



**Title:** Data science against gender-based violence

**Acronym:** DASCIVIO

**Project leader:** David Moraña

**Host organisation:** Universitat de Barcelona

**Main purpose of the project:**

To improve the social and health care model for the victim and her environment in cases of gender-based violence, using advanced data science and mathematical modeling methods able to quantify the degree of underreporting of cases and to identify the potential factors associated to the risk of suffering such violence.

**Design/methodology/approach:**

The project will adapt the most recent developments on underreported data modelling based on count data methods and new deep learning approaches will be proposed within its framework in order to identify the factors potentially associated to the risk of suffering gender-based violence.

**Potential results:**

In addition to the methodological developments necessary to produce the outcomes of the project, which will be publicly available to other researchers, a deep learning algorithm capable of quantifying the risk of suffering gender-based violence will be incorporated to the system used by health professionals in a daily basis.

**Social relevance of the research:**

Gender-based violence is a serious violation of human rights and a life-threatening health and protection issue. It is estimated that one in three women will experience sexual or physical violence in their lifetime worldwide, so the outcomes of this project will make a difference in the fight against gender-based violence.

**Originality/value of the project:**

The project will use real-world data that have not been analyzed in much detail before to estimate underreporting, predict potential victims of gender-based violence as well as generate accurate knowledge in the field to allow professionals updating their protocols and perspectives on certain aspects of the problem.