (1993, 2001, 2003) called the consumer based brand equity model or simply the Keller's Brand resonance pyramid(refer Figure 1 in Annexure .)

Customer-based brand equity occurs when the consumer has a high level of awareness and familiarity with the brand and holds strong, favorable, and unique brand associations in memory.

Salience: Brand salience is about awareness of the product/service/organization not only to the target customers but also to the Audience

Performance & Imagery: Utilization & /or experience of the brand, so be it a product/service or customer orientation. With these the users form judgments and feelings about the brand, the penultimate stage of brand resonance.

Judgment & Feeling: The consequence of performance & imagery in turns shapes up the judgments and feelings about the brand. So if the performance is on the positive side, advocacy, loyalty is on the cards.

Resonance: It is characterized by incredibly strong connections with a brand, and eventually a stronger ability of the brand to resist competitive actions taken by another brand.

YOUNG & RUBICAM (Y&R) Model

Y&R's BrandAsset Valuator (BAV) is an empirical model developed by Y&R, a leading advertising agency, which shows realistic prospect of brands by measuring the value of a brand where it is created: in people's hearts and minds. Y&R proposed that brands are driven by differentiation, relevance (to the consumer), esteem and knowledge (comprehension and perhaps intimacy) in that order (DREK). Awareness is assumed as a condition precedent, in other words, DREK operates only for those already aware.

The BAV takes into account two categories of metrics.

1) Brand Stature

This captures the achievements of a brand till date. It reflects the brand's present position in the market, present value, and is a lagging indicator: It is usually affected after the brand has changed. It incorporates metrics such as esteem (consumers' perceptions of quality and loyalty) and knowledge (consumers' awareness of and experience with the brand).

2) Brand Strength

Measures the brand's growth potential. This reflects the brand's future value, and is a leading indicator: an early visible sign of change. It incorporates the brand's relevance (consumers' perceptions about how appropriate the brand is for them) and its differentiation (consumers' perception of the brand's unique meaning to them).

So on the basis of above two metrics a Power Grid (Figure 2 in Annexure) that shows a brand's strength and weakness as well as its growth prospect is mapped out and brand under test will feature on this grid in one of the four quadrants.

The measurement of marketing metrics is increasingly turning into an area of academic research. The research paper on "**Advertising and Profit Growth**" by **Tim Ambler** presents a theoretical model of how advertising drives profit growth via brand equity. The paper validates the Young and Rubicam model of brand equity, and claims that brands are built in that proposed order.

Another paper by **Isabelle Schuiling et al (2003)** on "Real Differences between Local and International Brands: Strategic Implications for International Marketers" that Young and Rubicam database and discusses the managerial implication of the findings to form an ideal international brand portfolios. The paper evaluates the difference in awareness and brand image attribute, in particular the attributes of quality, prestige, and trust.

A finding on "**The Brand Bubble**" by **John Gerzema and Ed Lebar** indicate a downfall in brand equities in Y&R database, as measured by trustworthiness, esteem, perceived quality and awareness. The exception to this decline was those brands with energy. Thus the differentiation pillar in BAV has been redefined as energized differentiation.

Brand Trust– Defining Measurement Models

Elena et al., in their research developed and validated a scale that measures brand trust, also called the Brand Trust Scale (BTS). The paper defines brand trust as "*Feeling of security held by the consumer in his/her interaction with the brand, that it is based on the perceptions that the brand is reliable and responsible for the interests and welfare of the consumer.*" The paper proposes two dimension to define brand trust:

First, *fiability* dimension that concerns with the perception if the brand can fulfill or satisfy consumers' needs. It basically refers to an individual's belief that the brand accomplishes its value promise. The second dimension, *intentionality*, reflects an emotional security on the part of individuals. It is more from an assurance aspect that the brand will be responsible and caring towards any problematic situations and circumstances that may arise with the consumption of the product.

Hypothesis Setting

Based on the proposed theories secondary research on the parameters of brand equity, we propose to test whether the brand equity variable is entirely explained by the brand trust variable associated with a particular brand. Hence the following null hypothesis is formulated:

Null Hypothesis (H0) : There is no significant difference in mean or typical rank for Brand Equity variable and mean or typical rank for Brand Trust variable

Primary Research

An objective analysis of the models discussed in the preceding section, namely, The Customer based brand equity model by Keller, The PCDL model and the Young & Rubicam model for measuring brand performance of a product/organization, it emerges that Brand Trust is the single most important factor affecting brand equity and hence, long term brand performance.

Of the various factors discussed in the models, the overlapping factors affecting Brand Trust were found to be as follows:

1. Brand Differentiation

How well is it differentiated from other similar brands in the same category? To evaluate this factor, the customer is being asked to evaluate the brand from a list of attributes such as Different, Best in the category, etc.

2. Brand Appropriateness

To evaluate how relevant the individual feels the brand for oneself, i.e the customer feels the brand's proposition meets his needs/wants, rating from 1 (Very irrelevant) to 7 (highly relevant) is being measured.

3. Brand Regard

What level of regard does the brand command from the population in general. The individual is being asked to rate a brand from 1-7 based on the extremely negative (1) or extremely positive (7) feelings that one has towards the brand. Also, brand loyalty is being measured by evaluating the purchase related decisions of the individual.

4. Brand Knowledge:

It related to the level of awareness about the brand's functional and emotional attributes, personality etc. To measure Brand Knowledge, the individual's familiarity with the brand is evaluated.

5. Brand Selection

To measure Customer trust towards a brand, the brand Colgate was chosen from the category of Personal care. The brands from the given category were selected based on its relative market share. For Example, Colgate has been selected in the Personal care segment.

Questionnaire Development

The purpose of this paper is to evaluate the Brand Equity model proposed by Young & Rubicam with the Brand Trust variable as proposed in the research (Elena et al., pg. 14). The questionnaire prepared intends to take individual response on the brand equity parameters such as Differentiation, Relevance, Esteem, & Knowledge (as proposed by Y&R) and brand trust parameters such as Fidelity and Intentionality (as proposed as Brand trust parameters by Elena et. al) for Colgate.

The six aspects of the brand (four of Y&R and two of Brand Trust) were evaluated using a 7 point likert scale anchored at 1="strongly disagree" and 7="strongly agree".

1. Please rate how familiar you are with each brand. By familiarity, we mean how often you have come across a brand, as well as how well you know the brand and what it is like. The more you know about a brand, the higher you would rate it. The less you know about a brand, the lower you would rate it.
2. Please rate how you regard each brand. By regard, we mean how positively or negatively you think or feel about a brand. The more positively you regard a brand, the higher you would rate it. The more negatively you regard a brand, the lower you would rate it. Having heard of a brand is enough for you to rate it.
3. Please rate how relevant each brand is to you. By relevance, we mean how appropriate a brand is for you. The more you feel the brand is appropriate to you, the higher you would rate it. The less you feel the brand is appropriate for you, the lower you would rate it. Having heard of a brand (even if you have never used it) is enough for you to rate it. If you have never heard of a particular brand, please leave that rating box blank.
4. Please rate how differentiating the brand is, within the category. By differentiating, we mean how the brand stands out from the other similar brand in the category. The characteristics such as best in category, uniqueness etc. define the differentiation. If you have never heard of a particular brand, please leave those rating boxes blank.
5. Please rate whether the brand delivers its value promise. By value promise, we mean that the brand fully satisfies your needs.
6. Please rate whether you feel emotionally secure with the brand. By emotionally secure, we mean the assurance that the brand will be responsible and caring towards any problematic situations and circumstances that arises with the consumption of the product.

Data Collection and Sample

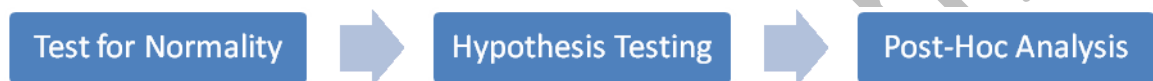
A personal online survey was conducted to collect data from a random sample of 65 consumers who had a personal experience with the brand in a specific product category. Forty-five percent of the sample was men and fifty-five percent were women. The median age of the respondents was thirty-seven years.

We selected as stimulus the product category of oral care. This selection was steered by three criteria. First, the products were "experience" in nature; that is consumers actually tried them,

judged its quality and then inferred whether the brand accomplishes its value promise (Swait et al. 1993). Second, people were familiar with similar brands in the category which aided them to compare and provide reliable and valid responses. Third, participants considered trust as an enabler while buying the products in the category.

Evaluation Procedure and Analysis

The evaluation procedure begins with testing the data for normality. The test result will determine the type of test, be it ANNOVA, MANOVA or any non-parametric tests, to be applied for hypothesis testing. Once the null hypothesis has been tested we'll do the post hoc analysis to verify the results. A sequential basis for the methodology that has been followed is shown below:



The response data constituting six measurement points for the brand was collected on a categorical scale. The data collected from participants was independent of each other and there were no interaction happening between study participants and treatments. Hence, no learning effect or carry over effect.

A test for normality of the data clearly affirmed that the data was not normally distributed with a significance level for Kolmogorov-Smirnov and Shapiro-Wilk test, with p-value being less than 0.01 (Table I in Annexure). A Normal Q-Q plot for the six variables also affirms the same (Table II in Annexure).

Table III (in Annexure) shows the basic stats – mean, standard deviation, maximum and minimum value corresponding to each parameter. From the table, it appears that the mean rank of the parameters does not look similar. Hence, Friedman ANOVA is used to assess the findings in the paper by examining the mean ranks across all the parameters.

A Friedman ANOVA was conducted to ascertain whether the brand trust parameters – Fiability and Intentionality - can be explained by brand equity parameters – Differentiation, Relevance, Esteem and Knowledge based on the responses from the participants. The test ranks the data for individual subjects for each measurement point. Level of significance was set at 5%. The procedure revealed that there is no significant difference in mean rank for the parameters, $\chi^2(5) = 64.97$, $p < 0.01$ (Table IV in Annexure). Hence our null hypothesis that there is no difference in mean or typical rank for Brand Equity variable and mean or typical rank for Brand Trust variable is not rejected.

In order to have one to one comparison between the parameters, we ran the post-hoc analysis for individual parameters using Wilcoxon signed-rank tests applied with Bonferroni adjustment (Table V in Annexure). It revealed that:

1. There is no significant difference in mean or typical rank for intentionality parameter and Relevance parameter, $Z = -1.419$, $p > 0.0125$
2. There is no significant difference in mean or typical rank for intentionality parameter and Knowledge parameter, $Z = -2.434$, $p > 0.0125$

3. There exists significant difference in mean or typical rank for intentionality parameter and Differentiation parameter, $Z = -4.558$, $p < 0.0125$
4. There exists significant difference in mean or typical rank for intentionality parameter and Esteem parameter, $Z = -4.167$, $p < 0.0125$
5. There is no significant difference in mean or typical rank for fiability parameter and Relevance parameter, $Z = -0.963$, $p > 0.0125$
6. There is no significant difference in mean or typical rank for fiability parameter and Knowledge parameter, $Z = -2.061$, $p > 0.0125$
7. There exist significant difference in mean or typical rank for fiability parameter and Differentiation parameter, $Z = -5.056$, $p < 0.0125$
8. There exist significant difference in mean or typical rank for fiability parameter and Esteem parameter, $Z = -4.100$, $p < 0.0125$

The above result indicate that only two equity parameters- Knowledge and Relevance are explaining the brand trust parameter, $p > 0.0125$ and others are not, $p < 0.0125$.

Now after the post hoc analysis, the importance of Relevance and Knowledge in explaining the Brand Trust parameters had been fortified. A separate Freidman test to ascertain the combined effect of Relevance and Knowledge on trust parameter was run. In the test result there is no significant difference between the trust parameters – fiability and intentionality – and brand equity parameters – Relevance and Knowledge, $\chi^2(3) = 4.451$, $p > 0.05$ (Table VI).

CONCLUSIONS

The Null hypothesis that there is no significant difference between trust parameters i.e fiability and intentionality and Brand equity parameters (DREK) is not rejected. However, on running a secondary post-hoc analysis it is revealed that only Relevance and Knowledge parameters of the brand equity are contributing towards development of brand trust in the oral care category. A Friedman test to check the relationship between the two brand equity parameters and brand trust revealed a significance at p value > 0.05 . Hence concluding that Brand relevance and Brand Knowledge contribute to the Brand trust parameters in the oral care category.

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TABLE I : Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Relevance	.213	65	.000	.803	65	.000
Differentiation	.179	65	.000	.871	65	.000
Esteem	.186	65	.000	.890	65	.000
Knowledge	.247	65	.000	.797	65	.000
Value promise	.221	65	.000	.849	65	.000
Emotional security	.199	65	.000	.855	65	.000

**TABLE II – Q-Q plots
Estimated Distribution Parameters**

		Relevance	Differentiation	Esteem	Knowledge	Value promise	Emotional security
Normal	Location	6.03	4.48	4.75	6.17	5.85	5.78
Distribution	Scale	.790	1.855	1.370	.762	1.034	1.053

The cases are unweighted.

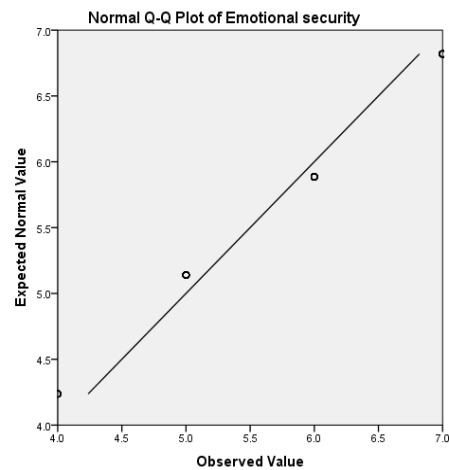
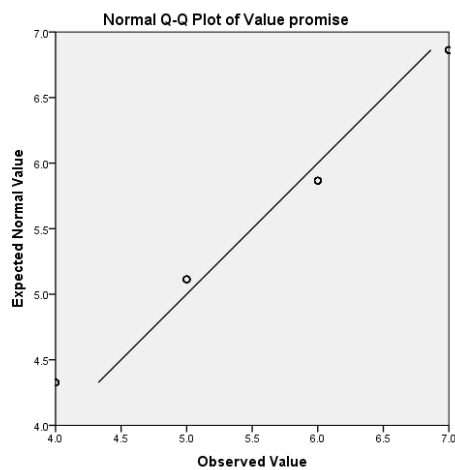
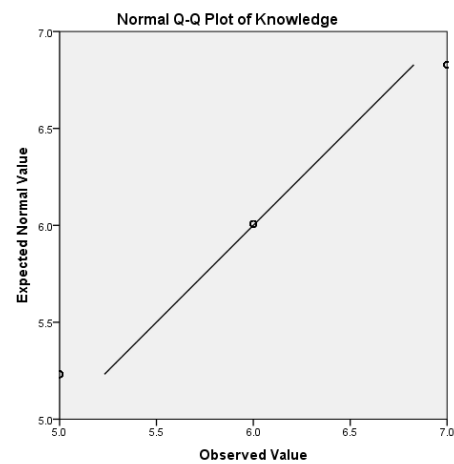
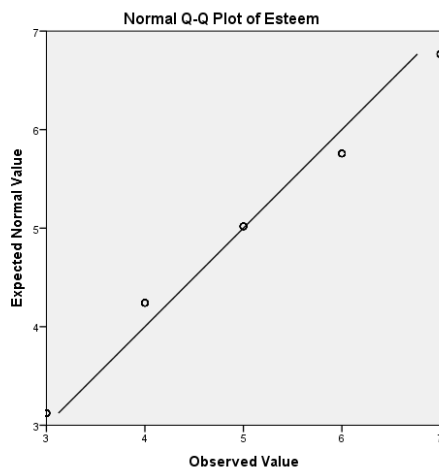
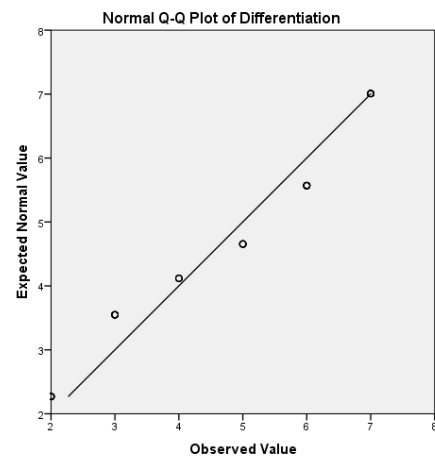
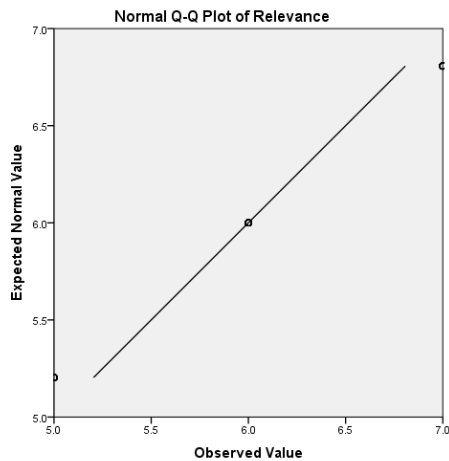


TABLE III : Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Emotional security	65	5.78	1.053	4	7
Value promise	65	5.85	1.034	4	7
Relevance	65	6.03	.790	5	7
Differentiation	65	4.48	1.855	2	7
Esteem	65	4.75	1.370	3	7
Knowledge	65	6.17	.762	5	7

TABLE IV: Friedman Test

Ranks		Test Statistics ^a	
	Mean Rank	N	
Emotional security	3.78	65	
Value promise	3.86	Chi-Square	64.972
Relevance	4.07	Df	5
Differentiation	2.48	Asymp. Sig.	.000
Esteem	2.55	a. Friedman Test	
Knowledge	4.25		

Table V: Wilcoxon Signed Ranks Test

Test Statistics ^a		Test Statistics ^a	
Relevance - Emotional security		Differentiation - Emotional security	
Z	-1.419 ^b	Z	-4.558 ^b
Asymp. Sig. (2-tailed)	.156	Asymp. Sig. (2-tailed)	.000
a. Wilcoxon Signed Ranks Test		a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.		b. Based on positive ranks.	
Test Statistics ^a		Test Statistics ^a	
Esteem - Emotional security		Knowledge - Emotional security	
Z	-4.167 ^b	Z	-2.434 ^b
Asymp. Sig. (2-tailed)	.000	Asymp. Sig. (2-tailed)	.015
a. Wilcoxon Signed Ranks Test		a. Wilcoxon Signed Ranks Test	
b. Based on positive ranks.		b. Based on negative ranks.	

Test Statistics ^a		Test Statistics ^a	
Relevance - Value promise		Differentiation - Value promise	
Z	-.963 ^b	Z	-5.056 ^b
Asymp. Sig. (2-tailed)	.336	Asymp. Sig. (2-tailed)	.000
a. Wilcoxon Signed Ranks Test		a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.		b. Based on positive ranks.	

Test Statistics^a

Esteem - Value promise	
Z	-4.100 ^b
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

Test Statistics^a

Knowledge - Value promise	
Z	-2.061 ^b
Asymp. Sig. (2-tailed)	.039

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

Table VI: Friedman Test

Ranks	
	Mean Rank
Emotional security	2.35
Knowledge	2.71
Relevance	2.57
Value promise	2.37

N	65
Chi-Square	4.451
Df	3
Asymp. Sig.	.217

a. Friedman Test