

**The Impact of Social Shopping and Customization Support  
on Students' Intentions to Purchase Online Travel**

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**Abstract**

This paper investigates how e-Business can benefit from serving students with social decision and service customization support. We test whether the social richness of online shopping in pairs, connected by screen sharing technology, contributes to a greater intent to book vacation travel. Furthermore, we test the value of allowing for high customization. We conducted a controlled laboratory experiment and a field experiment with a total of 391 subjects. A Partial Least Squares analysis of Perceived Effectiveness, Perceived Enjoyment, Perceived Partner Quality, Opinion Seeker and Opinion Leader, combined to explain Intent to Purchase with high variance explained (61.6%). We found significant differences between high-customization and low-customization groups. The high-customization group had a lower intent to purchase, but with greater variance explained (73.7%). The low-customization group had greater intent to purchase, but with lesser variance explained (50.0%). The results shed light on the value proposition for offering social and customization support to students. Future research will extend the results to other populations, task domains and devices.

**Keywords:** Social decision support, customization support, student travel, intent to purchase

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**Introduction**

Generation Y Students (born between 1981 and 1990) are online up to three hours per day for entertainment, peer communication, shopping and entertainment (Interactive 2006). They tend to shop socially, relying on friends and family for advice and approval, more so than any other age group (Sirgy, Grewal and Mangleburg 2000; Johnstone and Conroy 2006).

Social decision support is one way to reach students. Customization support, a growing trend in electronic business (Pine 1993; Tu, Vonderembse, Ragu-Nathan and Ragu-Nathan 2004; Tu, Vondermebse and Ragu-Nathan 2004; Tu, Xie and K. Fung 2007), is another way. Generation Y Students are the most likely age group to customize products online, particularly automobiles, computer hardware, greeting cards, apparel and consumer electronics (Johnson and Hult 2007). Socially-based computing is a phenomenon which appears to have strong promise in online retailing (Tedeschi 2006).

This study examined the intersection of Social and Customization factors among Generation Y students. Our purpose is to address how social and customization factors

interplay to affect intention to purchase. The results of this study shed light on their online travel planning, and it provides guidance to web site designers incorporating various kinds of decision support into online travel planning applications. Future research will extend the results to other task domains and devices, e.g., the mobile telephone.

### **Literature Review**

Fundamentally, effort is the key factor in decision making (Davis 1989; Todd and Benbasat 1992; Benbasat and Todd 1996). Decision makers tend to adapt their strategy selection to the type of decision aids available in such a way as to reduce effort (Todd and Benbasat 1991). Spending extensive time and effort without converging upon an adequate choice can easily lead to uncertainty and abandonment of the search process. In a study of college students' online vacation travel planning, the more time that was used to search for an online vacation, the less the likelihood of achieving higher levels of satisfaction (Bai, Hu, Elsworth and Countryman 2005).

With socially well-connected individuals, such as Generation Y students, the converging to a desirable choice can be achieved simply by sufficient social validation. That is, if a small number of trusted friends validate the individual's tentative choice, it becomes acceptable. Travel planning in pairs can decrease the real and perceived search effort. In the case of student travel, customers' satisfaction derives from low effort as much as discounted price (Kim, Kim and Han 2007).

Students are particularly sensitive to peer pressure (Johnson and Hult 2007; Temkin, Popoff-Walker, Melnikova and Geller 2007; Temkin and Popoff-Walker 2007), since social validation is important to them (Lueg and Ponder 2006). They often spend time online for purely social reasons, e.g., through Facebook, for social, hedonic reasons. The social interaction enables the sharing of opinions, which can lead to a wide-ranging discussion of vacation ideas or a focused task, e.g. online travel planning. An online exchange of social influence is more like a social gathering or a pleasurable social experience for its own sake. In such cases, hedonic rather than utilitarian factors are prominent.

Given that students are often looking for pleasure, leisure and social validation, it could be presumed that, even when they turn to a goal-directed task, i.e., online travel planning, they prefer a fun, social way of doing it. That is, they do not immediately transform themselves into deal optimizing, comparison shoppers who search for the best possible bargain. They look for a reasonably good choice that is socially validated by trusted others (Gefen, Karahanna and Straub 2003; Pavlou 2003; Koufaris and Hampton-Sosa 2004).

Nevertheless, retailers need to be careful about how they present information to customers. When online travel agencies offer package deals to their customers, the deals have to be as customizable as possible so that they satisfy customers' individual needs (Beirne 2003; Mullaney 2004). Customization can reduce effort, which is fundamental, and increase enjoyability of the process, which adds additional hedonic value (Childers, Carr, Peck and Carson 2001). Customization is important and it helps the online shopper strongly in situations of moderate complexity (Kamis, Koufaris and Stern 2008).

In sum, social interaction with a trusted partner is an excellent way to minimize effort and maximize enjoyment. In addition, customization can provide additional value. In terms of relative magnitude, we believe that the social impact is larger than the customization impact.

### **Expected Findings and Research Model**

We expect that users' intention to purchase is linked to the effectiveness of the site's user interface, including the perceived social decision support with a partner. Social shoppers (the traveler and his or her helper) can use each other as a reality check, as validation, for making a travel vacation choice. Ex ante, we expected users who are more social, i.e., stronger opinion seekers or stronger opinion leaders, to have more positive perceptions of the utility and enjoyment of the user interface when social decision support is provided. Ex post, those who perceive their partner to be of strong quality should experience a positive influence from the social support on the effectiveness and enjoyment of the travel planning task. The intent to purchase, which is specifically the intention to book the vacation, should be influenced by both utilitarian and hedonic factors, i.e., the effectiveness and the enjoyment of the process.

The need to interact socially can be considered as either the need for a validating opinion, or the need to offer a validating opinion. *Opinion Seekers* are individuals who search out advice from others when making a purchase decision and *Opinion Leaders* are individuals who try to influence the purchasing behavior of other consumers in specific product fields (Flynn, Goldsmith and Eastman 1996). We consider these to be traits, independent of any task or situation. *Perceived Partner Quality* is an important mediating variable, defined as how helpful each person considers his or her partner after the task is complete.

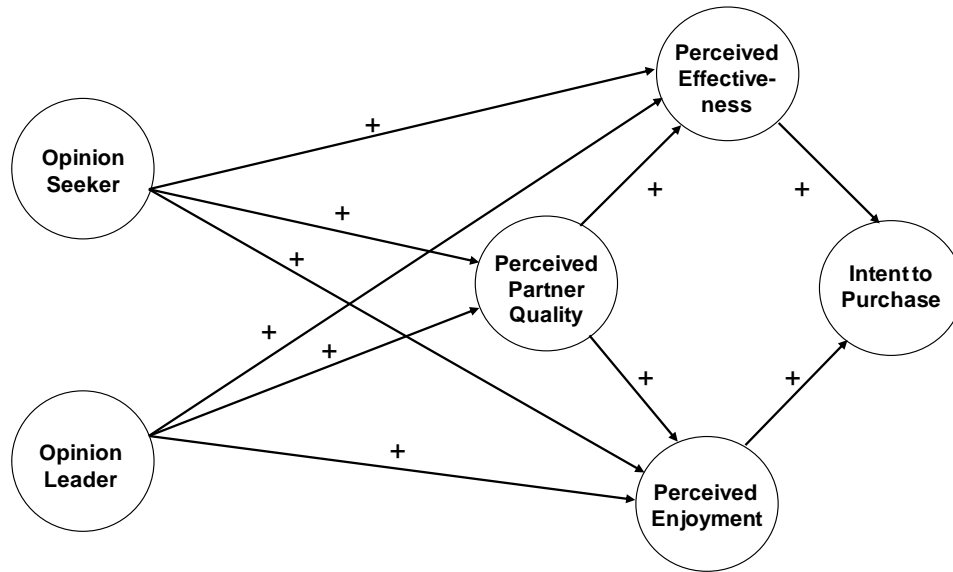
*Perceived Effectiveness* is defined as the extent to which an online shopper believes that using an information source would enable him or her to make more informed decisions when shopping online (Son, Kim and Riggins 2006). Depending on the task and the user, the activity may be screening or sorting (Tan 2003), structured as single or multiple stage (Kamis and Stohr 2006), fulfilling of utilitarian or hedonic needs (Koufaris 2002), or reinforcing of attitudes or beliefs (Song and Zahedi 2005).

*Perceived Enjoyment* is defined as "the extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use" (Venkatesh 2000). Enjoyment of the shopping process predicts intention to purchase (Kamis, Koufaris and Stern 2008). Shopping with a friend can improve the enjoyment of the process (Arnold and Reynolds 2003).

*Intention to Purchase* from a travel site is defined as the person's subjective assessment of his or her intention to execute a transaction. It may require significant levels of trust (Gefen, Karahanna and Straub 2003), a strong seller image (van der Heijden and Verhagen 2004), one or more returns to the web site or a perception of control and enjoyment of the process (Koufaris, Kambil and LaBarbera 2001-2002).

We argue that all of the influences in Figure 1 are positive, regardless of the support provided for customization of the travel plan.

Figure 1: Research Model, Independent of Customization Support Provided



**Research Design and Methods**

The units of analysis were pairs of students engaged in online travel planning. We started with students recruited from MIS and Marketing classes, in a controlled experiment (n=182). We added a field experiment with students recruited by MarketTool’s Zoomerang service from the United States outside our school’s region, in order to minimize overlap of populations (n=209). MarketTools is a top online survey company which fields anonymous surveys to large online panels of subjects who meet all the pre-qualification screening criteria. Our screening criteria were students, 18-27 years of age, who had a broadband Internet connection.

The task design was deliberately simple and open-ended. Subjects were told to plan the best vacation they could with a partner, given \$2000, and a specific travel site to use. Subjects were randomly assigned to either Low Customization (StudentCity.com) or High Customization (Expedia.com). StudentCity permitted students to choose a Spring Break vacation at a given resort from a given selection of vacation packages. Expedia permitted students to “build” their own vacation, choosing a completely customizable selection of vacation options. The subjects used livelook.net, a screen sharing utility, for communicating with their partner. The subjects were told that complete participation, from beginning to end, was required to qualify them to win a prize.

**Results**

Table 1 shows the descriptive statistics by treatment for 391 subjects.

**Table 1:** Descriptive Statistics by Treatment, Likert scale 1-7

	n	Opinion Seeker		Opinion Leader		Per. Partner Quality	
		mean	stdev	mean	stdev	mean	stdev
Low Customization	203	3.78	1.44	3.83	1.42	3.71	1.86
High Customization	188	3.65	1.45	3.52	1.49	3.53	1.94
difference		n.s.		p<0.05		n.s.	

	n	Per. Effectiveness		Per. Enjoyment		Intent to Purchase	
		mean	stdev	mean	stdev	mean	stdev
Low Customization	203	3.78	1.53	3.73	1.65	3.78	1.54
High Customization	188	3.36	1.68	3.31	1.57	3.35	1.64
difference		p<0.05		p<0.05		p<0.05	

The descriptive statistics show small differences in the five variables by treatment. The descriptive statistics are shown in Table 2, along with Convergent-Discriminant validity shown in Table 3.

**Table 2:** Survey Items, Descriptive Statistics and PLS Measurement Model (\*\*\*) = p < 0.001)

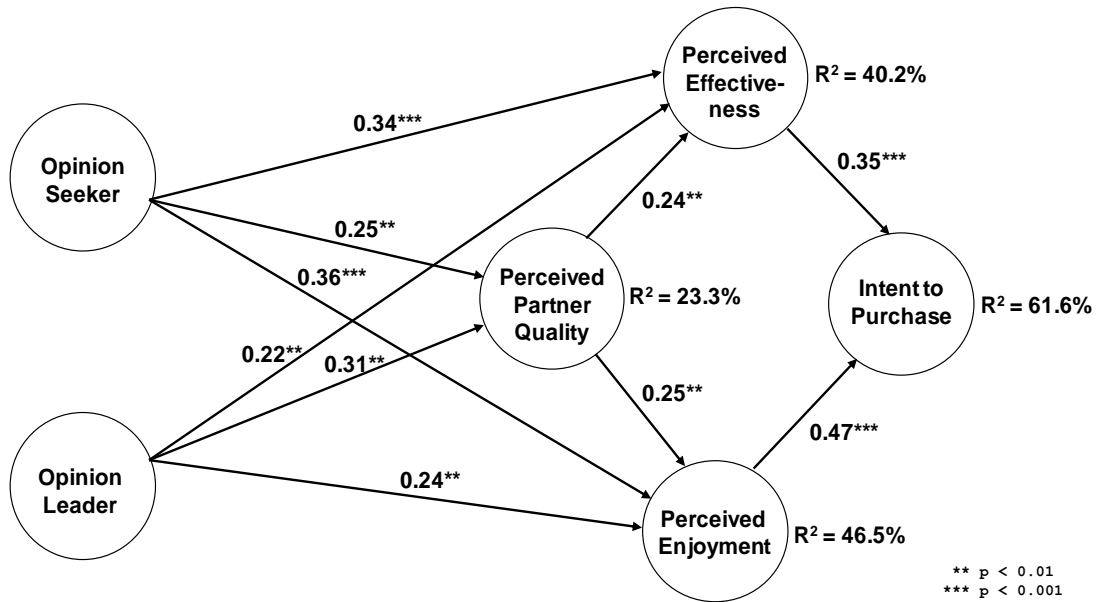
Construct	Cronbach Alpha	Composite Reliability	mean	stdev	PLS loading	t-stat	signif.
intentToPurch1	0.95	0.97	3.52	1.78	0.94	161.37	***
intentToPurch2			3.64	1.64	0.97	203.47	***
intentToPurch3			3.69	1.62	0.94	108.64	***
enjoyment1	0.97	0.98	3.47	1.69	0.97	239.57	***
enjoyment2			3.51	1.67	0.97	245.17	***
enjoyment3			3.61	1.66	0.96	207.20	***
effective1	0.96	0.98	3.58	1.65	0.96	191.82	***
effective2			3.58	1.71	0.97	257.96	***
effective3			3.56	1.66	0.97	235.60	***
opinionLeader1	0.95	0.97	3.70	1.57	0.92	101.27	***
opinionLeader2			3.66	1.56	0.94	99.31	***
opinionLeader3			3.70	1.56	0.92	71.16	***
opinionLeader4			3.66	1.55	0.95	149.48	***
opinionSeeker1	0.94	0.96	3.83	1.49	0.88	46.33	***
opinionSeeker2			3.66	1.60	0.94	101.85	***
opinionSeeker3			3.70	1.62	0.94	108.98	***
opinionSeeker4			3.68	1.53	0.94	116.93	***
partnerQuality	1.00	1.00	3.63	1.90	1.00	n/a	

**Table 3:** Convergent-Discriminant Validity

Average Variance Extracted	Opinion Seeker	Opinion Leader	Effectiveness	Enjoyment	Partner Quality	Intent to Purchase
Opinion Seeker	<b>0.86</b>					
Opinion Leader	0.52	<b>0.87</b>				
Effectiveness	0.55	0.50	<b>0.93</b>			
Enjoyment	0.59	0.54	0.83	<b>0.94</b>		
Partner Quality	0.41	0.43	0.47	0.50	<b>1.00</b>	
Intent to Purchase	0.44	0.49	0.74	0.76	0.45	<b>0.90</b>

Figure 2 shows the structural model in a partial least squares (PLS) analysis using PLS-Graph version 3.0 (build 1130) with bootstrapping resampling (Bagozzi 1979; Fornell and Larcker 1981; Bagozzi and Yi 1988; Chin 2000; Chin, Marcolin and Newsted 2003).

**Figure 2:** Overall Results

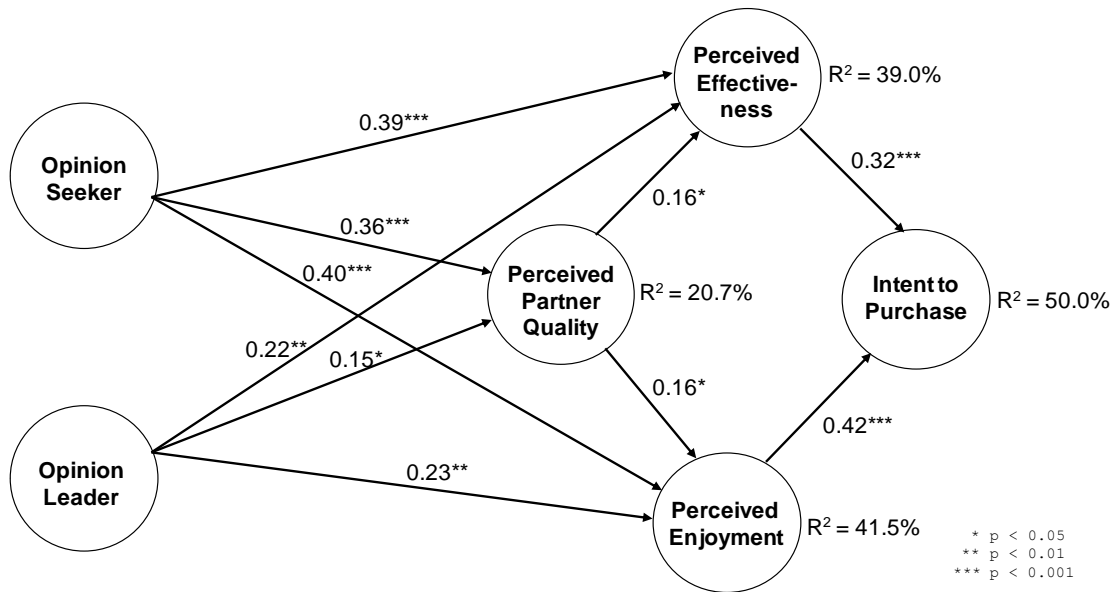


The numbers on each link are analogous to beta weights in a regression, showing the relative magnitude of influence. The graph shows that Perceived Effectiveness has its variance explained 40.2% by Opinion Seeker, Opinion Leader and Perceived Partner Quality. Variance explained is higher for Perceived Enjoyment (46.5%), influenced by the same antecedents. Variance explained is moderate for Perceived Partner Quality (23.3%), influenced by Opinion Seeker and Opinion Leader. Variance explained is quite high for

Intent to Purchase (61.6%), influenced strongly by Perceived Effectiveness and Perceived Enjoyment.

Overall, when the treatments are grouped together, we see high variance explained and that all of the expectations are supported. This means that regardless of user interface (high or low customization), we have a good explanatory model of Intent to Purchase in the context of online travel planning for vacations. Dividing the overall graph into the two separate graphs, one for low customization (StudentCity.com) and one for high customization (Expedia.com), we see differences.

**Figure 3:** Low Customization (StudentCity.com), n=203

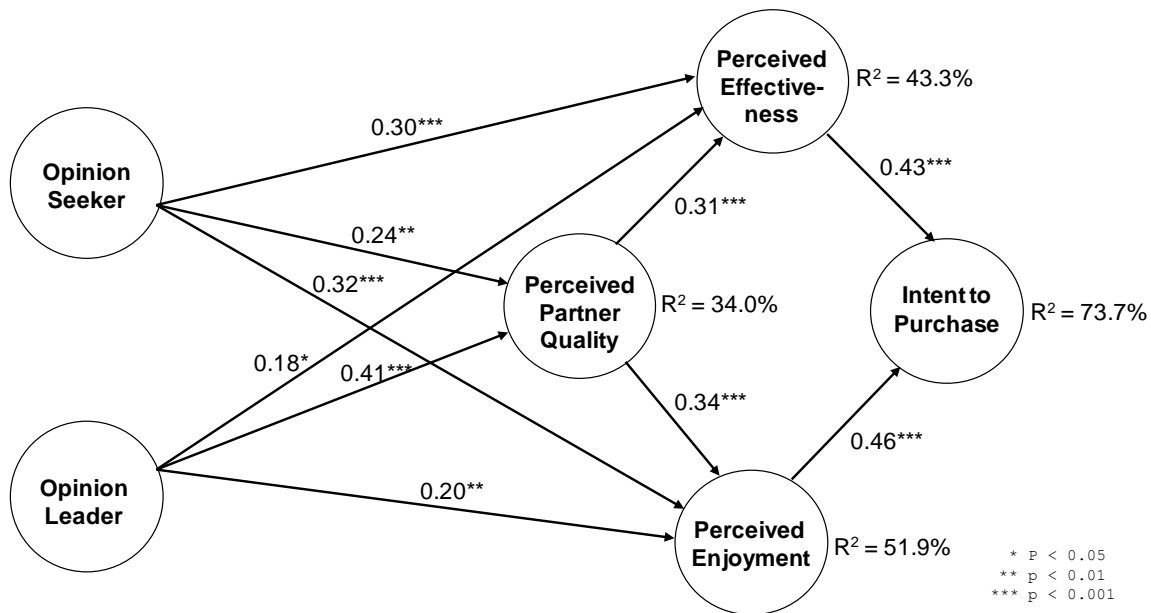


We see in Figure 3 that Opinion Seeker influences the mediating variables, Perceived Effectiveness, Perceived Partner Quality and Perceived Enjoyment, more strongly than does Opinion Leader. That suggests that opinion seekers need partners more than opinion leaders do, which makes sense. Someone could be both an opinion seeker and follower, however, in which case all those influences apply. Perceived Effectiveness, which is utilitarian, and Perceived Enjoyment, which is hedonic, strongly explain Intent to Purchase (R<sup>2</sup> = 50.0%). Recall that Intent to Purchase in this group was 3.78 / 7.0 (see Table 1).

We see in Figure 4 that the set of influences is similar yet stronger all around. Influence from Opinion Leader is as strong as influence from Opinion Seekers in the high customization travel group, and stronger than they were in the low customization travel group. Perceived Partner Quality has higher variance explained (34.0% vs. 20.7%).

Perceived Effectiveness is somewhat higher (43.3% vs. 39.0%), Perceived Enjoyment is higher (51.9% vs. 41.5%), and Intent to Purchase is substantially higher (73.7% vs. 50.0%) than in the low customization travel group. Recall, however, that Intent to Purchase in this group was lower than in the low customization travel group (3.35 / 7.0 vs. 3.78 / 7.0) (See Table 1).

Figure 4: High Customization (Expedia.com), n=188



### Conclusions

This paper makes a theoretical contribution to travel and tourism research by identifying the importance of combining easy to use co-browsing and communication between trusted users with product customization options in online travel planning. As the social dimension and the customizability dimensions largely explain students' intent to purchase online travel, we can support and influence both dimensions with careful design of the user interface and the social process. The two dimensions appear to influence vacation travel planning somewhat differently. We found significant differences between high-customization and low-customization groups. The high-customization group had a lower intent to purchase, but with greater variance explained. The low-customization group had greater intent to purchase, but with lesser variance explained. The results shed light on the value proposition for offering social and customization support to students planning a vacation.



## **Discussion and Future Directions**

This study focuses on the collaborative shopping experience of students planning a vacation. We are not claiming that social validation and peer influence are true only for students, but they are clearly a promising initial population. Students are early adopters of new technology, and highly sensitive to peer opinions. We encourage other researchers to test whether different age groups collaborate similarly or differently, and whether doing so is more a function of technology attitude or of social tendencies.

Our approach was appropriate to the context of students, because the quality of the collaborative online shopping experience involves a combination of inter-personal communication processes and real-time information technology support. The processes include co-browsing via screen sharing and verbal coordination via chat. Although conceptually complex, because it involves visual and auditory channels, they are distinct and separable, and both served well by existing technology.

We did not control or capture the communication process details in this study. Some subjects used cell phones; others chose Instant Messaging or Skype. Future studies could standardize the communication channel rather than let it vary. The key limitation of this study was that no data was collected from the primary user's chosen partner. In future studies, the chosen partner could be surveyed and the dialogue between the two partners could be captured and analyzed.

We recommend that researchers extend our results to other populations, task domains and mobile devices. For example higher cost travel products may entail a greater need or desire to provide social decision or customization support.

Future researchers should consider varying social group sizes, from pairs to larger groups/networks/communities of individuals. Larger groups introduce greater complexity of social dynamics, greater pooling of knowledge, but also greater chance of miscommunication.

We expect a cultural dimension to affect social shopping. Future research into travel planning by students should consider an examination of social shopping by students in other countries. There could very well be U.S.-based assumptions we are making about students, decision making, social dynamics, and customization desirability. Broadening our scope to other cultures would help determine whether those assumptions hold or vary across cultures.

## **Appendix: Survey Instruments**

### **Opinion Leading**

1. My opinion on vacation packages seems to count with other people.
2. When they choose a vacation package, other people do turn to me for advice.
3. Other people frequently come to me for advice about choosing a vacation package.
4. People that I know choose a vacation package based on what I have told them.
5. I often persuade others to buy the vacation package that I like.
6. I often influence peoples' opinions about vacation packages.

**Opinion Seeking**

1. When I consider buying a vacation package, I ask other people for advice.
2. I do like to talk to others before I buy a vacation package.
3. I frequently ask other people what vacation package to buy.
4. I like to get others' opinions before I buy a vacation package.
5. I feel more comfortable buying a vacation package when I have gotten other peoples' opinions on it.
6. When choosing a vacation package, other peoples' opinions are important to me.

**Perceived Partner Quality**

1. My shopping partner was the best person to help with this travel task.

**Perceived Enjoyment** (Venkatesh 2000)

1. The actual process of using this travel site is pleasant.
2. While using this travel site I found my web site visit interesting.
3. While using this travel site I found my web site visit enjoyable.
4. While using this travel site I found my web site visit fun.

**Perceived Effectiveness** (Son, Kim and Riggins 2006).

1. I believe that using this travel site is an effective way of vacation planning.
2. Using this travel site I can increase my vacation planning effectiveness (i.e., plan a good vacation).
3. Using this travel site I can increase my vacation planning efficiency (i.e., plan a good vacation using minimal time and effort)
4. Using this travel site improved the quality of my decision making in vacation packages.
5. Using this travel site gave me greater control over vacation packages.
6. Using this travel site enabled me to make a more informed decision in vacation planning.

**Intention to Purchase from the Online Store** (Yoo and Donthu 2001; Everard and Galletta 2005-2006)

1. If you needed to purchase a similar service in the future, how likely is it that you would return to this travel site?
2. If this vacation package were competitively priced, I would consider buying it from this travel site.
3. If this vacation package were significantly less expensive at this travel site than at a better-known online merchant, I would consider buying it from this travel site.
4. If I needed this vacation package in the near future I would consider purchasing it from this travel site.

5. If I needed this vacation package in the near future I would purchase it from this travel site.
6. If I needed this vacation package in the near future I would expect to buy it from this travel site.

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