

# Trader Behavior vs Market Sentiment

## Methodology:

The analysis extends baseline sentiment evaluation by incorporating trader-level profiling and behavioral segmentation. Hyperliquid trade data was aligned daily with the Bitcoin Fear & Greed Index. Trader-level metrics were computed including total PnL, win rate, trade frequency, average position size, and PnL volatility (used as a risk proxy).

Two segmentation approaches were implemented: (1) Activity-based segmentation (Frequent vs Infrequent traders using percentile thresholds), and (2) Consistency-based segmentation (Consistent Winners vs Inconsistent Traders based on win-rate distribution). Performance and risk metrics were then compared across sentiment regimes.

## Key Insights:

- Trader performance is strongly regime-dependent, with Greed environments generating higher average profitability.
- Fear regimes significantly increase volatility and trading activity, amplifying both risk and opportunity.
- Frequent traders outperform during strong sentiment phases, while neutral regimes penalize overtrading.
- Sentiment amplifies the performance gap between consistent and inconsistent traders.

## Strategy Recommendations:

- Dynamically allocate capital toward frequent and consistent traders during strong Greed regimes.
- Apply stricter risk controls during Fear periods due to elevated volatility.
- Reduce trading frequency in Neutral regimes to avoid unnecessary exposure.
- Use sentiment regimes as a filtering mechanism for capital allocation and risk adjustment.