Perceived Risk of Online Shopping: Differences Between the UK and China

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Abstract

Internet shopping is becoming the fastest-growing use of the Internet; however, some online consumers still take information gathered online to make purchases offline. A number of researchers attribute consumers’ reluctance to purchase online to perceived risk. This study investigates differences in perceived risk between online shoppers in the UK and China examining six types of perceived risk: financial, product performance, psychological, social, physical, and time risk. The results indicate that both British and Chinese Internet users have a similar aggregated degree of perceived risk. Findings also suggest that while cultural differences might significantly affect relative differences in three specific types of perceived risk, there is not as much variation as might be expected from Hofstede’s uncertainty avoidance dimension.

Keywords: culture; risk-avoidance; risk; online shopping

1.0 Introduction

Although internet shopping has gained wide acceptance, some online consumers are still “window shoppers” who browse information online to make purchases off-line (Forsythe and Shi 2003). Consumers cautiously purchase online because of such barriers as online risks or privacy issues. Many researchers claim perceived risk influences consumer purchase decision processes during online shopping (Crespo et al. 2009; Forsythe and Shi 2003; Ko et al. 2004; Park et al. 2004) and some researchers have analyzed different risks of shopping (Bauer 1967; Bhatnagar et al. 2000; Tan 1999), however, the differences of perceived risk of online shopping between different cultures and countries still needs more exploration. Therefore, this research explores cultural differences in perceived risk for online shopping between the British and Chinese Internet users. For this paper, online shoppers are those who purchase or transact online, offline or non-online shoppers are those who may search for information about products or services but do not transact online, choosing to transact offline. The findings of this research contribute to the understanding of perceived risk, and what effect differences in culture might have on perceived risk. It also helps explain the acceptance of online purchasing by consumers, updating the literature, much of which dates from the very early years of e-shopping in first years of the twenty-first century.
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There are several reasons to select the UK and China for comparison: firstly, they have very different cultural backgrounds. China, a typical Asian culture, has traditional belief and values quite different from a Western country such as the UK. Second, both countries provide a full range of Internet facilities. For example, the UK has an excellent broadband infrastructure, 74% of UK households have broadband Internet connections (Ofcom 2011), 82.5% of the population are Internet users. In China the number of people using broadband was 364 million by July 16, 2010 (CNNIC 2010). Finally, Internet users are very interested in online shopping in both countries: By March 2010 51.07% of the adult population of the UK had engaged in Internet shopping (IMRG 2010), and 26% Chinese Internet users shopped online (CNNIC 2010).

Internet users need to deal with new types of cases that might be quite different from non-Internet shopping (Barnes et al. 2007). The development of e-commerce has created opportunities and benefits for both companies and consumers. The Internet can make a wide range of products and services accessible for consumers, however, it has increased the negative consequences of some risks that exist in the offline environment, and created some risks that are completely new (Goldsmith and Bridges 2000; Jones and Vijayasarathy 1998; Rowley and Slack 2001). For example, consumers might worry that Internet shopping sites have weaker security and that it is dangerous to use their credit cards and disclose personal information. Consumers might also be more concerned about the performance and quality of the purchased product, loss of time or money, or whether the purchased product matches the online description. Hence, consumers perceive a different degree of risk from shopping offline when shopping online. Therefore, understanding consumer’s perceptions and attitudes of risks for internet shopping is a very important component for understanding e-commerce.

This research will to a degree replicate some previous studies (Bauer 1960; Cox and Rich 1967; Ko et al. 2004; R.A. 1960; Tan 1999; Weber and Hsee 1998), in particular Ko et al. (2004) cross-cultural differences in perceived risk of online shopping between the USA and Korea. Although perceived risk has been examined by many studies over the past few decades (Akaah and Korgaonkar 1988; Bauer 1960; Cox and Rich 1967; Dowling and Staelin 1994; Gefen and Heart 2006; Jacoby and Kaplan
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1972; Kim and Lennon 2000; Ko et al. 2004; Tan 1999; Weber and Hsee 1998; Yoon 2009) further study into cultural differences in perceived risk in Internet shopping is needed. What is more, according to Evanschitzky et.al. (2007), while editorial policies of some leading marketing journals encourage more replication, the replication rate has fallen to 1.2% - a decrease of 50%. Hence, more replication research is needed as it increases understanding of phenomena in different contexts, and enhances reliability (Eden 2002). Easley and Madden (2000) suggest researchers should be sceptical about using the results published in marketing journals unless they have been successfully replicated.

According to Hofstede different societies have adapted to uncertainty in different ways, and China and the UK have different degrees of uncertainty avoidance in the uncertainty avoidance index (UAI) (Hofstede 1980). This would lead us to predict that China and the UK have differences in perceived risk of certain situations. However, people may avoid uncertainty by imposing standard operating procedures and control devices (Cyert and March 1963). Thus, if shopping online has become normalized with routines such as choosing to only use familiar online vendors, trusted brands and security features such as secure websites, we might predict that there will be no difference in perceived risk of online shopping between China and the UK.

The method, hypotheses, and structure of questions in this research will be mostly replicated from previous studies, such as Cox and Rich (1967) and Ko et.al. (2004) in order to enable some degree of consistency and comparability between studies. The first hypothesis is Chinese online shoppers perceive a higher aggregate level of risk for online shopping than British online shoppers. The second hypothesis is that Chinese online shoppers perceive a higher level of risk than British online shoppers in each of the six risk categories for online shopping.

2.0 Context
This section is divided into four: The first sub-section is about Internet shopping; second the nature of perceived risk; third previous studies of the perceived risk of online shopping; finally, investigating cross country perceptions of online shopping.

2.1 Internet Shopping
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**Online shopping**

The Internet has changed the way consumers purchase products or services (Alba et al. 1997; Forsythe and Shi 2003). Consumers are not interested in the technology but how the Internet can improve their shopping experiences and help them make better decisions (Burke 2002). However, consumers conduct information searching on the Internet in addition to actually transacting (Chiang; and Dholakia 2003).

Butler and Peppard (1998) present a five step model of the consumer decision process to explain consumer behaviour and the purchasing decision process on the Internet: First, problem recognition, this motivates a specific demand for the product; Second, information search, consumers search for information to make decisions; Third, evaluation of alternatives, the consumers use relevant information to make the purchase decision after identifying and evaluating alternative solutions; Fourth, the decision to purchase is a process to decide on whether, where and how to buy (Beatty et al. 1988); Finally, post-purchase behaviour, customers return to the vendor’s site with queries and to repurchase (Mittal and Lee 1989). However, the model does not explain the relationship between perceived risk and consumer buying behaviour.

**Online and non-online shoppers**

The number of Internet shoppers is increasing, particularly in Western and Asian countries, however, researchers have not paid sufficient attention to why, how and when consumers use the Internet for their shopping, or why they do not choose online shopping (Soopramanien and Robertson 2007). Internet users can be classified as online shoppers and non-online shoppers based on their adoption or usage of the Internet for shopping (Tan 1999), and online shoppers may choose to purchase some products online but not others, they conduct an information search prior to some offline purchases, but transact online for other. Thus, online shoppers can be defined as those who use the Internet to buy a product or service, a transaction or purchase; non-online shoppers do not transact online, but many of search for products or services then purchase offline: online window shoppers. Many Internet users try to avoid purchasing online due to uncertainty, online risk, security, and privacy issues (Lian and Lin 2008). Kotler (2003) claims some factors of uncertainty are the critical influence on consumers’ purchasing behaviour. In addition, current research has paid
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less attention to the reasons for shopping online based on comparing risk perception of online shoppers and non-online shoppers (Soopramanien and Robertson 2007).

**Advantages and disadvantages of online shopping**

Consumers might gain more benefit from online shopping than from traditional shopping channels (Keeney 1999). E-commerce brings considerable benefits to both sellers and buyers but it also has disadvantages (Teo and Liu 2007): advantages include; online search engines and intelligent agents which dramatically reduce transaction costs, the Internet is a source of information as well serving as a transaction medium, it can provide better experiences than in-store (Alba et al. 1997; Forsythe and Shi 2003). The disadvantages include: the physical separation between buyers and sellers as the purchase cannot be face to face, or between buyers and merchandise because the buyer can not clearly see and touch the product to be bought (Gupta et al. 2004). Despite the benefits of online shopping, some consumers are still reluctant to shop online, in part due to risk and trust associated with online shopping (Forsythe and Shi 2003) and many uncertainties in online activities and transactions (Gefen 2000). Researchers have thus acknowledged that trust is an important aspect of e-commerce, with a strong relationship to security and privacy. What is more, perceived risk of online shopping might be different from one country to another country. For instance in China and the UK online shopping popular, but the perceived risk of online shopping might be different. Chinese Internet users are concerned about Internet risks, security, credit card security, and trustworthiness of online shopping (Efendioglu and Yip 2004). British Internet users may perceive similar risks, but the degree of perceived risk might be different.

2.2 Risk perception

**Perceived risk**

Risk is not necessarily objective risk, it is perceived risk that matters (Bauer 1960; Dowling and Staelin 1994; Garbarino and Strahilevitz 2004). According to Dowling and Staelin, perceived risk can be defined as the consumer's perceptions of the uncertainty and adverse consequences of buying a product or service. Hence, Perceived risk might be concern about the potential outcomes of a behaviour and possible loss (Forsythe and Shi 2003). It also means the consumer pays more attention to loss or gain in a particular purchase (Murray 1991). For general perceived risk, the
relationship with trust is different: the more risky a type of interaction is perceived to be, the more trust is necessary to engage in such an interaction with a particular partner (Delgado-Ballester and Munuera-Alemán 2001; Mayer et al. 1995; Schoorman 2007).

In addition, many researchers agree that perceived risk is a combination of the perception of the likelihood that something will go wrong and the perception of the seriousness of the consequences if it does (Bettman 1973; Kaplan et al. 1974; Lopes 1995; Taylor 1974). A lot of studies have used a psychometric approach in studying risk perceptions across various areas such as health, finance, naturally occurring hazards, technology etc. These studies suggest that the psychometric paradigm is an effective method to analyze perceived risk (Fischhoff et al. 1978). However, these studies of perceived risk were directed at offline risks, not online, and need to be incorporated into investigations of perceptions of risk in internet shopping. This research also uses the psychometric method to investigate risk perceptions. Hence, this study extends previous research on measurements of perceived risk by examining how buyers' perceived risks could be differentiated according to cultural differences.

Shoppers may perceive different degrees of risk in different purchasing behaviour (Cox and Rich 1967). Consumers may feel more risky when they are not sure they can guarantee they will achieve their buying goals (Roselius 1971). In other words, when a consumer hesitates to make a purchase, one possible reason is the consumer cannot be sure that the purchase will satisfy their needs and the consumer feels it is risky to buy. Otherwise, the perceived risk is not only associated with what is obtained but how or where it is acquired (Hisrich et al. 1972), thus perceived risk is influenced by the way in which consumers purchase products. Uncertain purchasing methods and unfamiliar places can make a consumer perceive different degrees of risk, including shopping by telephone or mail (Akaah and Korgaonkar 1988). Cox and Rich (1964) claim the most general reason for consumers not shopping through the telephone was fear of not obtaining what they want. Other researchers have found the following reasons: firstly, when it is not possible to check products in advance; second, it may be hard to replace or repair faulty products; and finally, lack of trust in vendors (Gillett 1970; Spence et al. 1970). Similarly, research into online shopping during the very early years of Internet shopping reported that consumers perceive a higher level
of risk with Internet shopping than in-store shopping (Donthu and Garcia 1999; Tan 1999), thus, the issues of many other types of non-store shopping might explain perceptions of risk in online-shopping. Some researchers suggest the types of risks perceived by shoppers, or potential influences from these risk perceptions, may shift a consumer’s behaviour (Forsythe and Shi 2003).

**Types of perceived risk**

Six types of perceived risk involved in purchase decisions have been identified by numerous studies: social, financial, physical, performance, time, and psychological risks (Brooker 1984; Garner 1986; Jacoby and Kaplan 1972; Kaplan et al. 1974; Kim and Lennon 2000; Mitchell 1999; Peter and TarpeySr. 1975; Schiffman and Kanuk 1994; Shimp and Bearden 1982). First, social risk where family or friends might affect a product purchase decision (Dowling and Staelin 1994). Second, financial risk of the loss of money when purchasing (Derbaix 1983; Garner 1986; Horton 1976; Sweeney et al. 1999). For example, many consumers believe that it is too easy to have credit card information stolen (Kim and Benbasat 2010; Kim et al. 2008), so are very cautious about using a credit card. Third, physical risk is about the perception that a product may be dangerous to a consumer’s health or safety when it does not work properly (Roselius 1971). Fourth, performance risk is where a product does not perform as expected and fails to meet a consumer’s expectations (Kim and Lennon 2000). Performance risk may result from the shoppers’ inability to check the quality of the product due to limited information, touching, feeling, and trying the product (Roselius 1971). Fifth, time risk refers to the potential loss of time, convenience, or effort associated with making a bad purchasing decision and when a product purchased needs to be repaired or replaced (Bauer 1967). Finally, psychological risk is the perception that a negative effect on a consumer’s peace of mind may be caused by a faulty product (Jacoby and Kaplan 1972), or potential loss of self-esteem (ego loss) from the frustration of not achieving a buying goal (Stone and Gronhaug 1993). Moreover, some studies added privacy risk to these six types of risk: the potential loss of control over personal information, such as when consumers’ personal information is used without their permission (Featherman and Pavlou 2003). However, some researchers have argued that four types of risk: financial, product performance, psychological, and time/convenience loss are most prevalent among Internet shoppers (Cox and Shi 2003). Garner (1986) found that financial, psychological, and social
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risks significantly affect buyers' purchasing decisions; however, time and financial risks were considered more critical in the purchase of services. Therefore, different perceptions of risk have a different degree of influence on tangible products versus intangible services.

2.3 Perceived risk of online shopping

Many studies find that perceived risk affects e-commerce adoption (Joines et al. 2003; Korgaonkar and Wolin 1999; Pavlou 2001; Salisbury et al. 2001), transaction frequency (Miyazaki and Fernandez 2001), intention to shop in the future (Liang and Huang 1998; Liao and Cheung 2001; Vijayasarathy and Jones 2000) or attitudes toward the channel (Hsu and Chiu 2004; Jarvenpaa and Todd 1997; Vijayasarathy and Jones 2000). Several studies also find perceived risk in e-commerce has a negative effect on e-shopping behaviour (Park et al. 2004), attitude toward usage behaviour (Fenech and O’Cass 2001; Shih 2004; Van der Heijden et al. 2003) and perceived usefulness of the system (Shih 2004). Therefore, perceived risk is not only important to e-commerce adoption, but also affects consumers’ e-shopping behaviour. Few researchers have examined consumers' perceived risks based on new types of buying channels or alternative methods of marketing such as perceived risks of telephone shopping (Cox and Rich 1967), and online shopping (Tan 1999). These studies indicate that risk perceptions in purchasing are different and it depends on the individual situation.

According to Forsythe and Shi (2003), consumers compare benefits and risks of shopping channels before purchasing products, and perceived benefits and risks of shopping online or in-store are multidimensional. On the one hand, consumers usually use the Internet to shop because it is more convenient to shop online than in-store; convenience can be defined generally as extended opening hours, wider choices of retailers, access factors (Burke 2002; Chiang; and Dholakia 2003; Rohm and Swaminathan 2004). On the other hand, the general perception of the risks such as misuse of personal and credit card information and financial loss from online transactions, can be significant barriers to consumer adoption of online shopping (Forsythe and Shi 2003; Joines et al. 2003). In addition, Szymanski and Hise (2000) claim online shopping is a more innovative, convenient way of shopping than traditional shopping channels. However, Tan (Tan 1999) found the level of perceived risk is higher when purchasing products online rather than in-store, based on costs and
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benefits of in-store versus online shopping. Consequently, there is evidence that online shopping is perceived as being more risky than offline shopping. According to Forsythe and Shi (2003), perceived risk of online shopping is the subjectively determined expectation of loss by e-shoppers when planning an online purchase. In other words, when Internet users purchase online, they may ask themselves “what if the purchase does not perform as expected and fails to deliver the desired benefits”. Online shopping shares many similar characteristics with other forms of remote shopping, so online shopping shares some similar perceived risks with other forms of remote shopping (Tan, 1999). For instance, it is difficult to examine physical goods by telephone, catalogue, or over the Internet; consumers’ judgments only depend on limited information and pictures shown on the website (Jarvenpaa and Tractinsky, 1999). These factors increase the level of perceived risk for online shopping so that the more risk that is perceived, the less likely it becomes that consumers will purchase.

Bhatnagar et al. (2000) reported two types of risk of online shopping, product performance and financial risk, have considerable influence on consumer behaviour. If the purchase is very complicated or the product is technologically advanced, the level of perceived risk for product performance is high; similarly, financial risk is high when the product is very expensive. For example, consumers perceive the level of perceived risk for buying books, glasses, or clothes as relatively low; however, perceived risk for mobile phones, computers, or cars was relatively high.

Finding a way to reduce perceived risk of online shopping might be critical to encourage more Internet users to shop online. However, this research does not consider how to minimize perceived risks.

2.4 Cross country differences in perceived risk

Since 1960, extensive consumer research has confirmed that perceived risk affects consumer’s behaviour not only in North America (Cox and Rich 1967; Cox and Rich 1964; Dowling and Staelin 1994) but also across different cultures (Verhage et al. 1990). This implies that perceived risk affects consumer’s behaviour worldwide, irrespective of race or country of origin, thus differences in culture might affect perceived risk. Although differences in culture can impact on consumer behaviour, most e-commerce research has ignored the influence of culture (Gefen and Heart.
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2006), but not all (Yoon 2009). Culture can be defined as the collective programming of the mind that distinguishes the members of one group or category of people from another (Choe 2004). In other words, the individual members of a group share certain ideas, values, acts, or emotions with other members of the group (deMooij 1997).

Consequently, a culture is not completely independent and it cannot be separated from the multidimensional world culture. A cultural background might have an impact on another country’s culture, and people from different countries can also share cultures. In international marketing, culture is one of the most influential factors that influence consumers’ motives, attitudes toward choices, intentions, and purchases (Jarvenpaa and Tractinsky 1999). In many cross-cultural studies cultural differences are analyzed by Hofstede’s five cultural dimensions (Hofstede 2001; Yoon 2009). They are (Hofstede 1980): power distance (PDI): the degree to which the less powerful members of organizations accept that power is distributed unequally; individualism (IDV): the degree to which a society emphasizes the role of the individual; masculinity (MAS): the degree to which a society emphasizes traditional masculine values (including competitiveness, achievement, and ambition); uncertainty avoidance (UAI): the degree to which people feel threatened by uncertain, unstructured situations and ambiguity; finally, long-term orientation (LTO): fostering of virtues oriented towards future rewards. Of the four main dimensions, uncertainty avoidance is the most important influence on perceived risk because this dimension reflects a culture's tolerance or intolerance of uncertainty factors or situations (Ko et al. 2004). The importance of perceived risk in online shopping suggests that online shopping will only be preferred over traditional shopping by those customers with low risk-avoidance profiles (Juan 1999). In other words, in a high UAI culture, people usually feel a higher level of threat under uncertain situations which might increase perceived risk of online shopping (Ford et al. 2003). In contrast, in a low UAI culture, people generally perceive low risk under uncertain situations, thus perceived risk of online shopping might be less. Therefore, high uncertainty avoidance cultures might tend to be risk averse because they are more concerned about failure or loss than gain (Bontempo et al. 1997). On the other hand, low uncertainty avoidance cultures might tend to be more risk seeking because they are less concerned about high risk if there may be high return.
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Hsee and Weber (1998) identify cross-cultural differences in risk preference between the USA and China. They find individualist Americans significantly more risk averse than collectivist Chinese in their options between risky choices and certain selections. Yamagishi (1994) suggested the opposite: that collectivists Japanese are less trusting and more risk-averse than individualist Americans. Hofstede (1991) explored cross-cultural differences in perceived risk between Korea and the USA. Korea was identified as a relatively high uncertainty avoidance country, ranked 17th of the 53 countries. The USA was identified as one of the lowest uncertainty avoidance countries, ranked 43rd of the 53 countries (Ko et al. 2004). Martín et.al. (2009) investigate differences in perceived risk of online shopping between Spain and Japan. They find perceived risk of online shopping could be different based on the differences of consumer styles, distribution systems, development of new technology, and Internet penetration (Martín et al. 2009). Consumers from different cultures have different attitudes, preferences and values, and remain reluctant to buy foreign products even after considerable exposure to globalization (Suh and Kwon 2002). Li and Kirkup (2007) find significant differences between Chinese and British students in use of, and attitudes toward, the Internet and computers generally, as well as gender differences. They find differences in Internet experience, attitudes, usage, and self-confidence.

As Internet and e-commerce adoption has increased over the last decade, previous studies need to be updated. Also, there are no studies to compare perceived risks of online shopping between the UK and China, so there is insufficient information and exploration in this field. This study addresses that gap in the literature and investigates perceived risk of online shopping in the UK and China.

3.0 Methodology

The research hypotheses and structure of questions are based on Akaah and Korgaonkar (1988). A hypothetical purchasing situation is based on Tan (1999). It also borrows measurement method as a list of six types of risk components: social, financial, physical, performance, time, and psychological risks from Garner (1986). The samples and data analysis are based on Ko et.al (2004).

3.1 Research hypotheses and questions
This research extends previous study on measurements of perceived risk by investigating how buyers' perceived risks might be distinguished based on online shopping experiences, and compares differences in perceived risk between the UK and China.

Uncertainty avoidance is expected to be intimately associated with risk perception (Ford et al. 2003). Therefore, a cultural difference in uncertainty avoidance might result in different levels of risk perception in different countries. Stewart (1999) claims people in a high uncertainty avoidance culture usually perceive higher levels of risk under uncertain situations because uncertainty avoidance increases risk perception. On the other hand, people perceive lower levels of risk in uncertain situations in low uncertainty avoidance culture. Thus, this research expects that people from a high uncertainty avoidance culture country such as China might perceive a higher level of perceived risk for online shopping than those people from a low uncertainty avoidance culture country such as the UK. Based on this assumption, the first hypothesis of this research is as follows:

- **H1:** Chinese online shoppers would perceive a higher aggregate level of risk for online shopping than British online shoppers.

Because risk in this paper is categorized into six categories, the second hypothesis of this research is as follows:

- **H2:** In each of the six categories of risk for online shopping Chinese online shoppers would perceive a higher level of risk than British online shoppers.

### 3.2 Method

Data was collected through online survey. The hypothetical purchasing situation is based on Tan (1999) and Ko et.al. (2004), the hypothetical situation of online shopping for Ko et.al. was "purchasing a scanner at a reputable website." This research sets up the hypothetical shopping case of purchasing a mobile phone online. One of the reasons for choosing a mobile phone is for its universality in both countries. This is to avoid a product which has different levels of popularity and usage in both countries. If the level of universality of the selected product is higher or lower that might affect this research, leading to an inaccurate result, and may fail to measure perceived risk of online shopping in both countries. Therefore, the product selected must be familiar to both Chinese and British respondents.
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Six risk components based on Garner (1986) are used to measure the degree of perceived risk: financial, performance, social, psychological, physical, and time risks. SPSS is used to identify the significance of differences in perceived risk. The questionnaire initially is written in English. Most Chinese participants are non-English speakers who have difficulty to read and understand English, so the questionnaire is translated from English to their own language. All questions in both versions are the same, except for the language.

**Data Source**

The survey is collected from both China and the UK and all participants volunteered to participate in the survey. The total sample is two hundred, one hundred Chinese and one hundred British (Error! Reference source not found.). The age of respondents ranges from 18 to 60 in both countries.

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>UK</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total respondents</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>46%</td>
<td>38%</td>
</tr>
<tr>
<td>26-33</td>
<td>23%</td>
<td>42%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47%</td>
<td>54%</td>
</tr>
<tr>
<td>female</td>
<td>53%</td>
<td>46%</td>
</tr>
<tr>
<td>Frequency of online shopping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a month</td>
<td>78%</td>
<td>67.1%</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate</td>
<td>63%</td>
<td>Undergraduate 64%</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>50%</td>
<td>52%</td>
</tr>
<tr>
<td>Student</td>
<td>42%</td>
<td>32%</td>
</tr>
<tr>
<td>Online shoppers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>91 (91%)</td>
<td>85 (85%)</td>
<td></td>
</tr>
<tr>
<td>Non-online shoppers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 (9%)</td>
<td>15 (15%)</td>
<td></td>
</tr>
</tbody>
</table>

**Table 1. Description of respondents in both countries**

**Structure of Questionnaire**

The questionnaire is divided into three parts: First asking respondents about their Internet experiences, usage, and frequency of online shopping. Second, using a list of six risks measures the degree of perceived risk. The hypothetical buying situation is: “If you buy a mobile phone on an Internet website, what would you worry about?” The following options are: (1) “The product or service may fail to satisfy your needs.” (Performance risk); (2) “Any of your friends may affect your buying decision making.” (Social risk); (3) “May lose money.” (Financial risk); (4) “your purchase may lead uncertain danger to your safety.” (physical risk); (5) May waste time to repair or
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change the product.” (Time risk); and (6) “the buying activity may cause a negative influence on your mind.” (Psychological risk). The third section is about respondents’ demographic data, such as age, gender, education level, and current occupation status. Seven-point scales are used, 1 indicates strong disagreement 7 shows strong agreement.

4.0 Findings and Analysis

Respondents are divided into two groups: online shoppers, and non-online shoppers. 91% of respondents are online shoppers in the UK, in China 85% are online shoppers. Thus only nine respondents (9%) are non-online shoppers in the UK, and fifteen (15%) Chinese respondents are non-online shoppers. However, the sample size for non-online shoppers is too low to draw any inference about them from the data.

SPSS was used to analyze all data collected from the survey. H1 and H2 were examined via independent samples T tests, firstly, testing whether any significant difference of perceived risk for online shopping existed between the British and Chinese Internet users in aggregate, and, second, for each individual risk category (Table 2).

H1 is not supported. Although the overall level of perceived risk of Chinese internet users is a little higher than British, the comparisons of independent samples T test and the overall results of the perceived risk for online shopping indicate no significant difference existed between the British and Chinese Internet users (F=0.522, P=0.471>0.05). Therefore, British and Chinese Internet users are more likely to perceive similar levels of aggregate risk.

However, H2 is partially supported, Table 2 shows Chinese e-shoppers perceive a higher level risk than British e-shoppers, for three out of the six different risk perceptions do show a significant difference between the two countries at under 0.05 (Table). Specifically, perceived risk of financial loss is 0.001; perceived risk of time is 0.001; finally, psychological risk perception is 0.009. However, there are three types of perceived risk with quite close mean scores, they are social, performance, and physical. This suggests both Chinese and British seemed to be concerned about these risks at similar levels.
Table 2: The perceived risk of online shopping between the UK and China

<table>
<thead>
<tr>
<th>Perceived risk index</th>
<th>Country</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance risk</td>
<td>China</td>
<td>100</td>
<td>4.9100</td>
<td>1.49136</td>
<td>.14914</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>100</td>
<td>3.8500</td>
<td>1.68400</td>
<td>.16840</td>
</tr>
<tr>
<td>Social risk</td>
<td>China</td>
<td>100</td>
<td>3.2000</td>
<td>1.83127</td>
<td>.18313</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>100</td>
<td>2.7900</td>
<td>1.78260</td>
<td>.17826</td>
</tr>
<tr>
<td>Financial risk</td>
<td>China</td>
<td>100</td>
<td>4.6400</td>
<td>1.49423</td>
<td>.14942</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>100</td>
<td>3.5500</td>
<td>1.91419</td>
<td>.19142</td>
</tr>
<tr>
<td>Physical risk</td>
<td>China</td>
<td>100</td>
<td>3.3000</td>
<td>1.52753</td>
<td>.15275</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>100</td>
<td>2.4500</td>
<td>1.57874</td>
<td>.15787</td>
</tr>
<tr>
<td>Time risk</td>
<td>China</td>
<td>100</td>
<td>5.0200</td>
<td>1.43534</td>
<td>.14353</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>100</td>
<td>4.4200</td>
<td>1.81564</td>
<td>.18156</td>
</tr>
<tr>
<td>Psychological risk</td>
<td>China</td>
<td>100</td>
<td>2.7300</td>
<td>1.70475</td>
<td>.17047</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>100</td>
<td>2.2600</td>
<td>1.36789</td>
<td>.13679</td>
</tr>
<tr>
<td>Total perceived risk index</td>
<td>China</td>
<td>100</td>
<td>3.9800</td>
<td>1.83116</td>
<td>.18312</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>100</td>
<td>3.2200</td>
<td>1.87261</td>
<td>.18726</td>
</tr>
</tbody>
</table>

Hypothesis 1 is not fully supported thus this research cannot claim that Chinese online shoppers would perceive a higher aggregate level of risk for online shopping than British online shoppers, an outcome that does not support the validity of the uncertainty avoidance dimension. Perceived financial and time risks are the factors with the highest difference between UK and Chinese e-shoppers.

5.0 Discussion

This research examines the differences in perceived risk between two culturally different countries: the UK and China. It shows that both British and Chinese Internet users have a similar aggregate degree of perceived risk for online shopping. The result is the same as a past study of perceived risk for online shopping between the USA and Korea (Ko, et al, 2004). However, in this research, there still are some significant differences in term of financial, time, and psychological factors in both countries. Otherwise there are no significant differences for performance, social, and physical risk. According to Hsee and Weber (1998), members of socially collectivist cultures can afford to take greater financial risks since their social networks insure them against catastrophic outcomes.

The sample was heavily weighted to the younger generation, 69% of respondents in the UK is from 18 to 25 (Error! Reference source not found.), China is even higher with 80%; this may have distorted the findings. Gender differences might account for
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differences in risk perceptions, however, gender differences in risk perception of online shopping is not analyzed in this research. The education level of most respondents in both countries is significantly different, 63% of the British respondents had a postgraduate degree, however, 64% Chinese respondents were only qualified to undergraduate level, this might also affect the findings of this research. Frequency of online shopping for both countries is somewhat similar. Occupation is also somewhat similar. The effect of demographic characteristics for respondents from both countries, such as respondent’s age, gender, education level, occupation, and frequency of online shopping requires further research. To a certain extent, these demographic factors might influence risk perception of online shopping in the UK and China potentially impacting upon Internet shopping behaviour.

In Ko, et al, (2004), 29.7% of respondents shopped online in the USA, 27.1% of respondents shopped online in Korea. Thus, they claimed that online shopping was still considered as relatively risky. In this research, the proportion of online shoppers in the UK and China was much higher than in 2004; 91% in the UK, 85% in China; so the proportion of online shoppers in the sample is almost three times that of the 2004 study. Therefore, this research suggests that increasing numbers of Internet users are becoming online shoppers, which suggests more Internet users perceive lower levels of risk in online shopping than before.

The authors expected that Chinese Internet users might perceive a higher level of risk for online shopping than the British. Yamagishi and Yamagishi (1994) suggests that collectivists (e.g., Chinese) are less trusting and more risk-averse than individualists (e.g., the UK) while Weber & Hsee (1998) found the Chinese to be significantly less risk-averse and more risk-seeking than Americans. These two findings were completely opposite. In this research, the results show no significant difference in the perceived risk of online shopping between the UK and China, even though they have different culture backgrounds. Thus, while research suggests that cross cultural factors have been identified as influencing perceived risk of online shopping, no significant impact on aggregate perceived risk of online shopping was found in this study. Therefore, the involvement of cross cultural factors in perceived risk for online shopping requires further study, and Hofstede’s view of the effects of collectivist and
individualist culture needs to be challenged, as does the impact of uncertainty avoidance, or even the very construct of uncertainty avoidance.

**Limitations and opportunities for future research**

The greatest limitation of this research is the small sample size, this research only investigated 100 respondents in each country, and the low number of participants makes comparison less generalisable. The second limitation refers to sample categories, many participants in this research are university students or graduates in both countries. Due to status and higher education level, students might be more familiar with Internet shopping and computer technologies than the wider population, so students might feel perceived risk of online shopping differently from the wider population. Hence, student respondents might not be representative of the wider population. Future research needs to consider different samples in terms of status, education level, and social classes. Thirdly, this research borrows the method from Ko et.al. (2004) using online survey and also establishes a hypothetical purchasing situation of online shopping. However, interview rather than survey may enable greater depth of analysis. Only one product category, a mobile phone, was utilized in this study. Otherwise, choice of purchasing may be different in the UK and China, for example, popular online products are quite different between Japan and Spain, the most popular products for Japanese online shoppers are computer-related products (Aoki, 2000) whereas Spanish people mainly buy travel tickets, books, and show tickets (Martin et.al., 2007). Therefore, more than one product category could be employed in future research. Participants’ age and education level may have been factors. Ko et.al (2004) argued that cultural differences might be reduced by the influence of younger age and higher education level between two different countries. In this research there was insufficient diversity of age. Furthermore, income level may affect Internet users’ perceived risk of online shopping and future research might examine this. This research assumed only one culture in each country, this is one of the weaknesses of Hofstede’s cultural dimensions. It was quite common to use a country to represent a culture in previous cultural studies (Jarvenpaa and Tractinsky 1999), however, it might be that a country has several different cultures, and within-country cultural differences may be greater than cross-country cultural differences. Several old references and theories are used in this research and they may now be out
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of date. Finally, issues of brand identity for product and retailer may be important, thus testing whether brand mitigates the effects of risk may be informative.

Understanding cross-cultural differences in online consumer behaviour is important. Increasing explorations of cultural differences and perceived risk for online shopping contributes to academic knowledge as well as aiding practitioners

References


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Cox, Donald F. and Bo Shi (2003), "Consumer patronage and risk perceptions in Internet shopping," Journal of Business Research, 56, 867-75.


Perceived Risk of Online Shopping: Differences Between the UK and China


Forsythe, Sandra M. and Bo Shi (2003), "Consumer patronage and risk perceptions in Internet shopping," Journal of Business Research, 56 (11), 867-75.

Garbarino, Ellen and Michal Strahilevitz (2004), "Gender differences in the perceived risk of buying online and the effects of receiving a site recommendation," Journal of Business Research, 57 (7), 768-76.


Perceived Risk of Online Shopping: Differences Between the UK and China


Perceived Risk of Online Shopping: Differences Between the UK and China


Perceived Risk of Online Shopping: Differences Between the UK and China


Martín, Sonia San, Carmen Camarerio, Carlos Hernández, and Lluís Valls (2009), "Risk, Drivers, and Impediments to Online Shopping in Spain and Japan," Journal of Euromarketing, 18 (1), 47-64.


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Perceived Risk of Online Shopping: Differences Between the UK and China


