How do cognitive biases influence athletes' performance under losing expectations?

Cognitive biases under "we're going to lose" expectations can both impair and sometimes protect performance, mainly by distorting threat appraisal, attention, and effort.

Key Biases When Athletes Expect to Lose

1. Optimism, availability & confirmation biases (over-believing in comebacks)

- Elite beach volleyball players **overestimate winning chances when trailing**, especially after rare comebacks, due to optimism bias, selective recall of comebacks (availability heuristic), and confirmation bias that supports "we can still win" beliefs (Ittlinger et al., 2025).
- This over-optimism can **distort strategy and risk–reward decisions**, potentially sustaining effort but also causing suboptimal tactics in objectively lost positions (Ittlinger et al., 2025).

2. Irrational beliefs, loss-focused thinking & threat appraisals

- "Irrational performance beliefs" (awfulizing failure, self-depreciation) are linked to higher **threat appraisals**, depressive symptoms, and poorer well-being in athletes, which can undermine performance under pressure (Mansell, 2021; Mansell et al., 2023; Jooste et al., 2022).
- In football, **cognitive anxiety and negative thoughts** predict poorer coping with adversity and reduced ability to "peak under pressure," especially when athletes fear losing prestige or status (Kaplánová, 2024).
- Loss aversion and impact bias lead people to **overpredict how bad losses will feel**, increasing pre-competition anxiety and cautious or avoidant play in high-stakes moments (Kermer et al., 2006; Zhao et al., 2018).

3. Adverse competition-related cognitions & self-serving bias

- High levels of adverse competition-related cognitions (e.g., "I'm worse than others," "my performance is poor") relate to greater cognitive interference and lower subjective performance evaluations, consistent with attentional disruption and performance drops when expecting to lose (Michel-Kröhler et al., 2025).
- After underperforming, runners show **self-serving bias**, inflating times and blaming externals to protect self-esteem; this does not fix performance but shapes how they learn from losses (Hyun et al., 2022).

4. Self-fulfilling expectations

- In a competitive lab task, participants told they were at a disadvantage set **lower goals and actually performed worse**, turning an illusory disadvantage into real underperformance (self-fulfilling prophecy) (Dalton et al., 1977).

Conclusion

Under losing expectations, cognitive biases mainly hurt performance by exaggerating threat, increasing intrusive negative thoughts, and lowering goals, though some optimism/confirmation biases can sustain effort. Training that targets irrational beliefs, stress mindset, and appraisal of setbacks appears critical for resilient performance under perceived loss (Beato et al., 2025; Mansell, 2021; Mansell et al., 2023; Gontijo et al., 2023).

These papers were sourced and synthesized using Consensus, an AI-powered search engine for research. Try it at https://consensus.app

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