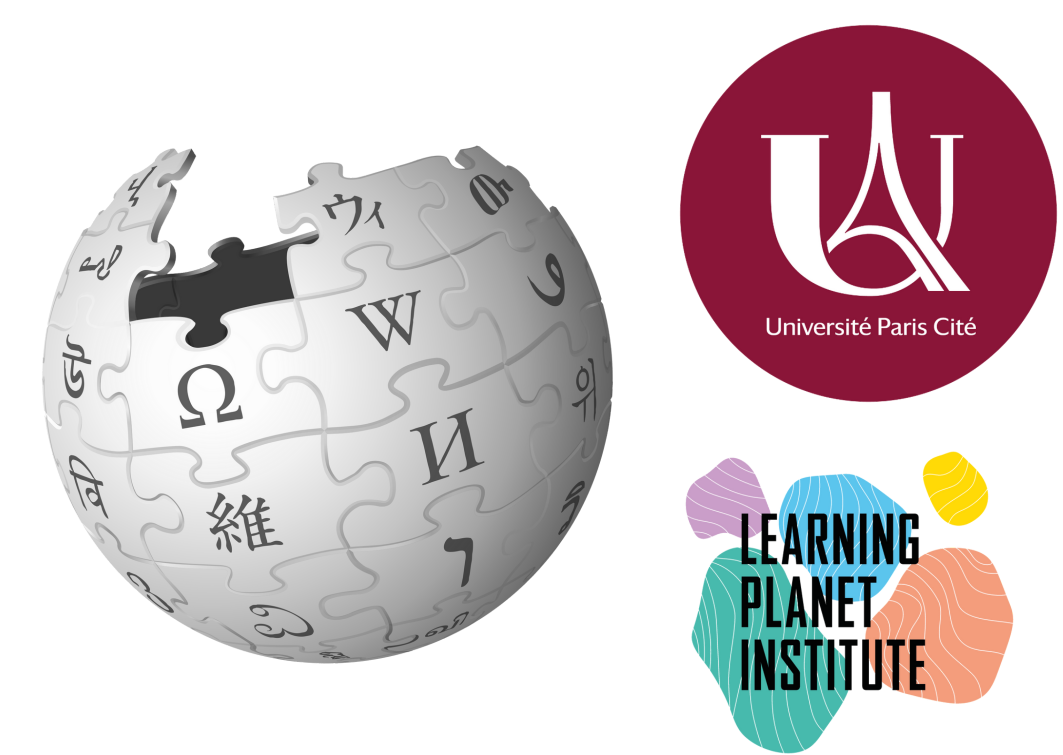


WIKIPEDIA ADMINISTRATORS

YanQing Zhou, Mahdi Mansour, Miya Manu Abraham, Atefeh Shahi, Louise Massacrier



STATE OF THE ART

On Wikipedia, 'blocking' maintains order by restricting disruptive editing through user or IP address bans. Administrators, vetted volunteers, wield special privileges to protect pages and enforce rules. They undergo rigorous evaluation via Request for Adminship (RfA)(1). Assisting them are bots, automated helpers performing repetitive tasks. Admin bots have elevated permissions for efficient administrative duties(3). This blend of human oversight and technological assistance upholds Wikipedia's reliability and accessibility, ensuring its smooth operation for millions worldwide.(2)

METHODS

This study employed a replicative extension approach to investigate the influences of policy introduction on administrative actions. Initially, it replicated a hypothesis concerning the dropdown menu's impact on block rationales. Then, it critically evaluated an alternative hypothesis related to user understanding of Wikipedia policies. Finding issues with the latter, the study employed an exploratory approach to identify new hypotheses. Additionally, it utilized a data scraping technique to investigate peaks in block frequency, particularly examining the role of automated tools used by administrators.

Research Question

What is the link between the blocking events evolution on the English Wikipedia with the number of blocks-performing administrators?

From the previous research...

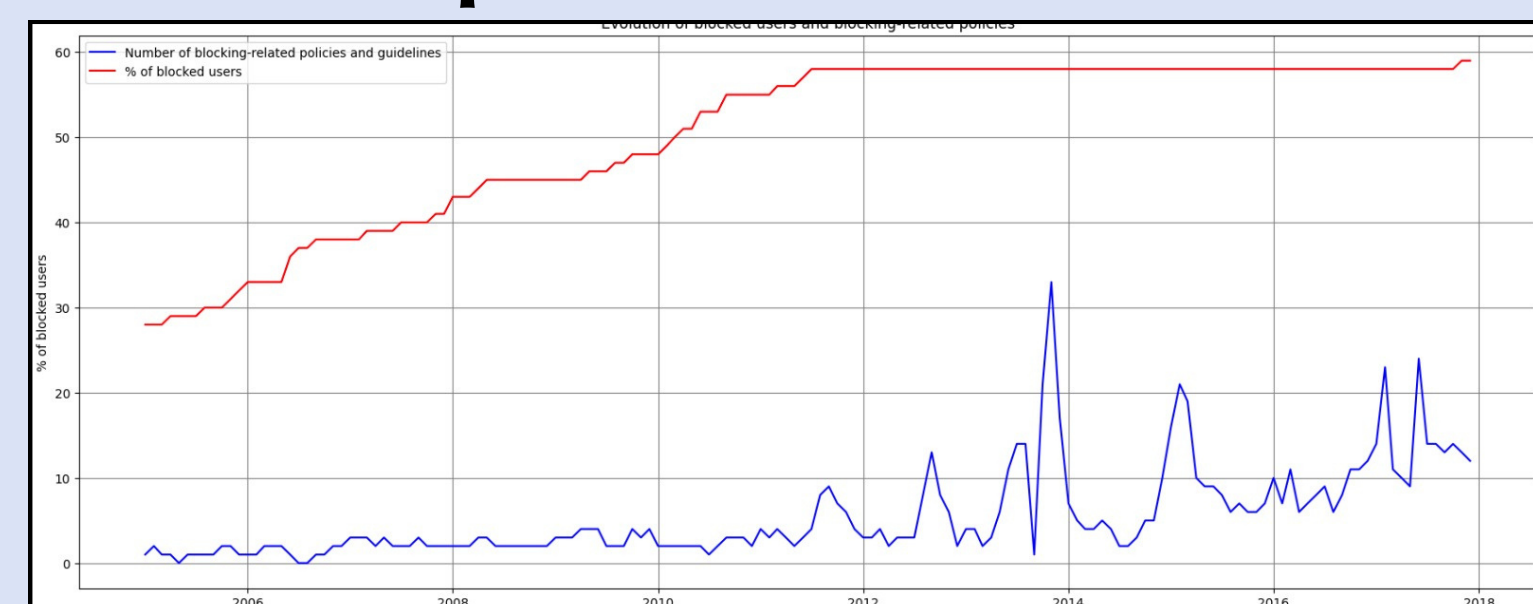


Fig. 1: Replication of the previous research figure "Evolution of blocked users and blocking-related policies")

Upon examining the first hypothesis in the previous research, 'How did the Wikipedians' protection from disruptive behavior using blocking evolve on the English Wikipedia along with the implementation of new regulation policies?', the expectation was that the total number of blocks (normalized) would decrease over time. However, since the data pertaining to this expectation could not substantiate it, we decided to change our research focus from blocking policies to administrators who actually performed those blocks and look into their role in the peaks...

...to investigating the role of bots among administrators

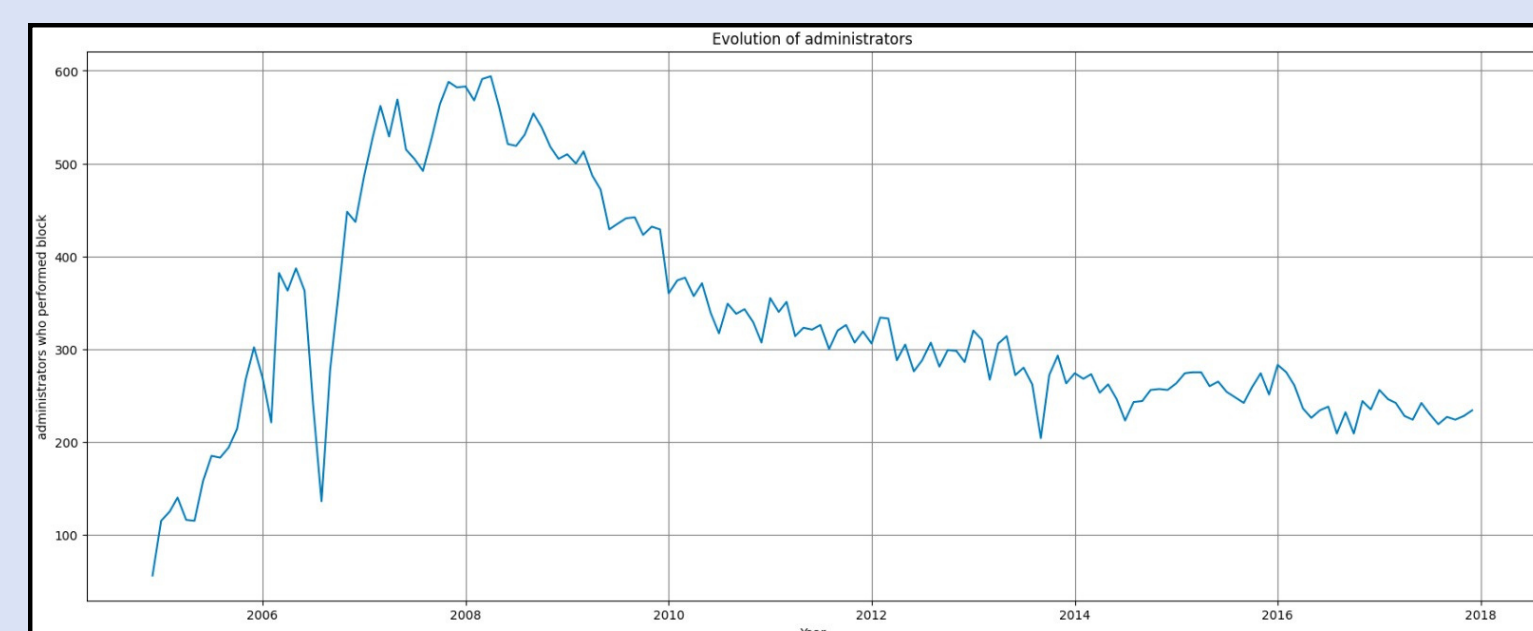


Fig. 2: Number of administrators performing blocks over time (2005-2018)

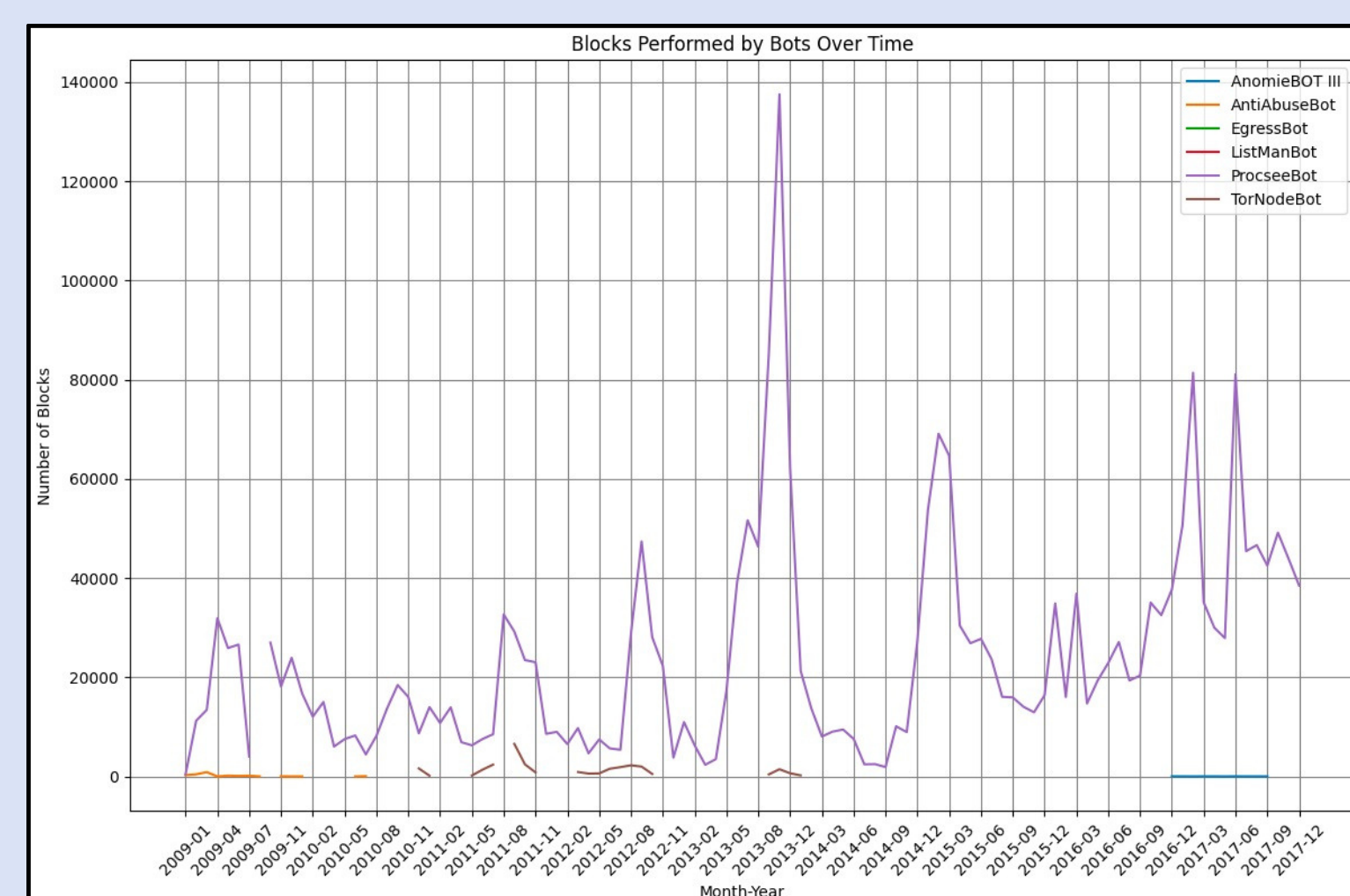


Fig. 3: Evolution of blocked users per Bot only over time (2005-2018)

Based on the scraped data, we can see clearly that the number of performing administrators only kept declining after 2008.

(Note: by administrators, we refer to all those who perform blocks instead of those tagged as 'administrator' by Wikipedia)

According to the Wikipedia Administrator List, 9 out of the 870 administrators are bots.

From our scraped data, we had a look at the most performing administrators over time as well as the administrators containing the word 'Bot' in their names. We identified 3 main block high performing administrators: ProcseeBot (2527093), TorNodeBot (28575) and AntiAbuseBot (1572).

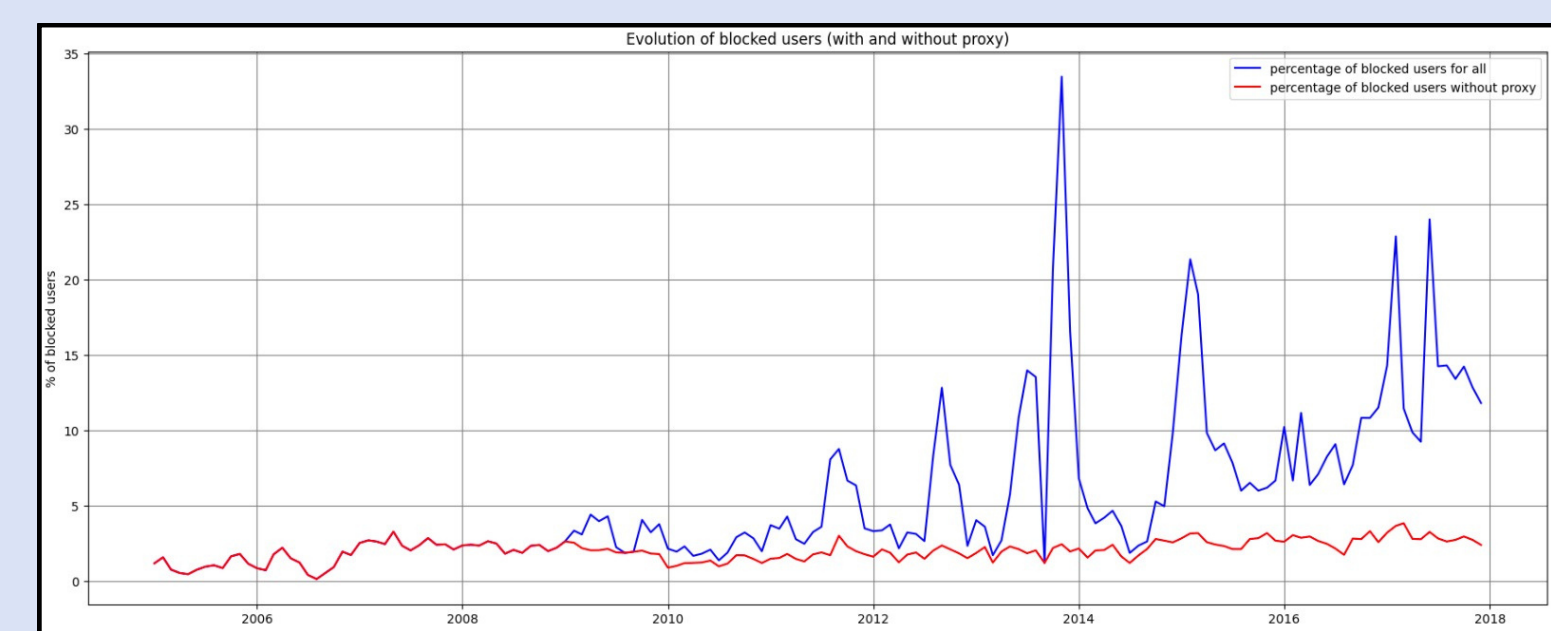


Fig. 4: Evolution of blocked users with and without ProcseeBot (2005-2018)

Procseebot, with accumulated 2527093 blocks, emerged as the most significant administrator. This bot was at first designed to block open proxies from making edits to Wikipedia page. It is currently inactive.

As seen above, it is clear that the proportion of blocks performed by administrators excluding Procseebot is always below 4%, and its variation is not significant in comparison to the blocks done by Procseebot alone.

Conclusion

- **Procseebot's Activity Drives Peaks:** By isolating bot and human administrator actions, we demonstrated that human-driven blocking remained relatively stable, while bot activity, primarily driven by Procseebot, exhibited significant fluctuations, the observed peaks included.
- **Limited Influence of Other Factors:** Direct influence of the growth of the editor community and policy changes did not significantly correlate with blocking trends, suggesting their limited impact on the observed peaks.

Limitations

- **Data Access:** Lack of data on editors' bots and qualitative policy analysis hinders a more comprehensive understanding of the blocking landscape.
- **Bot Identification:** Our approach to identifying bots might not be foolproof, potentially underestimating human-controlled bot activity.
- **Underlying Reasons for Blocking:** Understanding the reasons behind the blocks (e.g., content violations, VPN usage) requires further investigation. Further historical and qualitative analysis might provide nuanced insights,

Future perspectives

- **Bot Activity Scrutiny:** Deep analysis of Procseebot's and other admin bots' actions to understand their blocking tendencies, potential biases, and efficiency.
- **Community Engagement:** Involving the Wikipedia community, especially administrators and bot developers, can unveil the rationale and decision-making procedures behind blocks.
- **Alternative Explanations to blocking spikes:** impacts of organized vandalism, technological shifts...
- **Comparative Analysis:** Contrasting block trends across various Wikipedia languages may unveil wider trends and cultural impacts.

Bibliography

- 1 Forte, A., Larco, V., & Bruckman, A. (2009). Decentralization in wikipedia governance. *Journal of Management Information Systems*, 26(1), 49–72. <https://doi.org/10.2753/mis0742-1222260103>
- 2 Wikimedia Foundation. (2024a, February 1). *Blocking policy*. Wikipedia. https://en.wikipedia.org/wiki/Wikipedia:Blocking_policy
- 3 Wikimedia Foundation. (2024b, February 17). *Bot policy*. Wikipedia. https://en.wikipedia.org/wiki/Wikipedia:Bot_policy

Open Science Practices

Open Data

Data sources, scraping and analysis codes are provided. The data can be updated as well.

Replicability

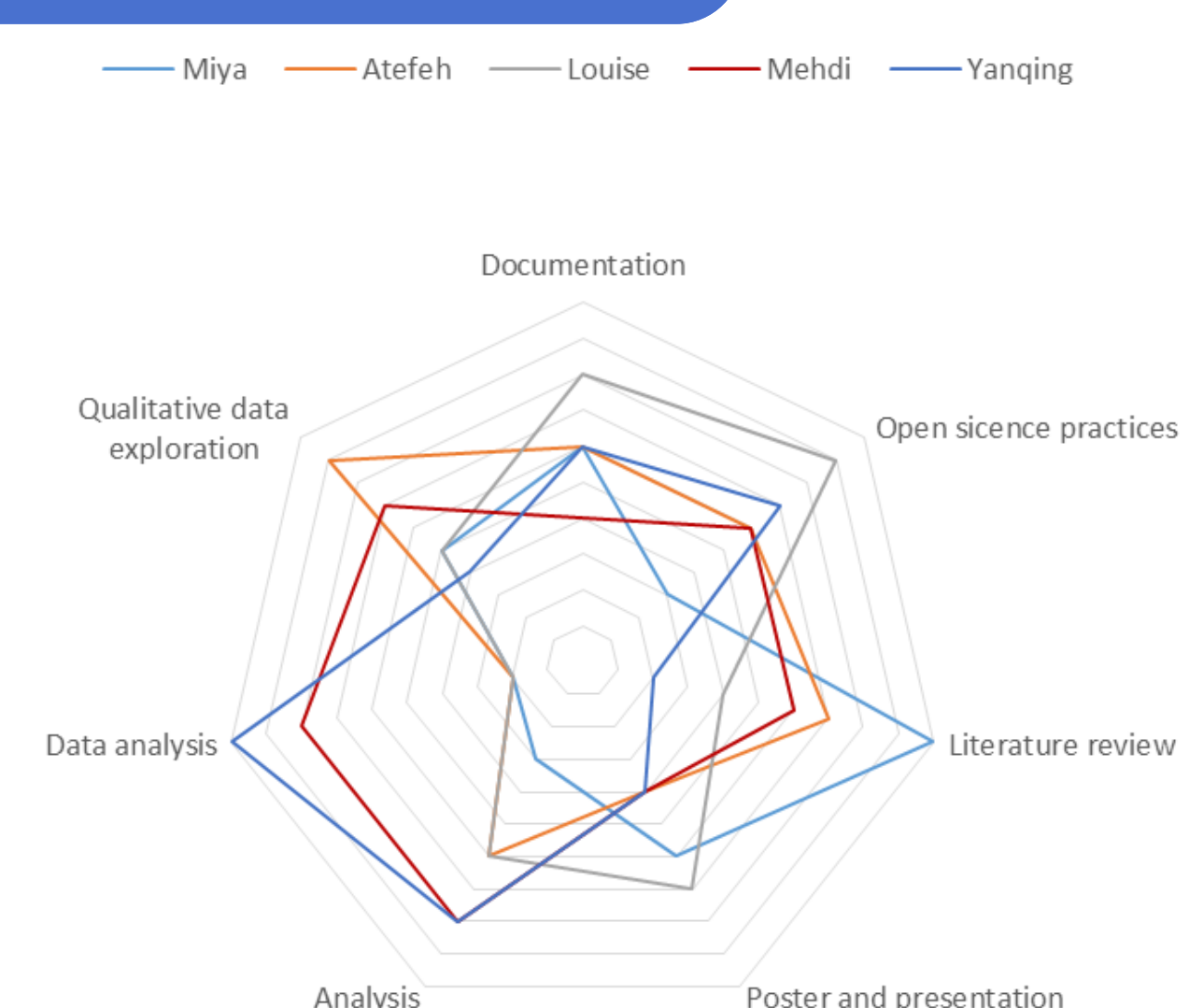
A part of our research summary is dedicated to a step by step to replicate our results for full transparency of the project. The replicability was also tested with a peer.

Open Access

You can find our GitHub repository here



Contribution Self-assessment



We would also like to extend our gratitude to our mentors Cl  a Montanari, Muki Haklay, Zahara and our teacher Ignacio Atal for their insightful guidance.