

# To Use, or Not to Use

**Paper Reviewed:** Kim, H., & Fesenmaier, D. R. (2008). Persuasive design of destination web sites: An analysis of first impression. *Journal of Travel Research*, 47(1), 3-13.

**Paper Reviewed by:** Joseph DeMaria

## ABSTRACT

Kim & Fesenmaier presented an informative review and validation of the dimensions of homepage persuasiveness that are most important within destination website homepages. Utilizing UBASE, I evaluate the following research to determine if the article is worth using in my real-world professional scenario.

## Author Keywords

UBASE; destination website; travel research; quantitative; survey; experimental design; homepage design; persuasiveness

## INTRODUCTION

Research is published in order to build a body of knowledge for others to act upon. When utilizing research for goal-oriented actions, research is consumed on the basis of the goal to be achieved. Why I chose to look through the *Journal of Travel Research* and read the “Persuasive design of destination web sites: An analysis of first impression” is to achieve my goal of redesigning a website homepage for the business I work for.

Using this article can be seen as a landmark in my business development; it’s the first time I’ve ever used peer-reviewed research in a business context. Now, I’m not forgetting my use of peer-reviewed research in academic contexts, but the consequence of how I use this research will have an immediate effect on the initial user experience of the company.

This article embodies Human Centered Design and Engineering (HCDE) through its focus on persuasive design psychology: understanding what constructs are most persuasive for a first impression within a certain context. With my training in analysis of empirical research, I should be able to parse if this research is “good” using UBASE, and determine if the research is worth using for my scenario.

## SUMMARY

Based on previous research by Kim & Fesenmaier [6], there are six dimensions of persuasiveness within the context of destination web sites: informativeness, usability, credibility, inspiration, involvement, and reciprocity. The overarching question being asked is what the effect of these persuasive design factors, of destination web sites, has on first impression formations.

To answer this question, an experimental design methodology was employed. This consists with first presenting participants with a destination website, then asking them to complete a short questionnaire for each website presented. The questionnaire used was one specifically created for this research, with each construct of persuasiveness having questions that originate from other peer-reviewed research.

The data that was gathered consisted of quantitative measures of question completion rates, Cronbach’s coefficient alpha and confirmatory factor analyses, variability, and multiple regression analysis.

The results of the study indicated that the largest driver of participants’ first impressions on a destination web site is the inspiration-related elements. This was closely followed by the usability of the website. The state of the websites observed by participants were found to be primarily focusing on informativeness and usability – acting more as an online brochure for the user.

## EVALUATION

There are many answers as to what constitutes “good” research. UBASE is a framework that guides one in critically evaluating research. UBASE was developed by Dr. Jennifer Turns, Professor at the University of Washington, and taught during lectures on Empirical Traditions in the department of Human Centered Design and Engineering [4]. UBASE is a scaffolding technique that guides research reviews across themes of understandability, believability, applicability, significance, and ethics.

### Understandable

Coming from the underlying philosophical empirical tradition of scientific quantitative research, Kim & Fesenmaier write predictably and anticipate many of the questions the audience might have. The research described a familiar process which adhered to the guiding principles of scientific inquiry that “...provide a framework indicating how inferences are, in general, to be supported...” [7].

To provide a clear definition of the research questions and assumptions as to what will happen, the authors call out six hypotheses that are being tested within this research (table 1). This orientates the reader to know exactly what is being tested, and capable of being refuted. Christensen [3], posits that hypothesis formation is the beginning of any point in scientific inquiry and helps the audience identify

what exactly is being researched. In terms of my own understanding, the hypotheses laid out were very beneficial in wrapping my head around what exactly is being tested. What was not understandable was how the researchers reported the findings. They never directly answered the hypotheses that were stated. Nonetheless, stating the hypotheses overall was instrumental in orientating me to understand the research.

Table 1: Kim & Fesenmaier's Hypotheses

Hypothesis 1	The more <i>informative</i> a tourism destination Web page is perceived to be, the more likely information searchers are to form a <i>favorable</i> first impression toward the Web page.
Hypothesis 2	The more <i>usable</i> a tourism destination Web page is perceived to be, the more likely information searchers are to form a <i>favorable</i> first impression toward the Web page.
Hypothesis 3	The more <i>credible</i> a tourism destination Web page is perceived to be, the more likely information searchers are to form a <i>favorable</i> first impression toward the Web page.
Hypothesis 4	The more <i>inspiring</i> a destination tourism Web page is perceived to be, the more likely information searchers are to form a <i>favorable</i> first impression toward the Web page.
Hypothesis 5	The more information seekers perceive to be <i>involved</i> with a tourism destination Web page, the more likely they are to form a <i>favorable</i> first impression toward the Web page.
Hypothesis 6	The more <i>reciprocal</i> a tourism destination Web page is perceived to be, the more likely information searchers are to form a <i>favorable</i> first impression toward the Web page.

On a last point of understanding, Kim & Fesenmaier took great length to anticipate questions a reader might have. For example, the article began by positioning the reader within the context of information search for destination websites on the internet. The first question I had when reading the abstract was, "I wonder how someone goes from wanting to travel, to exploring and interacting a webpage?" Lucky for me the first topic discussed was modeling this exact user flow. This may seem like an obvious start for an introduction, but this user flow analysis doesn't directly relate to the research being conducted. The authors could have started with the next section of "persuasiveness of destination pages," but they took time to position you within the context which they were working. This type of anticipatory writing is what Booth champions as making a good, coherent argument [1].

### Believable

The first observation a reader might make after a few pages is the vast amount of sources used – there are more than

three full pages of citations! This attests to the rigor in literature review that Kim & Fesenmaier employed while conducting their research. Providing ample sources embeds a sense of trustworthiness for the reader. Internal validity, or credibility within qualitative research, was perceived to be accurate from the rich description and sources which bolster the credibility of chain of reasoning for the methodology and conclusions drawn [8]. While credibility is a qualitative concept, it is mirrored to be believable as internal validity. I would say, a reader from a more qualitative bias would most likely be more inclined to believe the results.

*"The first judgment to make about a research report, no matter the setting, no matter how many data points, no matter the method employed, is whether the phenomenon under study is adequately described or captured in its reporting with some degree of precision."* [2]

My expectations were exceeded by the level of description Kim & Fesenmaier had for each dimension of persuasiveness for destination websites. It seemed to be the phenomena was accurately summarized with supporting argumentation from other research. These operationally defined persuasive dimensions tied into how the researchers constructed their survey, utilizing previously employed measures and scales which other researchers have validated as accurate and reliable.

Random assignment to various experimental groups further reinforces the believability of the study. Random assignment helps to protect against threats like group selection, selection history, and selection maturation [5]. Those coming from a quantitative bias will recognize this as a must within any experimental design.

The acknowledgement of the study's limitations was the construct which made this study the most believable for myself. This is again a type of reflective, anticipatory writing which helps to acknowledge that there are improvements to be made in which the study could be more sound [1]. Acknowledging limitations shows the authors are aware of the research process and how to go about justifying certain decisions.

While this research was overall believable, there were some things which I grappled with. The article tested United States, state tourism destinations on undergraduates and asked the participants to answer short surveys after each destination appeared. The conclusion drawn was that these websites are mostly acting as a brochure instead of "...taking advantage of the internet for creating deeper and longer lasting relationships with existing and potential visitors." At least to my knowledge, most state tourism websites purposes *are* being a brochure. I feel if they tested business related travel destination websites, there may have been other results. Despite this disconnect, this article takes care to use established methodology and controls, in turn, creating a perception of believability.

## Applicable

A highlight of how this research was written is the care to be as descriptive and transparent as possible. They went to great length to describe exactly their reasoning behind developing their survey to in which to test participants, the participants that were involved, the different experimental treatments participants received, and the reasoning for collecting the data they did. Burrell posits that transparency of methodology is a key factor in determining good research [2].

Much of what makes research applicable is what makes it believable. So again: acknowledging limitations, using controls, and justifying methodological decisions are important to having applicable research.

A great example is how Kim & Fesenmaier justify using student as participants despite the threat to external validity. *“It is argued here that student samples can be a good starting point in the exploratory study setting and, in particular, the characteristic of student participants in terms of computer skill and internet experience fits well to studies regarding internet usage”* [6] This type of justification for research decisions is important to note if others are to replicate or adopt the study’s findings for their own use. Overall, I feel this study is very applicable to others if they want to follow a similar method of creating a valid survey or following a similar type of experimental methodology to evaluate website persuasiveness.

## Significant

Significance within research is the effect to which the study reveals actionable results, formulate new theory, or raise new questions for further research [7]. In the case of this research, Kim & Fesenmaier found that of the six dimensions of persuasiveness, inspiration and usability were significantly the most persuasive, followed closely by credibility. This research finding helps to form an actionable result for a practitioner who wishes to create a persuasive destination site. The other dimensions of persuasiveness were not significantly persuasive as these three.

Another finding was that the state of the destination sites surveyed study focus on the informativeness and usability aspects, yet fail to engage users with the other dimensions of persuasiveness. Considering this study sampled only from United States state tourism websites, it’s hard to generalize this finding to destination websites as a whole. This is especially true for destination website conglomerates or services which connect travelers to a destination.

## Ethical

This study seems ethical at face value. Although, consent, coercion, and consent with participants was not explicitly addressed. Participants were undergraduates granted extra credit for their participation. Perhaps the audience for which this is published does not regularly address ethics in a formal matter. Regardless, there was no reason to believe this study was conducted unethically. I am making the assumption that as experienced researchers, Kim & Fesenmaier treated their participants in an ethical manner.

Data reporting is conducted in an ethical manner. The conclusions drawn follow a logical chain of reasoning and do not purport erroneous claims. The study is in a domain that has minimal harm to the participants – they were asked to answer a short questionnaire and view some websites. Overall, from my evaluation there are no ethical concerns within this study.

## CONCLUSIONS

Kim & Fesenmaier really took the care to craft what I would consider “good” research. In my evaluation, almost every aspect of UBASE was exemplar in how excellent quantitative research should be conducted. Outside UBASE, I wish that an appendix was attached with the survey items for me to evaluate for myself. That way, there is yet another way to evaluate the article and I could possibly use the survey for my own purposes.

Now, the important question: am I going to use this research?

From my evaluation, this is an extremely relevant article to my scenario. The research is recent, addresses the needs of my project, creates actionable conclusions, and seems believable. The only real deterrent of use is how the study focused on U.S state tourism websites, as opposed to commercial travel agency websites. Considering that both have the same goal of persuading users to explore the destination site more, I think it’s safe to say this research will be extremely useful in my scenario.

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