**Results from Supervised learning:**

For Unfiltered Dataset:

A screen shot of a computer

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For sf9 Labellled Dataset:

|  |  |  |
| --- | --- | --- |
| Evaluation Metrics | SVM | Naïve Bayes |
| Accuracy | 80.1% | 78.0% |
| Precision | 0.70 | 0.67 |
| Recall | 0.80 | 0.78 |
| F1-score | 0.73 | 0.70 |

For sf9 Labellled Dataset:

|  |  |  |
| --- | --- | --- |
| Evaluation Metrics | SVM | Naïve Bayes |
| Accuracy | 73.78% | 61.0% |
| Precision | 0.80 | 0.83 |
| Recall | 0.67 | 0.55 |
| F1-score | 0.69 | 0.53 |

**Sentiment Analysis – Labelled – Supervised Learning:**

**Emotional Support**

* **Words**: charybdis, done, entertainment, ever, blue, chaewon, defamation, action, crimnalsbully, bt
* **Scores**: Ranging from 0.337 to 0.656

These words seem to represent emotional themes or sentiments, possibly related to feelings, actions, or negative experiences such as defamation and bullying. The scores indicate the strength or relevance of these words within the emotional context.

**Instrumental Support**

* **Words**: boy, eunchae, agency, deny, difference, discus, anymore, bully, clearly, chaewon
* **Scores**: Ranging from 0.077 to 0.156

These words likely pertain to instrumental support, which involves practical or logistical assistance. Terms like "agency," "deny," and "anymore" suggest actions or processes related to support activities.

**Appraisal Support**

* **Words**: era, defamation, bighitbt, eunchae, crimnalsbully, blue, dont, don, clear, bt
* **Scores**: Ranging from 0.487 to 1.040

Appraisal support involves evaluating or judging something. Words like "defamation," "blue," and "clear" may reflect critical assessments or opinions. The higher scores indicate stronger appraisals or evaluations.

**Informational Support**

* **Words**: didnt, bighitbt, action, era, available, cyberbullied, come, bullying, box, ea
* **Scores**: Ranging from 0.174 to 0.239

Informational support typically involves providing information or knowledge. These words cover topics like actions, time periods ("era"), availability, and cyberbullying, suggesting a range of informative content.

**Miscellaneous**

* **Words**: available, cyberbullied, account, come, bluelovesick, back, dirty, check, along, chart
* **Scores**: Ranging from 0.095 to 0.122

This category likely includes terms that don't fit neatly into the other categories but are still relevant. Words like "available," "cyberbullied," and "chart" suggest varied contexts, possibly related to status, conditions, or monitoring.

A close up of words

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**Word Cloud**

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**Pie chart Representation**

A screenshot of a graph

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**Bar Graphs**

A graph of a bar graph

Description automatically generated with medium confidenceA diagram of a confusion matrix

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Top keywords for 'emotional':

['forever', 'he', 'since', 'fan', 'one', 'feel', 'really', 'group', 'like', 'love']

Top keywords for 'instrumental':

['check', 'photo', 'pc', 'without', 'album', 'tweet', 'posd', 'support', 'help', 'signature']

Top keywords for 'appraisal':

['look', 'new', 'day', 'ineed2noy', 'libertysince05', 'see', 'happy', 'link', 'great', 'good']

Top keywords for 'informational':

['thank', 'help', 'ticket', 'drama', 'show', 'guide', 'historical', 'like', 'connt', 'link']

Top keywords for 'none':

['posr', 'musical', 'birthday', 'happy', 'orig', 'twitr', 'upda', 'eng', 'sub', 'pretty']

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A diagram of a confusion matrix

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