Credibility of Online Reviews and Initial Online Trust in Hotel Services; The Roles of Similarity and Review Quality

Sony Kusumasondjaja, Curtin University/Airlangga University

Tekle Shanka & Chris Marchegiani, Curtin University

Abstract

As a new type of word-of-mouth media, online hotel review sites have a significant role in travelers' decision making. Despite of growing popularity and adoption among travelers, online reviews are often questioned for their credibility. The purpose of this study is to investigate how review quality and perceived similarity affect travelers' perception of credibility of the reviews and their initial trust in the hotel being reviewed. A survey involving 430 real travelers from 16 countries was conducted in popular tourist destination. Results confirm that (1) review quality affects credibility and initial trust in hotel services; (2) similarity affects credibility and initial trust in hotel services; (3) credibility of online reviews affects initial trust in hotel services.

Credibility of Online Reviews and Initial Online Trust in Hotel Services;

The Roles of Similarity and Review Quality

Introduction

The increasing adoption of online hotel reviews provides travelers greater and easier access to hotel-related information than ever before. This growing form of electronic word-of-mouth platform offers travelers travel-related information from other travelers and makes for better more informed decisions (Gretzel & Yoo 2008). Approximately 20 million travelers arranged their trip planning through online review sites such as TripAdvisor.com (Schegg et al. 2008). It is also noted that more than 74% of travelers use the online reviews to plan their leisure trips (Gretzel & Yoo 2008).

Despite of their growing adoption as travel information source (Xiang & Gretzel, 2009), online review sites have often been criticized for their information credibility. This is because information posted to the online review sites does not typically go through editorial process for factual verification (Johnson & Kaye 2002). The anonymity problem with online review site is very common. The only identity of the reviewer generally shown is an online nickname, while information about real name, self-picture, or any other self-description is not available in many online review sites. This lack of identity encourages travelers to look at other cues to assess the credibility of online information; such as the characteristics of the source and the message cues (Metzger et al. 2003). Among all message elements that might be influential in forming perception of credibility, similarity and message quality are two message factors that were investigated in this study.

To date, only a limited number of researchers have tried to investigate similarity and argument quality as the antecedents of credibility of online recommendation and initial trust formation (Cheung, Lee, Rabjohn 2008; Ziegler & Golbeck 2007). In order to fill in the literature gaps, it will be valuable to examine the roles of similarity and review quality in affecting travelers' perception of the credibility of the review and developing initial trust in hotel services.

Key Literature & Theoretical Framework

In media studies, credibility refers to the degree to which message recipient assesses information or message on one particular medium to be believable, fair, accurate, and in-depth (Flanagin and Metzger, 2000; Johnson and Kaye, 1998). Credibility is assessed when an individual make an assessment of an object; which could be a person as a message source in an advertisement, a company who sends the message in the advertisement, or a piece of information in the Internet.

Some studies measure credibility by using two dimensions; namely trustworthiness and expertise (e.g., Eastin, 2001; Erdem and Swait, 2004; Fogg, 2003; Ohanian, 1990), although the two dimensions do not necessarily come together as one package dimensions of credibility. Trustworthiness might come without expertise, and perceived expertise can occur without

trustworthiness. Other researchers treat credibility as a multidimensional concept, consisting of these following dimensions; accuracy, believability, bias, completeness, and trustworthiness (Austin and Dong, 1994; Flanagin and Metzger, 2000; 2007; Gaziano, 1988; Metzger, Flanagin, and Zwarun, 2003; Rimmer and Weaver, 1987; West, 1994). In this study, credibility is defined as the extent to which a traveler perceives a message from online word-of-mouth or recommendation as believable, true, trustworthy, and factual (Cheung et al. 2009; Flanagin & Metzger 2000; McKnight & Kacmar 2007).

One of the most concerning issues on online review sites is the absence of filtering mechanism (Johnson & Kaye 1998). It is easy for travelers to obtain fake reviews uploaded without any inspection to control the accuracy of the information (Fahey & Weinberg 2003; Stone & Jumper 2001). Reviews on popular online hotel review sites such as TripAdvisor.com are posted without any rigorous filter procedures (O'Connor 2010). Due to the absence of such filter mechanisms, some travelers are skeptical about the genuineness of information posted on online review sites. Stammer-Smith (2010) found that some reviews on TripAdvisor.com were fake and untrue where negative recommendation was suspected to be posted by non-guest reviewers. This deception issue creates uncertainty for travelers using the online reviews for their travel planning.

Based on the Uncertainty Reduction Theory, it is suggested that individuals who are exposed to uncertain situation will try to implement uncertainty reduction strategies (Berger & Calabrese 1975). In the context of online reviews investigated in this study, travelers attempt to lessen their uncertainty by assessing peripheral cues on the reviews that might help them to determine how credible the review they are reading. Two of the aspects suggested to have an influence to information credibility and initial trust are message quality (Chu & Kamal 2008; Moore et al., 1986; Pornpitakpan, 2004; Slater & Rouner, 1996) and similarity (Wang et al. 2008; Ziegler & Golbeck 2007).

This study defines similarity as the extent to which travelers perceive similarity between themselves and the source of online hotel reviews (Wang et al. 2008). Although similarity is often investigated in terms of demographic similarity (e.g. Aune & Kikuchi 1993; Whipple & McManamon 2002), the construct of similarity here is referred to similarity in preference or lifestyle (Meyer et al 2010; Ziegler & Golbeck 2007). Similarity of characteristics, experiences, and preferences may help individuals simplifying the process of communication with and evaluation of others (Hamm 2000), therefore trust will be easier to establish (Mollica et al. 2003). In traditional word-of-mouth practices, recommendation should be more persuasive for travelers when it is presented by family, friends, or others who have experienced the product and have similar personal characteristics with them (Murray 1991). Recommendation from one traveler only makes sense in the eyes of other like-minded travelers with similar tastes (Ziegler & Golbeck 2007). When travelers perceive that they and the reviewers posting an online recommendation share similar lifestyle and preferences, the recommendation is more likely to be deemed trustworthy (Walther et al. 2001; Wang et al. 2008; Ziegler & Golbeck 2007) and therefore initial trust to the recommended hotel is developed. Based on this point of view, the following hypothesis is proposed:

Hypothesis 1:   Perceived similarity is positively related to (a) perceived credibility of online reviews, and (b) initial trust in hotel services being reviewed

Adapted from Petty and Cacioppo (1986), quality information is defined for this study as information with strong arguments, relevant claims, and sound evidence. Providing quality information is most likely to increase consumer beliefs of information credibility (Doney & Canon 1997; Kempf & Palan 2006). Moreover, consumers would be more convinced by information with strong arguments, relevant claims, and concrete facts or examples (Dillard & Shen 2005) compared to information with weak arguments, lack of evidence and full of faulty reasoning. In the context of this study, travelers who read the online reviews make inferences about the characteristics of the sources and attribute the reviews to a certain level of credibility based on the quality of the reviews (Dutta-Bergman 2004). If the review is supported by convincing arguments and complete details, it is most likely that the review is considered trustworthy and trust in the reviewed hotel is most likely to be formed. Therefore, the following hypothesis is proposed:

Hypothesis 2:   *Message quality is positively related to (a) perceived credibility of online reviews, and (b) initial trust in hotel services being reviewed*

Although some prior studies use the term trust and trustworthiness interchangeably, both terms have different meanings. Trust is a positive belief about perceived reliability of an object; while trustworthiness concerns about an individual's perception of quality of the object (Komiak & Benbasat 2004). In word-of-mouth context, for product information, consumers tend to trust their family or expert as recommender more than they trust marketers; since family or expert does not have any interests with purchasing decisions consumers consider that family or expert are trustworthy. As suggested by many researchers, credibility or trustworthiness is an antecedent of trust (e.g. Colquitt et al. 2007; Lowry et al. 2008; Mayer et al 1995; Rosseau et al. 1998). From the perspective of this study, it is suspected that if travelers consider that online hotel reviews they read is credible, they are more likely to develop initial trust towards the hotel being reviewed. Therefore, this following hypothesis is proposed:

Hypothesis 3:   *Perceived credibility of online reviews is positively related to initial trust in hotel services reviewed*

Based on the literature review and the hypotheses proposed, a conceptual framework is developed as depicted in Figure 1.

Methodology

One online hotel review was pre-developed for this study. Several reviews from TripAdvisor.com were extracted and modified to align with the needs of this research. There were seven attributes mentioned in the review; (1) hotel's value in general, (2) quality of hotel's lobby, bed, bathroom, and balcony, (3) speed of check-in process, (4) service quality, expertise, knowledge about localities, and English proficiency of the hotel staff, (5) proximity to amenities and tourism spots, (6) quality of meals provided, and (7) hotel's facility. The hotel name, its location, and other basic information about the hotel were manipulated to avoid preference bias. Meanwhile, the sex of the reviewer was not identified to prevent gender bias; therefore name and self-picture of the reviewer were designed to be unisex and neutral.

4

Figure 1: Conceptual Framework & Hypotheses
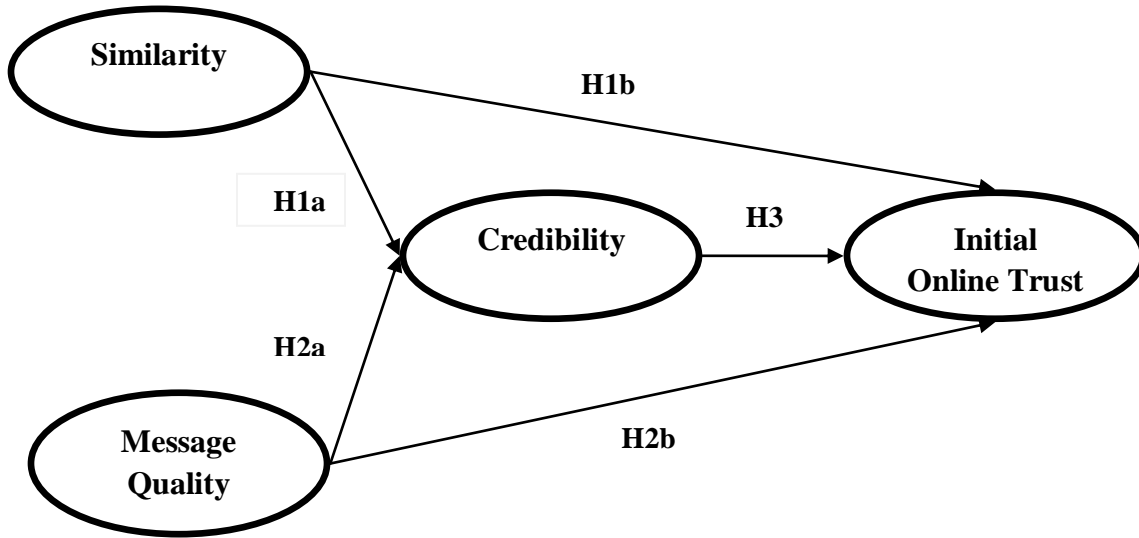
Realism checks for the online review with participants similar in characteristics to those in the main study were conducted prior to the survey suggested that the stimulus was considered as real. Respondents were instructed to read the pre-developed review, and then rate each measurement item on 7-point bipolar scales provided on the questionnaire. Measurement scales were adapted from established scales; message quality from Rains (2007), perceived similarity from Gilly et al. (1998), credibility from Flanagin and Metzger (2000), and initial trust from Bart et al. (2005).

A self-administered spot-intercept survey was conducted for data collection. Young travelers aged 18-30 having their holiday were approached at several popular tourism spots in Bali. Bali was chosen due to its easy access to international travelers targeted as respondents for this study. The choice of involving real current travelers instead of using student or 'at home' sample is aimed at obtaining high level of population representativeness (Voracek 2001) since using student samples may not be appropriate in this circumstance (Yavas 1994) and may lead to a biased result (Peterson 2001). There were 430 travelers from 16 countries participating in this study as respondents. Among them, 64% were males, 76% had at least bachelor degree, most worked as employee (48%) while the others are self-employed and students, and mostly considered themselves as knowledgeable in traveling.

Findings & Discussion

Before the structural model was estimated, a 4-construct measurement model was developed using AMOS 17. The model fit indices confirmed that the model is appropriate. The internal consistency of each constructs suggested high correlations among the individual measure items, ranging from 0.735 to 0.872 Cronbach's alpha. Meanwhile, construct reliability was also calculated with the score ranging from 0.732 to 0.857 – higher than 0.7 as Hair et al. (2010)

suggested. Measurement of construct validity showed that the standardized factor loading in all constructs were above the acceptable level. The results of the measurement model suggest that validity and reliability of the constructs and the model were all confirmed.

The results of the structural equation model shows all the hypothesized paths were significant. As a result, it was supported that perceived similarity and message quality were the antecedents of credibility of online reviews and initial trust to hotel services. The results show that similarity has a positive effect on credibility (B=0.312, p<0.001) and on initial trust in hotel services (B=0.352, p<0.001); and therefore H1 and H3 were supported. This finding supports prior studies which suggest that similarity is used by consumers, or travelers in this context, as a cue to facilitate their goals in fulfilling their information needs, as well as reducing uncertainty in following online recommendation and trusting the hotel services (Coulter & Coulter 2002; Crosby et al. 1990; Doney & Cannon 1997; Morgan & Hunt 1994; Palmatier et al. 2006; Swan et al. 1999). Similar result is indicated for H2 (B=0.346, p<0.001) and H4 (B=0.298, p<0.001), which means message quality has a positive effect on credibility of online reviews and on initial trust in the hotel services being reviewed. The intangible characteristics of hotel services which allows low level of product demonstrability requires travelers to obtain complete and quality information about the services (Yang et al. 2006; Payan & MacFarland 2005). The results also support H5 (B=0.344, p<0.001) meaning that credibility of online reviews positively affects initial trust in hotel services. When travelers need to choose hotel services they have never used previously, they are more likely to search for credible information about which hotel they trust being able to deliver services as they are expecting (Doney & Cannon 1997). From this point of view, credible reviews will lead to low level of initial trust in the hotel services.

Conclusion

Results of the study verify the relationships among similarity, message quality, credibility of online information, and initial trust formation to hotel services. When travelers read an online hotel review and they perceive that the reviewer has similarity with them in terms of travel preferences, they are more likely to consider the review as being credible and then trust the hotel being reviewed. It was also found that the argument strength of online reviews affects travelers' perception of credibility of the review and their initial trust in the hotel being reviewed. When the review is deemed trustworthy, the initial trust in the hotel will be developed. This study contributes to the marketing literature to the extent that it introduces theoretical underpinnings from information system, communication, psychology, and consumer behavior to develop a framework in which to convey how online review credibility is developed and initial trust is formed.

Reference

Aune, R.K., Kikuchi, T., 1993. Effects of language intensity similarity on perceptions of credibility relational attributions and persuasion. Journal of Language and Social Psychology, 12 (3), 224-238.

Austin, E.W., Dong, Q., 1994. Source versus content effects of judgments of news believability. Journalism Quarterly, 71 (4), 973-983.

Bart, Y., Shankar, V., Sultan, F., Urban, G.L., 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 (October), 133-152

Berger, C.R., Calabrese, R.J., 1975. Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. Human Communication Research, (1), 99-112

Cheung, C.M.K., Lee, M.K.O., Rabjohn, N., 2008. The impact of electronic word-of-mouth: the adoption of online opinions in online customer communities. Internet Research, 18 (3), 229-247

Cheung, M.Y., Luo, C., Sia, C.L., Chen, H., 2009. Credibility of electronic word-of-mouth: informational and normative determinants of online consumer recommendations. International Journal of Electronic Commerce, 13 (4), 9-38

Chu, S.C., Kamal, S., 2008. The effect of perceived blogger credibility and argument quality on message elaboration and brand attitudes: An exploratory study. Journal of Interactive Advertising, 8 (2), 26-37.

Colquitt, J.A., Scott, B.A., LePine, J.A., 2007. Trust, trustworthiness, and trust propensity: a meta-analytic test of their unique relationships with risk taking and job performance. Journal of Applied Psychology, 92 (4), 909-927.

Coulter, K.S., Coulter, R.A., 2002. Determinants of trust in a service provider: the moderating role of length of relationship. Journal of Services Marketing, 16 (1), 35-50.

Crosby, L., Evans, K.R., Cowles, D., 1990. Relationship quality in services selling: An interpersonal influence perspective. Journal of Marketing, 54 (July), 68-81.

Dillard, J.P., Shen, L., 2005. On the nature of reactance and its role in persuasive health communication. Communication Monographs, 72 (2), 144-168.

Doney, P.M., Canon, J.P., 1997. An examination of the nature of trust in buyer-seller relationships. Journal of Marketing, 61: 35-51.

Dutta-Bergman, M.J. 2004. The impact of completeness and web use motivation on the credibility of e-health information. Journal of Communication, 54 (2), 253-270.

Eastin, M.S., 2001. Credibility assessment of online health information: The effects of source expertise and knowledge of content. Journal of Computer-Mediated Communication 6 (4). Available from http://jcmc.indiana.edu/vol6/issue4/eastin.html. Accessed July 10, 2009.

Erdem, T., Swait, J., 2004. Brand credibility, brand consideration, and choice. Journal of Consumer Research, 31 (June), 191-198.

Fahey, D.K., Weinberg, J., 2003. LASIK complications and the Internet: Is the public being misled? Journal of Medical Internet Research, 5 (1), e2.

Flanagin, A.J., Metzger, M.J., 2000. Perceptions of Internet information credibility. Journalism and Mass Communication Quarterly, 77 (3), 515-540.

Flanagin, A.J., Metzger, M.J., 2007. Perceptions of Internet information credibility. News Media and Society, 9 (2), 319-342.

Fogg, B.J., 2003. Prominence-interpretation theory: Explaining how people assess credibility online. Proceedings of Conference on Human Factors in Computing System, April 2003, Ft. Lauderdale, Florida.

Gaziano, C., 1988. How credible is the credibility crisis? Journalism Quarterly, 65, 451-462.

Gilly, M.C., Graham, J.L., Wolfinbarger, M.F., Yale, L.J., 1998. A dyadic study of interpersonal information search. Journal of the Academy of Marketing Science, 26 (2), 83-100.

Gretzel, U., Yoo, K.H., 2008. Use and impact of online travel reviews. In: O'Connor, P., Hopken, W., Gretzel, U. (Eds), Information and Communication Technologies in Tourism. Springer, New York, pp. 35-46.

Hamm, J., 2000. Do birds of a feather flock together? The variable bases for African American, Asian American, and European American adolescent selection of similar friends. Developmental Psychology, 36 (2), 209-219.

Johnson T.J., Kaye, B.K., 1998. Cruising is believing?: Comparing Internet and traditional sources on media credibility measures. Journalism and Mass Communication Quarterly, Summer 75 (2), 325-341.

Johnson T.J., Kaye, B.K., 2002. Webelievability: A path model examining how convenience and reliance product online credibility. Journalism and Mass Communication Quarterly, Autumn 79 (3), 619-643.

Komiak,S.Y.X., Benbasat, I., 2004. The effects of personalization and familiarity on trust and adoption of recommendation agents. MIS Quarterly, 30 (4), 941-960.

Kempf, D.S., Palan, K.M., 2006. The effects of gender and argument strength on the processing of word-of-mouth communication. Academy of Marketing Studies Journal, 10 (1), 1-18.

Lowry, P.B., Vance, A., Moody, G., Beckman, B., Read, A., 2008. Explaining and predicting the impact of branding alliances and web site quality on initial consumer trust of e-commerce websites. Journal of Management Information Systems, 24 (4), 199-224.

Mayer, R., Davis, J., Schoorman, F.D., 1995. An integrative model of organizational trust. Academy of Management Review, 20 (July), 709-734.

McKnight, D.H., Kacmar, C.J., 2007. Factors and effects of information credibility. In Proceeding of the Ninth International Conference on Electronic Commerce, Minneapolis, 423-432.

Metzger, M.J., Flanagin, A.J., Zwarun, L., 2003. College student Web use, perceptions of information credibility, and verification behavior. Computers and Education, 41: 271-290.

Meyer, H.K., Marchionni, D., Thorson, E., 2010. The journalist behind the news: credibility of straight, collaborative, opinionated, and blogged "news". American Behavioral Scientist, 54 (2), 100-119.

Mollica, K.A., Gray, B., Trevino, L.K., 2003. Racial homophily and its persistence in newcomers' social networks. Organization Science, 14 (2), 123-136.

Moore, D.L., Hausknecht, D., Tharmodaran, K., 1986. Time compression, response opportunity, and persuasion. Journal of Consumer Research, 13 (1), 85-99.

Morgan, R., Hunt, S.D., 1994. The commitment-trust theory of relationship marketing. Journal of Marketing, 58: 20-38.

Murray, K.B., 1991. A test of service marketing theory: consumer information acquisition activities. Journal of Marketing, 55, 10-25.

O'Connor, P., 2010. Managing a hotel's image on TripAdvisor. Journal of Hospitality Marketing & Management, 19 (7), 754-772

Ohanian, R. 1990. Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. Journal of Advertising, 19 (3), 39-52.

Palmatier, R.W., Dant, R.P., Grewal, D., Evans, K.R., 2006. Factors influencing the effectiveness of relationship marketing: a meta-analysis. Journal of Marketing, 70 (October), 136-153

Payan, J., MacFarland, R.G., 2005. Decomposing influence strategies: Argument structure and dependence as determinants of the effectiveness of influence strategies in gaining channel member compliance. Journal of Marketing, 69, 66-79

Peterson, R.A., 2001. On the use of college students in social science research: insights from a second-order meta-analysis. Journal of Consumer Research, 28 (3), 450-461.

Petty, R.E., Cacioppo, J.T., 1986. Communication and Persuasion: Central and Peripheral Routes to Attitude Change, Springer-Verlag, New York.

Pornpitakpan, C., 2004. The effect of celebrity endorsers' perceived credibility on product purchase intention. Journal of International Consumer Marketing, 16 (2), 55-74

Rains, S.A., 2007. The impact of anonymity on perceptions of source credibility and influence in computer-mediated group communication: A test of two competing hypotheses. Communication Research, 34, 100-125.

Rimmer, T., Weaver, D., 1987. Different questions, different answers? Media use and media credibility. Journalism Quarterly, 64: 28-36.

Rousseau, D.M., Bitkin, S.B., Burt, R.S., Camerer, C., 1998. Not so different after all: A cross-discipline view of trust. Academy of Management Review, 23 (3): 393-404.

Schegg, R., Liebrich, A., Scaglione, M., Ahmad, S.F.S., 2008. An exploratory field study of Web 2.0 in tourism. In: O'Connor, P., Hopken, W., Gretzel, U. (Eds). Information and Communication Technologies in Tourism. Springer Wien, New York, pp. 152-163.

Slater, M.D., Rouner, D., 1996. How message evaluation and source attributes may influence credibility assessment and belief change. Journalism and Mass Communication Quarterly, 73 (4), 974-991.

Stammer-Smith, C., 2010. Fake TripAdvisor reviewers face legal action. The Telegraph, 22 October, available at http://www.telegraph.co.uk/travel/travelnews/8079786/Fake-Tripadvisor-reviewers-face-legal-action.html

Stone, T.W., Jumper, J.M., 2001. Information about age-related macular degeneration on the Internet. Southern Medical Journal, 94: 22 – 25.

Swan, J.E., Bowers, M.R., Richardson, L.D., 1999. Customer trust in the salesperson: an integrative review and meta-analysis of the empirical literature. Journal of Business Research, (44), 93-107

Voracek, M., 2001. Marital status as a candidate moderator variable of male-female differences in sexual jealousy: the need for representative population samples. Psychological Reports, 88, 553-566

Walther, J.B., Slovacek, C., Tidwell, L.C., 2001. Is a picture worth a thousand words? Photographic images in long term and short term virtual teams. Communication Research, 28, 105-134.

Wang, Z., Walther, J.B., Pingree, S., Hawkins, R.P., 2008. Health information, credibility, homophily, and influence via the Internet: web sites versus discussion groups. Health Communication, 23 (4), 358-368

West, M.D., 1994. Validating a scale for the measurement of credibility: A covariance structure modeling approach. Journalism Quarterly, 71 (1), 159 – 168.

Whipple, T.W., McManamon, M.K., 2002. Implications of using male and female voices in commercials: an exploratory study. Journal of Advertising, 31 (2), 79-91.

Xiang, Z., Gretzel, U., 2009. Role of social media in online travel information search. Tourism Management, 31 (2), 179-188.

Yang, S.C., Hung, W.C., Sung, K., Farn, C.K., 2006. Investigating initial trust toward e-tailers from the elaboration likelihood model perspective. Psychology & Marketing, 23 (5), 429-445.

Yavas, U., 1994. Students as subjects in advertising and marketing research. International Marketing Review, 11 (4), 35-43.

Ziegler, C.N., Golbeck, J., 2007. Investigating interactions of trust and interest similarity. Decision Support Systems, 43 (2), 460-475