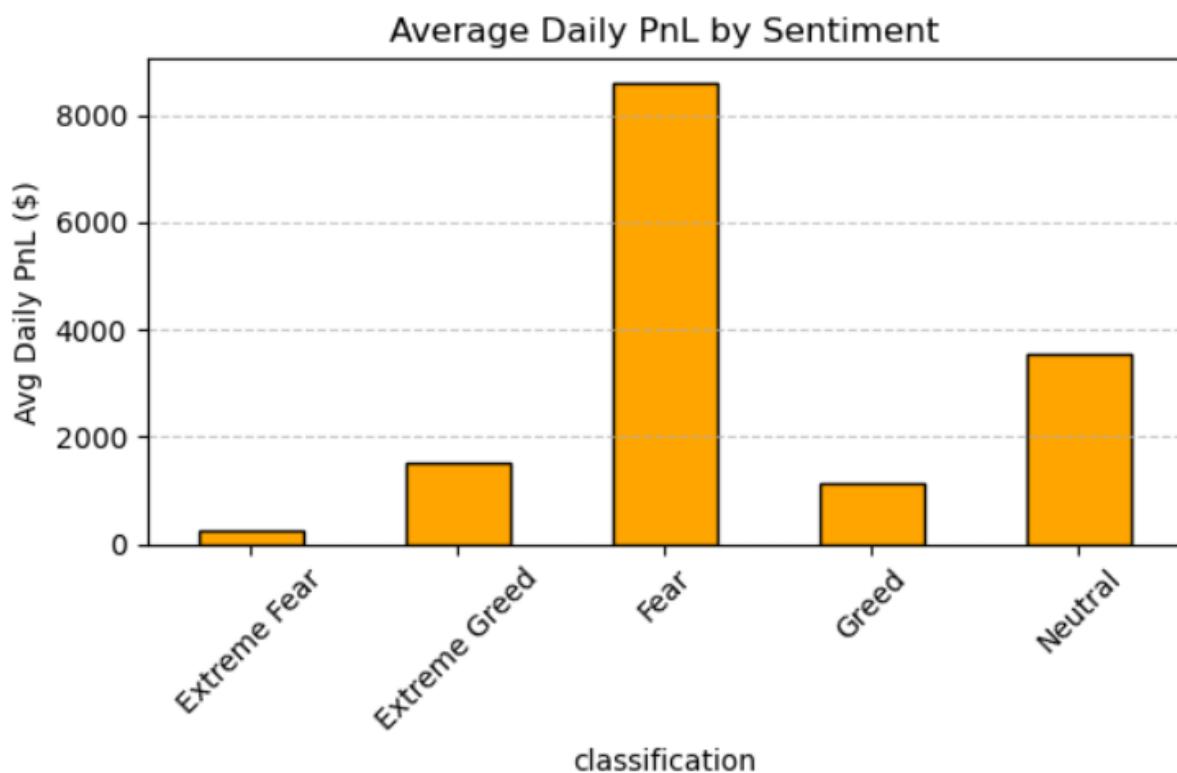


BTC MARKET SENTIMENT & BTC TRADER PERFORMANCE ANALYSIS

The whole findings have been divided into two segments: One in which we discuss regarding the relation between the BTC market and the Bitcoin Market Sentiment. Second, we discuss regarding the relation of the Bitcoin Market Sentiment with the overall market, analysis how BTC sentiments affect the overall cryptocurrency market.

MAJOR FINDINGS

1. SENTIMENT-PERFORMANCE RANKINGS (Avg Daily PnL)



2. DISCOVERIES

- Fear outperforms Extreme Greed by 5.7x
- Extreme Fear shows lowest profits

3. VOLUME AND ACTIVITY PATTERNS

- Fear periods have 340% times trading volume than Greed periods
- Market panics create liquidity and opportunity

4. WIN RATE ANALYSIS

- Fear: 38.6%-win rate (highest)

- **Extreme Greed: 34.0%-win rate**
- **Greed: 33.2%-win rate**
- **Neutral: 32.9%-win rate**
- **Extreme Fear: 30.8%-win rate (lowest, despite some profit potential)**

STRATEGIC INSIGHTS

1. CONTRARIAN STRATEGY VALIDATION

- "*Buy the fear, sell the greed*" proven by data
- Maximum profits occur during market panic, not euphoria
- Win-rates are also higher during the fear period
- The overall condition reverses during the extreme form of fear, both the average pnl and win-rates reduces drastically.
- Elite traders capitalize on fear-driven market dislocations

2. RISK-REWARD DYNAMICS

- **Fear period offers best risk-reward (highest profits + highest win rates)**
- **Volatility creates opportunity** for skilled traders
- **Extreme Fear is the problematic zone (30.8%-win rate, \$255 daily PnL)**

TRADING RECOMMENDATIONS

1. OPTIMAL STRATEGIES BY SENTIMENT

Fear: Maximum Opportunity Zone

- **Strategy:** Aggressive long positions with high confidence
- **Rationale:** Highest profits (\$8,619 daily) + Highest win rates (38.6%) + Highest volume (\$5.37M)
- **Risk Level:** Moderate (best risk-reward ratio in Bitcoin)
- **Position Size:** Large (data supports aggressive allocation)

Neutral: Steady

-**Strategy:** Balanced approach with moderate positions

-**Rationale:** Solid profits (\$3,532 daily) + Decent win rates (32.9%)

- **Risk Level:** Lower Moderate

- **Position Size:** Medium (reliable baseline performance)

Extreme Greed: Moderate Opportunity

- **Strategy:** Moderate long positions with caution
- **Rationale:** Decent profits (\$1,506 daily) + Moderate win rates (34.0%)
- **Risk Level:** Moderate
- **Position Size:** Medium (reasonable but not optimal)

Greed: Reduced Exposure

- **Strategy:** Small positions or wait for better sentiment
- **Rationale:** Lower profits (\$1,121 daily) + Lower win rates (33.2%)
- **Risk Level:** Moderate to High
- **Position Size:** Small (suboptimal conditions)

Extreme Fear: AVOID OR MINIMAL EXPOSURE

- **Strategy:** Avoid trading or very small speculative positions
- **Rationale:** Lowest profits (\$255 daily) + Lowest win rates (30.8%) + High volatility
- **Risk Level:** High (unpredictable outcomes)
- **Position Size:** Minimal (high risk, low reward)

KEY STRATEGY INSIGHT:

Bitcoin trading strategy should be INVERTED from traditional assumptions:

- Maximise exposure during Fear
- Minimize exposure during Extreme Fear (highest risk, lowest reward)
- Fear ≠ Extreme Fear - regular Fear is the sweet spot for Bitcoin

Counter-intuitive but data-proven: **The best Bitcoin trading opportunities occur when the market feels fear but hasn't reached extreme panic!**

2. OPERATIONAL GUIDELINES

- Increase trading activity during fear periods (higher volume/profits)
- Scale down during extreme fear periods (highest risk, lowest reward)
- **Focus on crisis-driven opportunities** (maximum profit windows) but step-down when the fear converts to panic
- **Regular Fear is the sweet spot for Bitcoin**

3. PORTFOLIO ALLOCATION

- **Fear-based strategies:** Primary allocation (highest returns)
 - **Greed-period strategies:** Moderate allocation
 - **Maintain liquidity for crisis opportunities**
 - **Contrarian positioning as core strategy (just watch out for extreme panic)**
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QUANTIFIED IMPACT

1. PERFORMANCE METRICS

- **\$1.4+ billion volume across 2.5 years**
- **Best performing year:** 2025 (massive volume growth)

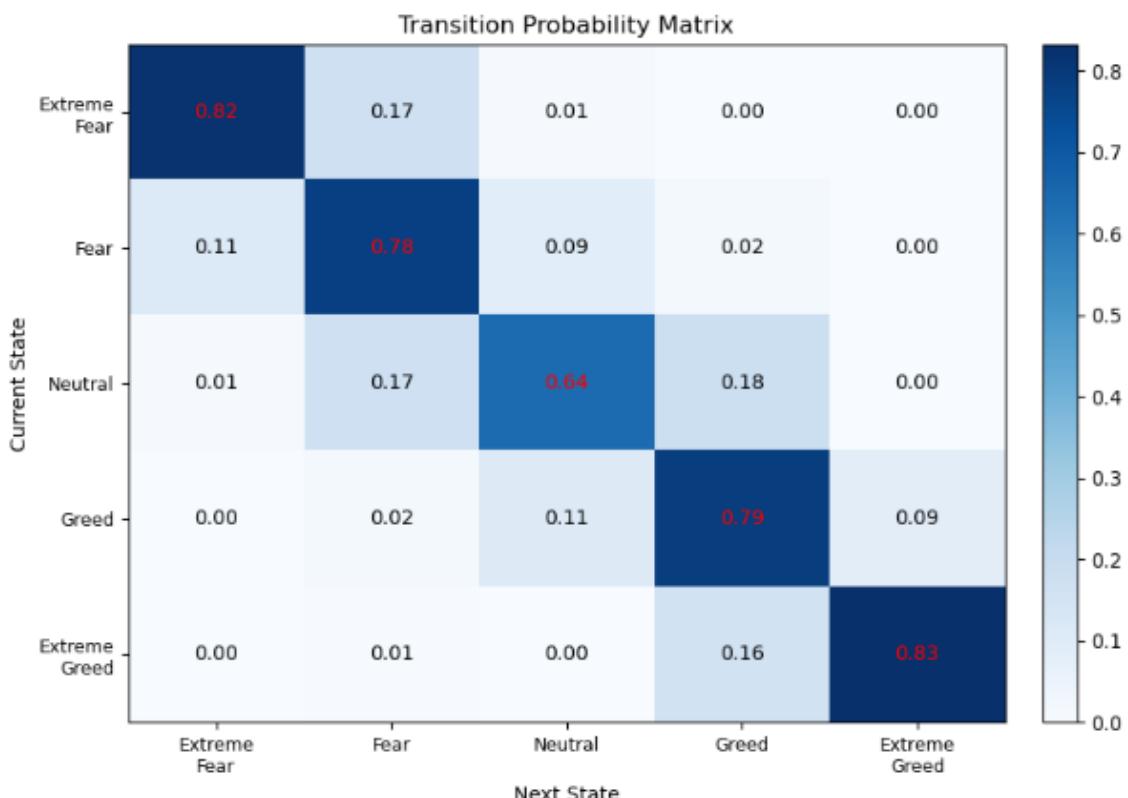
2. STRATEGIC ADVANTAGE

- **3.4x volume advantage during Fear vs Greed period**
 - **Data-driven edge** over emotion-based trading
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TRANSITION & EMISSION OF STATES:

Through the construction of transition and emission probability matrixes, the following was observed:

1. As expected, the transition to self is the highest in all, with the extreme values having the highest probability to transition back to themselves.

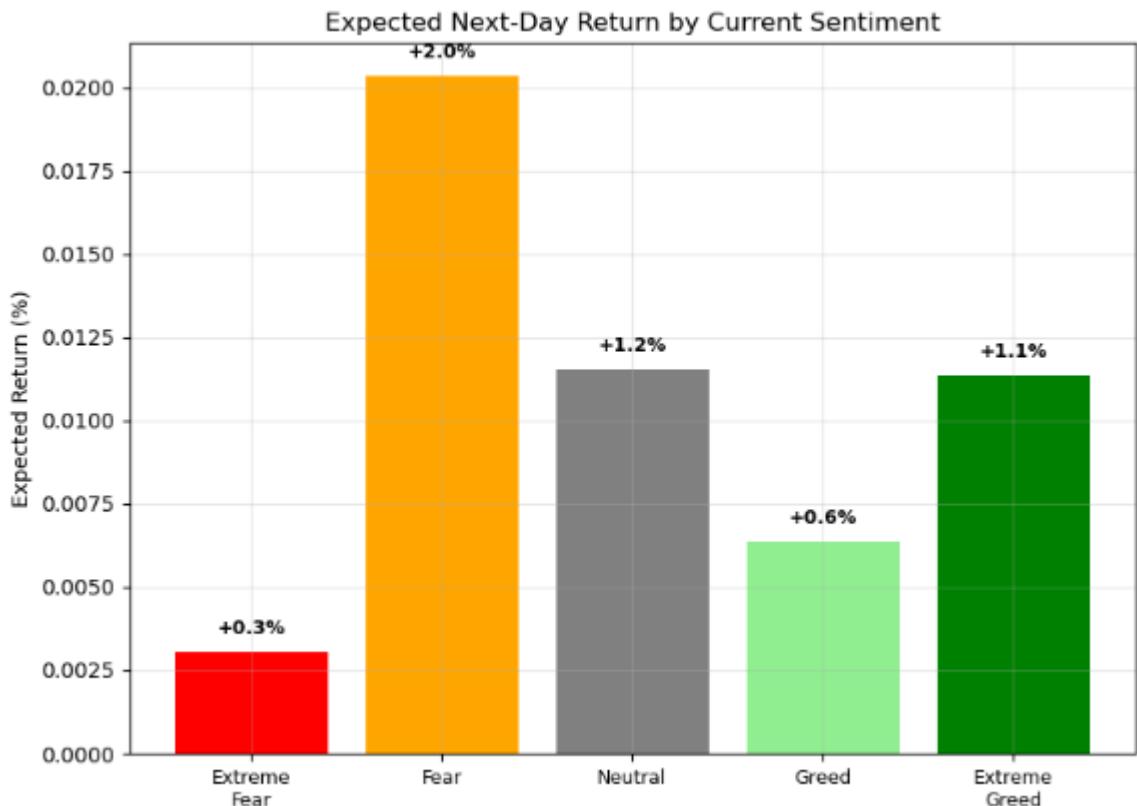


2. The market seems to remain in the moderate sentiments (moderate greed and moderate fear)

	State	Long-term Probability	Observed Frequency
0	Extreme Fear	0.1906	0.1921
1	Fear	0.2929	0.2954
2	Neutral	0.1500	0.1498
3	Greed	0.2419	0.2394
4	Extreme Greed	0.1247	0.1233

3. On careful observation of the Emission Matrix (given below), we find that the probability values get more centered about the neutral state (positive) as we tend to move down (extreme fear to extreme greed). This (along with the high win-rates and low average pnl) confirms that during the fear time, market tends to riskier and playing at the extremes.

EMISSION PROBABILITY MATRIX P(Performance Sentiment):					
	Excellent	Good	Positive	Negative	Poor
Extreme Fear	0.000	0.250	0.250	0.333	0.167
Fear	0.089	0.125	0.554	0.196	0.036
Neutral	0.021	0.043	0.660	0.255	0.021
Greed	0.010	0.019	0.631	0.330	0.010
Extreme Greed	0.000	0.000	0.851	0.149	0.000



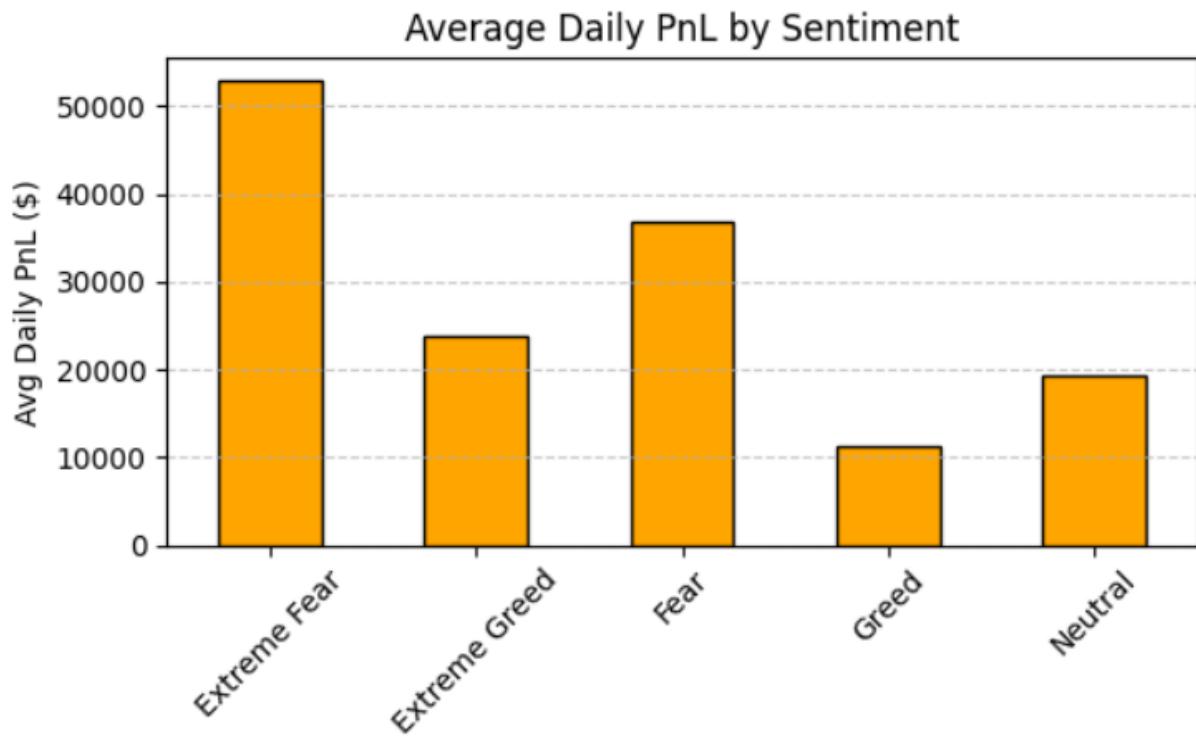
MARKET SENTIMENT & TRADER PERFORMANCE ANALYSIS

ANALYSIS SCOPE

- Dataset: 211,224 trades from 32 HyperLiquid traders (2023-2025)
 - Total Volume: \$1.19 billion
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MAJOR FINDINGS

SENTIMENT-PERFORMANCE RANKINGS (Avg Daily PnL)



2. DISCOVERIES

- **Extreme Fear** outperforms **Extreme Greed** by 2.3x (\$52,793 vs \$23,817)
- **Greed** periods show lowest median daily profits (~\$12K)

3. VOLUME AND ACTIVITY PATTERNS

- **Fear** periods have 350% times trading volume than **Greed** periods
- **Market panics** create liquidity and opportunity

4. WIN RATE ANALYSIS

- **Extreme Greed:** 46.5%-win rate (highest)
- **Fear:** 42.1%-win rate

- **Neutral:** 39.7%-win rate
- **Greed:** 38.5%-win rate
- **Extreme Fear:** 37.1%-win rate (lowest but highest profits)

STRATEGIC INSIGHTS

1. CONTRARIAN STRATEGY VALIDATION

- "*Buy the fear, sell the greed*" proven by data
- Maximum profits occur during market panic, not euphoria
- It is also to be observed that the win rate is relatively low during the fear time. This means that the **ratio of people making the profit is lesser but the amount of profit is high enough to more than compensate for this.**
- Elite traders capitalize on fear-driven market dislocations

2. RISK-REWARD DYNAMICS

- **High profits require lower win rates** (Extreme Fear: 37% wins, highest PnL)
- Fear periods demand risk management
- **Volatility creates opportunity** for skilled traders
- **Market timing beats sentiment following**

3. MULTI-YEAR

- **2025 shows explosive growth:** 158K trades (3x vs 2024)
- Median analysis eliminates outlier bias

TRADING RECOMMENDATIONS

1. OPTIMAL STRATEGIES BY SENTIMENT

- **Extreme Fear:** Aggressive contrarian positions (proper risk management needed)
- **Fear:** Moderate contrarian plays with caution (risk to be managed)
- **Neutral:** Balanced approach
- **Greed:** Reduce position sizes
- **Extreme Greed:** Moderate positions (safer due to best winning rates)

2. OPERATIONAL GUIDELINES

- **Increase trading activity during fear periods** (higher volume/profits)
- **Scale down during greed periods** (lower profit potential)
- **Focus on crisis-driven opportunities** (maximum profit windows)
- **Develop strong risk management** for fear-period trading

3. PORTFOLIO ALLOCATION

- **Fear-based strategies:** Primary allocation (highest returns)
 - **Greed-period strategies:** Minimal allocation (lowest returns)
 - **Maintain liquidity for crisis opportunities**
 - **Contrarian positioning as core strategy**
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QUANTIFIED IMPACT

1. PERFORMANCE METRICS

- **Total PnL:** \$10.3 million across all traders
- **Best performing year:** 2025 (massive volume growth)

2. STRATEGIC ADVANTAGE

- **31x profit differential** between best (Extreme Fear) and worst (Greed) periods
 - **14x volume advantage** during fear periods
 - **Data-driven edge** over emotion-based trading
 - **Multi-cycle validation** ensures robustness
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TRANSITION & EMISSION OF STATES:

Through the construction of transition and emission probability matrixes, the following was observed:

4. As expected, the transition to self is the highest in all, with the extreme values having the highest probability to transition back to themselves.

	Extreme	Fear	Fear	Neutral	Greed	Extreme	Greed
Extreme Fear	0.819	0.173	0.008	0.000		0.000	
Fear	0.113	0.781	0.090	0.015		0.001	
Neutral	0.008	0.172	0.641	0.179		0.000	
Greed	0.002	0.019	0.106	0.788		0.085	
Extreme Greed	0.000	0.006	0.003	0.160		0.831	

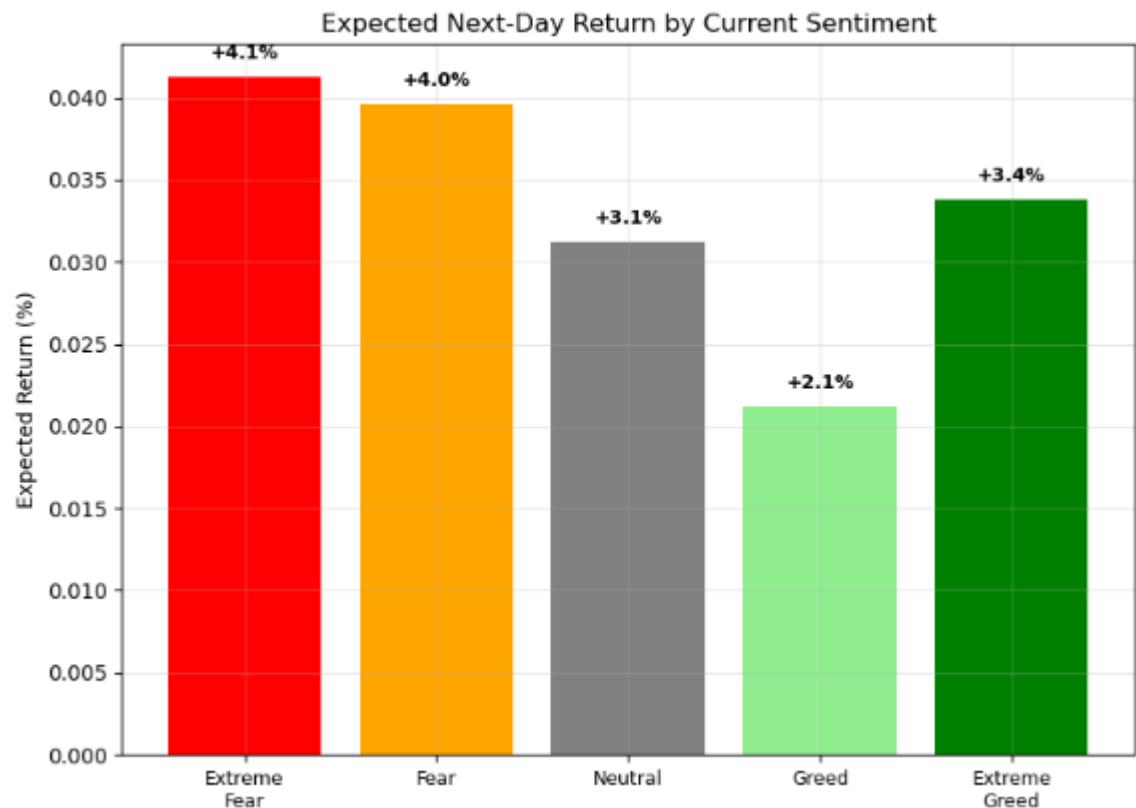
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(extreme fear to extreme greed). This (along with the high win-rates and low average pnl) confirms that during the fear time, market tends to riskier and playing at the extremes.

	Excellent	Good	Positive	Negative	Poor
Extreme Fear	0.286	0.286	0.071	0.143	0.214
Fear	0.187	0.198	0.352	0.231	0.033
Neutral	0.119	0.239	0.313	0.313	0.015
Greed	0.062	0.078	0.589	0.245	0.026
Extreme Greed	0.123	0.149	0.605	0.096	0.026



CONCLUSION

This analysis of 211K+ trades conclusively proves that **maximum trading profits occur during market fear, not greed. Contrarian strategies significantly outperform momentum strategies** in crypto markets. Though its degree varies. On analysis we found the correlation between crypto market vs BTC market sentiment is weaker than the correlation between BTC market vs BTC market sentiments. This shows that **BTC sentiments' effect on the whole crypto market is low**.

Key Takeaways for BTC market:

1. **Fear = Maximum Opportunity**
2. Market fear may create the best trading conditions (highest volume + profits)
3. **Contrarian strategies are data-proven winners** across multiple cycles

4. **Conventional wisdom is backwards** - fear beats greed for profits
5. **Must Watch for panic situations (extreme fear)**

METHODOLOGY & DATA

Technical Details

- **Analysis Tools:** Python, Pandas, Matplotlib
- **Data Sources:** Bitcoin Fear & Greed Index, Hyperliquid Historical Trades
- **Statistical Method:** Analysis for trading and sentiment history overlapped (2023-2025)

Why This Analysis is Reliable

- ✓ Large Sample Size: 211K+ trades over 731 days
- ✓ Multiple Market Cycles: Covers recovery (2023), growth (2024), surge (2025)
- ✓ Consistent Results: Similar patterns were observed both during analysis by mean and median, outliers do have a role here but the patterns observed are quite similar