The paper titled "The Friendship Paradox: An Analysis on Signed Social Networks with Positive and Negative Links" by Catherine Yang, Yuying Zhao, and Tyler Derr[2] investigates the Friendship Paradox (FP) and Generalized Friendship Paradox (GFP) in signed networks, which contain both positive and negative relationships (e.g., friends and foes). The authors propose a first-order signed neighbor metric based on the traditional (G)FP that considers both undirected homogeneous link relations and directed heterogeneous link relations[2].

The study extends beyond node degree/popularity, which is the focus of most existing works on FP and GFP[2]. The authors develop a second-order metric to further study the relationship between an individual's positive and negative neighborhood sets[2]. This work is significant as it bridges the gap in understanding the network topology of social network systems, which is essential for a deeper understanding of these networks[2].

The authors perform an empirical analysis of these proposed metrics in signed networks across a representative set of real-world datasets[2]. This paper contributes to the field of data mining, particularly in the context of social network systems, by providing a comprehensive analysis of the Friendship Paradox in signed social networks[2].

Source: Conversation with Copilot, 5/24/2024

(1) The Friendship Paradox: An Analysis on Signed Social Networks with .... https://www.kdd.org/kdd2023/wp-content/uploads/2023/11/yang2023friendship.pdf.

(2) KDD '23: Proceedings of the 29th ACM SIGKDD Conference on Knowledge .... https://www.kdd.org/kdd2023/wp-content/uploads/2023/08/toc.html.

(3) Research Track Papers - KDD 2023. https://www.kdd.org/kdd2023/research-track-papers/index.html.

(4) KDD 2023 | Long Beach, CA, USA - KDD 2023. https://www.kdd.org/kdd2023/index.html.

(5) undefined. https://doi.org/.