Topics in Wiki-dataset

This document is part of the supplementary material for the following paper:

Isar Nejadgholi and Svetlana Kiritchenko (2020) On Cross-Dataset Generalization in Automatic Detection of Online Abuse - WOAH2020 Shared Exploration: Bias and Unfairness in the Detection of Online Abuse

The following 20 topics are extracted from *Wiki*-dataset annotated for toxicity ¹ using LDA algorithm. Each topic is represented by 10 keywords. The number of utterances that fall under each topic and the percentage of toxic utterances is reported.

Category 1: incoherent and mixture of general topics

```
Topic #0: 0.025*"know" + 0.019*"like" + 0.019*"thank" + 0.015*"think" + 0.014*"want" + 0.013*"look" + 0.012*"ll" + 0.012*"ve" + 0.012*"hi" + 0.011*"time"   31210 documents - 0.195 of dataset 0.18\% \text{ labeled as } Toxic \text{ and } 36\% \text{ of all } Toxics  Topic #1: 0.012*"time" + 0.010*"like" + 0.009*"peopl" + 0.009*"think" + 0.007*"life" + 0.007*"year" + 0.007*"idiot" + 0.007*"day" + 0.006*"know" + 0.006*"drink"   9598 documents - 0.060 of dataset 0.19\% \text{ labeled as } Toxic \text{ and } 12\% \text{ of all } Toxics
```

Category 2: coherent and high association with offensive language Topic #2:

```
0.020*"suck" + 0.015*"year" + 0.010*"new" + 0.009*"citi" + 0.009*"school" + 0.008*"cock" + 0.008*"old" + 0.008*"dick" + 0.007*"pussi" + 0.007*"women"
```

6466 documents - 0.040 of all the documnets 0.18% labeled as Toxic and 8% of all Toxic

¹https://meta.wikimedia.org/wiki/Research:Detox/Data_Release

```
Topic #7:
0.018*" english" + 0.017*" languag" + 0.016*" peopl" + 0.011*" countri" + 0.010*" americal countri = 0.018*" english" english = 0.017*" languag" english = 0.016*" peopl" english = 0.011*" countri = 0.010*" americal english = 0.010*" english = 0
ican" + 0.009*"nation" + 0.008*"term" + 0.008*"use" + 0.008*"word" +
0.007*"german"
7706 documents - 0.048 of dataset
0.06\% labeled as Toxic and 3\% of all Toxics
Topic #8:
0.047^*"kill" + 0.038^*"live" + 0.027^*"pro" + 0.024^*"die" + 0.023^*"eat" +
0.018" jewish" + 0.017" anti" + 0.017" islam" + 0.016" al" + 0.016" israel"
997 documents - 0.006 of dataset
0.34\% labeled as Toxic and 2\% of all Toxics
Topic #9:
0.024*"god" + 0.020*"book" + 0.019*"christian" + 0.009*"jesus" + 0.009*"cast"
+0.008*"king" +0.008*"prime" +0.008*"william" +0.008*"presid" +0.008*"japanes"
1102 documents - 0.007 of dataset
0.12\% labeled as Toxic and 1\% of all Toxics
Topic #12:
0.014*"person" + 0.013*"editor" + 0.013*"admin" + 0.011*"attack" + 0.011*"say"
+0.010*"peopl" +0.009*"like" +0.009*"wikipedia" +0.008*"accus" +0.008*"user"
13949 documents - 0.087 of dataset
0.13% labeled as Toxic and 12% of all Toxics
Topic #14:
0.187^*"fuck" + 0.078^*"shit" + 0.056^*"ass" + 0.051^*"stupid" + 0.045^*"bas-
tard" + 0.037*"em" + 0.033*"bitch" + 0.032*"moron" + 0.030*"cunt" + 0.027*"hate"
1294 documents - 0.008 of dataset
0.97% labeled as Toxic and 8% of all Toxics
Topic #16:
0.040*"team" + 0.031*"footbal" + 0.029*"infobox" + 0.027*"award" + 0.023*"win"
+0.022*"gav" +0.015*"air" +0.015*"engin" +0.015*"match" +0.014*"sta-
tion"
475 documents - 0.003 of dataset
0.13\% labeled as Toxic and 0.0\% of all Toxics
```

Category 3: coherent and low association with offensive language

```
Topic #3:
0.047*"redirect" + 0.040*"talk" + 0.039*"utc" + 0.036*"categori" + 0.032*"film"
+0.017*" episod" +0.013*" merg" +0.012*" octob" +0.012*" decemb" +0.011*" jan-
uari"
3023 documents - 0.019 of dataset
0.04\% labeled as \mathit{Toxic} and 1\% of all \mathit{Toxics}
Topic #4:
0.086*"page" + 0.082*"wikipedia" + 0.059*"edit" + 0.043*"talk" + 0.035*"help"
+0.033*"articl" +0.028*"thank" +0.022*"question" +0.016*"ask" +0.015*"re-
vert"
10097 documents - 0.063 of dataset
0.04% labeled as Toxic and 3% of all Toxics
Topic #5:
0.086*"sourc" + 0.021*"reliabl" + 0.015*"claim" + 0.012*"cite" + 0.012*"re-
fer" + 0.012*" wikipedia" + 0.011*" inform" + 0.011*" fact" + 0.010*" publish"
+ 0.010*"research"
9439 documents - 0.059 of dataset
0.04% labeled as Toxic and 3% of all Toxics
Topic #6:
0.034*"link" + 0.029*"list" + 0.023*"add" + 0.022*"page" + 0.014*"game" +
0.013*"inform" + 0.011*"articl" + 0.010*"date" + 0.010*"chang" + 0.009*"googl"
7807 documents - 0.049 of dataset
0.03\% labeled as Toxic and 1\% of all Toxics
Topic #10:
0.102*" delet" + 0.048*" articl" + 0.045*" imag" + 0.033*" wikipedia" + 0.029*" tag"
+0.028" copyright" +0.025" file" +0.025" notabl" +0.024" page" +0.017" use"
6308 documents - 0.040 of dataset
0.02\% labeled as Toxic and 1\% of all Toxics
Topic #11:
0.017*"univers" + 0.017*"th" + 0.012*"law" + 0.012*"scienc" + 0.011*"the-
ori" + 0.009*"capit" + 0.008*"centuri" + 0.008*"definit" + 0.008*"state" + 0.008
0.007*"student"
```

1875 documents - 0.012 of dataset

0.03% labeled as Toxic and 0.0% of all Toxics

0.028*"page" + 0.025*"discuss" + 0.024*"review" + 0.024*"talk" + 0.023*"thank"

+0.023*"request" +0.020*"vertic" +0.019*"comment" +0.018*"templat" +0.017*"wp"

7555 documents - 0.047 of dataset 0.02% labeled as Toxic and 1% of all Toxics

Topic #15:

0.050* "articl" + 0.011*" think" + 0.011*" section" + 0.009*" wp" + 0.009*" discuss" + 0.008*" refer" + 0.008*" editor" + 0.008*" point" + 0.008*" need" + 0.007*" chang"

30128 documents - 0.189 of dataset 0.02% labeled as Toxic and 3% of all Toxics

Topic #17:

0.054*"http" + 0.045*"com" + 0.033*"www" + 0.033*"org" + 0.026*"en" + 0.017*"state" + 0.015*"wiki" + 0.013*"unit" + 0.011*"compani" + 0.008*"html"

2757 documents - 0.017 of dataset 0.04% labeled as Toxic and 1% of all Toxics

Topic #18:

0.121*" edit" + 0.097*" block" + 0.038*" vandal" + 0.030*" user" + 0.029*" account" + 0.028*" stop" + 0.027*" ip" + 0.023*" war" + 0.022*" page" + 0.021*" revert"

6559 documents - 0.041 of dataset 0.09% labeled as Toxic and 4% of all Toxic

Topic #19:

0.130*"style"+0.096*"px"+0.069*"align"+0.059*"color"+0.052*"background"+0.051*"pad"+0.044*"middl"+0.038*"border"+0.033*"solid"+0.023*"size"

1341 documents - 0.008 of dataset 0.06% labeled as Toxic and 1% of all Toxics