GENDER EFFECT ON BRAND CREDIBILITY AND PURCHASE RELATION: DOES BC VARY AMONG DIFFERENT BRANDS

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Abstract

*Given the potential utility of brand credibility for marketers, the present research conceptualizes and investigates the relationships between brand credibility and high-technology products purchase intention. Moreover, it is aimed in the study that if different brands can have different brand credibility or not and to study the relationship between brand credibility and high-tech product purchase intention can be moderated by gender. In order to measure statement's explanatory power of the variables, Confirmatory Factor Analysis was applied. In order to examine the differences between brand's credibilities Anova test was used. Also, for investigating linear effects linear regression and for investigating moderation effects of demographic variables, hierarchical regression was used. The results suggest that brand credibility influence the purchase intention for high-tech products. Also, **SONY** is perceived as more credible according to some other brands. In addition gender is likely to moderate the relationship between brand credibility and purchase intention. Theoretical and practical contributions and implications are discussed.*

Key Words: Brand Credibility, High-Technology Products, Purchase Intention, Gender, Moderation.

INTRODUCTION

Besides the producers, nowadays also the consumers face with the high-technologies in every field of life. Today, the most frequently used concept of "high-technology" is defined as the "use of the programmable integrated circuits and the programmable integrated circuits-based systems in the effective usage areas of, including but not limited to, data processing, production, information management and transfer, education, national defense, entertainment, energy management, environmental pollution control, security, communication, material and human resources" (Aksoy, 2003)[1]. Those profits, made by way of producing scientific and technical information-based "high-technology products" upon development of the concept of high-technology, have reached to the power of directing the industry, scientific and technical information. All these developments are posing problems related to adoption of information technologies and/or high technologies by consumers in the said new markets while ensuring development of new markets. Therefore, those studies clarifying the matter of adoption of high-technologies by consumers are becoming more of an issue today. The more complex and technological products get, consumers need to rely more on the identity of a brand in order to overcome this complexity. Therefore establishing a brand in the area of technological products is more important than establishing a brand for consumer products (Pettis, 1995). When an advanced technology product enters the market for the first time, the exact need which the product will meet may not be perceived by the consumer. For this reason, consumer considers the reputation of the brand before the product itself (Meldrum, 1995).

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[1] Acedemic member of A.Ü. Faculty of Education Sciences, Assist. Prof. Dr . Hasan Hüseyin Aksoy (2003) Added from the address http://80.251.40.59/education.ankara.edu.tr/aksoy/teknoloji/teknoloji_aksoy.doc on the date of 03.03.2010.

THEORETICAL BACKGROUND

Brands potentially play many roles in affecting consumer choice behavior. While consumers are uncertain about brands and the market is characterized by asymmetric information (i.e., firms know more about their products than do consumers), brands can serve as signals of product positions (Wernerfelt 1988). As a signal of product positioning, the most important characteristic of a brand is its credibility. Firms are more well-informed than the consumers on quality of the product that they sell (asymmetric information) and consumers cannot easily evaluate quality of the product in terms of experience and trustfulness (imperfect information). Accordingly, firms are in need of a mechanism for informing the consumers about quality of their products in order to enable them to evaluate credibility of their products as high (Erdem and Swait, 1998). The signaling theory in information economies take those clues, such as price, advertisement or distribution channel selection, as signs that will increase the product-related credibility imprinting in the consumers' minds. According to the signaling approach: a firm could use its various marketing mix elements (such as price, advertisement or distribution channel selection, and the like) as signs that could form a product quality-related position in the consumers' minds. Studies in this movement are analyzing those signs, such as advertisement (Nelson, 1974) and price (Khilstrom and Riordan, 1984; Milgrom and Roberts, 1986), existing in the market and informing the consumers about the product. In many of those studies carried out in the field of marketing, these signs could be those marketing mix elements such as advertisement (Kirmani, 1990), guarantee (Boulding and Kirmani, 1993) and brand (Dawar and Parker, 1994) that inform consumers of either the firm or the product and allow for positioning of the firm in the minds of consumers. Brand credibility could also be taken as one of these signs. According to this, the perceived quality of the product increases so long as brand credibility increases. So, information research costs decrease and the perceived risk drops. This increases the consumer's expected benefit. Increment of the expected benefit means "the added-value provided to a product by the brand" (Farquhar, 1990). In other words, expected benefit increment increases the value of brand. Emphasis is put on the concept of brand value while bringing the concept of brand credibility into open. Relation between brand value and brand credibility is explained through the signaling theory that is based on information economies (Erdem and Swait, 1998).

Based on all these examinations, the purposes of the present study is to investigate the relationships between brand credibility and high-technology products purchase intention. Moreover, it is aimed in the study that if a brand can perceived as much more credible than other brands. Finally, to study the relationship between brand credibility and high-tech product purchase intention can be moderated by gender.

Brand Credibility and Purchase Intention

Credibility is broadly defined as the believability of an entity's intentions at a particular time (Vacino and Oppewal, 2006; Erdem and Swait, 1998; Erdem and Swait, 2004; Erdem et.al., 2002; Kim et.al., 2008; Erdem et.al., 2006). The concept of credibility has two main dimensions, namely trustworthiness and expertise (Erdem et.al., 2002). Trustworthiness implies that a brand is willing to deliver what is promised, while expertise implies that it is capable of delivering (Erdem & Swait, 1998). Thus, the more credible a brand's signal of its product positioning, the lower consumers' perceived risks and the less information gathering and processing costs consumers need to incur during decision making (Srinivasan & Ratchford, 1991; Shugan, 1980). Ceteris paribus, higher signal credibility also may increase consumer perceptions (or expectations) of quality insofar as consumers may infer that more credible brands are higher in quality than less credible brands (Wernerfelt, 1988). Finally, credible brands may increase consumers' quality perceptions (Aaker, 1991) because brand signals may affect the psychophysical process by which objective quality levels are transferred into perceived levels (Park & Srinivasan, 1994). In short, brand credibility should increase expected utility by (1) increasing perceived quality and/or raising expected quality (ceteris paribus) and (2) decreasing perceived risk and information costs (Erdem et.al, 2002). Therefore, the brand credibility, which is a property of the brand, also plays a crucial role in consumer's brand preferences or purchase behaviors.

Interaction of brand credibility and different variables is discussed in those studies examining the brand credibility in literature. Some of the variables for which a relationship is established between brand

credibility: investments made in brand (Erdem and Swait, 1998; Vacino and Oppewal, 2006), clarity (Erdem and Swait, 1998; Vacino and Oppewal, 2006), consistency (Erdem and Swait, 1998; Vacino and Oppewal, 2006), perceived risk (Erdem and Swait, 1998; Erdem and Swait, 2004; Erdem and others, 2006), perceived quality (Erdem and Swait, 1998; Erdem and Swait, 2004; Erdem and others, 2006), information collection cost (Erdem and Swait, 1998; Erdem and Swait, 2004; Erdem and others, 2006), relative price (Erdem and others, 2002), brand loyalty (Sweeney and Swait, 2008; Kim and others, 2008), word-of-mouth communication (Sweeney and Swait, 2008), switching to another brand intention (Sweeney and Swait, 2008), benefit and satisfaction (Erdem and Swait, 1998; Erdem and others, 2006; Sweeney and Swait, 2008), brand selection and purchase behavior (Erdem and others, 2006; Erdem and Swait, 2004; Baek and others, 2008). As it will be seen in Table 1, relations between different variables and brand credibility have been determined in the literature. There is a relation in the opposite direction between some of these variables (such as the perceived risk, and the like) and the brand credibility while there is a positive relation between the brand credibility and some of them (such as brand investments, perceived quality, benefit, and the like). These variables and direction of relations are shown in Table 1.

Table 1: Variables That Has Relation With Brand Credibility Previously Studied in Literature

Variables	*Studies that investigates Brand Credibility*							
	Erdem and Swait, 1998	Vacino and Oppewal, 2006	Erdem and Swait, 2004	Erdem, Swait and Valenzuela, 2006	Erdem, Swait and Louviere, 2002	Sweeney and Swait, 2008	Kim, Morris and Swait, 2008	Baek, Kim and Yu, 2008
Brand Investment	+	+						
Clarity	+	+						
Consistency	+	+						
Perceived Risk	-		-	-				
Perceived Quality	+		+	+				
Information Cost	-		-	-				
Price Sensitivity					+			
Word of Mouth						+		
Switching Propensity						-		
Expected Utility	+			+	+			
Satisfaction	+			+	+			
Brand Choice			+	+				+
Purchase								+
Brand Loyalty						+	+	

(+); shows positive relationship, (-); shows negative relationship

The brand's effect on consumer preferences comes on the scene due to its eliminating those uncertainties regarding the products. Therefore, there are models in literature (e.g. Louviere and Jhonson, 1988; Park and Sirinvasan, 1994) established for examining the relation between the brand and consumers' preferences. In these models it is dwelled upon the benefit provided by the consumer and the brand's effect on consumer's preferences in the direction of such benefit. By this way importance of the brand's effect on consumer's preferences is emphasized. Brands are one of the important sources from where consumers could get product-related information especially when asymmetric information[2] is the case in point in the market. However, credibility of the brand must be perceived as "high" by the consumer for this source (brand) to

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[2] It is the consumers' not having information about and experience in the product as much as the firms do have (Erdem and Swait, 1998).

reduce the risk perceived by the consumer (Erdem and others, 2002). Credibility is one of the most important properties of a brand (Maathuis and others, 2004). As already defined previously, brand credibility is the plausibility of the information related to the position of a product's brand created in the mind of a consumer (Erdem and Swait, 1998). In this context, credibility is one of the important sources of the product's position formed in the mind of the consumer and plays an important role in purchase of the brand by the consumer (Wernerfelt, 1988; Erdem and Swait, 1998; Maathuis and others, 2004). Now therefore, brand credibility reduces the product's uncertainty and effects the consumer's brand preferences (Erdem and others, 2002; Erdem and Swait, 2004). Accordingly, brand credibility might have effects on purchase intention.

There are studies in the relevant literature examining the effects of different credibility concepts on product purchase intention (Lafferty and Goldsmith, 2004; Erdem and Swait, 2004; Amin, 2007). For example, Lafferty and Goldsmith (1999), have studied the relation between firm credibility and purchase intention and found out that firm credibility has positively affected the purchase intention. However, different results are obtained when the same study is repeated on the technological products (Lafferty and Goldsmith, 2004). Effects of the firm credibility and credibility of the person, used in advertisement, on technological product purchase intention is analyzed in a study carried out regarding the mobile phones (Lafferty and Goldsmith, 2004). Significant effects of the firm credibility on technological product purchase intention could not be determined according to the results of such study. Writers have explained the reason for this by emphasizing that especially when the point in question is technological product purchase behavior, then the product-related information is more important than the firm credibility. Amin (2007) has examined effects of the perceived credibility on the use of internet banking which is a kind of technological service. The perceived credibility in this study includes the concepts of safety and confidentiality. Findings obtained have supported the results of similar studies (Wang and others, 2003) and emphasized that the perceived credibility is an important determinant in use of internet banking. So, when technological product purchase is the point in question and by basing on the findings of Lafferty and Goldsmith'in (2004), it is considered that the brand credibility, which includes more product-related information, might have affects on technological product purchase behavior.

Its effects on the indirect relation between brand credibility and purchase (Baek and others, 2008) and brand selection (Laferty and Godsmith, 2004) are examined in different studies. According to this, Baek and others (2008) have determined that brand credibility affects the consumers' purchase behavior by means of its effects on the perceived quality, information cost and perceived risk. In other words, it is disclosed that the perceived quality, information cost and perceived risk have mediation effects in the relation between brand credibility and purchase behavior. However, the brand credibility's direct effects on purchase intention are not studied. Laferty and Goldsmith (2004) have analyzed the effects of brand credibility on consumer's brand selection and have determined at the end of such study that brand credibility has positive effects on brand selection. However, no any study related to analysis of its direct effects on purchase intention is encountered and deficiencies regarding this issue are determined while analyzing the brand credibility's effects on brand selection.

From these studies forth, first hypothesis of the study is constituted as follows for measuring the direct effect of the brand credibility on technological product purchase intention:

H1: Brand credibility has direct and positive effects on consumer's technological product purchase intention.

Gender Effects

According to the studies analyzing the consumer behaviors (Holbrook, 1986; Palmer and Bejou, 1995), processing of information obtained by men and women may differentiate. It is determined that different reactions are given by men and women especially to consumption-oriented stimulants (such as those pictures or words in advertisements) (Meyers-Levy, 1989). For example, according to Gilligan (1982), women compared to men, visual interpretations and detailed explanations evoke more from the point of stimulating. Staring from this perspective, Chiu, Lin and Tang (2005) have put forward that gender differentials have a moderation effect on manner and purchase over internet. Accordingly, females are more sensitive to relevant

information online than males when making judgments (Meyers-Levy and Sternthal, 1991), causing subsequent purchase attitudes and intentions rendered by males and females to vary.

Consensus among numerous studies about technological products, it is stated that computer anxiety is definitely implicated by gender role identity (Rosen et al., 1987). Men have long been associated with technology while women have often been depicted as some what passive users. Starting as early as high school, female students seem to be noticeably less interested in technology and are underrepresented in computer application courses (Slyke, Comunale ve Belanger, 2002). There also appeared that female report higher levels of computer anxiety than males (Igbaria and Chakrabarti, 1990; Okebukola and Woda, 1993; Farina et al., 1991; Brosnan and Davidson, 1996). Furthermore, Brosnan (1998) makes the proposition that apparent sex differences are due to the masculinity of technology. According to this, studies pertaining to differentiation of computer use-related manners and behaviors as per gender are involved in the literature (Gattiker and Hlavka, 1992).

Compared to traditional product purchase, consumer's innovativeness is critical for technological product purchasing behavior (Rosen, Schroeder and Purinton, 1998). Also, Chiu et.al. (2005) suggest that the fundamental gender differences may contribute to the moderating role for attitudes and online purchase intention. As gender remain alternative sex roles, individuals with stronger feminine or masculine identities make different consumption choice (Chiu et.al., 2005). It has been summarized that males are guided predominantly controlling tendencies and stress self ascertain, self efficacy, mastery, and avoidance of insecurity and uncertainty (Myyers-Levy, 1988). This phenomenon implies that the influence of brand credibility on purchase intention may be moderated by gender, and such an influence is hypothesized to be stronger for male consumers than for females. Based on this review, the second hypothesis is that;

H2: The relationship between brand credibility and purchase intention is stronger for males than females.

Brand Credibility of Brands

Brands are defined as "a name, term, sign, symbol or design, or a combination of them which is intended to identify the goods and services of one seller or a group of sellers and to differentiate them from those of competitors" (Kotler 1997, p. 443). In marketing literature, producer's prestige perceived by the consumer is described as credibility (Goldberg and Hartwick, 1990). In this way credibility can be considered as one of the important characteristics of the brand (Maathuis, Rodenburg and Sikkel, 2004) and brand credibility affects the way how the consumer positions a product (Erdem and Swait, 1998). This effect comes forth with the brand credibility increasing the perceived quality and in turn decreasing the risk perceived by the consumer and information research costs, and thus increases the benefit the consumer expects from the product. In this way brand credibility plays an important role in the consumer's *brand choices* or purchasing behaviors.

What sets brands apart from the individual marketing mix elements as credible signals is the total effect of past marketing mix strategies and activities. According to this view, credibility is based on the sum of past behaviors (Herbig and Milewicz 1995). So, we can state that every brand has a different past behaviors and different credibility. So, a brand can be perceived as more credible than some other brands.

In addition, brand of technological products is more important than establishing a brand for consumer products (Pettis, 1995). When an advanced technology product enters the market for the first time, the exact need which the product will meet may not be perceived by the consumer. For this reason, consumer considers the reputation of the brand before the product itself (Meldrum, 1995). From this viewpoint, we propose and test that consumer's perceived brand credibility of technological product can vary among different brands.

RQ: For technological products, does any of brand's credibility perceived much more than other brands?

METHODOLOGY
Questionnaire and Sample

In this study, questionnaire was used to collect the data. In order to gather reliable data, measurements that the validity and reliability tests accomplished in literature were used. The questionnaire comprised three sections: (a) brand credibility scale, (b) purchase intention scale, and (c) demographic variables.

First section of the questionnaire, which is drawn up in the form of three sections for the purpose of measuring the variables and relations in the model to be tested in such study, is composed of questions for measuring the properties of data, second section measures the purchase intention and third section is composed of questions measuring the brand credibility. The entire expressions in the questionnaire are translated into Turkish and then their accuracy and comparability is tested by translating them back again into English.

Participants are required to evaluate the questions by considering the laptops they are using. So that it is aimed at having them evaluate the brand credibility of the product they are using by focusing on the brand they are using. Following is the detailed explanation of the method of forming those questions existing in the questionnaire.

There are three questions in the second section of the questionnaire reflecting the consumers' intention to purchase products of the brand they are using, purchase intention, which is the dependent variable of the study. These questions, which are quoted from the study Goldsmith and others (2000), are measured with three septet bipolar adjective scales as very reasonable – completely unreasonable, very possible – not possible and very high probability – completely non-probable.

As it is already disclosed in the study, concept of brand credibility is defined as "perception of brand by the consumers as a brand is having the ability of experience and eagerness to keeping its promise" (Erdem and others, 2002). In line with this diagnosis, there are two concepts, named as experience and trustfulness, within the brand credibility (Erdem and others, 2002). Trustfulness means eagerness of a brand to keep its promise. Experience means the ability of a brand to keep its promise (Erdem and Swait, 1998).

In accordance with this definition, it could be said that basic dimensions of the brand credibility are trustfulness and experience and now therefore, those brand credibility measurement-oriented questions must measure these concepts. For this purpose, questions measuring the brand credibility are listed in the literature. For example; question regarding *"the brand I use keeps its promise"*, which is quoted from the study of Sweeney and Swait (2008) is one of the questions measuring the dimension of trustfulness and prepared by basing on its definition. The entire dimensions are measured by using a septet Likert-type scale as well as the following expressions "Strongly Agree", "Strongly Disagree.

Seven questions, determining the answerers' demographical properties, are asked in the first section of the questionnaire. By this way it is aimed at collecting data pertaining to the participants' gender, educational background, age and laptop use and term of use, change tendency and *brand selection*. From among these questions, those directed towards gender, age, laptop use and term of use and change are measured by using a nominal scale and the educational background is measured by using an interval scale. The *brand* used by the consumer is asked via an open ended question. Then, every brand was recorded by numeric variable.

Table 2 Demographic characteristics of respondents

		Frequency (n)	Percentage (%)			Frequency (n)	Percentage (%)
Age	20 and younger	99	10,7	**Gender**	Female	483	52,8
	21-29	584	63,9		Male	431	47,2
	30-39	146	16		Total	914	100
	40-49	53	5,9				
	50 and older	32	3,5				
Education	Primary Education	6	0,6	**Income**	Very Low	21	2,3
	High School	54	5,9		Low	775	84,8
	Graduate Degree	709	77,6		Middle	102	11,2
	Post-graduate Degree	145	15,9		High Very High	14	1,5
						2	0,2

Sample was constituted from consumers that use internet and personal computer with regards to survey questions. Accordingly, in order to select respondents from a wide variety of demographic, socioeconomic

and organizational background. So, survey was send to 1000 person that was selected with a convenience sampling method trough the mailing lists of firms, public corporations and private and public universities in Ankara. 970 questionnaires returned and 917 questionnaires were accepted as valid and the sample of 914 respondents consisted of 47.2 percent men and 52.8 percent women. Respondents were relatively young, with a majority of them being below 40 years of age (90,6 %). Respondents had a relatively high education level, considering that 93.5 percent of the respondents have a graduated or post graduated degree. Most of the respondents have low income (84.8 %) (See in Table 2).

Analytical Procedures
First the question that is present in the questionnaire and has to be coded inversely is recoded. This expression is "what they say in the advertisement of the brand that I use are unconvincing" that exists in the Brand Credibility scale. After the recoding procedure, "Strongly Disagree" answers are coded as "Strongly Agree"; "Disagree" answers are coded as "Agree" and "Undecided" answers are left as is.

Results show that answerers have expressively distinguished the answer options, which are present in the questionnaire in the form of Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree, at 95% reliability level. In this section, the reliability test, which is made for pre-testing purposes, is applied for all participants who are used in this study. Cronbach Alpha values of each one of the scales are checked on separately for the purpose of testing reliabilities of those scales used in the questionnaire of such study. Cronbach Alpha value for Brand Credibility scale is 0.83 and for Purchase Intention scale, 0.80. Results pertaining to both scales are over 70%; so they are high in reference to 60%, which is recommended by Hair and others (2000:391), and 70% that is recommended by G. D. Garson[3] and therefore they are of acceptable quality. In that case, it is possible to say that those expressions on the scales are interrelated and measure the same dimension.

Skewness and Kurtosis analyses are carried out for performing the "test for normality" of the expressions on the questionnaire. It is also determined that skewness and kurtosis values have ranked between the recommended values +2 and-2 (Shao, 2002; 424-426). So, these values do support the normal distribution of the data.

According to the analytical procedures employed in this study, the data were analyzed using *ANOVA*, and *Tukey's* test in order to test research question, *linear regression* is applied in order to test the hypotheses of such study and *hierarchical regression* is applied with interaction terms for testing the moderation effect. Before passing to analyses, the Centering procedure of independent variables and moderator variable is carried out in order to eliminate the possibility of multicollinearity between continuous variables as recommended by Aiken and West (1991:5). Centering procedure is the procedure where averages are subtracted from the values of variables. Researchers indicate that there is no need for subjecting the dependent variable to such procedure (Bickel, 2007:135; Aiken and West 1991:35).

Positive effect of brand credibility on a technological product purchase intention was seen in the **1st Hypothesis** (H1) of the study. Linear regression, where brand credibility is independent variable and purchase intention is dependent variable, is applied in order to test this hypothesis. Results of the regression analysis are presented in Table 3.

Table 3: Regression Solutions about the Effects of Brand Credibility on Purchase Intention

	R^2	F	B	P
Model	0,286	35,766		
(Constant)			1,956	0,000
Brand Credibility			0,383	0,000*

Dependent Variable: Purchase Intention
*P<0,05

According to the results of the analysis; brand credibility positively (0,383) and significantly (0.000; P<0,05) effects the technological product purchase intention. In other words, one unit increase in brand

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[3] G. D. Garson, "Quantitative Research in Public Administration", added from the adress (http://faculty.chass.ncsu.edu/garson/PA765/structur.htm) at 02.02.2011.

credibility will raise consumer's purchase intention 0,383 units. Accordingly, **H1 hypothesis** of the study is **supported.**

2nd hypothesis of the study is generated for analyzing the moderation effect of gender on the relation between Brand Credibility and Purchase intention. Suggested hypothesis were tested using a multiple regression model was used (Jose, 2008) [4]. The scaled independent variable, brand credibility was multiplied with the moderator (gender) as were the interaction terms were computed (Aiken and West 1991:5). To reduce multicollinearity between the interaction term and its constituent terms, the continuous variables were mean-centered prior to the analysis, as Cronbach (1987) suggests.

Three-stage hierarchical regression is applied by calculating the interaction term, composed of multiplication of gender and Brand Credibility, for the purpose of measuring the moderation effects of gender on the relation between Brand Credibility and Purchase intention. The brand credibility is put to analysis on the first stage, brand credibility and gender are put to analysis on the second stage and the interaction term is added to it on the third stage. Results of the regression analyses are presented in Table 4.

Table 4: Hierarchic Regression Solutions About the Moderator Effects of Gender on the Relationship Between Brand Credibility and Purchase Intention

	R^2	ΔR^2	F	B	P
1st Step					
Model	0,030		28,522		
(Constant)				3,422	0,000*
Brand Credibility				0,174	0,000*
2nd Step					
Model	0,030	0,000	14,267		
(Constant)				3,398	0,000*
Brand Credibility				0,174	0,000*
Gender				0,007	0,836
3rd Step					
Model	0,901	0,875	2769,881		
(Constant)				3,398	0,000*
Rand Credibility				-0,015	0,148
Gender				0,005	0,609
Brand Credibility x Gender				0,952	0,000*

Dependent Variable: Purchase Intention
*P<0,01

As already seen in Table 4, it is specified that gender has caused a significant difference (Beta=0,952, P<0,05) in regression model of the interaction between the brand credibility and purchase intention. In other words, the relation between the brand credibility created in consumer's mind and purchase intention shows difference according to gender.

To understand the form of the interaction, it was necessary to explore it further. As mentioned, one way is to plot predicted values for the outcome variable (Purchase Intention) for representative groups. A common practice (recommended by Cohen et al., 2003) is to choose groups at the mean and at low (_1 *SD* from the mean) and high (1 *SD* from the mean) values of the continuous variable. Here we plotted scores for men and women at the mean and at low (_1 *SD*) and high (1 *SD*) levels of brand credibility (see Figure 1). Predicted values were obtained for each group by multiplying the respective unstandardized regression coefficients for each variable by the appropriate value (e.g., _1, 1 for standardized variables) for each variable in the equation.

In other words, following two regression equations are formed for the low and high levels of the moderation variable (where value perceived by Purchase Intention is Y; Brand Credibility is X):

$$Y_{High} = -0.015\ X + 0,005\ (Z_{High}) - 0,952\ X\ (Z_{High}) + 3,398$$

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[4] P. Jose. **"Statistical Moderation"**, Victoria University of Wellington. 27 March, 2008. SASP Conference, added from the adress: www.victoria.ac.nz/sasp2008/moderation.ppt at 01.02.2011.

$$Y_{Low} = -0.015 X + 0.005 (Z_{Low}) - 0.952 X (Z_{Low}) + 3,398$$

The graphic, obtained by giving two different values to X value, is presented in Figure 1.

Figure 1. Graphical Presentation of the Moderator Effects of Gender on the Relationship Between Brand Credibility and Purchase Intention
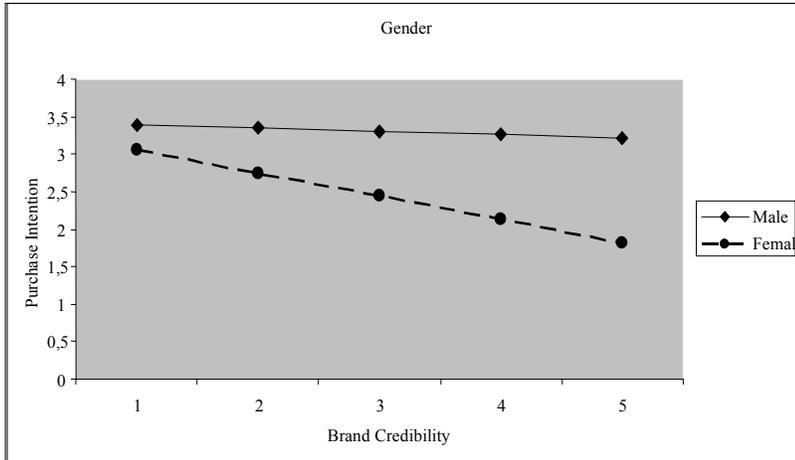
As already seen in the Graphic (Figure 1), course of the relation between brand credibility and the perceived ease of use changes under circumstances where gender of consumers are different. In other words, woman consumers, on the same brand credibility level, demonstrate lower purchase intention compared to men.

Table 5: Anova Solutions

BC	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	52.31	11	4.75	3.21	.00
Within Groups	1208.73	816	1.481		
Total	1261.05	827			

As it can be seen in Table 5. One-way ANOVA was used to test for brand credibility difference among 11 varied brands. Perceived brand credibility differed significantly across 11 brands, $F(11, 816) = 3.21$, p = 0,000.

Table 6: Tukey's Test of Simultaneous Multiple Comparisons

Bc Tukey HSD

(I) Brand	(J) Brand	Mean Difference	Std. Error	Sig.
SONY	1	0.79*	0.24	.046
	2	0.87*	0.23	.011
	3	0.94*	0.27	.025
5	2	0.54*	0.16	.032

*The mean difference is significant at the 0.05 level

Tukey's post-hoc comparisons test for simultaneous paired comparisons (Nester and Wasserman 1974) was used to determine which brand's credibility differed among 11 brands. In Table 6 search results of 11 groups occurs and the results indicate that *SONY* (9) brand (M= 4.96, %95, CI (4.47, 5.45)) gave significantly higher brand credibility ratings than brand (1) (M= 4.17, %95, CI (3.91, 4.43)), brand (2) (M= 4.08, %95, CI (3.86, 4.30)) and brand (3) (M= 4.01, %95, CI (3.69, 4.35)). In addition, brand (5) (M= 4.63, %95, CI (4.48, 4.78) gave significantly higher brand credibility rating than brand (2) (M= 4.08, %95, CI (3.86, 4.30)). Comparisons between the other brands were not statistically significant at $p<.05$.

RESULTS AND DISCUSSION

This study demonstrates that brand credibility has positive effects on purchase intention and at the similar altitude of brand credibility, women view high-tech product less favorably than men. It is proposed in the

first hypothesis of the study that brand credibility significantly and positively affects the consumer's technological product purchase intention and this hypothesis is confirmed. That is to say, consumers' intention for purchasing a product of that brand will increase as long as the brand credibility, which they have created in their minds in connection with a product, rises. This relation will probably make a contribution to literature since no any study, where such relation is directly worked through, is encountered although it has been conceptually put into words previously in literature by using mediating variables (Baek and others 2008).

The finding of significant gender differences provides additional support to literature, stating that males and females have different gender-based consumer behavior (Holbrook, 1986; Meyers-Levy, 1989). The results indicate that at the same level of brand credibility, female consumer tend to purchase technological product lower than male consumers. Thus, high-tech producers have to satisfy female consumers with a trustworthy brand image by providing additional information in order to reduce the risk perception and anxiety, such as insurance, guarantee or straightforward operating manuals for products. After all, female consumers will have purchase intention if they feel that buying a high-tech product is safe and under guarantee. All the above measurements can be promoted by celebrity endorsers, reducing perceived risk and technology anxiety to consumers. In addition, high-tech product producers or retailers can effectively demonstrate for female consumers how to use products in a fashionable manner, and engage them with surprising visual effects, and thus successfully stimulate positive attitudes and increased purchase intention.

Specifically, our results suggest that, according to consumer *SONY* really do have perceived as the most credible brand among brand 1, brand 2 and brand 3. Which means consumer perceives *SONY* as much more trustful and expert than brand 1, brand 2 and brand 3. Also, brand 5 has perceived much more credible than brand 2 which means that brand 5 perceived more trustful and expert than brand 2.

MANAGERIAL IMPLICATIONS AND LIMITATIONS

The literature review has focused on "brand credibility" and the existing research on "gender" and "purchase intention" in developing the construct of this paper. From the extensive existing research and the findings of this study, the authors conclude that a factor moderating the relationship between brand credibility and purchase intention found to be gender. But, also education level and income level can be important factors that moderate the same relationship. While the study was conducted mostly in universities, frequency of the income level and education level couldn't differentiate and be clustered (93.5 percent of the respondents have a graduated or post graduated degree and majority of the respondents (84.8 %) have low income) that allows the investigation of the moderating effects of income and education factors. This study has confirmed that both products related factors (brand credibility) and human factors (gender) are an essential component when purchasing technological products. But for the high-tech products it is necessary to understand the psychological factors affecting individual attitudes. Therefore, the causal relationship between system design features, perceived usefulness, perceive ease of use and avalibility should rest high on the agenda of laptop innovation. Furthermore, this paper is limited to the alternative technological products. An extension of the product range include other digital personal devices will allow wider confirmation of the factors related to this paper which influence decision making.

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