



used only two dimensions of perceived risk in their study: product risk and security risk, whereas, Jarvenpaa and Todd examined five dimensions of perceived risk. In a recent study (Forsythe et al., 2006), three types of risk, namely financial, product, and time/convenience risks are examined.

#### **Perceived Benefit In Online Shopping**

Perceived risk is not only the factor involved in consumer purchasing behavior. Consumers make purchase decisions to maximize expected gain, in other words, for perceived benefit. Consumers regard the perceived benefit as an incentive for the purchasing behavior (Kim et al., 2000). Researchers have discussed the several benefits that online shopping confers on the consumers. These benefits all provide "convenience" to a degree that is not quite available in traditional shopping channels (Bhatnagar and Ghose 2004). These benefits include time saving, effort saving, easy ordering process, low transaction costs, etc. We can say that as an alternative channel, online shopping is convenient and time saving; with vast information freely available online, consumers can easily compare prices and product features across suppliers.

In a recent research report, Greenfield Online found that online shopping is preferred over in-store shopping by some Internet users because of its convenience and time saving. However, the study also found that an overwhelming 69 percent of Internet users said shopping at stores and malls allows them to see, feel, touch, and try on the products before they buy them. These findings suggest that the consumers who value convenience are more likely to buy on the Web, while those who prefer experiencing products are less likely to buy online (Li et al., 1999). In other words, we can say that perceived benefit like perceived risk is also a subjective concept.

There are two kinds of shopping motives in the literature: functional and nonfunctional (Babin et al., 1994; Forsythe et al., 2006; Dholakia and Uusitalo: 2002; Bhatnagar and Ghose:2004; Sorce et al.2005; Childers et al. 2001). Functional motives are related to utilitarian functions such as convenience, variety and quality of merchandise, and price, whereas nonfunctional motives (hedonic) are related to social and emotional needs for enjoyable, interesting shopping experiences(Forsythe et al., 2006).

In our study we mostly used Forsythe, Liu, Shannon and Gardener's scale for measuring perceived benefit. The product selection statements from Bhatnagar and Ghose's study were also included. We include four dimensions of perceived benefit: shopping convenience, ease/comfort of shopping and product selection for functional motives, hedonic/enjoyment for nonfunctional motives.

#### **DATA AND ANALYSIS**

The data used in this article was collected via an online survey. Participants were solicited through announcements on Internet-related newsgroups (Haberturk.com, Internethaber.com, Gazeteoku.com) and announcements made on one online retail store (estore.com.tr). The prerequisite for answering the questionnaire was to be an online shopper. A total of 2751 valid and complete responses were included in the final analysis out of 2910 responses we received.

In order to measure perceived benefit and perceived risk from online shopping, a questionnaire developed out of 31 questions. The respondents had to indicate their agreement/disagreement on 5 point Likert scale. Two of the statements about perceived risk were reverse coded. The final section of the questionnaire was devoted mainly to the demographic characteristics of the respondents for classification purposes. Their gender and the highest level of education they attained were also recorded. To ensure that the questionnaire was well understood, it was tested on a small scale of respondents to detect the existence of misinterpretation as well as any spelling and grammatical errors. The suggestions made were subsequently incorporated into the final questionnaire. We tested the following hypotheses:

H<sub>1</sub>: The respondents' risk perceptions from online shopping differentiate according to their gender

H<sub>2</sub>: The respondents' risk perceptions from online shopping differentiate according to their education

H<sub>3</sub>: The respondents' benefit perceptions from online shopping differentiate according to their gender

H<sub>4</sub>: The respondents' benefit perceptions from online shopping differentiate according to their education

Demographics of the respondent resulted that the gender mode is male with 2243 of 2751. The education level mode is Bachelors' degree with 1597. Among other respondents, 796 are high school graduates, 289 have a master's or PhD degree, and 69 finished primary school or middle school.

We also tested the reliability of our scales used for measuring perceived benefit and perceived risk. The Cronbach's alpha for perceived benefit was found to be 0.908 and Cronbach's alpha for perceived risk was found 0.791. Both of them are over 0.70, the general accepted Cronbach's alpha coefficient.

**Discriminant analysis of risk and benefit perception according to gender**

A discriminant analysis of perceived risk and benefit according to gender was attempted using the 14 perceived risk and 17 perceived benefit statements. The final discriminant functions are highly significant (0.0000). Therefore H<sub>1</sub> and H<sub>3</sub> are accepted.

**Table 1: Structure Matrix and Group Statistics**

|   | Structural Matrix<br>Function Coeff.* | Men<br>Mean | Women<br>Mean |
|---|---------------------------------------|-------------|---------------|
| Providing credit card information through the web is the single most important reason I don't buy through the web more often (R.P.) | .565                                  | 3.14        | 3.38          |
| It is just as safe to use credit cards when making purchases from Internet vendors (Reverse coded) (R.P.)                           | .563                                  | 3.12        | 3.31          |
| May not get the product (R.P.)  | .481                                  | 2.82        | 2.99          |
| Can't examine the actual product (R.P.)   | .441                                  | 3.42        | 3.58          |
| Broader selection of products (B.P.)  | .413                                  | 3.99        | 3.79          |
| Size may be a problem with clothes (R.P.)   | .385                                  | 3.78        | 3.91          |
| Difficult to find appropriate websites (R.P.)   | -.369                                 | 2.23        | 2.1           |
| Internet vendors offer more useful information about the choices available (B.P.)   | .323                                  | 3.53        | 3.36          |
| Don't have to wait to be served (B.P.)  | -.253                                 | 3.75        | 3.89          |
| Items from everywhere are available (B.P.)  | -.239                                 | 4.05        | 4.17          |
| Internet vendors offer better prices (B.P.)   | .237                                  | 3.7         | 3.6           |
| Can custom design products (B.P.)   | .224                                  | 3.86        | 3.76          |
| Can get good product information online (B.P.)  | .207                                  | 4.04        | 3.93          |

\* Significant at p<0.05. B.P.: benefit Perception R.P.: Risk Perception

When we look at the structure matrix the most powerful discrimination variables from the statements were found as above for gender variables. According to those coefficients, female respondents have higher risk perception in most of the statements. But men mostly agree with the benefit perception statements.

**Discriminant analysis of risk and benefit perception according to education level**

After discriminant analysis for risk and benefit perception according to gender was conducted, a similar analysis was performed according to education levels of the respondents. The final discriminant functions are highly significant (0.00). Thus, both H<sub>2</sub> and H<sub>4</sub> are accept

The structure matrix shows us the most powerful discrimination variables from the statements for education level. According to those coefficients, respondents with Bachelor's degree or more have higher risk perception in every statement. They also mostly agree with the benefit perception statements.

**Table 2: Structure Matrix and Group Statistics**

|  | Structural Matrix Function Coeff <sup>a</sup> | High School graduate or less Mean | Bachelors' Degree or more Mean |
|--|---|-----------------------------------|--------------------------------|
| Size may be a problem with clothes (R.P.)  | .632  | 3.67                              | 3.86                           |
| No busy signal (B.P.)  | .625  | 3.79                              | 3.95                           |
| Can't examine the actual product (R.P.)  | .623  | 3.31                              | 3.51                           |
| Inability to touch and feel the item (R.P.)  | .595  | 3.88                              | 4.06                           |
| Can't try on clothing online (R.P.)  | .559  | 3.93                              | 4.1                            |
| It is easier to place orders with Internet vendors (B.P.)  | .548  | 3.87                              | 4.00                           |
| Don't have to wait to be served (B.P.)   | .515  | 3.68                              | 3.82                           |
| Can get good product information online (B.P.)   | .506  | 3.93                              | 4.06                           |
| Items from everywhere are available (B.P.)   | .456  | 3.99                              | 4.11                           |
| Internet vendors offer more useful information about the choices available (B.P.)  | .408  | 3.43                              | 3.53                           |
| Broader selection of products (B.P.)   | .400  | 3.89                              | 3.99                           |
| No hassles (B.P.)  | .375  | 4.09                              | 4.18                           |
| Providing credit card information through the web is no riskier than providing it over the phone to an offline vendor (Reverse coded) (R.P.) | .370  | 3.15                              | 3.16                           |
| Not embarrassed if you don't buy (B.P.)  | .364  | 3.9                               | 4.0                            |
| Internet vendors offer better prices (B.P.)  | .343  | 3.64                              | 3.73                           |
| Can custom design products (B.P.)  | .337  | 3.79                              | 3.87                           |
| Pictures take too long to come up (R.P.)   | .318  | 2.16                              | 2.25                           |
| My personal information may not be kept (R.P.)   | .296  | 2.8                               | 2.9                            |

<sup>a</sup> Significant at p<0.05. B.P.: benefit Perception R.P.: Risk Perception

**CONCLUSION AND RECOMMENDATION**

This research was conducted with an aim to examine the differences of consumers' risk and benefit perceptions in online shopping and whether it differs according to their gender and education level. The results of the study indicate that there are differences between men and women, and also between the education levels of respondents, namely, those with graduates of secondary education and with higher educational level in their perception of risk and benefit.

Female online shoppers who participated in this survey fear more than their male counterparts in cases that arose from the product itself. They worry about not receiving the product they bought, not to have the chance to examine the actual product and hence have a problem about size especially in clothes. But men differently, feel worried in situations like finding appropriate websites. When we look at results about benefit perception we see that men respondents find Internet shopping to be easier and find that online retailers have better prices. Also men like to custom design products more than women. Women value the variety of products and product categories in online retailers more than men.

Women respondents generally agree to statements which measures perceived risk, and men mostly agree with statements that measures perceived benefit from online shopping. Thus, one can say that men see online shopping less risky, but more beneficial when compared to women.

Respondents in higher-education level hesitate using credit cards in online shopping, and they refrain from buying clothes without trying. They have a higher risk perception than respondents with secondary education. Furthermore

they perceive online shopping more beneficial. Therefore, an increase in education level corresponds to a higher risk and benefit perception.

Our findings indicate that risk reduction strategies are advised to the managers of online stores in order to attract more people from every segment to shop online. Some measures must be taken to improve the payment issues, especially. When convenience and competitive prices at online retailers can be emphasized, women and less educated people will be attracted to online shopping.

#### REFERENCES

- BABIN, Barry J., William R. DARDEN, Mitch GRIFFIN. Mar 1994. Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value. *Journal of Consumer Research*, 20, 4; Pharmaceutical News Index p.644
- BHATNAGAR, Amit, Sanjoy GHOSE. 2004. Segmenting Consumers Based on the Benefits and Risks of Internet Shopping. *Journal of Business Research*, Volume 57, Issue 12, December.
- CHANG, Man-Kit. Risks, Trust and Trust Building for Online Shopping. August 2003. *A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy*, The Chinese University of Hong Kong.
- CHILDERS L. Terry, Christopher L. CARR, Joann PECK, Stephen CARSON. 2001. Hedonic and Utilitarian Motivations for Online Retail Shopping Behavior. *Journal of Retailing*, 77, pp. 511-535
- DHOLAKIA Ruby Roy, Outi UUSITALO. 2002. Switching to Electronic Stores: Consumer Characteristics and the Perception. *International Journal of Retail & Distribution Management*, 30, 10; ABI/INFORM
- FORSYTHE, Sandra, Chuanlan LIU, David SHANNON, Liu Chun GARDENER. Spring 2006. Development of a Scale to measure the Perceived Benefits and Risks of Online Shopping. *Journal of Interactive Marketing*, Volume 20, Number 2.
- KIM, Dan Jong, Bongsoon CHO, H. Raghav RAO. Dec 2000. Effects of Consumer Lifestyles on Purchasing Behavior on the Internet: A Conceptual Framework and Empirical Validation. *Proceedings of the twenty first international conference on Information systems ICIS '00*.
- KIM, Youn-Kyung, Eun Young KIM, Shefali KUMAR. 2003. Testing the Behavioral Intentions Model of Online Shopping for Clothing. *Clothing and Textiles Research Journal*, 21(1), pp.32-40.
- KWON, Kyoung-Nan, Jinkook LEE. 2003. Concerns About Payment Security of Internet Purchases: A Perspective on Current On-Line Shoppers. *Clothing and Textiles Research Journal*, 21(4), pp.174-184 (2003)
- LI, Hairong, Cheng KUO, Martha G. RUSSELL. 1999. The Impact of Perceived Channel Utilities, Shopping Orientations, and Demographics on the Consumer's Online Buying Behavior. *Journal of Computer-Mediated Communication*, 5 (2).
- SORCE, Patricia, Victor PEROTTI, Stanley WIDRICK. 2005. Attitude and Age Differences in Online Buying. *International Journal of Retail & Distribution Management*, 33, 2/3; ABI/INFORM Global pp.122-132.
- Turkish Statistical Institute News Bulletin, 2005 "Hanehalkı Bilişim Teknolojileri Kullanımı Araştırması Sonuçları,"(Household Information Technology Usage Study Results), Nr: 179
- YURDAKUL Müberra, Ercan TAŞKIN, Hakan KİRACI, 2006. Sanal Alışveriş Olgusuna İlişkin Uygulamalı Bir Araştırma (A Survey Relating to Online Shopping Fact) *Pazarlama Dünyası Dergisi (Marketing World Magazine)*, pp.40-41

|  |     |
|--|-----|
| <b>EXAMINING THE DIFFERENCES OF CONSUMERS' RISK AND BENEFIT PERCEPTIONS IN ONLINE SHOPPING</b>                               |     |
| Ismail Kaya, Department of Marketing, Istanbul University, Turkey  |     |
| Abdullah Okumus, Department of Marketing, Istanbul University, Turkey  |     |
| Hilal Ozen, Department of Marketing, Istanbul University, Turkey .....   | 157 |
| <b>BUYER RESPONSE TO MULTIPLE ONLINE AUCTION SELLING STRATEGIES</b>  |     |
| Ian Knox, University of Ballarat, Australia  |     |
| David Lynch, University of Ballarat, Australia .....   | 162 |
| <b>THEORETICAL MODEL FOR LEAD USER IDENTIFICATION IN THE CONTEXT OF UBIQUITOUS SERVICES</b>                                  |     |
| Kaisa Koskela, University of Oulu, Finland .....   | 166 |
| <b>VIRTUAL CUSTOMER INTEGRATION IN NEW PRODUCT DEVELOPMENT</b>   |     |
| Guido Lang, University of Bern, Switzerland  |     |
| Marc Fetscherin, Rollins College, USA  |     |
| Christoph Lettemann, University of Potsdam, Germany .....  | 170 |
| <b>ON-LINE STRATEGIES FOR CHARITIES: THE RELATIVE IMPORTANCE OF CHARITY ACCOUNTABILITY AND WEBSITE DESIGN</b>                |     |
| Mark AAM Leenders, Amsterdam Business School, The Netherlands .....  | 176 |
| <b>APPLICABILITY OF ENVIRONMENTAL MANAGEMENT PERSPECTIVE IN E-MARKETING</b>  |     |
| Xianghui Liu, Huaqiao University, China .....  | 179 |
| <b>THE .IT REGISTRAR MARKET</b> .....  | 183 |
| Maurizio Martinelli, Institute for Informatics and Telematics - Italian National Research Council (IIT-CNR), Italy           |     |
| Irma Serrecchia, Institute for Informatics and Telematics - Italian National Research Council (IIT-CNR), Italy               |     |
| Michela Serrecchia, Institute for Informatics and Telematics - Italian National Research Council (IIT-CNR), Italy            |     |
| <b>WHEN CULTURES COLLIDE: HOW FAMILY BUSINESS INTERFACES WITH E-BUSINESS</b>   |     |
| Gregory K. McCann, Stetson University, USA   |     |
| Eugene J. Muscat, University of San Francisco, USA .....   | 190 |
| <b>THE STATUS OF E-COMMERCE ACTIVITY: WHY ARE DEVELOPING/LD COUNTRIES LAGGING BEHIND?</b>                                    |     |
| Mohan K. Menon, University of South Alabama, USA .....   | 194 |
| <b>THE MEDIATION EFFECT OF EMOTION AND THE COGNITION ON THE RELATIONSHIP BETWEEN WEB ATMOSPHERICS AND APPROACH BEHAVIOUR</b> |     |
| Naourez. Mkaouar, Faculty of Economics and Management of Sfax, Tunisia   |     |
| Jamel Eddine. Gharbi, Faculty of Economics and Management of Jendouba, Tunisia .....   | 198 |
| <b>MEASURING THE SERVICE QUALITY OF WEBSITES</b>   |     |
| Vivek Natarajan, Lamar University, USA   |     |
| Soumava Bandyopadhyay, Lamar University, USA .....   | 202 |
| <b>THE IMPACT OF CULTURE ON ONLINE INFORMATION PRIVACY CONCERNS</b>  |     |
| Vivek Natarajan, Lamar University, USA   |     |
| Soumava Bandyopadhyay, Lamar University, USA .....   | 206 |
| <b>ONLINE TRADEMARK ABUSE IN PAY-PER-CLICK SEARCH ENGINE MARKETING: A MULTI-SECTOR STUDY</b>                                 |     |
| Peter O'Connor, IMHI - Essec Business School, France .....   | 210 |

**ALL RIGHTS RESERVED**  
**International Academy of E-Business**  
Box 631064, Nacogdoches, Texas 75963 USA  
[www.iaeb.org](http://www.iaeb.org), [www.iaeb.info](http://www.iaeb.info), [adm@iaeb.net](mailto:adm@iaeb.net)

Printed in the United States of America

**ISSN 1550-7793**  
**ISBN 0-9707955-7-2**

In collaboration with  
**The Academy of E-Commerce**

**Theme**  
E-ntrepreneurship, Creativity, Innovation: Models, Strategies, Trends

# THE E-BUSINESS REVIEW

---

**Volume VIII**

**2008**



A Publication of

**THE INTERNATIONAL ACADEMY OF E-BUSINESS**