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Gender Differences Concerning Wikipedia: A Follow-Up Study

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ABSTRACT
This follow-up study of Lim and Kwon (2010) examined whether gender differences persist in certain aspects concerning Wikipedia. Additionally, this study examined other new variables, such as *satisficing* (*satisfying and sufficing*) and peer approval in relation to gender. Data were collected using a web survey in fall 2011. A total of 123 surveys were usable for this study. The key findings show that two data sets collected three years apart were consistent with each other, demonstrating that the persistence of gender differences in college students with respect to Wikipedia use, their perceived credibility of Wikipedia, and self-evaluation of their ability discerning the credibility of Wikipedia information. In addition, this study found that male students showed a higher level of *satisficing* with Wikipedia and tended to report a higher level of their peer's approval for Wikipedia than their female counterparts did. The findings call for attention to educational interventions to narrow the gender gap concerning Wikipedia or user-generated content (UGC).

Keywords
Wikipedia, gender

INTRODUCTION
The popularity of Wikipedia has been growing since its creation in 2001. As of May 2010, a Pew Internet & American Life Project survey showed that 53% and 62% of adult Internet users under the age of 30 use Wikipedia, respectively (Zickuhr & Rainie, 2011). However, (Lim & Kwon, 2010) study demonstrates that gender differences in

perceptions, attitudes and behaviors toward Wikipedia among college students exist. Furthermore, with respect to editing Wikipedia, a gender gap is even greater, showing that only 13 % of contributors are female (Forte et al., 2012). This evidence suggests that gender regarding Wikipedia is clearly an issue.

This study examined gender differences among college students concerning Wikipedia by conducting a follow-up study of (Lim & Kwon, 2010) research and by examining new variables, *satisficing* (*satisfying and sufficing*) and peer approval. It is interesting to see whether gender differences concerning particular areas have been narrowed down since 2008. In addition, the literature has shown that one or two additional variables play a role in human information behavior within the context of user-generated content (UGC) (Lim & Simon, 2011; Metzger & Flanagin, 2011; Rieh & Hilligoss, 2008). Nonetheless, little is known regarding whether gender is related to these variables.

This study especially explores the following research questions: RQ1. Is there a gender difference regarding Wikipedia use? RQ2. Is there a gender difference regarding the perceived credibility of Wikipedia? RQ 3. Is there a gender difference in evaluating individuals' own abilities to discern the credibility of Wikipedia information? RQ4. Is there a gender difference in the level of *satisficing* with Wikipedia? Finally, RQ5. Is there a gender difference regarding the peer approval of Wikipedia?

Examining gender in the content of Wikipedia is important due to its popularity among college students (Head & Eisenberg, 2010; Lim, 2009) and its applicability to other UGC. Given some evidence that the advantages of using Wikipedia is greater than its disadvantages (Head & Eisenberg, 2011; Lim, 2009), gender differences regarding Wikipedia can lead to other disparities such as new literacy skills in the digital age. In particular, (Maehre, 2009) argues that students would not be able to develop appropriate information literacy skills in an increasingly interactive world without learning how to evaluate unconventional sources, such as Wikipedia. In this regard, female students

may be more vulnerable than male students by shying away from such an unconventional source. As a result, this study calls attention for the need to implement educational interventions for female students with respect to Wikipedia.

RELEVANT LITERATURE

Gender differences in a variety of online activities are well documented (Lim & Kwon, 2010). The literature shows that men tend to pursue a wide range of topics and use the Internet for entertainment more than women (Harp & Tremayne, 2006; Jones, Johnson-Yale, Millermaier, & Pérez, 2009). Women are more sensitive to taking risks or violating laws than men. For instance, a meta-analysis shows that men take risks more than women (Byrnes, Miller, & Schafer, 1999). Similarly, female students download music less often than male students due to their concerns about possible copyright violation (Gallaway & Gallaway, 2006; Jones et al., 2009). Women perceived a higher level of risk in online shopping than men (Hui & Wan, 2007). In addition, despite no gender difference in ability or actual performance, women or girls tend to evaluate their own online or computer skills less than men or boys do (Abbiss, 2008; Hargittai & Shafer, June 2006

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With respect to Wikipedia, students' behavior and attitudes toward Wikipedia reveal similar patterns those of online activities. (Lim & Kwon, 2010) study shows that male students use Wikipedia more frequently than their female counterparts. Male students had much more positive perceptions of Wikipedia's information quality than their female counterparts. In addition, male students had higher confidence in evaluating Wikipedia information than female students.

On the other hand, previous studies suggest that some possible risks of obtaining inaccurate information due to the open editing model of Wikipedia do not discourage students from using Wikipedia (Head & Eisenberg, 2011; Lim & Simon, 2011). In this regard, Wikipedia may be seen as a *satisficing* choice to college students. According to (Simon, 1979; Simon, 1997), humans pursue a "*satisficing*" strategy that is "good enough" for their needs. A *satisficing* strategy enables humans to simplify choices available in making decisions, and thus requires less time and less cognitive effort than an optional strategy (Todd, 2002). Further, humans use heuristics to make decisions, taking into account a combination of accuracy, speed and frugality (Gigerenzer, 2002). Indeed, (Lim & Simon, 2011) study shows that college students (N=58) tended to agree with their *satisficing* in terms of Wikipedia use. However, little is known regarding whether female and male students display different *satisficing* levels with Wikipedia.

Finally, in a participatory Web 2.0 environment, endorsement via others influences people's credibility judgments of information (Metzger & Flanagin, 2011). A previous study shows that women are more influenced than men by friends' recommendations in choosing travel destinations (Kim, Lehto, & Morrison, 2007). As a result, it is interesting to find out whether the two genders perceive Wikipedia differently regarding peer approval of its use.

METHODOLOGY

Data were collected using a Web survey at a large public university in the Midwestern United States in fall 2011. This study employed a convenient sample that consisted of undergraduate students from several courses whose instructors agreed to their participation. A total of 142 students participated in this study and 123 surveys were usable for this study. The measurements of key variables of this study were developed based on credibility literature ((Cassidy, 2007; Gaziano & McGrath, 1986; Hilligoss & Rieh, 2008; Lim, 2009; Lim & Simon, 2011; Meyer, 1988; Tseng & Fogg, 1999) and the theory of bounded rationality (Agosto, 2002; Gigerenzer, 2008; Gigerenzer & Selten, 2002; Selten, 2002; Simon, 1955; Simon, 1997a; Simon, 1997b; Todd, 2002).

KEY FINDINGS
Sample Characteristics

Approximately 34.1% (N=42) of the respondents were men and 65.9% (N=81) were women. The mean age was 19.28 years old.

A set of t-tests were performed to answer the research questions. A two-tailed test under α=0.05 was used. All of the tests show significant results. RQ1. Male students used Wikipedia more frequently than their female counterparts. RQ2. Male students had higher perceived credibility of Wikipedia than their female counterparts did. RQ3. Male students' ratings of their own abilities discerning the credibility of Wikipedia articles were higher than those of female students. These results are consistent with those of (Lim & Kwon, 2010) study, indicating that gender differences in these areas are persistent over three years. RQ 4. Male students showed a higher level of *satisficing* with Wikipedia than their female counterparts. Finally, RQ5. Male students tended to report a higher level of their peers' approval for Wikipedia than their female counterparts.

Variable	t	df	p-value
Wikipedia use in the past 4 months [RQ1]	4.89	120	.000
Perceived credibility [RQ2]	5.25	118	.000
Self-reported ability evaluating credibility [RQ3]	2.38	120	.019
Satisficing [RQ4]	3.37	119	.001

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Peer approval [RQ5]	3.36	119	.001

Table 1. Results of Gender Differences

CONCLUSION

Data collected three years apart from the same population show that gender differences in Wikipedia use, perceived credibility, and self-evaluation of discerning the credibility of Wikipedia information concerning Wikipedia persist: Male students had more positive attitudes and behavior toward Wikipedia than their female counterparts. It is unclear why male students had a higher level of *satisficing* with Wikipedia than female students and why male students reported a higher level of peer approval than female students. Further research needs to examine why this is the case. This poster session will further present the discussions and limitations of the study, and some suggestions for further research.

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