

# Addressing Wikipedia’s Gender Gaps Through LinkedIn Ads

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## Abstract

Gender bias on Wikipedia, or the Wikipedia gender gap, refers to the fact that readership, editorial contributions, and article representations on Wikipedia tend to be male-dominated. Existing initiatives such WikiGap have helped organize several edit-a-thons worldwide to close the gender gap on Wikipedia. In this paper, we propose a new initiative to help in increasing female representation in Wikipedia. This initiative relies on targeting skilled women on LinkedIn and inviting them to edit Wikipedia articles related to their knowledge and expertise. This paper discusses the first action towards implementing this initiative, which is to test the reach of LinkedIn ads via a pilot survey.

**Keywords:** Gender Gaps, Wikipedia, LinkedIn Ads, targeting skilled editors, gender inclusive Wikipedia

## Introduction & Related Work

The 2020 Wikimedia Movement Strategy stresses the importance of creating a positive consumption and contribution experience on the Wikimedia platforms irrespective of gender (Redi et al., 2021). This strategy has been provoked by many studies that have found that Wikipedia has a substantial representation gender gap (Redi et al., 2021). The representation gender gap encompasses gaps in both Wikipedia readership and contribution (Redi et al., 2021). Specifically, men are more likely to be frequent readers of Wikipedia and tend to generate many more views and edits than other gender identities (Redi et al., 2021). Focusing on gender gaps in Wikipedia readerships, (Johnson et al., 2020) conducted a global online survey of 65,031 readers of Wikipedia and their corresponding reading logs. The study found that although men and women visit Wikipedia for similar reasons and exhibit specific topical preferences, women are usually underrepresented among readers of Wikipedia and view fewer pages per reading session than men do (Johnson et al., 2020). Focusing on gender gaps in Wikipedia contribution, studies including (Antin et al., 2011) drew a sample of 256,190 English-language Wikipedia users. The study revealed that male Wikipedia editors strikingly

exceed female editors (Antin et al., 2011). On top of that, among the 25% most active Wikipedia editors, women make far fewer revisions than men (Antin et al., 2011). Similar work confirmed these findings by discussing that Wikipedia does not only have fewer female editors than men, but they also drift to leave Wikipedia sooner than males (Lam et al., 2011). Moreover, female newcomers are reverted more frequently than males (Lam et al., 2011). Research on the Spanish and Swedish languages affirmed that women are a minority among Wikipedia editors, not exceeding 19% of editors (Minguillón et al., 2021) (Helgeson, 2015).

Research has looked at the reasons behind the low representation of women in Wikipedia’s contribution. For instance, after conducting a global survey of 176,192 readers (Collier and Bear, 2012) demonstrated that female Wikipedia users are less likely to contribute to Wikipedia due to the high level of conflict involved in the editing, debating, and defending process. Besides, female Wikipedia users are less likely to contribute to Wikipedia due to lower confidence in their expertise and lower confidence in the value of their contribution (Collier and Bear, 2012). Additionally, (Hargittai and Shaw, 2015) emphasized that a gender gap in internet skills exacerbates the gender gap in Wikipedia editing. Other editors have reported that they had a negative experience on Wikipedia as they observed that the community is relatively unwelcoming (Helgeson, 2015).

## Gap in Knowledge & Contribution

Previous research has disclosed important patterns regarding the gender gaps in reading and editing Wikipedia articles and the rationales behind this gap. However, previous research has fallen short in discussing methods or strategies to encourage more women to contribute to Wikipedia. Accordingly, this research aims to understand options to identify and contact potential Wikipedia editors and, in turn, to see if the targeting can lead to successful recruitment and retention of female editors. More specifically, we propose to use targeted advertising on LinkedIn to find and contact women who are interested in becoming Wikipedia editors and who have skills and knowledge in a particular topic.

## Methods

LinkedIn and other online platforms provide a rich set of advertising targeting capabilities enabling advertisers to selectively show their message to, say, women with a university degree who are working in a research capacity in the sector of technology industries<sup>1</sup> We envision that appropriately targeted advertising will be able to identify women who are qualified to edit articles on a specific niche topic, inviting them to contribute to Wikipedia based on their expertise. However, as a first feasibility test we decided not to redirect anyone directly to Wikipedia. Rather, we first ran a survey to better understand how well the targeting worked, and how likely the people targeted would be to actually contribute to Wikipedia. Furthermore, running this advertising for our survey gave us the opportunity to better estimate the reach on LinkedIn for niche topics. The test survey on LinkedIn was designed with the following targeting criteria: [Location: USA] AND [Gender: Female] AND [Skill: Machine Learning AND Wikipedia].

The survey included questions on different constructs. The **first construct is Demographics**, which aims to collect information about participants' gender and location. The **second construct is Expertise**, where we ask respondents to self-rate their expertise in Machine Learning ranging from No knowledge to Expert. The **third construct is Reading Wikipedia articles**, which includes questions on the frequency and reasons to read Wikipedia articles. The **fourth construct is Editing Wikipedia articles**, where respondents are asked about their willingness, prior experience, and reasons to edit Wikipedia articles. Please find the link to the survey at: [https://docs.google.com/forms/d/e/1FAIpQLSdUS2xbyQredBqigV-EeIk\\_o9ytcghIYyPckrETzi4UGz1LDw/viewform](https://docs.google.com/forms/d/e/1FAIpQLSdUS2xbyQredBqigV-EeIk_o9ytcghIYyPckrETzi4UGz1LDw/viewform).

## Findings & Discussion & Impact of the Work

The test survey was launched on LinkedIn Ads on May 2022. The targeting audience size after specifying the targeting criteria is 1,200+. Even though the survey received impressions and clicks, participants did not progress to completing the survey. Specifically, the LinkedIn Ad has received a total of 4,936 impressions, and 25 survey website visits for an ad cost of \$71.45. This low completion rate could be attributed to many reasons. First, the survey has been launched for 1 week only, so this could be a brief period to collect responses. Second, the targeting criteria might be very narrow, such as only for women with Machine Learning skills. As such, presenting at

the Wiki Workshop 2023 would be a great chance to get feedback on this project and discuss alternative methods or strategies to contribute to narrowing the gender gaps in Wikipedia. In particular, we look forward to discussing the potential use of other advertising platforms, such as Google, Quora, Facebook, or TikTok to recruit under-represented groups into the pool of Wikipedia editors.

## References

- [Antin et al.2011] Judd Antin, Raymond Yee, Coye Cheshire, and Oded Nov. 2011. Gender differences in wikipedia editing. In *Proceedings of the 7th International Symposium on Wikis and Open Collaboration, WikiSym '11*, pages 11–14. Association for Computing Machinery.
- [Collier and Bear2012] Benjamin Collier and Julia Bear. 2012. Conflict, criticism, or confidence: an empirical examination of the gender gap in wikipedia contributions. In *Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work, CSCW '12*, pages 383–392. Association for Computing Machinery.
- [Hargittai and Shaw2015] Eszter Hargittai and Aaron Shaw. 2015. Mind the skills gap: the role of internet know-how and gender in differentiated contributions to wikipedia. 18(4):424–442. Publisher: Routledge eprint: <https://doi.org/10.1080/1369118X.2014.957711>.
- [Helgeson2015] Björn Helgeson. 2015. The swedish wikipedia gender gap.
- [Johnson et al.2020] Isaac Johnson, Florian Lemmerich, Diego Sáez-Trumper, Robert West, Markus Strohmaier, and Leila Zia. 2020. Global gender differences in wikipedia readership. (arXiv:2007.10403).
- [Lam et al.2011] Shyong (Tony) K. Lam, Anuradha Uduwage, Zhenhua Dong, Shilad Sen, David R. Musicant, Loren Terveen, and John Riedl. 2011. WP:clubhouse? an exploration of wikipedia's gender imbalance. In *Proceedings of the 7th International Symposium on Wikis and Open Collaboration, WikiSym '11*, pages 1–10. Association for Computing Machinery.
- [Minguillón et al.2021] Julià Minguillón, Julio Meneeses, Eduard Aibar, Núria Ferran-Ferrer, and Sergi Fàbregues. 2021. Exploring the gender gap in the spanish wikipedia: Differences in engagement and editing practices. 16(2):e0246702. Publisher: Public Library of Science.
- [Redi et al.2021] Miriam Redi, Martin Gerlach, Isaac Johnson, Jonathan Morgan, and Leila Zia. 2021. A taxonomy of knowledge gaps for wikimedia projects (second draft). (arXiv:2008.12314).

<sup>1</sup>A complete guideline of how to publish an ad on LinkedIn can be found at <https://blog.hubspot.com/marketing/linkedin-advertising-campaigns>.