Trader Behavior Insights vs Market Sentiment

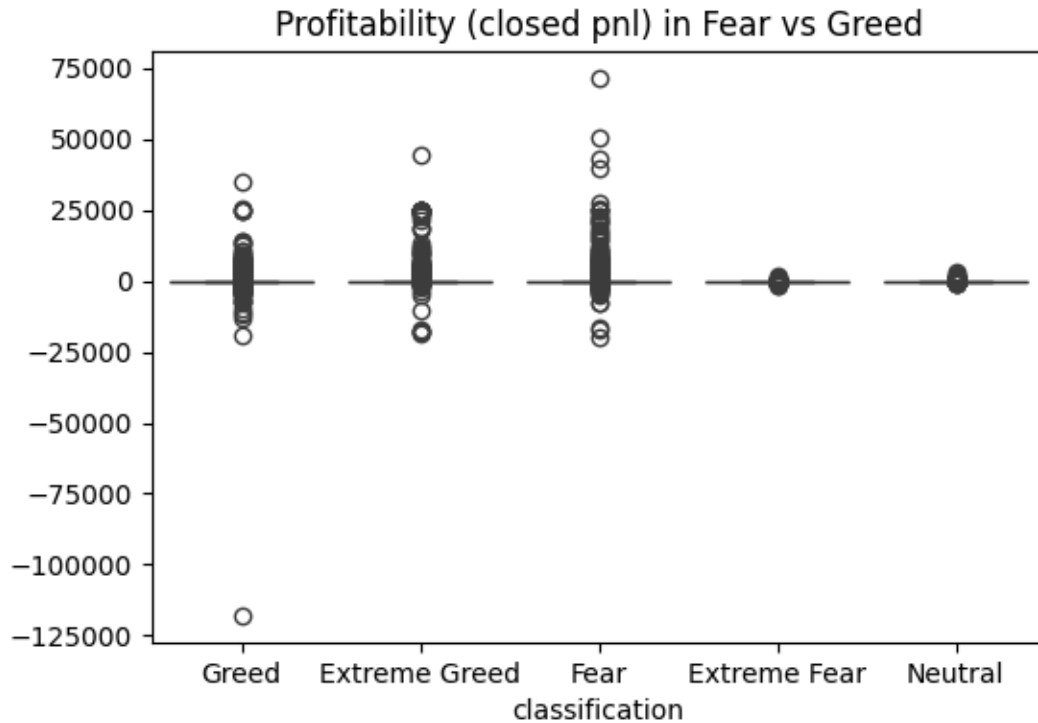*Generated on 2025-08-17 17:38:45*

1. Data Overview

- Trader dataset: 211,224 rows
- Sentiment dataset: 2,644 rows
- Merged dataset: 211,224 rows

2. Trade Distribution

Observation: Fear and Greed dominate trading activity, with fewer trades during Neutral and Extreme sentiment periods.

3. Profitability vs Sentiment

Profitability (closed pnl) in Fear vs Greed

- T-test (Fear vs Greed): $p \approx 0.71 \rightarrow$ No significant mean difference.
- Mann-Whitney test: $p < 0.001 \rightarrow$ Significant distributional difference.
- ANOVA: $p < 0.001 \rightarrow$ At least one sentiment differs.

Takeaway: Distributions of profitability shift subtly across sentiment, though mean PnL differences are small.
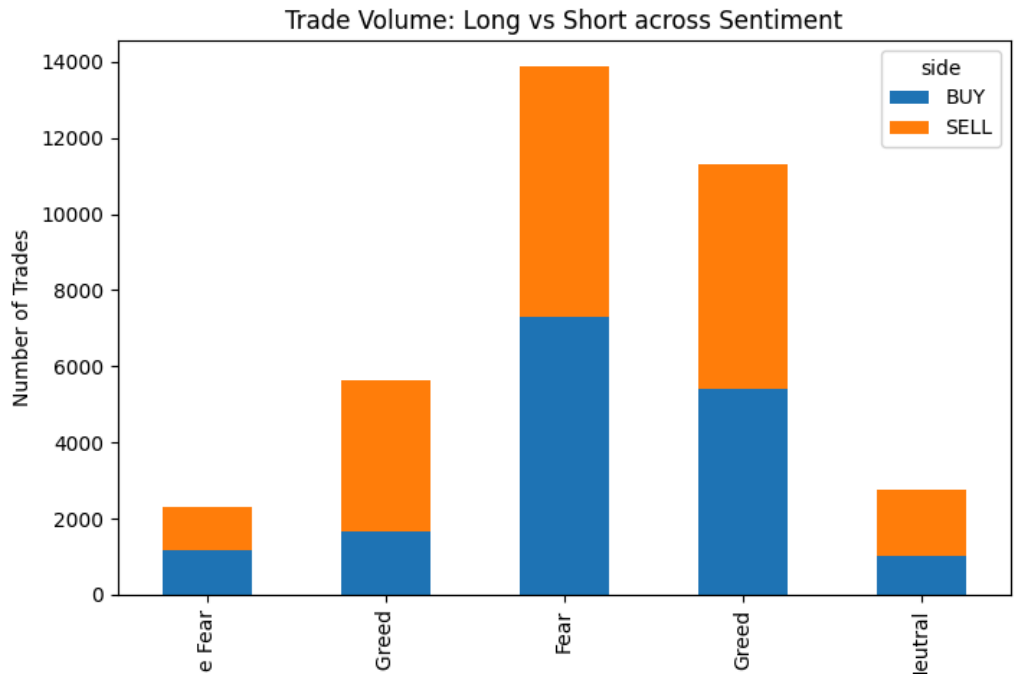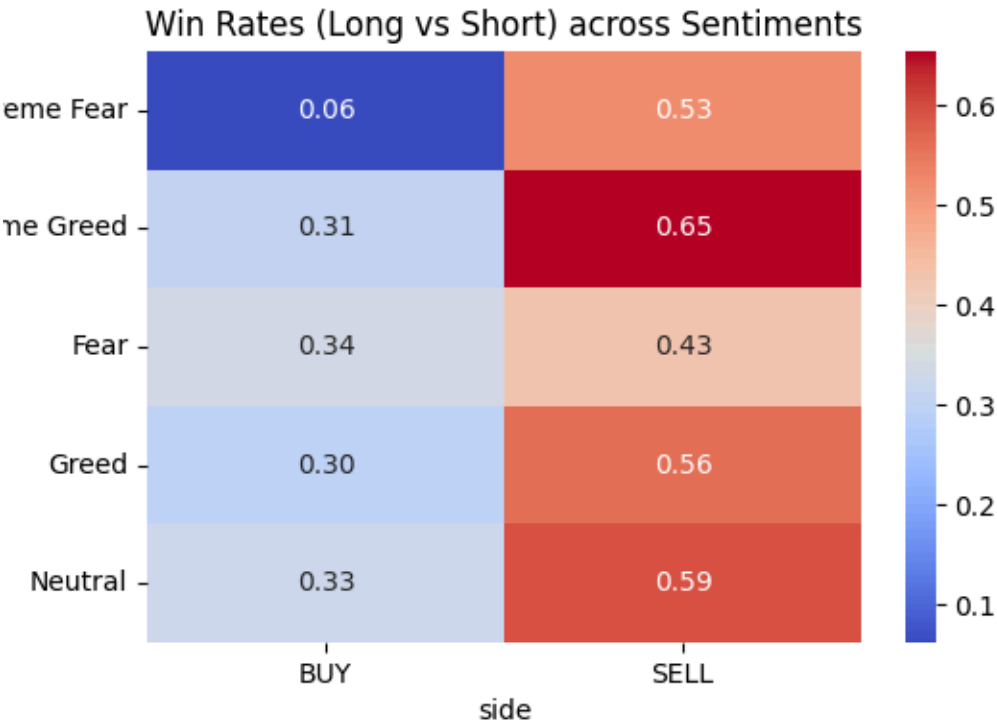
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4. Leverage Behavior

⚠️ Leverage data was not available in the provided dataset.
(If available in future datasets, analysis will compare leverage usage across sentiment regimes.)

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5. Long vs Short Performance

Win Rates (Long vs Short) across Sentiments

Trade Volume: Long vs Short across Sentiment

- Win-rate summary saved in: `csv_files/winrate_by_sentiment.csv`
- Trade volumes saved in: `csv_files/trade_volume_by_sentiment.csv`

Insight: Long trades perform relatively better during Greed, Shorts fare better in Fear/Extreme Fear.

6. Symbol-Level Insights

Example (@107):
- Greed → +85.7 average PnL
- Fear → +46 average PnL
- Extreme Greed → +495 average PnL

Takeaway: Some symbols thrive in Greed regimes while others do better in Fear → strategy should be sentiment- & asset-specific.

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7. Final Insights

- Market sentiment shapes **volume, leverage, and trade direction** more than raw profitability.
- Greed → More trades, higher leverage, higher long success.
- Fear → Fewer trades, lower leverage, shorts perform better.
- Strategy: **Adaptive trading** (switch long/short bias & leverage depending on sentiment).

✅ Report auto-generated with charts & summaries.