Appendix A - Instrument and Measurement Properties

			Mean	(std dev)	Std Loading
Usage Intentions					
Intention					
	INTENT1	I would consider using the site for future travel arrangements	4.78	(1.67)	0.94
	INTENT2	I have no desire to buy from the website [R]	4.48	(1.71)	0.67
	INTENT3	I would prefer using the site over available alternative travel sites	3.81	(1.53)	0.77
Beliefs about using the technology (behavioral beliefs)					
Perceived Usefulness					
	PU1	Using the site enabled me to investigate travel arrangements more quickly	5.02	(1.55)	0.88
	PU2	In my opinion, using the site increased my effectiveness in researching travel arrangements	4.93	(1.58)	0.90
	PU3	Overall, the travel site was useful in researching travel arrangements	5.26	(1.41)	0.95
Perceived Ease of Use					
	PEU1	I believe that the site was difficult to use [R]	5.12	(1.70)	0.73
	PEU2	It was easy to get the site to do what I wanted it to do	4.94	(1.75)	0.84
	PEU3	Learning to use the site was easy for me	5.77	(1.34)	0.74
Beliefs about the technology as an object (object-based beliefs)					
Information Quality Beliefs *(Inhibitor beliefs are bolded)*					
Information overload (inhibitor)					
	OVERLO1	The website provided too much information	2.56	(1.34)	0.80
	OVERLO2	The site was so comprehensive it was hard to find what I wanted	2.61	(1.40)	0.85
	OVERLO3	The amount of information provided by the site was overwhelming	2.52	(1.42)	0.91
Irrelevant requests for information (inhibitor)					
	IRREL1	The site requested personal information not directly relevant to the transaction	2.25	(1.38)	0.90
	IRREL2	The site requested information that I thought was irrelevant	2.26	(1.32)	0.87
	IRREL3	The site asked for information without good reason	2.20	(1.29)	0.88
Deceptiveness (inhibitor)					
	DECEPT1	Misleading	1.89	(1.33)	0.86
	*DECEPT2**	*Truthful [R]*	2.77	(1.46)	0.59
	DECEPT3	Deceptive	1.98	(1.33)	0.88
	*DECEPT4**	*Factual [R]*	2.73	(1.54)	0.60
	DECEPT5	Distorted	2.05	(1.38)	0.86
Format					
	FORMAT1	The information was well formatted.	5.09	(1.47)	0.95
	FORMAT2	The information was well laid out.	5.10	(1.46)	0.97
	FORMAT3	The information was clearly presented on the screen.	5.21	(1.41)	0.86
	*FORMAT4**	*The site was cluttered and confusing. [R]*	4.94	(1.67)	0.61
Currency					
	CURR1	The site provided me with the most recent information.	5.24	(1.18)	0.97
	CURR2	It produced the most current information.	5.23	(1.17)	0.97
	CURR3	The information from the website appeared to be up to date.	5.58	(1.08)	0.81
Relevance					
	RELEV1	The information provided by the site was relevant to my needs	5.70	(1.14)	0.95
	RELEV2	The site gave me information applicable to what I was looking for	5.70	(1.17)	0.94
Accuracy					
	ACCUR1	The information provided by the website was accurate	5.18	(1.24)	0.96
	ACCUR2	It produced correct information	5.16	(1.25)	0.93
	*ACCUR3**	*There were few errors in the information that I obtained from the site*	4.63	(1.65)	0.19
Completeness					
	COMPLET1	The site provided me with a complete set of information.	5.16	(1.49)	0.92
	COMPLET2	It produced comprehensive information.	5.18	(1.45)	0.92
	COMPLET3	It provided me with all the information that I needed.	4.94	(1.71)	0.90
Information Quality (Global measure for model testing)					
	IQ1	I think the quality of the information provided by the website was...(very bad - very good)	5.41	(1.29)	0.82
	IQ2	The website provided me with quality information on itinerary schedule and price.	5.39	(1.20)	0.85
	IQ3	The website provided me with high-quality information.	5.32	(1.51)	0.85

Continued on next page

			Mean	(std dev)	Std Loading
Beliefs about the technology as an object (object-based beliefs)					
System Quality Beliefs *(Inhibitor beliefs are bolded)*					
Intrusiveness (inhibitor)					
	INTRUS1	I felt that the site was interrupting me as I was investigating travel arrangements.	2.09	(1.25)	0.82
	INTRUS2	The site disrupted my task at hand	2.17	(1.30)	0.92
	*INTRUS3**	*The travel site made changes to my system without my permission*	1.87	(1.09)	0.50
	INTRUS4	I found the site intrusive	1.84	(1.00)	0.61
Process uncertainty (inhibitor)					
	UNCERT1	The site left me uncertain that it processed my request.	2.71	(1.54)	0.82
	UNCERT2	When I used the site, it wasn't clear as to what was going on, there was no indication whether my request was completed	2.58	(1.49)	0.98
	UNCERT3	The site didn't provide confirmation of a process request that I made	2.59	(1.40)	0.88
Effort redundancy (inhibitor)					
	REDUN1	The site lost data I had provided earlier forcing me to redo steps I've already performed.	3.34	(2.15)	0.96
	*REDUN2**	*The site kept a record of my previous entries making minor adjustments easy to perform [R]*	3.49	(1.84)	0.61
	REDUN3	The site forced me to re-enter information I had already provided.	3.51	(2.08)	0.84
Reliability					
	RELIAB1	The site operated reliably	5.52	(1.25)	0.95
	RELIAB2	The operation of the travel website was dependable	5.49	(1.26)	0.96
	RELIAB3	The site performed reliably	5.49	(1.32)	0.97
Accessibility					
	ACCESS1	The site allowed information to be readily accessible to me	5.30	(1.38)	0.93
	ACCESS2	It made information easy to obtain.	5.22	(1.48)	0.96
	ACCESS3	Information was very accessible from the site	5.25	(1.47)	0.99
Navigation					
	NAV1	It was easy to go back and forth between pages within the website	4.95	(1.75)	0.77
	NAV2	I could locate information with a few clicks	5.41	(1.43)	0.87
	NAV3	I got lost in this website [R]	5.76	(1.41)	0.69
	NAV4	In general, the site was easy to navigate	5.36	(1.45)	0.93
Timeliness					
	*TIMELY1**	*The site was responsive to my requests*	5.33	(1.36)	0.70
	TIMELY2	It quickly loaded text and graphics	5.18	(1.53)	0.81
	TIMELY3	It took too long to respond to my requests [R]	4.97	(1.70)	0.81
	TIMELY4	It provided information in a timely fashion	5.14	(1.42)	0.92
Flexibility					
	FLEX1	The site adapted to meet a variety of my needs	4.90	(1.48)	0.91
	FLEX2	It flexibly adjusted to my new demands	4.82	(1.53)	0.92
	FLEX3	It was versatile in addressing my needs as they arose	4.80	(1.50)	0.93
System Quality (Global measure for model testing)					
	SQ1	I think the quality of the website itself was…(very bad - very good)	5.16	(1.45)	0.90
	SQ2	Overall, the website was of high quality.	5.07	(1.59)	0.93
	SQ3	I would give the quality of the website a high rating.	4.98	(1.67)	0.91

* *Item dropped from final analysis*

[R] - Reverse coded item. Statistics are based upon the transpose of the original scale.

Scale notes: with the exception of *deceptiveness,* all scales use the anchors 1-Strongly disagree, 7-Strongly agree. Deceptiveness uses the anchors 1-Not at all, 7-Very much so.

Appendix B – Exploratory Factor Analysis

Component:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
ACCESS1	0.53																	
ACCESS2	0.59																	
ACCESS3	0.61																	
OVERLO1		0.90																
OVERLO2		0.82																
OVERLO3		0.94																
NAV3		-0.41															0.40	
CURR1			0.92															
CURR2			0.90															
CURR3			0.78															
ACCUR1			0.41			-0.33												
ACCUR2			0.44			-0.31												
REDUN1				0.84														
REDUN2				0.92														
REDUN3				0.69														
IRREL1					0.93													
IRREL2					0.91													
IRREL3					0.88													
DECEPT1						0.79												
DECEPT3						0.84												
DECEPT5						0.81												
TIMELY2							0.82											
TIMELY3							0.90											
TIMELY4							0.81											
INTRUS1								0.75										
INTRUS2								0.66										
INTRUS3								0.55							-0.38			
INTRUS4								0.62										
UNCERT1									0.85									
UNCERT2									0.91									
UNCERT3									0.93									
RELEV1										0.87								
RELEV2										0.87								
RELIAB1											0.86							
RELIAB2											0.86							
RELIAB3											0.86							
DECEPT4												0.93						
DECEPT2												0.91						
FORMAT1													0.73					
FORMAT2													0.74					
FORMAT3													0.76					
FORMAT4													0.47					
ACCUR3														0.99				
COMPLET1															0.57			
COMPLET2															0.47			
COMPLET3															0.53			
FLEX2																0.84		
FLEX3																0.74		
FLEX1																0.73		
TIMELY1																0.49		
NAV4																	0.48	
NAV2																	0.47	
NAV1																	0.47	
PEU1																	0.37	0.32
PEU2																		0.40
PEU3																	0.40	0.31
PU1																		0.70
PU2																		0.69
PU3																		0.62

- All loadings < 0.30 are suppressed
- Usage inhibitor items are bolded.

Appendix C - Field Study Scenario

University of of British Columbia e-Business Research Study

Scenario

You've just moved to Seattle, Washington to take a new job. Your best friend Pat, who lives in Indianapolis, Indiana, wants to come visit you for a few days. Pat doesn't use the Internet and, strangely enough, there are no travel agents within the city. Pat has asked if you could help out with the travel arrangements. After all, what are best friends for? So you sit down at the computer to see what you can do. You just saw an advertisement for *[RANDOMLY ASSIGNED SITE LINK]* and decide to see what they have to offer. Over the phone, Pat tells you about all the details…

Price is important. Pat has a maximum budget of $800 for the entire trip. Pat's job will only allow a flight departure on or after April 3, 2004 and a return on or before April 9, 2004. Pat can't sleep on planes so a "red eye" (overnight flight) is out of the question. Also, Pat doesn't want to leave too early in the morning and prefers departures between 10:00 AM and 2:00 PM. You will also need to find Pat a hotel room. Anywhere in downtown Seattle is fine. Although cost is a concern, Pat won't stay at any hotel that offers a room for less than $75 per night (inclusive of sales tax).

Pat knows how much work this is for you and offers the following incentive scheme (Pat is a good but eccentric friend):

- For every $ 1you save in the $800 budget, you get 1 point. You lose a point for every dollar you go over the $800 budget.
- You get 50 points if the flight (either from Indianapolis or Seattle) departs between 10:00 AM and 2:00 PM. If both departures are within those times, you earn 100 points.
- You get 100 points for every day Pat is in Seattle.

We'll rank order everyone who participates by the point values earned above. The top scorers will get added prizes from $ 10 to $ 50 according to the following table. At least 1 in 3 people will get anywhere from $ 10 to $ 50 in addition to the guaranteed $ 10 participation prize!

- The top 3% of the highest point-earning participants receive **$50**
- The next 11% receive **$30**
- The second 11% receive **$20**
- The third 11% receive **$10***

Here's the link to the travel site once again *[RANDOMLY ASSIGNED SITE LINK]* (this will launch in a new browser window). When using the travel website, keep these guidelines in mind:

1. You may be required to register with the site to proceed.
2. You are **not** expected to make an actual flight reservation and/or purchase. You are only using the website to find out the best itinerary.
3. To ensure you do not actually make a purchase, **do NOT at any time provide the website with your credit card information.**
4. You can *only* use the *assigned* travel site to make the arrangements. If you have any questions at all, contact [Author's Name] at [Author's Email]

Return to this page when complete and don't forget to keep a record of your itinerary information for later. Once you've completed researching the best possible travel arrangements...

click here to continue

*Point ties to be decided by random draw

Appendix D – Latent Construct Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 Adoption Intention	**0.80**																		
2 Perceived Usefulness	0.75	**0.91**																	
3 Perceived Ease of Use	0.63	0.81	**0.77**																
4 Information overload	-0.18	-0.22	-0.44	**0.85**															
5 Irrelevant requests for information	-0.24	-0.31	-0.33	0.34	**0.88**														
6 Deceptiveness	-0.47	-0.54	-0.58	0.31	0.31	**0.87**													
7 Format	0.55	0.63	0.66	-0.40	-0.34	-0.53	**0.93**												
8 Currency	0.42	0.41	0.44	-0.15	-0.33	-0.45	0.50	**0.92**											
9 Relevance	0.51	0.70	0.60	-0.10	-0.27	-0.49	0.46	0.45	**0.95**										
10 Accuracy	0.41	0.53	0.58	-0.17	-0.23	-0.64	0.46	0.67	0.59	**0.95**									
11 Completeness	0.56	0.70	0.61	-0.15	-0.32	-0.56	0.60	0.52	0.69	0.66	**0.91**								
12 Intrusiveness	-0.35	-0.46	-0.51	0.28	0.33	0.49	-0.51	-0.27	-0.37	-0.29	-0.33	**0.79**							
13 Process uncertainty	-0.34	-0.42	-0.47	0.28	0.43	0.44	-0.42	-0.31	-0.41	-0.40	-0.39	0.44	**0.90**						
14 Effort redundancy	-0.29	-0.32	-0.40	0.15	0.26	0.28	-0.28	-0.26	-0.22	-0.31	-0.29	0.47	0.35	**0.82**					
15 Reliability	0.49	0.56	0.63	-0.21	-0.26	-0.55	0.44	0.43	0.49	0.53	0.56	-0.54	-0.44	-0.42	**0.96**				
16 Accessibility	0.59	0.69	0.78	-0.32	-0.34	-0.60	0.64	0.50	0.59	0.56	0.74	-0.44	-0.46	-0.28	0.60	**0.96**			
17 Navigation	0.57	0.67	0.86	-0.48	-0.34	-0.52	0.70	0.44	0.52	0.52	0.58	-0.56	-0.44	-0.47	0.62	0.74	**0.82**		
18 Timeliness	0.48	0.54	0.57	-0.30	-0.22	-0.40	0.44	0.32	0.47	0.36	0.48	-0.41	-0.33	-0.26	0.59	0.52	0.62	**0.85**	
19 Flexibility	0.60	0.73	0.66	-0.15	-0.26	-0.49	0.58	0.52	0.64	0.60	0.72	-0.42	-0.41	-0.42	0.60	0.71	0.69	0.54	**0.92**

The square root of Average variance extracted (AVE) is shown in the diagonal and bolded. All correlations are significant at $p < 0.05$.

APPENDIX E - Confidence Intervals for Latent Construct Bivariate Correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 Adoption Intention																			
2 Perceived Usefulness	(0.83,0.91)																		
3 Perceived Ease of Use	(0.70,0.82)	(0.75,0.87)																	
4 Information overload	(-0.30,-0.10)	(-0.32,-0.12)	(-0.54,-0.34)																
5 Irrelevant requests for information	(-0.39,-0.19)	(-0.41,-0.21)	(-0.43,-0.23)	(0.24,0.44)															
6 Deceptiveness	(-0.61,-0.45)	(-0.62,-0.46)	(-0.66,-0.5)	(0.21,0.41)	(0.21,0.41)														
7 Format	(0.51,0.67)	(0.57,0.69)	(0.58,0.74)	(-0.49,-0.29)	(-0.44,-0.24)	(-0.61,-0.45)													
8 Currency	(0.34,0.54)	(0.33,0.49)	(0.34,0.54)	(-0.25,-0.05)	(-0.43,-0.23)	(-0.53,-0.37)	(0.42,0.58)												
9 Relevance	(0.52,0.68)	(0.64,0.76)	(0.53,0.69)	(-0.2,0)	(-0.37,-0.17)	(-0.57,-0.41)	(0.38,0.54)	(0.37,0.53)											
10 Accuracy	(0.48,0.64)	(0.45,0.61)	(0.5,0.66)	(-0.27,-0.07)	(-0.33,-0.13)	(-0.7,-0.58)	(0.38,0.54)	(0.61,0.73)	(0.51,0.67)										
11 Completeness	(0.55,0.71)	(0.64,0.76)	(0.53,0.69)	(-0.25,-0.05)	(-0.42,-0.22)	(-0.64,-0.48)	(0.52,0.68)	(0.44,0.6)	(0.63,0.75)	(0.60,0.72)									
12 Intrusiveness	(-0.52,-0.32)	(-0.54,-0.38)	(-0.61,-0.41)	(0.18,0.38)	(0.23,0.43)	(0.41,0.57)	(-0.58,-0.42)	(-0.37,-0.17)	(-0.47,-0.27)	(-0.39,-0.19)	(-0.43,-0.23)								
13 Process uncertainty	(-0.49,-0.29)	(-0.53,-0.33)	(-0.58,-0.38)	(0.18,0.38)	(0.33,0.53)	(0.34,0.54)	(-0.52,-0.32)	(-0.41,-0.21)	(-0.51,-0.31)	(-0.5,-0.3)	(-0.49,-0.29)	(0.34,0.54)							
14 Effort redundancy	(-0.43,-0.23)	(-0.42,-0.22)	(-0.5,-0.3)	(0.05,0.25)	(0.16,0.36)	(0.18,0.38)	(-0.38,-0.18)	(-0.36,-0.16)	(-0.32,-0.12)	(-0.41,-0.21)	(-0.39,-0.19)	(0.37,0.57)	(0.25,0.45)						
15 Reliability	(0.46,0.62)	(0.48,0.64)	(0.55,0.71)	(-0.31,-0.11)	(-0.36,-0.16)	(-0.63,-0.47)	(0.37,0.53)	(0.35,0.51)	(0.41,0.57)	(0.45,0.61)	(0.48,0.64)	(-0.62,-0.46)	(-0.52,-0.36)	(-0.50,-0.34)					
16 Accessibility	(0.59,0.71)	(0.63,0.75)	(0.72,0.84)	(-0.42,-0.22)	(-0.44,-0.24)	(-0.68,-0.52)	(0.58,0.7)	(0.42,0.58)	(0.53,0.65)	(0.48,0.64)	(0.68,0.8)	(-0.52,-0.36)	(-0.54,-0.38)	(-0.38,-0.18)	(0.54,0.66)				
17 Navigation	(0.57,0.73)	(0.61,0.73)	(0.82,0.9)	(-0.56,-0.4)	(-0.44,-0.24)	(-0.6,-0.44)	(0.64,0.76)	(0.36,0.52)	(0.44,0.6)	(0.43,0.59)	(0.50,0.66)	(-0.64,-0.48)	(-0.54,-0.34)	(-0.54,-0.38)	(0.56,0.68)	(0.68,0.80)			
18 Timeliness	(0.45,0.61)	(0.5,0.66)	(0.53,0.69)	(-0.4,-0.2)	(-0.33,-0.13)	(-0.54,-0.34)	(0.39,0.55)	(0.26,0.46)	(0.44,0.6)	(0.31,0.51)	(0.45,0.61)	(-0.53,-0.33)	(-0.46,-0.26)	(-0.39,-0.19)	(0.57,0.69)	(0.49,0.65)	(0.6,0.72)		
19 Flexibility	(0.62,0.74)	(0.67,0.79)	(0.58,0.74)	(-0.25,-0.05)	(-0.36,-0.16)	(-0.57,-0.41)	(0.5,0.66)	(0.44,0.60)	(0.58,0.70)	(0.52,0.68)	(0.66,0.78)	(-0.52,-0.32)	(-0.51,-0.31)	(-0.52,-0.32)	(0.54,0.66)	(0.65,0.77)	(0.63,0.75)	(0.52,0.68)	

APPENDIX F: Hierarchical Cluster Analysis

We used Hierarchical Cluster Analysis (HCA, Arabie and Hubert 1994) to find candidate inhibitors from the textual unit categorization. HCA is a data reduction technique analogous to exploratory factor analysis. Factor analysis seeks to find the common variance among differing items and that common variance is presumed to be the result of an underlying latent construct. In the case of HCA, clusters of similar units represent an underlying latent construct and we are seeking common variance among the multiple judges who categorized the units. If two textual units are similar, and tap a common construct, than it is likely a judge will categorize these two units together. Furthermore, the more judges that do so, the more assurance there is that the two units are indeed similar.

Before conducting the HCA, we first created a similarity matrix for each usage context (PDA, email, and website). The matrix consists of pairwise comparisons of all textual units. If a judge places two textual units together into the same category, they are judging those units as being similar. The similarity matrix assesses how each judge matched all possible textual unit pairs. The value of a cell in the matrix is binary where a "1" indicates that the judge considered the two units to be similar; otherwise it is "0". The effectiveness of this pairwise comparison is magnified when the similarity matrices are aggregated *across* judges. If *all* of the judges were to group two particular units together, that provides stronger support that those two units share or represent some common meaning. For the aggregated matrix, a "0" supports there is no similarity between a pair of textual units. Increasing values in a single cell provides greater support for similarity (e.g., more judges agree the two units belong together). For example, if 10 judges were involved in a categorization, then a cell value of 8, 9 or 10 (maximum) would indicate stronger support for similarity of the pair of items.[11] Again using factor analysis as an analogy, a similarity matrix is similar to a correlation matrix in that higher values in a cell imply a greater relationship between two units.

We then analyzed the three similarity matrices using HCA as enabled through SPSS. In any cluster analysis, cluster size can vary from one (e.g., the same number of clusters as the number of units) to the total number of units (e.g., one single cluster). As a result, we had to determine the optimal number of clusters and cluster size. The optimal number of clusters is a balance between two competing objectives. On one hand is the objective of parsimony that comes from having a few clusters with a relatively larger number of units in each cluster. On the other hand is the objective that the units within a cluster are as similar as possible to one another, but this comes at the expense of having a greater number of clusters. A means of finding this optimal balance is to apply the agglomerative clustering procedure (Arabie et al. 2001). This procedure involves progressively forming clusters from individual units with the most similarity. At each stage of cluster formation, an agglomeration (fusion) coefficient is calculated. This coefficient is an aggregate measure of dissimilarity between the clusters formed. This coefficient increases monotonically with cluster formation and it is possible to plot the coefficient values against the number of clusters. Such a plot resembles a scree plot used in factor analysis and - as in factor analysis - a sharp increase in the coefficient (the "elbow") can be used to identify the optimal number of clusters. Based on this criterion, we found nine clusters for the e-business context, five clusters for the PDA context, and five clusters for the email context.

[11] The three usage contexts and two types of judges (student or population-at-large) resulted in six aggregated similarity matrices. A chi-squared test supported that there were no significant differences in the similarity matrices between the two types of judges. This allowed us to consolidate the results into three matrices, one for each usage context.

APPENDIX G: Post Hoc Investigation of Inhibitor Asymmetric Effects

We investigated the possibility of inhibitors having asymmetric effects on usage intentions by having an effect when present, but little or no effect when absent (Bhattacherjee and Hikmet 2007; Bhattacherjee and Hikmet 2008; Cenfetelli 2004). We again used multilevel modeling with HLM. In testing the research model, the β_{xj} coefficients were fixed and not allowed to vary between groups. The β coefficients reported in Table 7 (level 1 models 1a-d) describe the strength of the relationship between the independent and dependent variables across all websites. In other words, the strength of the relationship as measured by β did not vary between websites. However, we can allow this β to vary by making it a function of a level 2 variable. The β then itself becomes a variable.[12] We conducted a simple analysis by analyzing only the effects of inhibitors on usage intentions and so neglecting the effects of enablers and control variables:

$$\text{INTENTION}_{ij} = \beta_{0j} + \beta_{1j}\ \text{INHIBITOR}_{ij}$$

$$\beta_{0j} = \gamma_{00} + \mu_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}\ \text{INHIBITOR}_{j} + \mu_{1j}$$

These equations describe that an inhibitor has an effect on intentions, and the strength of that effect (β_{1j}) is a function of the mean level of the inhibitor for the given website. Our supposition is that as websites become increasingly "worse" in terms of having higher mean inhibitor values, the effect of an inhibitor on an individual's intentions to use the website will intensify. The following table summarizes the results of our analyses.

Multilevel Examination of the Asymmetric Effects of Inhibitors

Inhibitor	β_1 *Mean* slope value across all websites	γ_{11} Moderation effect of website inhibitor level
Intrusiveness	**-0.30** ($p<0.001$)	**-0.15** ($p<0.05$)
Process Uncertainty	**-0.21** ($p<0.001$)	*-0.04 ($p>0.5$)*
Effort Redundancy	**-0.21** ($p<0.001$)	**-0.13** ($p<0.05$)
Irrelevant requests for information	**-0.16** ($p<0.001$)	*-0.03 ($p>0.5$)*
Information overload	**-0.22** ($p<0.001$)	**-0.11** ($p<0.05$)
Deceptiveness	**-0.32** ($p<0.001$)	**-0.19** ($p<0.05$)

Boldface indicates significance, italics indicates non significance

There was support for asymmetric effects for four of the six inhibitors as indicated by the γ_{11} results above. For these inhibitors, there are differences between websites in terms of the Inhibitor → intentions relationship and that relationship is more strongly negative for a high degree of inhibitors (presence) than it is for a low degree (absence or near absence). The β_1 results above are main effects. Each β is the mean value of the relationship between inhibitors and intentions across all websites. All of the β's are negative and significant and so consistent with the findings from the model testing. The additional results for γ_{11} indicate that as a website's mean value of an inhibitor increases; the β_1 term becomes more negative. Note that typically a negative moderation effect is viewed as attenuating, but this is for the case of a positive main effect. When the main effect is negative, a negative moderation effect makes the relationship more negative – stronger in essence.

[12] This may not be intuitive for those familiar with OLS since OLS regression coefficients do not vary for a given model. In HLM, they can vary.

APPENDIX H: Sample Size, Mean-Centering, and Level-2 Aggregation associated with Multilevel Models

There are three issues that bear scrutiny in the use of HLM: assuring adequate sample size; the centering of independent variables about each group's mean; and the use of level-2 variable measurement from aggregation of level-1 data. First, we assessed whether there was adequate sample size at each level in our multilevel model. For our study, the level 1 sample size of 9 to 16 participants per website is well within the guidelines suggested by Scherbaum and Ferreter (2009). This is also the case for the level 2 sample size as it is greater than 30. The significant effects found in this study also indicate that sample sizes at both levels were large enough for multilevel analysis. The second issue is the determination of whether to center the independent variables on each group's mean or the grand mean. Enders and Tofighi (2007) provide an overview of this choice and its implications. We used grand mean centering for both the level 1 and level 2 models consistent with our focus on a contextual main-effects model, and not a cross-level moderation model (Hofmann and Gavin 1998). However, Hofmann and Gavin also suggest that when using mean aggregates for level 2 assessments, group mean and grand mean centering at level 1 are equivalent. We use mean aggregates for the level 2 variables and this is a third issue relevant to HLM. A level 2 variable may be an aggregate of a level 1 variable within each group (e.g., average group IQ) or it may be independently assessed from the level 1 variables (e.g., school budget). Grand mean centering is ideal when level 2 aggregates are used (Enders and Tofighi 2007).