

The voices of rape: Cognitive networks reconstruct emotional perspectives of rape survivors' passive and active narratives on Reddit

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Survivors of sexual assault often feel guilty, ashamed, and even somewhat responsible for what "happened to them", despite not being at fault. The advent of social media has provided unprecedented access to narratives of victims of violence, providing textual data that associates ideas with emotions. In this way, social media posts act as online diaries where individuals can report their traumatic experiences, but also as communication channels, where online users can engage with other people's narratives.

This study uses nearly 18,000 posts from nearly 3,000 users on Reddit's *r/sexualassault* board to investigate how emotional perspectives of rape survivors are structured in terms of connections between concepts within the sentences of their posts. We apply cognitive network science, a research area that constructs quantitative models of cognitive and emotional knowledge, and in particular, we adopt the recent framework of textual forma mentis networks (Stella 2020) in which nodes represent concepts in sentences while links indicate either syntactic relationships (e.g. "I was raped" yields the syntactic link "I" - "raped") or semantic overlap (e.g. linking "violence" and "aggression" as synonyms). Following previous investigations within clinical psychology (Henley et al. 1995), we investigate the differences in emotional structure of two different networks constructed from rape narratives written in the passive voice and active voice, respectively.

We find that concepts of *guilt*, *shame*, *blame*, *fault*, *responsibility*, and *victim* are all more central to narratives written in the passive voice, while concepts related to other people (e.g. family, friends, and partners) are more central to narratives written in the active voice. These results suggest that survivors who use the passive voice may view themselves more as protagonists in their stories, while survivors who use the active voice may have a stronger tendency to frame their assailants as antagonists (see Figure 1). Our findings indicate how cognitive networks can provide quantitative support to pre-existing conjectures in clinical psychology, while giving voice to rape victims and enabling a better understanding of the mechanisms and repercussions of rape across thousands of different experiences.

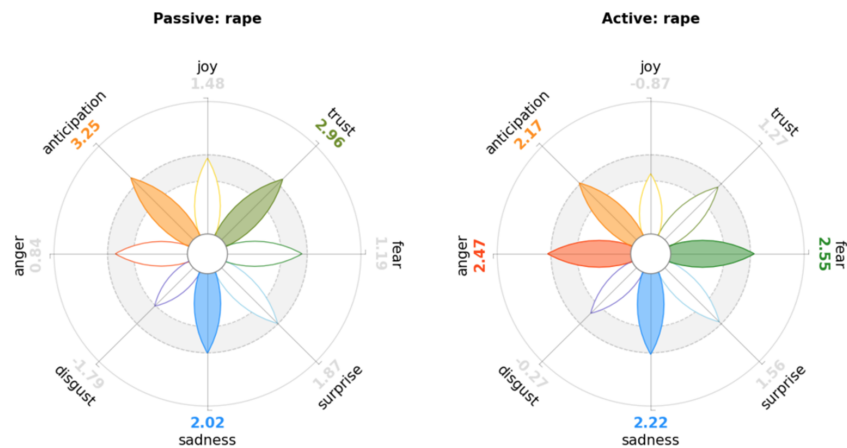


Figure 1. Z-score plots of prominent emotions capture emotional differences in the semantic frames surrounding the word "rape" in the passive and active voice networks, respectively.

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References.

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Henley, N. M., Miller, M., & Beazley, J. A. (1995). <https://doi.org/10.1177/0261927X95141004>