# PFL Academy

Teacher Guide: Chapter 67 — Investment Technology and Behavioral Investing

## OVERVIEW

| TIME | MATERIALS | PREREQUISITES |
|---|---|---|
| 45-50 Minutes | Student Activity Packet | L-47: Investment Types, L-64: Risk and Return |

## LESSON FLOW

**5 min** — **THE CHALLENGE**

- Read Marcus's pandemic panic story—emphasize his pre-written rule saved him.
- Discussion: "How did it feel to keep investing when everything was crashing?"
- Key insight: The rule was written BEFORE the crisis, not during.

**10 min** — **CORE CONCEPTS**

- Cover the 3.6% behavioral gap—this is the "wow" statistic.
- Walk through each bias with relatable examples students can connect to.
- Quick check: "Which bias drives FOMO investing?" (Herd mentality + recency)

**25-30 min** — **APPLY IT**

- **Part A (10 min):** Platform matching—discuss why personality matters for platform choice.
- **Part B (5 min):** Bias identification—ensure students can recognize each bias.
- **Part C (10 min):** Creating rules—this is the actionable takeaway.

**10 min** — **CHECK YOUR UNDERSTANDING**

- Q3 calculation shows real cost of confirmation bias.
- Q5 personal reflection is crucial—honest self-assessment prevents future mistakes.

## DIFFERENTIATION

### Support

- Use simple bias summaries: "Loss aversion = hate losing more than love winning."
- Provide behavioral rule templates for Part C.
- Focus on just 2-3 biases rather than all four.

### Extension

- Research Daniel Kahneman's prospect theory and Nobel Prize work.
- Compare actual robo-advisor features and fees (Betterment vs. Wealthfront).
- Design a complete "Investment Policy Statement" with bias-countering rules.

## ANSWER KEY

### Part A: Platform Comparison

**Keisha:** Robo-advisor. Automation prevents FOMO-driven decisions. She doesn't enjoy research, so DIY would lead to poor choices or neglect. Modest fee is worth behavioral guardrails.

**Derek:** Online brokerage. He enjoys research and is disciplined. Lower costs (fund fees only). Full control matches his preference and personality.

### Part B: Behavioral Bias Identification

**B** - After markets rose 30%... assumes gains continue = **Recency Bias**

**A** - Refuses to sell stock down 40% = **Loss Aversion**

**D** - Everyone at work buying crypto = **Herd Mentality**

**C** - Only reads positive news = **Confirmation Bias**

### Part C: Creating Behavioral Rules

Accept rules that are: (1) Specific and actionable, (2) Written in advance, (3) Address specific bias vulnerabilities. Examples: "Invest same amount monthly regardless of headlines." "Never sell within 48 hours of market drop." "Review investments only quarterly."

### Check Your Understanding

**1.** B (Loss aversion)

**2.** Recency bias causes buying after rallies (high) and selling after crashes (low). Loss aversion causes panic selling during downturns. Herd mentality amplifies both behaviors. Result: systematically buying high, selling low.

```
3. Sold at $25 instead of $38:
Loss per share: $38 - $25 = $13
100 shares × $13 = $1,300 cost of confirmation bias
```

**4.** Robo-advisors automate rebalancing and remove the "sell" button during panic. They make it harder to act on emotional impulses. Automation creates friction that prevents rash decisions.

## COMMON MISCONCEPTIONS

| Misconception | Clarification |
|---|---|
| "Smart people don't have behavioral biases." | Biases are hardwired into human psychology—even Nobel Prize-winning economists exhibit them. Awareness helps but doesn't eliminate biases; systems and rules are required. |
| "I'll be able to stay calm during a crash." | Everyone thinks this until they experience 30%+ losses. Pre-written rules and automation are essential because you CAN'T trust your future panicked self. |
| "Robo-advisors are only for beginners." | Many sophisticated investors use robo-advisors specifically for behavioral guardrails. Automation prevents even experienced investors from making emotional mistakes. |