Can an Automatic Tool Assess Risk of Radicalization Online? A Case Study on Facebook

Javier Torregrosa†, Irene Gilpérez-López†, Raul Lara-Cabrera†, David Garriga‡, David Camacho†

†Computer Science Department, Universidad Autónoma de Madrid - ‡Parc Sanitari Sant Joan de Déu

Email (correspondig author): david.camacho@uam.es

I. INTRODUCTION

Can risk of radicalization be measured analyzing users' information on the Internet? Following the background from recent studies [1], [2], [3], [4], this work aims to test the viability of detecting and measuring risk factors of jihadist radicalization with a Facebook case. The work has been performed under the frame of RiskTrack project, which aim is to develop an automatic risk assessment tool for jihadist radicalization, using data from online social networks profiles.

II. METHODOLOGY

To test the considered risk factors, a qualitative study was performed. A real case was selected from the Internet, provided by an expert analyst on jihadist radicalization, and its shared information on Facebook – also combined with extra information from other social network profiles when needed, such as YouTube or Twitter – was analyzed manually. To provide a final risk level, as a first approach to a more complex measurement, all the risk factors that could be found were scored with a number: 0 (not present), 1 (partially present) and 2 (highly present). This classification was based on already existent psychological risk tool: the HCR-20 [5].

III. CASE STUDY

The Assessed Subject (AS), a young male living in a city of Spain, presented originally one Facebook account and one Facebook page with a different name. The analysis was conducted with the Facebook profile as the main data source, with some aggregated data obtained from other sources. Finally, the expert who provided the profile was contacted in order to have a second opinion about AS' assessment. The shared opinion by the psychologists' team and the expert was that the profile, with a medium level risk of being radical (17/36) (see Table I), could be a radical recruiter due to the high amount of followers he had (that shall be confused with Facebook contacts) and the high frequency to share fundamentalist doctrinal information.

IV. CONCLUSIONS

This theoretical case study [1] was conducted in order to test some risk factors with a Facebook profile, as a way of monitoring data of real people so a risk assessment could be fulfilled. Althouth there is still a lot of work needs to be done until the tool would be finally ready, some interesting computational tools are currently under development [2], [3], to be used in combination with terrorism experts, to measure these risk factors.

TABLE I
RADICALIZATION RISK ASSESSMENT OF AS

PERSONAL FACTORS	Scores
Generation	1
Education level	0
Age	2
Mental health	0
Economical level	-
Religious orientation	2
Social isolation	0
Attitude towards politics	2
Attitude pro-terrorism	0
Psychological factors	1
Exposure to radical propaganda	1
Travel to a conflict / training zone	0
Criminal record	-
GROUP FACTORS	
Family conflicts	0
Perceived discrimination	0
Sense of belonging to a group	2
Use of radical rhetoric	1
Identification with Muslim victims	2
Relation with radical peers or family	2
Presence of a charismatic leader	1
Final risk level	17/36

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