

The Cost of Fear (and What We're Doing About It): Research and Practice from Market Alchemists

What This Looks Like in Practice

Here's a small piece of what members are working through inside Market Alchemists this month.

Most traders try to stop cutting winners short by "having more discipline." That's not the mechanism.

The actual fix borrows from how exposure therapy treats fear: not by willing it away, but by proving to yourself, rep after rep, that you can sit with the discomfort of an open trade and it turns out fine.

This month's protocol runs it in four stages; starting with a target members are highly likely to hit, and building week by week toward holding a full trade through to a 2:1 target without touching the stop once they're in.

One rule stays fixed the entire month. Only the difficulty moves.

On unrealized gains, loss aversion, regret, and avoidance in trading behavior

1. Is a monetary loss literally "physical" pain?

Feng, X., et al. (2022). "Does losing money truly hurt? The shared neural bases of monetary loss and pain." *Human Brain Mapping*. Open access: <https://pmc.ncbi.nlm.nih.gov/articles/PMC9189080/>

A meta-analysis of neuroimaging studies asking whether financial loss and physical/social pain share brain circuitry. The finding: the anterior insula activates for both monetary loss and pain, regardless of whether that pain is physical or social — and the pattern for monetary loss actually resembles *social* pain (rejection, exclusion) more closely than physical pain. This is the strongest direct evidence for the "losing money hurts" framing, useful for explaining to traders why a losing (or evaporating) position produces a genuine visceral reaction, not just a rational disappointment.

Tom, S.M., Fox, C.R., Trepel, C., & Poldrack, R.A. (2007). "The Neural Basis of Loss Aversion in Decision-Making Under Risk." *Science*, 315(5811), 515–518. DOI: 10.1126/science.1134239 | Free PDF: researchgate.net/publication/6547758

The foundational fMRI paper on loss aversion. Rather than finding a separate "pain center" for losses, the study found that the *same* dopaminergic reward regions (ventral striatum, prefrontal cortex) that ramp up with potential gains ramp *down* with potential losses — and how strongly they ramp down predicts how loss-averse a person behaves. Useful counterpoint/nuance to the Feng et al. paper: losses may not need a distinct pain system to feel bad, they may just be the withdrawal of an expected reward signal.

2. Regret over foregone or unrealized gains

Coricelli, G., Critchley, H.D., Joffily, M., O'Doherty, J.P., Sirigu, A., & Dolan, R.J. (2005). "Regret and its avoidance: a neuroimaging study of choice behavior." *Nature Neuroscience*, 8, 1255–1262. DOI: 10.1038/nn1514 | Mirror PDF: researchgate.net/publication/7645216

Directly models the "I closed at +\$200 and it ran to +\$2,000" experience. Subjects who saw the outcome of the gamble they *didn't* take showed regret-related activity in the medial orbitofrontal cortex, anterior cingulate, and hippocampus. Critically, subjects became progressively more regret-averse over the course of the experiment, and the same circuitry that fires during the experience of regret also fires in *anticipation* of it — right before the next choice is made. This is the mechanism behind traders who won't close a profitable position because they're pre-emotionally bracing for the regret of leaving money on the table.

Coricelli, G., & Rustichini, A. (2010). "Counterfactual thinking and emotions: regret and envy learning." *Philosophical Transactions of the Royal Society B*, 365(1538), 241–247. Open access via PMC (PubMed: 20026462)

Frames regret as fundamentally a comparison between the outcome you got and the outcome of the choice you didn't make — the counterfactual. Explains the psychological machinery behind "if only I'd held longer," distinct from loss aversion itself.

3. Avoidance mechanisms in psychology

Wang, Y., Tian, J., & Yang, Q. (2024). "Experiential Avoidance Process Model: A Review of the Mechanism for the Generation and Maintenance of Avoidance Behavior." *Psychiatry and Clinical Psychopharmacology*, 34(2), 179–190. Fully open access: <https://pmc.ncbi.nlm.nih.gov/articles/PMC11332439/>

A recent, freely-readable review of experiential avoidance: the tendency to avoid engaging with uncomfortable internal experiences (thoughts, emotions, bodily sensations) via suppression or situational escape. Frames avoidance as a self-protective mechanism against perceived catastrophic outcomes — directly applicable to why a trader avoids looking at a losing position or clicking "close" on a shrinking gain.

Hayes, S.C., Wilson, K.G., Gifford, E.V., Follette, V.M., & Strosahl, K. (1996). "Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment." *Journal of Consulting and Clinical Psychology*, 64(6), 1152–1168. Not open access itself, but well-summarized in open papers (e.g., PMC3635495, "Acceptance and Commitment Therapy and Contextual Behavioral Science")

The foundational paper defining experiential avoidance: attempting to change the form, frequency, or intensity of an internal experience — even when doing so is costly or counterproductive. This is the theoretical backbone under Wang et al. above, and under most ACT-based approaches to trading psychology (accepting the discomfort of an open position rather than acting to escape it).

4. The trading-specific literature (disposition effect)

Shefrin, H., & Statman, M. (1985). "The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence." *Journal of Finance*, 40(3), 777–790. Not open access; SSRN preprints circulate freely

The paper that named the disposition effect. Investors feel more pain from realizing a loss than pleasure from an equivalent gain, so they hold losers hoping for recovery, and sell winners quickly to lock in the pride of a win and avoid the regret of watching it slip away.

Odean, T. (1998). "Are Investors Reluctant to Realize Their Losses?" *Journal of Finance*, 53(5), 1775–1798. Not open access; SSRN preprint circulates freely

Empirical confirmation using real brokerage account data: investors were roughly 50% more likely to realize a gain than a loss.