

Increasing customers' information sharing in the online setting: an empirical investigation on the role of trust and compensation

Introduction

This paper addresses a relevant problem that e-vendors have to solve in order to fully exploit the potentialities of e-commerce namely, consumers' reluctance to transact on-line business. Indeed, the potentialities of e-commerce can only be realized if consumers are willing to transact – disclosing their personal information – with unseen and unknown e-vendors. However, three-fourths of non-users regard the Internet as a threat to their privacy [Cole, 2001], suggesting that for potential shoppers, on-line privacy invasion is a strong deterrent. Threats to privacy may lessen participation in on-line commercial activities and are of particular concern to new users, thereby limiting the growth potential of on-line commerce [Rifon et al., 2002]. To fully realize the benefits of recent innovations in customer interface technologies, companies need therefore to reduce consumers' privacy concerns and increase their information sharing.

The aim of this research is to answer the need for strategies to increase customers' information sharing with e-firms at the initial stage of the relationship between an e-vendor and a consumer. Specifically, we will rely on self-disclosure theories, to examine the effects of two relevant antecedents of information sharing with unknown e-vendors that have been identified within these theories but have mainly been investigated separately in previous studies namely, trust and compensation. Furthermore, in this paper we will analyze the role of these two variables not only on customers' willingness to divulge information, that has been the dependent variable of the majority of past research, but also on their actual disclosure behavior towards e-

marketers. Moreover, we will investigate both the dimensions of self-disclosure: the number (quantity) and the type (quality) of information provided.

Previous research has studied these issues from different perspectives, such as consumers' concerns about information privacy [Culnan and Armstrong, 1999 ;Milne and Boza, 1999], how they respond to such concerns [Sheehan and Hoy, 1999], consumers' willingness to provide personal information [Phelps et al., 2000], the effect of trust (in the organization) on customers' willingness to provide information [Schoenbachler and Gordon, 2002], consumer awareness of privacy mechanisms [Culnan, 1995; Milne and Rohm, 2000], the contents of privacy disclosures [Miyazaki and Fernandez, 2000] and legal and ethical issues associated with online privacy [Caudill and Murphy, 2000].

This study differs from previous research in two aspects that represent its main contributions. First, no prior studies on information disclosure have combined trust, different compensation typologies, attitudinal willingness to provide information, and actual information giving behavior in a single empirical investigation. Previous literature has focused on separately on these issues without being able to provide evidence for interaction among relevant variables. In particular, separate studies have appeared on the definition and measurement of privacy concern [e.g. Sheehan, 2005; Smith et al., 1996], antecedents and consequences of privacy concern [e.g. Phelps et al., 2000; Phelps et al., 2001], the impact of trust [e.g. Grabner-Krauter, 2002; Miyazaki and Krishnamurthy, 2002], and compensation for information [Sheehan and Hoy, 1999].

A second contribution of this study is the use of a controlled experimental setting that allows the measurement of respondents' actual behavior in an online setting, in addition to declared intentions or past behavior. Indeed, a common element of many

studies on responses to privacy invasion has been the use of surveys¹. The problem of a research design using surveys is threefold. As just mentioned, surveys measure past or intentional behavior, not actual behavior [Berendt et al., 2005; Hui et al., 2007]. Secondly, this methodology tends to heighten the concern for privacy because respondents are sensitized to the topic since they are forced to focus on it [Harper and Singleton, 2001]. Finally, past research suggests that many consumers ignore the implications of privacy invasion either because of denial [Ramen et al., 2006] or of the manner in which choices are presented to them [Johnson et al., 2002]. According to this view, consumers may not be conscious of the implications of sharing their information with an on-line website, nor might they be able to predict their own behavior. The use of a behavioral approach avoids problems surrounding both sensitizing effects and the lack of awareness that plague surveys.

In summary this research represents a first effort in conducting empirical research as realistic as possible by (1) considering the interaction of variables that can be leveraged at the same time by e-service providers but have mostly been considered separately in previous studies and (2) analyzing real consumer behavior in the online environment.

Literature review and hypotheses development

Self-disclosure theories suggest that consumers' willingness to disclose personal information is based on their assessments of the costs/risks and benefits [Andrade, et al., 2002]. While collecting personal information from customers is essential for electronic commerce viability, it has both risk and benefit implications for individuals

¹ Some exceptions include a series of experiments by Miyazaki and Krishnamurthy [58] that indicate that the presence of seals of approval (e.g., TRUSTe, BBBOnline) can make consumers feel more favorable about a web site's privacy policy.

[Hui et al., 2007]. Thus, companies interacting with consumers by means of the Internet could use a number of approaches to alter this cost-benefit trade-off and, consequently, encourage consumers to participate in self-disclosure [Andrade, et al., 2002].

The development of consumers' initial trust [Koufaris, M. and Hampton-Sosa, 2004; McKnight, et al. 2004; Wang et al., 2004] and the offering of a compensation for disclosing their information [Andrade, et al., 2002] are among the approaches that companies can implement to alter their cost-benefit analysis and encourage information disclosure.

Initial trust reduces the perception of risk in potential consumers [Jarvenpaa and Tractinsky, 1999], thus enhancing their propensity to disclose personal information to e-vendors:

H₁: the higher consumers' initial trust, the higher: (a) their willingness to provide information; (b) their behavioral information disclosure.

Secondly, companies can increase the subjective benefits of self-disclosure by offering rewards in exchange for personal information [Andrade, et al., 2002; Hui et al., 2007]. In this study, we concentrate on two kinds of frequently utilised compensation [Andrade, et al., 2002]: money – that takes the form of coupons in the on-line environment [Deutskens et al. 2004] – and gifts.

As consumers can use monetary incentives flexibly, they are perceived as providing higher benefits than those of a gift – whose nature cannot be chosen – of the same value. This is consistent with the argument by Deutskens et al. [2004] that monetary compensation is most effective. Hence, our second hypothesis posits that:

H_{2a}, H_{2b}: Willingness to provide information (H_{2a}) and actual disclosure behavior (H_{2b}) will be higher if monetary compensation is offered, followed by a gift as compensation and will be less if no compensation is offered.

This study also intends to analyze the interaction between the 2 variables whose effects on information disclosure have to date only been investigated separately. Even though there are no previous studies on initial trust and compensation's joint effect on information disclosure, the extant literature can be helpful in hypothesising the relationship between the two variables. Initial trust is the key element to start an on-line transaction; we therefore surmise that the benefits provided by initial trust – in terms of reduced perceived risk – will provide a necessary condition for increasing disclosure of information. Conversely, in a situation in which trust is lacking, we expect incentives to have a lower effect on information disclosure. Specifically:

H_{3a}, H_{3b}: In the high trust condition, subjects will be more willing to provide information (H_{3a}) if offered compensation than if not offered compensation. Conversely, the impact of compensation will be lower in a low trust condition. Hypothesis H3b asserts that the same will hold true with respect to actual behavior.

The hypothesized relationships were investigated empirically in two laboratory experiments whose results are described thereafter.

Study 1

Design and procedure

The study was designed as a 2 (initial trust: high vs. low) x 3 (compensation type: no compensation, monetary and non monetary compensation) between-subject design.

Data were collected from 163 undergraduate and graduate students (Table 1) recruited in an University located in North Italy.

Table 1 - Study 1: The number of participants in each experimental cell

		<i>Compensation condition</i>			<i>Total</i>
		No compensation	Monetary compensation	Non monetary compensation	
<i>Trust condition</i>	Low Trust	29	28	25	82
	High Trust	27	29	25	81
	<i>Total</i>	56	57	50	163

Subjects were recruited under the pretext of participating in a consumer opinion market research for a (fictitious) UK mobile phone service provider that was considering entering new competitive markets, including the Italian one. By definition, the initial trust manipulation required that the participants would not be familiar with the firm used in the study.

Subjects were first given a short pamphlet describing the company profile. Trust was manipulated by preparing two different versions of the pamphlet with varying descriptions of the fictitious company. The description consisted of excerpts of articles on this company from the on-line version of The Wall Street Journal, considered a well-known and credible source. A company rating was also included.

The questionnaire ended with a trust manipulation check consisting of a multi-item question, using a seven-point scale with 1 = strongly disagree and 7 = strongly agree.

Subjects were then instructed to thoroughly view a (fictional) company's beta test web site which had been designed to contain on-line features that one might expect from a mobile phone services company (i.e. pages devoted to plans, services, models, accessories, etc.).

After the subjects had thoroughly viewed the site, they were instructed to proceed to the registration page and provide information that the company might need if it wanted to contact them. This registration page requested the subjects to provide

personal information and financial data: their name, address, city, state, zip code, e-mail, phone number, Italian social security number, credit card type, number and expiry date.

At this stage, the compensation manipulation was undertaken. There were, in fact, three different versions of the web site (randomly assigned), each reflecting one of the compensation conditions. In the “no compensation” condition, subjects were simply required to provide the data indicated above. In the “monetary compensation” condition, subjects were informed that after registration they would receive a coupon worth €20 to be used in one of the main retail chains selling electronic products in Italy. In the “non monetary compensation” condition, participants were informed that they would receive a €20 wireless headphone as a gift.

The personal information provided by each subject was registered and matched with the corresponding hardcopy questionnaire by means of the individual code required to enter the web site. Once the task had been completed, participants were asked to fill out a questionnaire with questions measuring the dependent variable willingness to provide information online, as well a third control variable, privacy concern.

Measures of the variables

Dependent Variables. We measured two dependent variables: willingness to provide information and behavioral information disclosure.

Willingness to provide information was measured as the average score on a multi-item question. Participants rated their willingness to provide 6 different types of personal data, using a seven-point scale (1 = no willingness, 7 = high willingness).

Behavioral information disclosure was measured as follow. First of all, we computed the quantity of information provided by subjects on the experimental web site as the

sum of the number of identifying information items (name, address, zip code, citizenship, phone number, e-mail address, SSN and credit card expiry date, type and number) provided. Hence, we firstly calculated a variable “N_provided”. As the provision of false or incomplete information is a relevant issue in on-line information disclosure [Sheehan and Hoy, 1999], we matched all the data provided with the questionnaire data, creating a dummy variable with a value of 1 for each data item if the provided information was true, and zero if it was false. We subsequently computed the sum of the true data items, and obtained the variable “N_matches”. Finally, the dependent variable “behavioral information disclosure” was computed as the mean between the two variables. The higher the mean, the higher the participant’s behavioral disclosure.

Covariates. In the questionnaire, we measured three variables that could act as covariates: privacy concern, attitude towards online shopping and attitude towards mobile phone services. These variables were measured using an eleven-item index with each item comprising a seven-point (1 = strongly disagree, 7 = strongly agree) scale. The items were factorized to create a single measure for each variable (Table 1).

Table 1 - Study 1 – Covariates’ scales Cronbach Alpha

<i>Variable</i>	<i>Alpha</i>
Privacy concern	0.868
Attitude towards online shopping	0.749
Commitment to mobile phone services	0.839

Trust. To undertake the manipulation check, trust was measured using a 7-point (1 = strongly disagree, 7 = strongly agree) multi-item scale that had been adapted from existing scales in the literature [Bart et al., 2005]. The items were factor analyzed to

create a single measure of trust, with high scores indicating a higher level of trust in the web site (Cronbach alpha = 0.949).

Manipulation check and assumptions

Tests were conducted to ensure that statistical assumptions associated with the analysis of variance (ANOVA) and the analysis of covariance (ANCOVA) had been met. Levene's test of equality of error variance was not rejected. In addition, tests were conducted to ensure there was no interaction effect between the covariate and any of the three other factors, which indicated that the assumption of the covariance regression coefficients' homogeneity had not been violated.

A one-way ANOVA was used to check the trust manipulation. Participants in the high trust condition group reported a higher level of trust than those in the low trust condition ($M_{\text{HIGH}} = 4.6971$, $M_{\text{LOW}} = 3.5449$; $F(1, 161) = 85.152$, $p = 0.000$).

Results

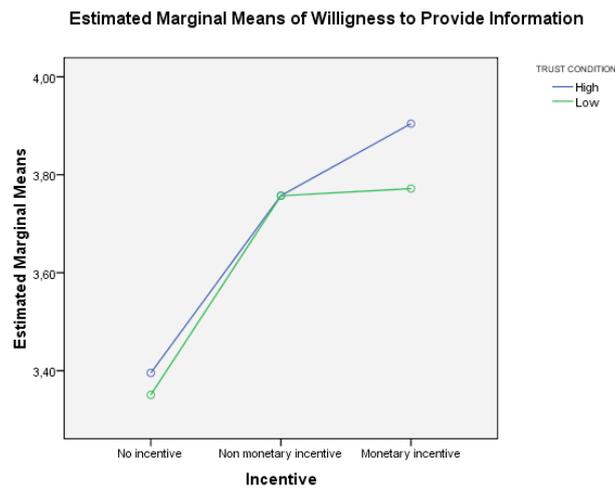
To test H_{1a} , H_{2a} and H_{3a} , we conducted a factorial analysis of covariance (ANCOVA), using trust and compensation as independent variables, and willingness to disclose information as the dependent variable. Attitude towards on-line shopping, commitment to mobile phone services and privacy concern were used as covariates. The only significant covariate that emerged was attitude towards on-line shopping; consequently, we re-ran the analysis with just that one covariate. The beta parameter was 0.312, implying a positive relationship between attitude towards on-line shopping and willingness to provide information (Table 2). These results thus show (Figure 1) that only the main effect of compensation is significant at 10% ($M_{\text{NO COMP.}} = 3.375$, $M_{\text{NON MONETARY COMP.}} = 3.7542$, $M_{\text{MONETARY COMP.}} = 3.8392$), thus confirming H_{2a} . The

main effect of trust and the interaction effect between trust and compensation are not significant, meaning that both H_{1a} and H_{3a} have been rejected.

Table 2 - Study 1 – GLM results for Willingness to Provide Information

Source	df	Mean Square	F-value	P-value
Trust (T)	1	0.131	0.095	0.758
Compensation (C)	2	3.428	2.487	0.086
Attitude towards online shopping	1	9.548	6.928	0.009
T*C	2	0.060	0.044	0.957
Error	154	1.378		

Figure 1 - Study 1 – Incentive main effect on Willingness to Provide Information



The same procedure was followed, using behavioral information disclosure as the dependent variable, to test our H_{1b} , H_{2b} and H_{3b} . In this case too, the only significant covariate was attitude towards on-line shopping. The beta parameter was then 0.423, implying a positive relationship, that was stronger than in the previous case, between attitude towards on-line shopping and behavioral information disclosure (Table 3).

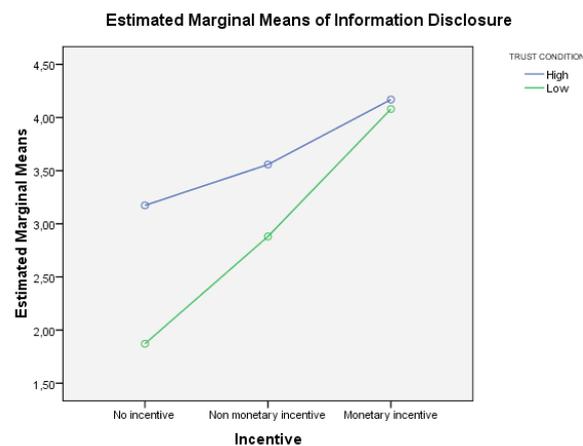
Table 3 - Study 1 – GLM results for Information Disclosure

Source	df	Mean Square	F-value	P-value
Trust (T)	1	18.318	8.706	0.004
Compensation (C)	2	36.451	17.324	0.000
Attitude towards online shopping *	1	18.276	8.686	0.004
T*C	2	5.185	2.464	0.088
Error	156	2.104		

* Attitude towards online shopping was used as a covariate.

These results show that if behavioral information disclosure is considered instead of willingness to provide information – as in the majority of previous studies – findings change, since the main effects of trust ($M_{\text{HIGH}} = 3.7284$, $M_{\text{LOW}} = 2.8537$) and compensation ($M_{\text{NO COMP.}} = 2.5089$, $M_{\text{NON MONETARY COMP.}} = 3.2$, $M_{\text{MONETARY COMP.}} = 4.1316$) are both significant at 5%, thus confirming our H_{1b} and H_{2b} . The interaction effect between trust and compensation is significant at 10%, as illustrated in Figure 2. However, H_{3b} is not confirmed as, contrary to the prediction, the incentive has a higher effect in the low trust condition than in the high trust condition.

Figure 2 - Study 1 – Interaction effect of Trust and Incentive on Behavioral Information Disclosure



Even though students are considered an appropriate target group in experimental research, our aim of conducting an empirical study as realistically as possible required us to conduct the same study using another target. The assumption behind this choice is twofold. First of all, since students are more familiar with and skilled in respect of IT than older people, they may show some differences in their on-line behavior. Secondly, since students often do not have an income, this could influence the effect of compensation, which emerged in Study 1.

We therefore replicated the study, using an older and more heterogeneous target group.

Study 2

Study 2 perfectly replicates Study 1, the only difference is that in this study, the 178 participants were not students, but working people – hence, with an income – aged between 35 and 64 years; 47.6% of these participants were female, while 52.4% were male (Table 4). Participants were in this case recruited by a marketing studies recruitments society with the aim of maximising the variance within the sample on the key demographics.

Table 4 - Study 2 - The number of participants in each experimental cell

		Compensation condition			Total
		No compensation	Monetary compensation	Non monetary compensation	
Trust condition	Low Trust	30	32	33	95
	High Trust	28	31	33	92
	Total	58	63	66	187

Table 5 - Study 2 – Scales Cronbach Alpha

Variable	Alpha
Privacy concern	0.903
Attitude towards online shopping	0.879
Commitment to mobile phone services	0.847
Trust	0.873

Again Levene’s test of error variance equality was not rejected and the assumption of the covariance regression coefficients’ homogeneity had not been violated.

A one-way ANOVA was used to check trust manipulation. Participants in the high trust condition group reported a higher level of trust than those in the low trust condition ($M_{HIGH} = 4.6046$, $M_{LOW} = 4.2237$; $F(1, 185) = 8.217$, $p = 0.005$).

Results

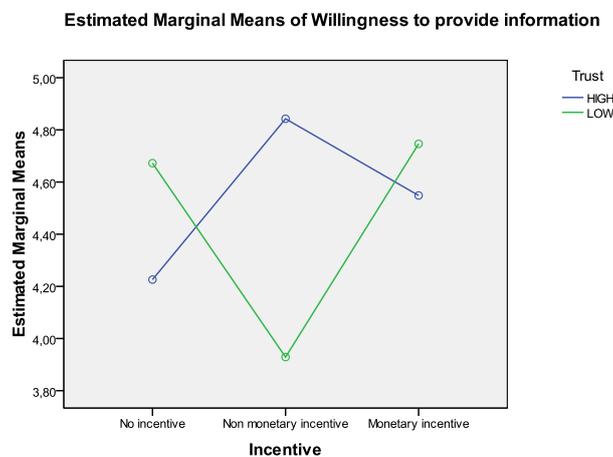
As in study 1, we conducted a factorial analysis of covariance (ANCOVA). All the covariates now emerged as significant. The beta parameter for privacy concerns was -0.245, while commitment to mobile phones was -0.284 and attitude towards on-line shopping was 0.371, implying that privacy concerns and commitment to mobile phone services had a negative effect, while attitude towards on-line shopping had a stronger, positive effect on willingness to provide information. Table 6 shows the results of the analysis. The main effects of trust and compensation are not significant, meaning that both H_{1a} and H_{2a} are rejected. Only the interaction effect of compensation and trust (Figure 3) is significant at 5%, but does not follow the predicted pattern, therefore H_{3a} is not confirmed

Table 6 - Study 2 – GLM results for Willingness to Provide Information

Source	df	Mean Square	F-value	P-value
Trust (T)	1	.370	.236	0.627
Compensation (C)	2	1.127	.719	0.489
Attitude towards online shopping *	1	25.257	16.6117	0.000
Commitment to mobile phones*	1	15.288	9.756	0.002
Privacy concern*	1	10.023	6.396	0.12
T*C	2	8.283	5.285	0.006
Error	178	1.567		

* Attitude towards online shopping, commitment to mobile phones and privacy concern were used as covariates.

Figure 3 - Study 2 –Interaction effect of Trust and Incentive on Willingness to Provide Information



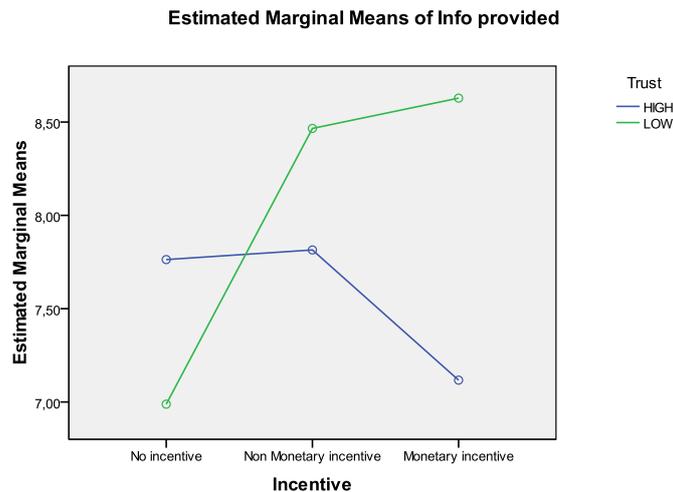
The same procedure was followed using behavioral information. None of the covariates was significant.

Table 7 - Study 2 – GLM results for Behavioral Information Disclosure

Source	df	Mean Square	F-value	P-value
Trust (T)	1	11.319	3.794	0.053
Compensation (C)	2	9.129	3.128	0.046
T*C	2	20.039	6.718	0.002
Error	181	2.983		

These results show that when behavioral information disclosure is taken into consideration, the main effect of trust ($M_{HIGH} = 7.56$, $M_{LOW} = 8.027$) is significant at 10%, but in the opposite direction than the prediction of H_{1b} , while the main effect of compensation ($M_{NO COMP.} = 7.376$, $M_{NON MONETARY COMP.} = 8.140$, $M_{MONETARY COMP.} = 7.873$) and the interaction effect are both significant at 5%. These results confirm our H_{2b} and H_{3b} and disconfirm H_{1b} . The interaction effect between trust and incentive is illustrated in Figure 4. Even though the interaction effect is significant at 5%, this once again does not confirm the hypothesized relationship.

Figure 4 - Study 2 – Interaction effect of Trust and Incentive on Behavioral Information Disclosure



Discussion

These results highlight an important methodological contribution of our paper: the measure of actual behavior. Indeed, the results related to willingness to provide

information (attitudinal measure) diverge from those based on the actual disclosure behavior (behavioral measure). This study therefore overcomes a major limitation of previous studies that were exclusively based on attitudinal dependent variables. What consumers claim or assert could, however, differ from what they actually do when facing a particular situation, implying some risk. The difference in the results obtained when testing H₁, H₂ and H₃ with attitudinal and behavioral data points this out clearly. Owing to this difference in the results, we concentrate our attention on the actual information disclosure when discussing the paper's theoretical contribution. Contrary to our expectations, compensation appears more useful for improving information disclosure in the low trust condition than in the high trust one (see Figures 2 and 4). This is consistent with Hui, Teo and Lee's [Hui et al., 2007] results according to which compensation can offset the lack of privacy assurance, implying a sort of "tradability" of privacy. Here, compensation seems to offset the lack of initial trust in information disclosure.

However the results do not mean that initial trust is useless. Indeed, when compensation is lacking, trust always allows a higher disclosure of information. This implies that creating trust could be a valuable approach, based on immaterial resources, through which firms can increase consumers' disclosure.

Finally, the difference in the results obtained with the two samples implies that consumers' characteristics could be a promising variable that affects various strategies' effectiveness regarding information disclosure and which should be considered in future theoretical developments.

The relevance of the target group is also a key element when discussing the managerial implications of the study. The differences in the results between the two studies suggest that firms should define their strategies according to the main target

that they address. If the target group comprises working people with an income, monetary incentives could be threatening for firms perceived as trustworthy at first sight, as it undermines the initial trust and lessens the tendency to information disclosure.

As with any empirical study, this one's limitations need to be recognized. A first group of limitations concerns certain simplifications that make the experimental study possible. In an effort to isolate the effect of the experimental manipulations, we kept the web sites relatively simple and free from the myriad of images and opportunities for interactivity that are commonly found in commercial web sites. Furthermore, the study participants did not actually shop in the web site. Future research should increase the generalizability of our findings by investigating information disclosure with respect to other product and service categories as well as using more complex commercial web sites to test consumers' behavior in an even more realistic purchasing situation.

A second group of limitations pertains to the variables that have been investigated in the study. Firstly, we focused on initial trust, which is a weaker, calculus-based form of trust [Lewicki and Bunker, 1996]. Trust is an ongoing, dynamic construct that evolves – strengthening or weakening – as the relationship between two parties evolves. Further studies should investigate the impact of trust at a further stage in consumers' development of a relationship with a firm on information disclosure, as well as its interaction with compensation.

Finally, given the experimental methodology, even if we used two different samples we have to take into account that the external validity of this study is low. Experiments indeed allow for the maximum internal validity, necessary to support the causal relationships among the key variables investigated in the study, but external

validity, that is the generalizability of these results has to be further investigated with research methodologies apt to this end.

Despite these limitations, the present study indicates new paths through which future research could increase our current knowledge about on-line strategies for e-service providers and which might prove beneficial for both marketing theory and practice.

Key References

- Ajzen, I. 1977. Information Processing Approaches to Interpersonal Attraction. In S.W. Duck (Ed.), *Theory and Practice in Interpersonal Attraction*. San Diego, CA: Academic Press., 51-77.
- Andrade, E.B.; Kaltcheva, V.D.; and B.A. Weitz. 2002. Self-disclosure on the web: the impact of privacy policy, reward, and company reputation. *Advances in Consumer Research*, 29: 350-353.
- Bart, Y.; Shankar, V.; Sultan, F. and G.L. Urban. 2005. Are the drivers and role of online trust the same for all web sites and consumers? A large-scale exploratory empirical study. *Journal of Marketing*, 69: 133-152.
- Berendt, B.; Gunther, O.; and Spiekermann, S. 2005. Privacy in ECommerce: stated preferences vs. actual behavior, *Communications of the ACM*, 48, no. 4: 101-106.
- Caudill, E. and Murphy, P. 2000. Consumer online privacy: legal and ethical issues, *Journal of Public Policy & Marketing*, 19, (Spring), 7–19.
- Cole, J.I. 2001. *Surveying the Digital Future: Year Two*. Los Angeles: UCLA Center for Communication Policy (available on <http://www.digitalcenter.org/pdf/InternetReportYearTwo.pdf>).
- Culnan, M.J. 1995. Consumer awareness of name removal procedures: implications for direct marketers, *Journal of Direct Marketing*, 9 (Spring), 10–19.
- Culnan, M.J. and Armstrong, P.K. 1999. Information privacy concerns, procedural fairness, and impersonal trust: an empirical investigation, *Organization Science*, 10, no. 1: 104–115.

- Deutskens, E.; De Ruyter, K.; Wetzels, M. and P. Oosterveld. 2004. Response rate and response quality of internet-based surveys: an experimental study. *Marketing Letters*, 15, no. 1: 21-36.
- Gefen, D. 2000. E-Commerce: the role of familiarity and trust. *The International Journal of Management Science*, 28, no. 6: 725-737.
- Goodwin, C. 1991. Privacy: recognition of a consumer right. *Journal of Public Policy & Marketing*, 10, no. 1: 149-166.
- Grabner-Krauter, S. 2002. The Role of Consumers' Trust in Online-Shopping. *Journal of Business Ethics*, 39: 43-50.
- Harper, J. and Singleton, S. *With a Grain of Salt: What Consumer Privacy Surveys Don't Tell Us*, Washington, DC: Competitive Enterprise Institute, June 2001.
- Hoffman, D.; Novak, T.P.; and M.A. Peralta. 1999. Building consumer trust online environment: the case for information privacy. *Communication of the ACM*, 42, no. 4: 80-85.
- Hui, K.L.; Teo, H. H.; and S.Y.T. Lee. 2007. The value of privacy assurance: an exploratory field experiment. *MIS Quarterly*, 31, no. 1: 19-33.
- Im, S.; Lee, D.H. Taylor, C.R.; and C. D'Orazio. 2008. The influence of consumer self-disclosure on web sites on advertising response. *Journal of Interactive Advertising*, 9, no. 1: 87-106.
- Jacobs, R.S; Hyman, M.R.; and S. McQuitty. 2001. Exchange-specific self-disclosure, social self-disclosure, and personal selling. *Journal of Marketing Theory and Practice*, 9, no. 1: 48-62.
- Jarvenpaa, S. L. and N. Tractinsky. 1999. Consumer trust in an internet store: a cross-cultural validation. *Journal of Computer Mediated Communication*, 5, no. 2.

- Johnson, E.J.; Bellman, S.; and Lohse, G.L. 2002. Defaults, framing and privacy: why opting in-opting out, *Marketing Letters*, 13, no. 1: 5-15.
- Jourard, S.M. 1971. *Self-Disclosure: An Experimental Analysis of the Transparent Self*. New York: Wiley.
- Koufaris, M. and W. Hampton-Sosa. 2004. The development of initial trust in an online company by new customers. *Information & Management*, 41: 377-397.
- Luhmann, N. 1989. Familiarity, Rely and Trust: Problems and Alternatives. In Diego Gambetta (Ed.) *Trust. Making and Breaking Cooperative Relations*, Oxford, Basil Blackwell, 123-140.
- McKnight, D.H.; Kacmar, C.J. and V. Choudhury. 2004. Dispositional trust and distrust distinctions in predicting high and low-risk internet expert advice site perceptions. *e-Service Journal*, 3, no. 2: 35-58.
- Milne, G.R. and M.E. Boza. 1999. Trust and concern in consumers' perceptions of marketing information management practices. *Journal of Interactive Marketing*, 13, no. 1: 5-24.
- Milne, G.R. and M.E. Gordon. 1993. Direct mail privacy-efficiency trade-offs within an implied social contract framework. *Journal of Public Policy & Marketing*, 12, no. 2, 206-215.
- Milne, G.R. and Rohm, A.J. 2000. Consumer privacy and name removal across direct marketing channels: exploring opt-in and opt-out alternatives. *Journal of Public Policy & Marketing*, 19 (Fall), 238-249.
- Miyazaki, A.D. and Fernandez A. 2000. Internet Privacy and Security: An Examination of Online Retailer Disclosures. *Journal of Public Policy & Marketing*, 19, (Spring), 54-61.

- Miyazaki, A.D. and Krishnamurthy, S. 2002. Internet seals of approval: effects on online privacy policies and consumer perceptions, *The Journal of Consumer Affairs*, 36, no. 1: 28-49.
- Moon, Y.M. 2000. Intimate exchange: using computers to elicit self disclosure from consumers. *Journal of Consumer Research*, 26: 323-339.
- Moon, Y.M. 2003. Don't blame the computer: when self-disclosure moderates the self-serving bias. *Journal of Consumer Psychology*, 13, no. 1&2: 125-137.
- Phelps, J.; Nowak, G.J.; and E. Ferrell. 2000. Privacy concerns and consumer willingness to provide personal information. *Journal of Public Policy and Marketing*, 19, no. 1: 27-41.
- Phelps, J.E.; D'Souza, G.; and Nowak, G.J. 2001. Antecedents and consequences of consumer privacy concerns: an empirical investigation, *Journal of Interactive Marketing*, 15, no. 4: 2-17.
- Premazzi, K., Castaldo, S, Grosso, M, , Raman, P., Brudvig, S.; and C.F. Hofacherk. 2010. Customer Information Sharing with E-Vendors: The Roles of Incentives and Trust. *International Journal of Electronic Commerce*, 14, no. 3: 63-91.
- Ramen, P.; Brudvig, S. and Hofacker, C.F. (2006), " To Give or Not to Give: Providing Personal Information to Online Firms," Paper Presented at the Direct Marketing Association Educators' Conference, San Francisco, CA, October 2006.

- Reibstein, D.J. 2002. What Attracts Customers to Online Stores, and What Keeps Them Coming Back?. *Journal of the Academy of Marketing Science*, 30, no. 4: 465-47.
- Rifon, N.J.; LaRose, R.; and S.M. Choi. 2005. Your privacy is sealed: effects of web privacy seals on trust and personal disclosures. *The Journal of Consumer Affairs*, 39, no. 2: 339-362.
- Schoenbachler, D.D. and Gordon, G.L. 2002. Trust and customer willingness to provide information in database-driven relationship marketing, *Journal of Interactive Marketing*, 16, no. 3: 2-16.
- Sheehan, K.B. 2005. Public Opinions of Online Privacy: Definitions, Assessment and Implications for Industry and Public Policy, In Sandeep Krishnamurthy (ed.), *Contemporary Research in E-Marketing*, Hershey, PA: Idea Group Publishing, 186-199.
- Sheehan, K.B. and M.G. Hoy. 1999. Flaming, Complaining, abstaining: how online users respond to privacy concerns. *Journal of Advertising*, 28, no. 3: 37-51.
- Sheehan, K.B. and M.G. Hoy. 2000. Dimensions of privacy concern among online consumers. *Journal of Public Policy & Marketing*, 19, no. 1: 62-73.
- Smith, H.J.; Milberg, S.J.; and S.J. Burke. 1996. Information privacy: measuring individuals' concerns about organizational practices. *MIS Quarterly*, 16: 167-196.
- Van den Poel, D. and J. Leunis. 1999. Consumer acceptance of the internet as a channel of distribution. *Journal of Business Research*, 45: 249-256.
- Wang, S., Beatty S.E. and W. Foxx. 2004. Signalling the trustworthiness of small online retailers. *Journal of Interactive Marketing*, 18, no. 1: 53-69.

White, T.B. 2004. Consumer disclosure avoidance: a motivational framework.

Journal of Consumer Psychology, 14, no. 1&2: 41-51.