

Methodology

This project analyzes the relationship between market sentiment (Fear vs Greed) and trader behavior on the Hyperliquid trading platform. Bitcoin market sentiment data was combined with historical trade-level transaction data from Hyperliquid.

After cleaning and standardizing timestamps, both datasets were aligned at a daily level. Key trader behavior and performance metrics were engineered, including daily PnL, win rate, leverage usage, trade frequency, and long/short ratios. Traders were further segmented based on leverage exposure, trading frequency, and consistency of profitability. Comparative analysis was then conducted across Fear and Greed market regimes to uncover behavioral and performance patterns.

Key Insights

1. Performance Variation by Sentiment:

Traders achieve significantly higher profitability and win rates during Greed periods, while Fear regimes exhibit increased volatility and drawdowns.

2. Leverage Risk Amplification:

High leverage traders suffer disproportionately larger losses during Fear periods, highlighting the compounding risk of leverage under adverse market conditions.

3. Behavioral Shifts Across Regimes:

During Greed phases, traders increase trade frequency, leverage, and position sizes, reflecting risk-seeking behavior. In contrast, Fear periods are characterized by reduced participation and conservative positioning.

Strategy Recommendations

- Risk Control Rule:

During Fear regimes, traders should reduce leverage exposure by 40–60% to minimize drawdowns and improve capital preservation.

- Participation Rule:

High-frequency and momentum-based trading strategies should be emphasized during Greed periods, when trend persistence, liquidity, and profitability potential are higher.

Conclusion:

These findings demonstrate how sentiment-driven adaptive strategies can significantly enhance trading performance and risk management. Integrating market sentiment into decision-making frameworks enables traders to dynamically adjust risk exposure and participation levels, leading to more resilient and profitable trading outcomes.