

Wikipedians From Mars: Female Students' Perceptions Toward Wikipedia

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ABSTRACT

This paper presents the results of a preliminary study on non-contributing behaviors among college-aged Wikipedia users. By focusing on female freshmen, I investigated how college-aged female students start establishing certain attitudes toward Wikipedia, how previous experience influences these perceptions, and how a new social environment has an impact on their perceptions. Based on in-depth interviews with 9 female college freshmen and 4 non-freshmen students, the results suggest that experience, subjective norms, and their social position as a college student influenced female freshmen to establish negative perceptions and constrain them from contributing to Wikipedia. The present study is significant in that it provides multifaceted aspects of perceptions that discourage contributions from young female students to Wikipedia, and design implications for promoting their participation.

Keywords

Wikipedia, user perceptions, female college students, theory of planned behavior.

INTRODUCTION

Wikipedia has become one of the most important repositories of knowledge and is one of the most popular websites people visit to seek information. Previous research has found that college-aged young adults (between the ages of 18 and 24 years) were the most dominant user group and people mainly used Wikipedia for academic resources (Quantcast, Feb 2013; Rainie & Tancer, 2007). It also has been consistently reported that there is a lack of Wikipedia contribution, especially with respect to gender (Cohen, 2011 Mar). Yet, there are only a few studies studying read-only users, and investigating underlying reasons behind the gap between the intensive use and the lack of contribution among young adults users (Lim, 2009; Nov. 2007; Yang & Lai, 2011).

This study aims to understand the perceptions of female college students—how their attitudes are established and what factors influenced their read-only behavior—toward Wikipedia as read-only users. I investigated how personal and social factors (i.e., attitudes, subjective norms, and

perceived behavioral control) act as either triggers or barriers of their participating in Wikipedia. The result of this study is significant for the following reasons. It provides new information on the influence of social factors on participation in a social media platform. It also brings new perspectives to prior research regarding Wikipedia, which mainly focused on understanding contributors and voluntary user participation from open-source platform perspectives. I hope that the findings of this study about barriers for college students in contributing to Wikipedia can provide design implications when developing voluntary knowledge sharing platforms for future generations of users.

LITERATURE REVIEW

A number of studies have investigated the motivation and gratification of Wikipedia contributors—namely Wikipedians—(Forte & Bruckman, 2005; Nov, 2007). Researchers have attributed intrinsic reward systems such as self-expression, pro-social traits, intrapersonal (e.g., fun and ideology) or interpersonal reward systems (e.g., credits and community membership) as reasons for contribution among Wikipedians. These findings suggest that the perceptions and experience of an individual shape his or her attitude and play an important role in whether a person decides to contribute actively to Wikipedia.

The theory of planned behavior (TPB) (Ajzen, 1991) is a useful framework to understand various factors that comprise of user perceptions. According to this theory, social beliefs toward a behavior (subjective norms) and the perceived ability of performing the behavior (behavioral control), as well as personal attitudes, influence an individual's intention of doing the behavior. Previous researchers applied TPB to predict user's behavioral intention for participating in a system (Lin, 2006; Pelling & White, 2009). For example, Lin (2006) indicated that attitude and behavioral control influenced users' intentions of participating in online communities, whereas social influence did not have an influence due to the anonymous and voluntary characteristics of online community platforms. A study of Wikipedians, conducted by Yang and Lai (2011), reported that perceived behavioral control, namely self-efficacy, is important for deciding whether or not to participate in Wikipedia. They saw that Wikipedia contribution is attributable to personal attitudes towards information and system quality as well as personal motivation. They also confirmed that social identity is a significant predictor of intentions to participate in

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Wikipedia use. Antin (2011) reported the cognitive distinction of read-only users and casual contributors from active Wikipedians, which might suggest the importance of subjective norms for behavioral intentions to participate in Wikipedia. In his study, both positive and negative perceptions drove the participants to compare themselves with potential Wikipedians, which hindered them from full participation.

A few studies related to motivation among Wikipedia contributors have focused on generation and age. For example, Lim (2009) offered a picture of current young adults' Wikipedia use characteristics by studying their information behavior on Wikipedia. Findings highlighted that past positive experience in Wikipedia positively influenced their outcome expectations, while at the same time past positive experience did not subvert the perceived information quality of Wikipedia. Lampe and his colleagues (2012) carried out a survey with students who were taking a course in editing Wikipedia in school, and reported that increased self-efficacy could play a more important role in Wikipedia contribution.

Previous research has provided a good understanding about how users have developed intentions to participate in a system, but the reasons of the gap between information consumption and the lack of contributing behaviors among young Wikipedia users still needs to be investigated. This study attempts to apply TPB and investigates how young Wikipedia readers came to obtain certain perceptions and why they did not develop intentions to contribute to the Wikipedia.

METHODS

Considering the intense use of Wikipedia for academic resources and popularity among college-aged students, I studied female freshmen to understand how their perceptions about Wikipedia came to be. Nine female freshmen (ages 18~19) were recruited at a large north-eastern University in the United States. Additionally, I interviewed 4 non-freshmen students (2 female and 2 male students) to see whether age and gender influence them to hold different perceptions toward Wikipedia and Wikipedians. Participants were recruited through class online bulletin boards and a snowball sampling. The sample included 9 White, 3 Asian American, and one African American participant. Each interview was audio-recorded with prior approval of each participant. The author transcribed and summarized the records, and individual analysis of the interview transcripts were conducted to identify themes that ran through each interview session.

RESULTS

Attitudes

The participants were of the generation who grew up with Internet, and they have used online resources for their schoolwork since middle school. Wikipedia was first introduced to them during their middle school years by

adults, which included schoolteachers and parents. Participants noted that school was the most influential source where they could learn about the other side of Wikipedia, such as reliability and credibility issues. For example, Linda (freshman/Undecided) noted, "I probably wouldn't have realized it isn't credible, if my teachers hadn't banned us from using it." The method of addressing this issue also varied from banning to discouraging the use of Wikipedia, but participants mentioned the role of school in developing attitudes toward Wikipedia at a young age.

The perception of unreliable academic sources overwhelmed some participants, and these participants showed negative stances overall toward Wikipedia. For example, Stephanie (freshman/Elementary Education) claimed, "most of the students would have shied away from Wikipedia. Most of the time, it will be just like bottom results, the last resort, if you couldn't find any other information". In contrast, some students had developed positive attitudes towards Wikipedia, in general, and they were well aware of the negative aspects of Wikipedia resources. Jamie (freshman/Communication) agreed with concerns of teachers, but in her experience, Wikipedia was a useful resource to look up background information that she was unfamiliar with, and also to click through original resources of the information. Lisa also commented,

"I know it's not completely trustworthy, and of course I had all those [negative] talks. But I feel like it only matters if you're relying on way too heavily. I feel like a lot of people got into like whole Wikipedia." (Lisa, freshman/Environmental Science & Policy)

Lisa attributed the evaluation of information as the reader's responsibility rather than to Wikipedia itself. Like Jamie and Lisa, participants who had developed positive attitudes through previous experiences, emphasized the role of readers and their expectations for Wikipedia. The participants claimed that information on Wikipedia might be incorrect, and the readers should be able to filter out the wrong information. Thus, positive stances from the participants were associated with low expectations toward Wikipedia as a major information source. Behaviors of 'find and exit' also influenced their perceptions and contributing intentions for participants. Search engine results enabled the participants to click through to Wikipedia and influenced them to perceive Wikipedia entries as another search result, rather than as a collaborative platform.

Subjective Norms

Participants were generally unaware of the presence and interaction between contributors and readers of Wikipedia. Participants felt that they read a thread of information by themselves on Wikipedia.

"I never think about the contributors. Because the way I read it, for some reason I read it like a textbook. Like it's a stagnant kind of thing. It doesn't have the look of that's constantly evolving."

As Lisa pointed out, participants could read ready-made information that Wikipedians contributed, but did not observe the traces of how and who has changed information they were reading. This lack of visible interactions within the system affected them to ignore the role of participation among contributors or Wikipedia community, and failed to cultivate the culture of contribution among its users.

Participants also reported lack of social interaction regarding Wikipedia contribution among their social groups. We intentionally recruited read-only users, so none of the participants had contributed to Wikipedia before. They did not have any friends who they knew as contributors. These social environments hindered them from recognizing who the real contributors are, exactly what they are doing, or how they are contributing.

“I mean, first of all, I need to learn how to post. I have no idea. Like, with all my other social media, I had to have a friend who told me “this is how you’re doing.” I’m not technologically advanced, I would have to have someone teach me how to do it first, and then I mean if I liked it, I would continue doing it.” (Karen, Letters & Sciences)

As Karen was not an early adopter, her social groups had taken an important role for her to start using other social media by introducing and teaching about those. Yet, there were fewer chances to talk about Wikipedia because it was considered as a very familiar and old platform, and their read-only behaviors seldom changed due to absence of encouraging social groups. Some participants said that they would consider fully participating in Wikipedia if their social groups did.

Social environments influenced participants to make a distinction between themselves and Wikipedians. They did not recognize the profiles of actual contributors, and one interviewee assumed that employees of Wikipedia would be the contributors. Many participants came up with an image of a male contributor, and expertise and age/generation were also used to describe typical Wikipedia contributors. Janet (freshman/Undecided), for example, noted that males in their late 20s or 30s were the image of Wikipedians because they should have more expertise as well as time for contribution than herself. Susan (freshman/Business) explained that males would be more likely to share their knowledge publicly, and thus, guy friends or older male adults could be a potential contributor. Several participants mentioned knowledge and expertise of Wikipedians, and this affected participants to feel a cognitive distinction from Wikipedians of proven ability. Stephanie said,

“I guess they would probably be not just people. They’d probably be the people who actually have more basis like more credibility, because most of the time the post they put is pretty in-depth.” (Stephanie, Elementary Education)

Stephanie showed respect for the knowledge and expertise of Wikipedians, but she distinguished Wikipedia contributors from experts in the academy. Other participants mentioned social norms at college, which

discouraged use of Wikipedia for academic resources, and argued that professors would not read or contribute to Wikipedia. This perception was associated with the image of Wikipedians that they might not have institutional channels (e.g., publication, classroom) to share their knowledge other than Wikipedia. Interestingly, people who advocated the value of Wikipedia also did not necessarily give positive descriptions of Wikipedia contributors. For example, Lisa considered contributors as working for their own gratification, so that they could express their knowledge. Her low expectation of Wikipedia led her to accept it as a casual source of information, but it also led her to have low opinion of its contributors. Either way, the participants did not consider the Wikipedia community as their own, and most of the participants did not even realize the existence of the community.

Perceived Behavioral Control

One of the common beliefs among participants was that they had to contribute a major part of the information to the Wikipedia pages. Participants sometimes mentioned their lack of expertise on any topics as one of the reasons why they were not contributing to Wikipedia. Carol noted,

“I don’t think writing information to Wikipedia is important thing to do, and also I don’t think I have the expertise a lot of times to write about experienced subject. And I feel like being trained, in even encyclopedia, even though it’s online, Wikipedia contributors are experts about whatever the entry is about. But I don’t have any expertise in any subjects, so. I feel like I’m not the person who should be contributing.” (Carol, Undecided)

As much as she was not interested in contributing to Wikipedia, she was also not confident enough in her level of knowledge to publicly write down an entry on any subject. She argued that a college degree might be proof of expertise of a person, and thus, she, as a freshman, was not eligible to be a contributor. Other participants also mentioned the college degree or higher degree as a proof of credibility of expertise.

Participants were worried about their ability to contribute correct and valuable information, when being asked about their potential contribution to Wikipedia in the future. None of the interviewees saw themselves involved in minor but necessary contributions (e.g., fixing grammar, adding images). They wanted to find out if their contributions were unique or expert enough to be significant in order to avoid making simple contributions that could be made by anyone. Since they could not objectively evaluate the value of their own knowledge, participants wanted a confirmation process like a personal assignment from the Wikipedia coordinator.

Participants also mentioned the emotional aspect of Wikipedia contribution. Stephanie mentioned that she felt “intimidated” when she saw the “wordy and long” text-heavy information on Wikipedia. The daunting feeling relates to her respectful view of Wikipedia contributors, and her self-effacing attitude.

CONCLUSION & DISCUSSION

This young generation that I studied grew up with Wikipedia, and they had established a different perception toward Wikipedia through their own experience and interactions with their social groups. The participants' lack of intention for contributing to Wikipedia can be explained by these personal and social interactions. Negative attitudes toward Wikipedia prevailing in the past and new social environment (i.e., high school and college) influenced participants to shape negative images about Wikipedia. Participants did not have social groups that can trigger contributing behaviors, nor identified themselves as a potential member of Wikipedians. Rather, their descriptions of Wikipedians showed that female students' cognitive distinction from Wikipedians was remarkable, which were related to their devaluations of Wikipedians or works of Wikipedians among their social groups. Some of the participants talked about their lack of expertise as a reason for not having any intentions of contributing to Wikipedia, but in the follow-up question, they responded that they would not contribute to Wikipedia even after they gained expertise on certain topics. Participants mentioned the nature of the Wikipedia contribution—which was often described as non-interactive and self-satisfactory—was not what they felt inclined to do. Non-freshmen participants in this study had similar social experiences regarding Wikipedia. Two junior female and two male students of this study showed some similarities of these general perceptions and behaviors toward Wikipedia. For them, being in a college meant that they are still developing skills and knowledge, and freshmen and juniors were practically the same in terms of lack of expertise and in this case, gender did not seem to be a factor. However, cautions should be taken in generalizing the findings as this study is conducted with a small number of participants who are recruited from a relatively homogenous group.

An open source-based knowledge system can be maintained only through the participation of users, and it is essential to invite new generation to contribute constantly evolving knowledge. This study shows why young students seldom contribute, and results suggest that social environment and subjective norms could be essential for attracting young contributors. A person is inclined to drive themselves for the behavior that conforms to their values and identities (Be'nabou & Tirole, 2004), and the interviewees could not find the connection between their current life and Wikipedia contribution. The participants were spending significant amount of time on academic work to earn a degree with good grades, and their social environment did not encourage them to consider non-institutional knowledge system. Antin (2011) also reported the role of in-group identity that out-group conceptions toward Wikipedians might discourage continuing contribution to Wikipedia among readers or casual contributors. Absence of social

cues within and outside of the system could affect participants to retain their attitudes or behaviors to use Wikipedia. Highlighting profiles and works of young contributors and exposing their contributing activities on social network sites (i.e., Facebook) would be helpful to increase visibility of who the contributors are and what they are doing, and encourage young generations' participation by reducing cognitive gaps from Wikipedians. Also, find-and-exit behaviors of the participants in this study suggest that interfaces should be changed to invite engagement of these casual users. An array of topics to which they might contribute because they did not recognize which information is to be filled in and what they can do.

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