A cross-cultural comparison of the impact of Social Presence on website trust, usefulness and enjoyment

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Abstract: Previous studies have shown that website design elements (such as text and pictures) can be manipulated to increase the perception of Social Presence (SP) among online consumers, which can then impact trust, usefulness and enjoyment. This paper seeks to determine if the impacts of infusing SP in websites is culture specific or universal. We were able to demonstrate similar results with Chinese online consumers compared to Canadian online customers in terms of usefulness and enjoyment, but not for trust. The paper concludes with a discussion of these results outlining implications for practitioners and directions for future research.

Keywords: SP; social presence; cross-cultural; website design; Canada; China.

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1   Introduction

Electronic commerce (e-commerce) promises significant potential to revolutionise the way business is conduced; however, to date, online business is still relatively insignificant. In particular, business-to-consumer e-commerce transactions have not reached a point of critical mass (Ho et al., 2006).

A notable difference between online and offline consumer markets that is hindering the growth of e-commerce is the decreased presence of human and social elements in the online environment. The traditional offline shopping experience includes a wide range of emotions involving various types of social interactions with humans (Tauber, 1972). In contrast, the online shopping experience may be viewed as lacking human warmth and sociability (Gefen and Straub, 2003). Online vendors can try to overcome the more impersonal, anonymous and automated stigma of online shopping (Riegelsberger et al., 2003) by making their virtual storefront socially rich (Kumar and Benbasat, 2002).

This paper explores how human warmth and sociability can be integrated through the Web interface to positively impact consumer perceptions. More specifically, the impact of design elements (emotive text and socially-rich pictures) is explored across two national cultures: Canadian and Chinese. Research has shown that the infusion of Social Presence (SP) into e-commerce websites has a positive effect on the perceptions of North American online consumers (Gefen and Straub, 2003; Cyr et al., 2006). More specifically, it has a positive effect on various web experiences such as trust, Perceived Usefulness (PU) and enjoyment. This paper seeks to understand if these positive impacts of SP hold for other cultures (in particular, the Chinese culture).

2 Theory

In this section we provide a brief overview of two important lines of research that are fundamental to our hypotheses development: SP and cultural influence.

2.1 Social Presence

Social Presence (SP) is broadly defined as the extent to which a medium allows users to experience others as being psychologically present (Fulk et al., 1987). A more specific perspective of SP focuses on 'warmth', where a medium is perceived to be warm if it conveys a feeling of human contact, sociability, and sensitivity (Rice and Case, 1983). This is the perspective we adopt in the current study.

In computer mediated communications, automated and impersonal interactions can become more warm and personal by integrating interface elements that help to build perceived SP. As outlined by Hassanein and Head (2007), these interface elements can provide means for actual interactions with other humans (via chats, message boards, virtual communities, etc.) or imaginary interactions (which can be stimulated through socially-rich pictures and text, personalised greetings, intelligent agents, etc.). This, in turn, can help to promote acceptance and use of such systems. For example, in an online environment, Dormann (2001) suggests that incorporating emotional or social displays (via pictures, text, etc.) can be a key factor to the success of e-commerce.

Gefen and Straub (2003) suggest that pictures and text content can convey a personal presence in the same way that personal photographs and letters can. Choice of language can help create a sense of psychological closeness, warmth and SP (Weiner and Mehrabian, 1968; Nass and Steuer, 1993). The effect of pictures may be even more pronounced, as our visual senses tend to dominate our perceptions and may be more susceptible to the influence of SP (Short et al., 1976).

For this study, we focus on studying the impact of manipulating website SP via pictures and text across cultures. Pictures and text are standard elements in webpage design, and have been shown to instil perceptions of SP among web users in Western cultures (Cyr et al., 2006; Hassanein and Head, 2007). However, their effects have not been studied in the context of other cultures.

2.2 Cultural influence

Culture is defined as the "collective programming of the mind which distinguishes the members of one human group from another" (Hofstede, 1980). In his widely cited research in this area, Hofstede (1980) identifies the following dimensions for characterising national cultures:

- *Power distance*: The extent to which less powerful members expect and accept that power is distributed unequally.

- *Individualism vs. collectivism*: Looking after oneself and immediate family vs. loyalty to cohesive groups.

- *Uncertainty avoidance*: The extent to which members feel threatened by unknown situations.

- *Masculinity vs. femininity*: Competitiveness and material success vs. nurturing behaviour and quality of life.

Context is another commonly cited cultural dimension that had been affirmed by many researchers for its validity and usefulness (de Mooij, 2003). According to Hall and Hall (1990), "high context or low context refers to the amount of information that is in a given communication as a function of the context in which it occurs". In high context cultures (such as China), information is part of a contextual understanding and is implicit, while in low context cultures (such as Canada) information is conveyed explicitly.

Previous research has shown that culture can influence the attitude towards, and adoption of, information technologies (see Ford et al., 2003 for a comprehensive review). More specifically, research results have shown that there are differences between cultural-based perceptions and satisfaction with websites (Simon, 2001; Tsikriktsis, 2002) and e-commerce adoption (Pavlou and Chai, 2002; Hwang et al., 2006). However, our understanding of how different cultures react to various websites and their designs is still sparse. As noted by Gefen (2000) there is a particular need to conduct research on cross-cultural effects and trust within an online environment.

For this study, Canadian and Chinese cultures were chosen as they have been acknowledged for their diversity (Hofstede, 1980). Table 1 highlights how Canadian and Chinese cultures differ as per Hofstede's (1980) and Hall and Hall's (1990) dimensions. While previous studies have shown that increased levels of SP can have a positive effect on online consumer's perceptions in a Western culture (Canada and the USA), this effect has not been investigated in different cultures. Selecting a contrasting culture (such as China), will help to determine if the impacts of infusing SP through website design are culture specific or universal.

Table 1   Country comparisons

Dimension	Canada	China
Power distance	Low	High
Individualism	High	Very low
Uncertainty avoidance	Low	Medium
Context	Low	High

Source: Hofstede (1980), and Hall and Hall (1990)

2.3   Research hypotheses

A number of Information Systems (IS) studies have examined various determinants of consumer attitude towards and intentions to transact with a website. Three common determinants of attitude/intention within the web context are the PU construct of Technology Acceptance Model (TAM) (Davis, 1989); Trust; and Enjoyment.

2.3.1   Social Presence and Perceived Usefulness

There is a psychological connection between perceiving that a medium is warm and its usefulness across a range of communications tasks (Rice and Case, 1983). Therefore,

when a website serves as a communication interface between an online vendor and a customer, it is expected that SP will be positively related to PU. This relationship between SP and PU has been investigated and established by Straub (1994), Karahanna and Straub (1999), Gefen and Straub (1997), and Hassanein and Head (2007).

The above studies have established the positive influence of SP on PU within a western culture. Since China is classified as a culture with a higher degree of uncertainly avoidance (Hofstede, 1980), a rich interface incorporating SP elements such as pictures of people with products should help reduce the degree of consumer uncertainty in conducting business with a particular website. Additionally, China is classified as a collectivist society (Hofstede, 1980) that finds large and varied amounts of information on websites to be useful and preferred (Choi et al., 2006). Instilling SP through website design elements enhances the breadth of website content. As such, it is reasonable to expect that Chinese consumers will demonstrate similar positive reactions to the usefulness of SP in website design as already demonstrated by Canadian consumers. We, therefore, hypothesise that:

> *Hypothesis 1: Increased levels of social presence in a website will have a positive impact on Perceived Usefulness for both Canadian and Chinese consumers while shopping online.*

2.3.2 Social Presence and trust

Trust is a complex and multi-faceted concept that has been widely studied. Online trust relates to consumer confidence in a website and willingness to rely on the vendor in conditions where the consumer may be vulnerable to the seller (Jarvenpaa et al., 1999). Trust is especially important in the online environment to positively impact consumers' attitudes and purchasing intentions (Corritore et al., 2003). Since trust is created within the context of a social environment (Blau, 1964), SP is a necessary condition for the development of trust (Gefen et al., 2003). A lean SP environment may facilitate information hiding and untrustworthy behaviour. Whereas, a high SP environment may engender trust among participants (Gefen et al., 2003). Within the context of a western culture, several researchers have shown that increased levels of perceived SP on a website has a positive impact on online consumers' trust (Gefen and Straub, 2003; Cyr et al., 2006; Hassanein and Head, 2007).

China is considered to be a collectivist society (Hofstede, 1980), where trust is built through frequent face-to-face communications (Jarvenpaa and Leidner, 1999). In the online environment, face-to-face interaction is minimal, making it more difficult for Chinese consumers to develop trust. It is reasonable to expect that instilling human warmth and sociability through website design would have a positive impact on trust for consumers in a society that values human contact. Thus, a socially rich web interface should help engender trust for online consumers in collectivist societies (such as China), as it has been shown for consumers in individualist societies (such as Canada). We hypothesise that:

> *Hypothesis 2: Increased levels of social presence in a website will have a positive impact on trust for both Canadian and Chinese consumers while shopping online.*

2.3.3   *Social Presence and enjoyment*

Enjoyment is an intrinsic motivation (Davis et al., 1992) that describes how an individual perceives something to be enjoyable, apart from any performance consequences that may be anticipated (Carroll, 1988). Enjoyment is an important experiential aspect in offline shopping (Morris, 1987). Likewise, enjoyment has emerged as an essential factor in online shopping with significant impacts on online consumers' attitudes (Koufaris et al., 2001–2002). Lombard and Ditton (1997) argue that perhaps the most prominent psychological impact of SP is enjoyment. Previous research has shown that increased SP positively influences enjoyment for low context cultures (Cyr et al., 2006; Hassanein and Head, 2007).

Communication styles differ across cultures, and highly individualistic countries (such as Canada and the USA) prefer more factual and text advertising, while collectivist countries (such as China) prefer more symbolic messaging (de Mooij, 1998; Hong et al., 1987). Sun (2001) confirmed this observation by showing that web users from collectivist cultures had a stronger preference for pictures and visuals on websites than users from individualistic cultures.

In addition to being a collectivist country, China is also classified as a high context culture. High context cultures tend to place strong emphasis on mood and emotion, as compared to low context cultures (such as Canada). Therefore, high context cultures tend to favour face-to-face over computer-mediated interactions (Liu and Murphy, 2003). Hence, infusing SP through interface elements should result in increased enjoyment for online consumers in a high context culture (such as China), as it has been shown within a low context culture (such as Canada). We, therefore, hypothesise that:

> *Hypothesis 3: Increased levels of social presence in a website will have a positive impact on enjoyment for both Canadian and Chinese consumers while shopping online.*

3   Research methodology

An empirical study was conducted to investigate our proposed hypotheses. The study was designed as a one-factorial experiment manipulating three levels of website SP with three independent groups. The study was conducted in Canada and in China using the same experimental design and methodology. Subjects were given the task of purchasing a shirt/top as a gift for a female friend. Clothing was selected as the online product to sell on the websites for this study as it is a product that all consumers would be familiar with, and to which SP could be easily and naturally applied.

Each of the three websites displayed the same products and followed the same design. Only SP elements were manipulated on the sites. The experiment was conducted entirely online and subjects could complete the study from any computer with an internet connection, thus increasing the online shopping task realism. Following the completion of the task (selecting a woman's top for a friend), subjects completed a questionnaire about their experiences on the clothing website they visited.

3.1 Experimental websites

Three websites were created for a fictitious clothing company (called myCloset.com). A fictitious company was chosen to avoid any potential bias from previous branding or experience. The manipulated levels of SP were incremental, as shown in Table 2. With this approach, differences between the three groups could be directly attributed to the increasing levels of SP.

Table 2 Social Presence manipulations of the experimental websites

Website	SP level	Available features
SP-1	Low	• Products are shown in a solitary format
		• Point form, functional descriptions
SP-2	Medium	• All features of SP-1
		• Socially-rich text: descriptions aimed at evoking positive emotions
SP-3	High	• All features of SP-2
		• Socially-rich pictures: products are shown worn by people in emotional, dynamic settings

As previously mentioned, this study was restricted to manipulating SP through imaginary interaction elements of textual and graphic information. Sample screen shots of the study sites are shown in Figures 1–3, which show the same product page for the low, medium and high SP websites, respectively.

Figure 1 SP-1 low social presence website (see online version for colours)
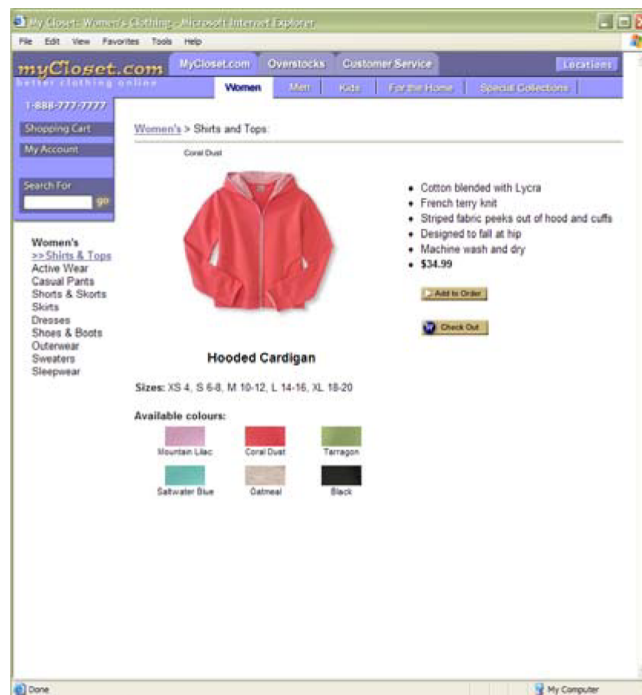
Figure 2   SP-2 medium social presence website (see online version for colours)
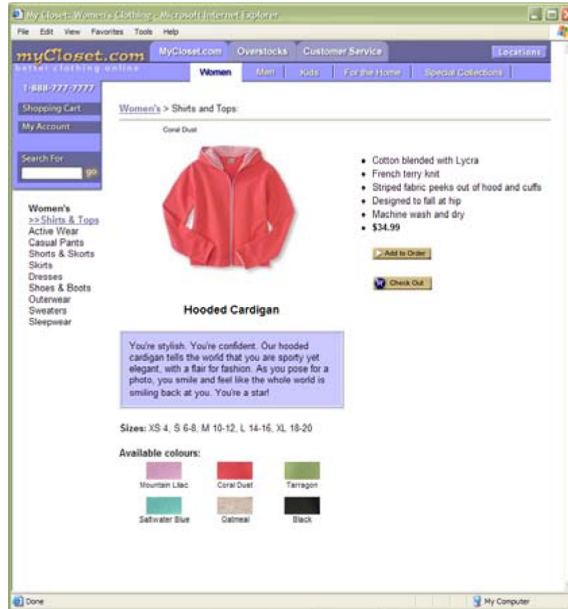

Figure 3   SP-3 high social presence website (see online version for colours)
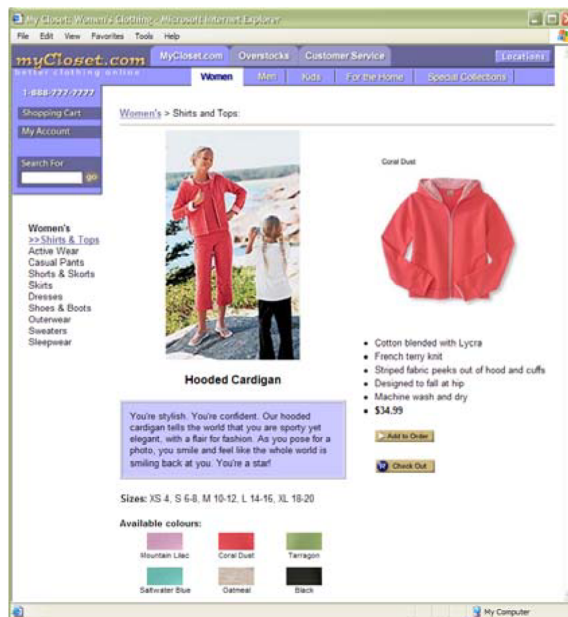
It is important to note that the same experimental websites were used for both the Canadian and Chinese samples. While the Chinese participants were residents of mainland China, they were all fluent in English and had experience with English e-commerce websites. This was a highly controlled study, with no website localisation (translations and/or other cultural markers).

3.2 Subjects

A total of 158 subjects participated in this experiment (78 for the Canadian study and 80 for the Chinese study). Subjects were largely undergraduate and graduate students. As shown in Table 3, the demographics were similar among the Canadian and Chinese samples. While the Chinese sample spent more time online than the Canadian sample, there were no correlations between the amount of time spent online and the various perceptual measures gathered in this study. Each subject participated in only one of the three SP groups. Subjects were randomly assigned to the SP groups to control for confounding effects due to possible variations in individual characteristics. ANOVA tests found no significant differences for subjects in the various treatment groups in terms of gender, age and internet experience. Therefore, randomisation of assignment across groups for both cultures was successful in terms of subject characteristics.

Table 3   Subject demographics

Characteristics	Canada statistic	China statistic
Gender		
Male	31 (40%)	27 (34%)
Female	47 (60%)	53 (66%)
Age		
18–24	53 (68%)	47 (59%)
25–29	13 (17%)	30 (38%)
30–34	3 (4%)	3 (3%)
35–39	3 (4%)	0 (0%)
40–44	4 (5%)	0 (0%)
45+	2 (2%)	0 (0%)
Hours online/week		
0–5	9 (11%)	8 (10%)
6–10	18 (23%)	12 (15%)
11–20	27 (35%)	16 (20%)
21–30	16 (21%)	17 (21%)
31+	8 (10%)	27 (34%)
Average number of online purchases	*7.0*	*5.2*

3.3 Validity

Measures for our dependent variables (i.e., PU, enjoyment and trust) came from existing literature, where they had been repeatedly shown to exhibit strong content validity. The construct items used in this study are provided in the Appendix. Construct validity (measured through convergent and discriminant validity) examines the extent to which a construct measures the variable of interest. A construct is considered to exhibit satisfactory convergent and discriminant validity when items load highly on their related factor and have low loadings on unrelated factors. Table 4 includes the results of the

varimax rotation on the original 12 items for both the Canadian and Chinese samples. Hair et al. (1995) suggested that an item is significant if its factor loading is greater than 0.50. From the original 12 items, one was eliminated in the Canadian sample (T3) and three were eliminated in the Chinese sample (PU4, E2, and T3) due to high cross-loadings on other constructs. Table 4 also shows that the Cronbach α-values (measure for construct reliability) were satisfactory for both the Canadian and the Chinese samples.

Table 4   Construct validity

Construct items	Canada		China	
	Item loading	*α-value*	*Item loading*	*α-vaLue*
PU1	0.610	0.856	0.785	0.844
PU2	0.806		0.783	
PU3	0.778		0.790	
PU4	0.622			
E1	0.804	0.900	0.810	0.914
E2	0.847			
E3	0.872		0.879	
E4	0.775		0.788	
T1	0.860	0.821	0.698	0.789
T2	0.820		0.904	
T3				
T4	0.605		0.750	

In this study, three experimental websites were designed to represent three levels of SP. The perceived SP scale, developed by Gefen and Straub (2003), was used to check the validity of the manipulation of our experimental treatments. An ANOVA test indicated that the subject groups assigned to the different treatments were significantly different in terms of their perceived SP for the Canadian sample ($F = 70.75$, $p = 0.000$) as well as for the Chinese sample ($F = 4.06$, $p = 0.021$). A post hoc Tukey test was conducted to examine pair-wise differences of manipulated sites for both the Canadian and Chinese samples. For the Canadian sample, significant differences were perceived between any pair-wise grouping of manipulated SP sites ($p < 0.001$ for SP-2/SP-3 and SP-1/SP-3 comparisons; $p < 0.01$ for SP-1/SP-2 comparison). For the Chinese sample, significant differences were perceived between the low (SP-1) and high (SP-3) SP sites ($p < 0.05$) and, to a lesser extent, between the medium (SP-2) and high (SP-3) SP sites ($p < 0.1$); however, the medium SP site (with the addition of emotive text) was not perceived as being significantly richer in SP compared to the low SP site. For the Chinese, it appears that the addition of socially rich pictures has a more profound impact on perceived SP than the addition of emotive text. Hence, with one exception (SP-1/SP-2 comparison in the Chinese sample), the three experimental websites effectively demonstrated three different and increasing levels of perceived SP among our samples.

4   Results

A MANOVA analysis was conducted to examine differences between group means for the three dependent variables of SP (i.e., PU, trust and enjoyment) across cultures (Canada and China). Groups were defined by the three levels of manipulated SP (SP-1, SP-2, and SP-3). MANOVA test statistics included Pillari's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root. The p-values of these statistics were found to be significant ($p < 0.01$) across all three groups of respondents for both the Canadian and the Chinese samples. Table 5 summarises the MANOVA results, where SP level is the independent variable, and PU, trust and enjoyment are the three dependent variables.

Table 5   MANOVA results

Dependent variable	Canada		China	
	F	*Sig.*	*F*	*Sig.*
PU	7.360	*0.001****	3.221	*0.045**
Trust	8.503	*0.000****	0.207	0.813
Enjoyment	6.101	*0.004****	4.468	*0.015**

Level of Social Presence is the independent variable.

*Denotes significance at the 0.05 level.

**Denotes significance at the 0.001 level.

As shown in Table 5, the *F*-statistic was significant for all three dependent variables in the Canadian sample ($p < 0.01$), but only significant for PU and enjoyment in the Chinese sample ($p < 0.05$). Significance indicates that at least one of the SP levels is different from the others. To investigate where the differences arise, we analysed the contrasting results of the MANOVA analysis (Tables 6 and 7) between the various website treatments.

Table 6   MANOVA contrast results for the Canadian sample

Contrast		Dependent variable		
		PU	*T*	*E*
SP-1 vs. SP-2	Contrast Est.	0.519	–0.013	0.096
	Std. Error	0.291	0.239	0.294
	Sig.	0.078	0.955	0.744
SP-1 vs. SP-3	Contrast Est.	–1.115	–0.846	–0.933
	Std. Error	0.291	0.239	0.294
	Sig.	*0.000****	*0.001****	*0.002****
SP-2 vs. SP-3	Contrast Est.	–0.596	–0.859	–0.837
	Std. Error	0.291	0.239	0.294
	Sig.	*0.044**	*0.001***	*0.006***

*Denotes significance at the 0.05 level.

**Denotes significance at the 0.01 level.

***Denotes significance at the 0.001level.

Table 7   MANOVA contrast results for the Chinese sample

Contrast		*Dependent variable*		
		PU	*T*	*E*
SP-1 vs. SP-2	Contrast Est.	0.439	0.211	0.293
	Std. Error	0.369	0.334	0.340
	Sig.	0.238	0.529	0.392
SP-1 vs. SP-3	Contrast Est.	−0.992	−0.060	−1.062
	Std. Error	0.391	0.353	0.360
	Sig.	*0.013**	0.865	*0.004***
SP-2 vs. SP-3	Contrast Est.	−0.553	0.151	−0.769
	Std. Error	−0.403	0.364	0.371
	Sig.	0.174	0.679	*0.041**

*Denotes significance at the 0.05 level.
**Denotes significance at the 0.01 level.

It is interesting to note that there were no perceived differences for usefulness, trust and enjoyment between SP-1 and SP-2 for Canadian or Chinese subjects. Hence, the addition of emotive text to website design did not influence the dependent variables investigated in this study for either culture. However, there were significant differences between SP-1 and SP-3 and between SP-2 and SP-3. In the Canadian study, these differences were exhibited for PU, trust and enjoyment. In the Chinese study, there were significant differences between SP-1 and SP-3 and between SP-2 and SP-3 for enjoyment, but only between SP-1 and SP-3 for PU. There were no differences in terms of trust for the Chinese participants for any pair-wise comparisons of website conditions. This indicates that the addition of socially-rich pictures to website design had a more influential impact on user perceptions than the addition of emotive text for both cultures. This is in line with extant literature that suggests the effects of pictures may be more pronounced than the effects of text alone (Short et al., 1976; Fogg, 2002; Olson et al., 2002; Riegelsberger, 2003). However, this impact appears to be more pronounced for Canadians than for Chinese. While the Chinese perceived the addition of socially-rich pictures to website design to positively impact their enjoyment, it had a marginal effect on their perceptions of usefulness and no impact on their perceptions of trust. On the other hand, Canadian perceptions of enjoyment, usefulness and trust were significantly enhanced through the inclusion of socially-rich pictures. A summary of our hypotheses and whether they were supported or not for the Canadian and Chinese samples is provided in Table 8.

Table 8   Hypotheses support summary

Hypotheses	*Canada*	*China*
Increased levels of social presence will have a positive impact on PU	Supported	Supported
Increased levels of social presence will have a positive impact on trust	Supported	Not supported
Increased levels of social presence will have a positive impact on enjoyment	Supported	Supported

5   Conclusions and recommendations

This research suggests that infusing SP through the web interface could play an important role in enhancing the experience of online consumers. Specifically, we have shown that increased levels of SP through socially-rich design elements (i.e., socially-rich text and pictures) have a positive impact on the antecedents of the attitude/intention of Canadian online shoppers (PU, trust and enjoyment).

We were also able to demonstrate similar results with Chinese online consumers in the case of PU and enjoyment. However, higher levels of SP failed to have a significant influence on establishing trust within an online environment with Chinese consumers. This may be due to one or more of the following factors:

- Our study utilised the same website for the Canadian and Chinese studies. Although the Chinese subjects were all English speaking, they might have perceived more trust had we localised the websites in terms of language (Mandarin instead of English); nature of emotive text used (Chinese narrative instead of English narrative) photos (Asians instead of Westerners); clothing fashions (Chinese-based instead of western-based fashions).

- The Chinese culture places a lot of emphasis on frequent face-to-face interactions over time in terms of building trust. Hence, it is more difficult to establish swift trust with Chinese subjects based on one encounter with a website, as was the case in our experimental setup even if the interface is socially rich.

- Recent work by Srite and Karahanna (2006) suggests that individuals espouse national culture value to differing degrees. As such, it may be misleading to utilise country scores on a cultural dimension to predict individual behaviour. Thus, it is possible that some of Chinese participants in our study exhibited values that more closely resemble Canadian cultural values, and/or vice versa.

The results of this study can have direct implications for designers of online shopping websites. We have shown that SP can be infused by including descriptions aimed at evoking positive emotions and pictures that depict products with people in social settings. Text and pictures are standard elements in web pages, not requiring advanced technologies or additional resources from the designers' or users' points of view. Therefore, inducing a sense of SP through these design elements on commercial websites can be an attainable goal for e-vendors.

It is also important to realise that website artefacts that are appropriate for one culture may not have the same effects on members of another culture. For example, in this study, Canadians perceived significant increases in perceived SP by the addition of emotive text and/or socially-rich pictures. On the other hand, adding emotive text to a basic website did not appear to significantly impact perceptions of SP for the Chinese participants in this study. This is not surprising given that the emotive text was written in English which is not the mother tongue of Chinese participants. Adding socially rich pictures, however, did have a significant and positive effect on their perceived SP of the website. Subsequently, increases in perceived SP through the addition of socially-rich pictures to website design was found to have a positive impact on enjoyment and, to a lesser degree, the usefulness of the site for Chinese participants. Hence, web designers that seek to increase the hedonic experience for their Chinese users are encouraged to consider incorporating socially-rich pictures into their webpages. While increased trust was not

found to be a consequence of increased SP for Chinese web users in this study, web designers should not discount the potential of appropriately localising website artefacts to the target culture to potentially realise the intended effects, including trust.

A definite area for future research is to explore whether localising the websites to the Chinese culture as outlined above would yield different results (e.g., show SP as having a significant influence on trust). Additionally, future research should explore whether focusing the unit of analysis on the individual espoused cultural value level would yield different results. Future research needs to also determine the extent to which the findings presented in this paper can be expanded to include other persons, settings, products and times. Other areas for future research include examining the influence of increased SP for other product types, other cultures and other applications (e.g., B2B and C2C). The impact of other socially-rich design elements (such as virtual communities, chats, message boards, human web assistants, etc.) should also be explored.

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Appendix

All items were measured on a seven-point Likert, strongly disagree/strongly agree, scale.

Perceived Social Presence (PSP)

PSP1	There is a sense of human contact on this website
PSP2	There is a sense of sociability on this website
PSP3	There is a sense of human warmth on this website

Source: Gefen and Straub (2003)

Perceived Usefulness (PU)

PU1	This website provides good quality information
PU2	This website improves my performance in assessing clothing online
PU3	This website increases my effectiveness for clothing assessment online
PU4	This website is useful for assessing clothing online

Source: Moon and Kim (2001), and Chen et al. (2002)

Enjoyment (E)

E1	I found my visit to this website interesting
E2	I found my visit to this website entertaining
E3	I found my visit to this website enjoyable
E4	I found my visit to this website pleasant

Source: Ghani and Deshpande (1994), van der Heijden (2003), and Hwang and Yi (2003)

Trust (T)

T1	I feel that this online vendor is honest
T2	I feel that this online vendor is trustworthy
T3	I feel that this online vendor cares about customers
T4	I feel that this online vendor would provide me with good service

Source: Gefen et al. (2003)