

# Supplementary Information

## Random Forest Cross-Validation

min comments	5	8	10
f1	0.041 ± 0.026	0.017 ± 0.029	0.025 ± 0.042
precision	0.033 ± 0.021	0.018 ± 0.031	0.024 ± 0.043
recall	0.056 ± 0.036	0.017 ± 0.028	0.025 ± 0.041
f1 MAp	0.975 ± 0.002	0.985 ± 0.002	0.987 ± 0.002
precision MAp	0.981 ± 0.001	0.984 ± 0.0	0.986 ± 0.001
recall MAp	0.968 ± 0.004	0.987 ± 0.004	0.987 ± 0.003
f1 Mlp	0.041 ± 0.026	0.017 ± 0.029	0.025 ± 0.042
precision Mlp	0.033 ± 0.021	0.018 ± 0.031	0.024 ± 0.043
recall Mlp	0.056 ± 0.036	0.017 ± 0.028	0.025 ± 0.041

Table 1: **Average Evaluation Metrics Across 5-Fold Cross-Validation.** The table reports the mean performance of five SMOTE Random Forest models, each trained and tested on a distinct fold. While overall accuracy remains relatively stable, the performance on the minority class (Mlp) is consistently poor, with low recall and precision. This highlights the difficulty of learning meaningful decision boundaries under severe class imbalance, despite the application of oversampling techniques.

## Dyads Summary

This section reports information on the dyads' names used in the article.

Dyad	Emotion 1	Emotion 2
love	trust	joy
submission	trust	fear
dominance	trust	anger
hope	trust	anticipation
sentimentality	trust	sadness
curiosity	trust	surprise
ambivalence	trust	disgust
guilt	joy	fear
pride	joy	anger
optimism	joy	anticipation
bittersweetness	joy	sadness
delight	joy	surprise
morbidness	joy	disgust
frozenness	fear	anger
anxiety	fear	anticipation
despair	fear	sadness
alarm	fear	surprise
shame	fear	disgust
aggressiveness	anger	anticipation
envy	anger	sadness
outrage	anger	surprise
contempt	anger	disgust
pessimism	anticipation	sadness
confusion	anticipation	surprise
cynism	anticipation	disgust
disappointment	sadness	surprise
remorse	sadness	disgust
unbelief	surprise	disgust

Table 2: **Summary of the basic emotion combinations and the dyad names associated to them.**

## Arborescence Plots

This section reports the arborescence plots which were not reported in the main article due to space constraints.

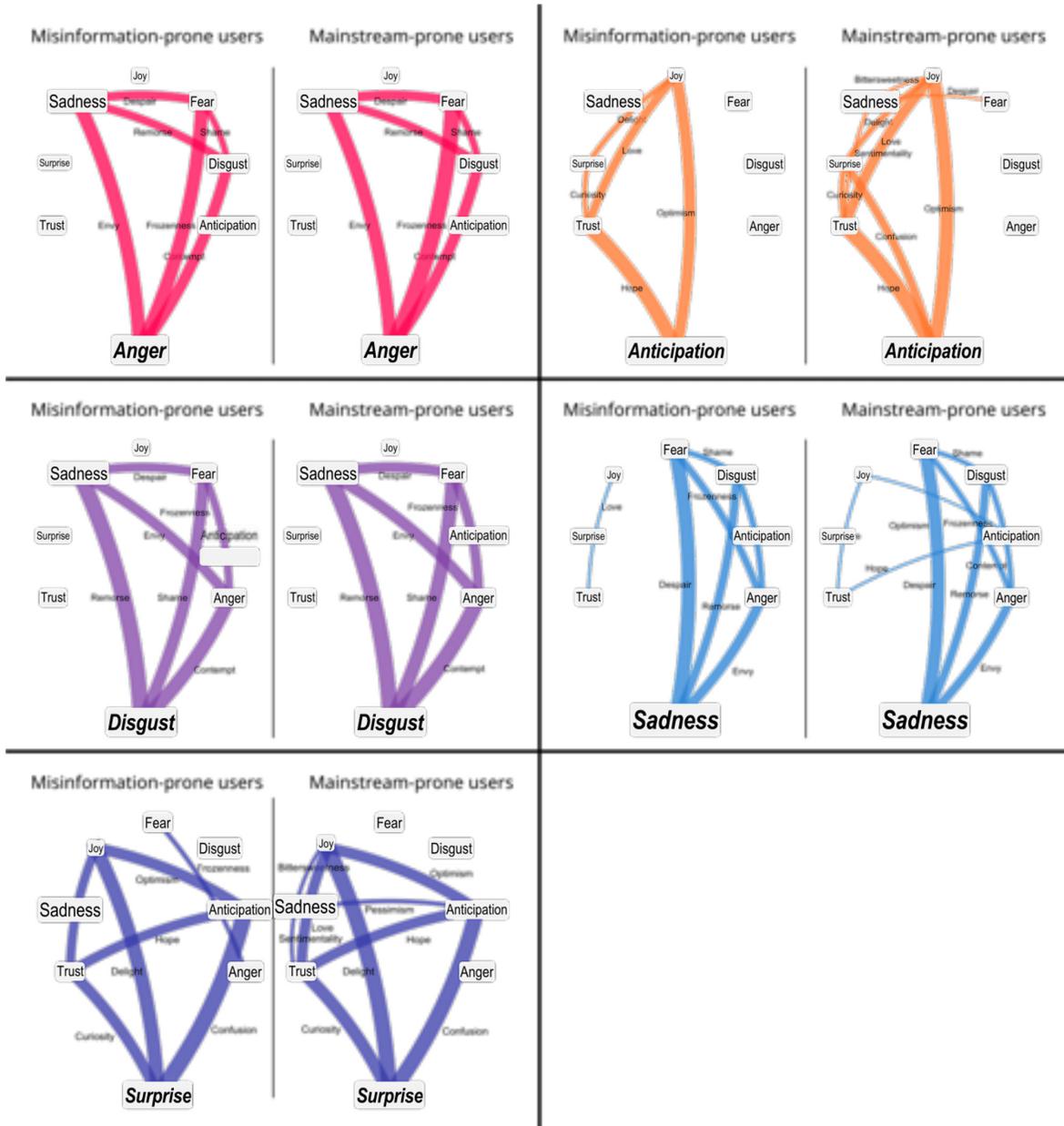


Figure 1: **Additional Arborescence Plots.** We can see that misinformation-prone users' arborescences generally present less stems and branches. In the anger and disgust plots the differences only the branch thicknesses differ, while in surprise we can see that fear and anger have significant presence. Dangling branches are the result of stems' poor significance.