

More than Meets the Tie: Examining the Role of Interpersonal Relationships in Social Networks

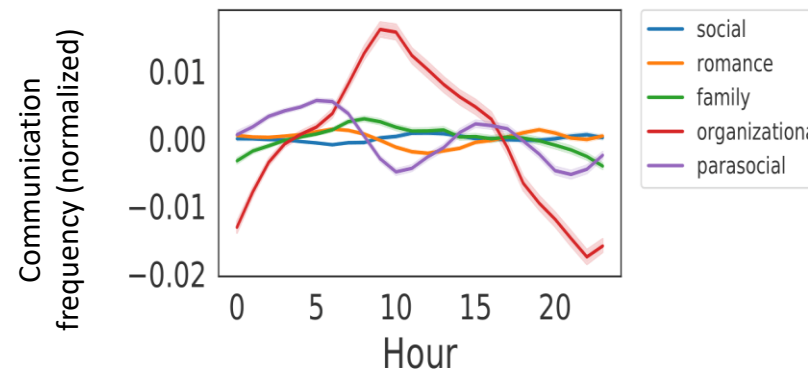
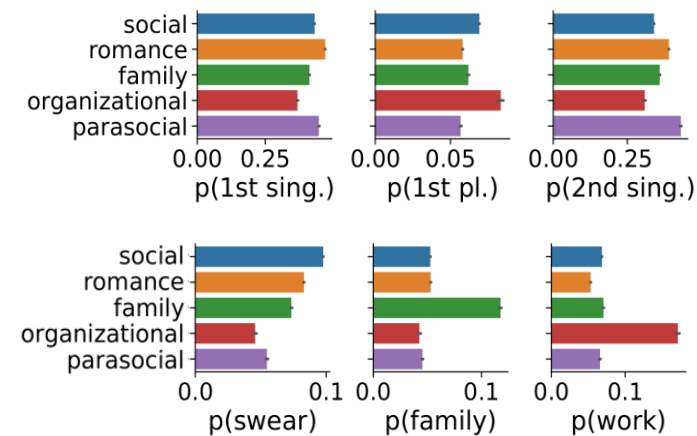
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To study how *interpersonal relationships* relate to communicative differences in social interactions, we examined the interactions of 9.6M Twitter user dyads, grouped into *social*, *romance*, *family*, *organizational*, and *parasocial* relationships



Construction of Classifier Model

We build a model using the interacting tweets, network and user-information features

Our proposed model based on RoBERTa outperforms baselines and achieves an F1 score of 0.7

Aids in Predicting Information Diffusion

The addition of relationship types as features improve retweet prediction performance by capturing content shared only between specific relationships

Linguistic Differences

The type of relationship shapes the language used when interacting with others, such as change in usage of person pronouns and swearing words

Behavioral/Social Differences

Communication between different relationship types occur during different hours of the day

Communication Differences

The diversity of the topics shared, the level of reciprocity, and network connectivity of the dyads also differ depending on relationship type

