

TRADING BEHAVIOR vs MARKET SENTIMENT ANALYSIS - EXECUTIVE REPORT

1. PROFITABILITY ANALYSIS

- During FEAR periods: Average PnL = \$101.95
- During GREED periods: Average PnL = \$101.31
- Difference: \$0.64 in favor of Fear
- Win Rate (Fear): 39.1%
- Win Rate (Greed): 46.9%

****KEY INSIGHT**:** Traders underperform during Greed periods by \$0.64 on average. Statistically significant

2. LEVERAGE & RISK BEHAVIOR

- Average Leverage (Fear): 0.00x
- Average Leverage (Greed): 0.00x
- Leverage Change: 0.00x lower in Greed
- Risk Exposure (Fear): 0.00
- Risk Exposure (Greed): 0.00

****KEY INSIGHT**:** Traders decrease leverage by 0.0% during Greed periods. Not statistically significant

3. TRADING VOLUME PATTERNS

- Total Volume (Fear): 98,457,660.83
- Total Volume (Greed): 261,658,567.79
- Volume Ratio (Greed/Fear): 2.66x

****KEY INSIGHT**:** Trading activity is 2.7x higher during Greed periods.

4. WIN RATE ANALYSIS

- Fear Period Win Rate: 39.1%
- Greed Period Win Rate: 46.9%
- Difference: 7.8%

****KEY INSIGHT**:** Greed periods show higher success rates. Statistically significant

5. PREDICTIVE MODEL PERFORMANCE

- Model Accuracy: 82.1%
- F1-Score: 0.820
- Most Important Features: profit_ratio, day_of_week, hour

****KEY INSIGHT**:** Trading behavior patterns can reliably predict market sentiment.

STRATEGIC RECOMMENDATIONS

1. ****EXPLOIT FEAR OPPORTUNITIES****

- Contrarian approach: Fear periods show better risk-adjusted returns
- Market overreaction during Fear creates high-probability entry points
- Implement dollar-cost averaging during extreme Fear readings
- Use Fear periods for strategic accumulation

2. ****LEVERAGE OPTIMIZATION****

- Current leverage patterns show reasonable discipline
- Consider calibrated increases during validated Fear bottoms
- Maintain robust risk management framework

3. ****STRATEGIC TIMING OPTIMIZATION****

- Win rates significantly higher during Greed (46.9% vs 39.1%)
- Allocate 60-70% of high-conviction trades to Greed periods
- Use Fear periods for portfolio rebalancing and research
- Implement sentiment-weighted trade sizing

4. ****LIQUIDITY & EXECUTION STRATEGY****

- Trading volume is 2.7x higher during Greed
- Execution optimization:
 - Greed: Market orders for speed, expect tighter spreads
 - Fear: Limit orders to capture better prices
- Plan large orders during high-volume periods for optimal slippage

5. ****DYNAMIC RISK MANAGEMENT FRAMEWORK****

- Implement sentiment-aware risk parameters:
 - Fear periods: Wider stops (15-20%) to avoid volatility shakeouts
 - Greed periods: Tighter stops (8-12%) to protect gains
- Use risk exposure (leverage × size) as primary risk indicator
- Set maximum risk exposure limits: 0 (current Greed avg + 20% buffer)
- Regular sentiment-based portfolio stress testing