Online social networks brought a new definition to relationships and communications. One may have hundreds of friends in cyberspace without even having seen their real faces. Along with this transition there is increasing evidence that bullying has transformed as well, from school yards to internet precincts – cyberbullying.

Although bullying draws a lot of attention, due to its technical aspects, cyberbullying is not fully understood yet. State-of-the-art studies in cyberbullying detection have mainly focused on the sentiment of terms and the content of conversations, while largely ignoring the involved actors and their interactions. A funny chat between teenage friends, just because of having foul words, can be flagged as bullying while a tenacious intruder with subtle but hurtful comments sneaks out.

We hypothesize that incorporation of the potential victim's profile and their characteristics, into cyberbullying detection improves the discrimination capacity of the procedure. This study outlines a framework for this faceted approach. Our study demonstrated that deploying gender-specific and age-specific features improve the cyberbullying detection accuracy for the MySpace dataset, compared to the conventional approaches. Analysis showed that authors' information can be leveraged to discriminate between harassing posts and the bullying ones.

The main limitation of our experiment was the limited size of the dataset. A larger and more diverse dataset should be developed for future work in cyberbullying detection. Other features which may differentiate writing styles, such as profession, and educational level can also be investigated in this matter.

In future stages this approach will be extended by considering the behaviour of actors across social networks, and how they react to a potentially cyberbullying incident. A second line of future research will be to address the various use scenarios for the detection of bullying as well as the corresponding detection approaches that may be required in each of the different types of cyber contexts.

1 Corresponding author: m.dadvar@utwente.nl ; PO Box 217, 7500AE, Enschede, the Netherlands