

# Experiments

## Effectiveness of different types features

Removed type	R-19	W-16	W-20
Emotion Category	0.193	0.679	0.686
Emotion Lexicon	0.239	0.715	0.745
Emotional Intensity	0.216	0.725	0.750
Sentiment Score	0.245	0.723	0.743
Other Auxiliary Features	0.307	0.653	0.722
<b>Dual Emotion Features</b>	<b>0.337</b>	<b>0.728</b>	<b>0.759</b>

- The macro F1 scores of Dual Emotion Features **all decrease regardless** of the removed type of emotion features.
- Thus, it reveals the **necessity** of using five types of emotion features jointly.

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## Evaluation Questions

- EQ1: Are Dual Emotion Features more effective than baseline features when used alone for fake news detection? How effective are the different types of features in Dual Emotion Features?
- EQ2: Can Dual Emotion Features help **improve the performance** of text-based fake news detectors?
- EQ3: How robust do the fake news detection models with Dual Emotion Features in real-world scenarios?
- EQ4: How effective are the components of Dual Emotion Features, including the publisher emotion, social emotion, and emotion gap?