

A Case study of the breakdown of Sport skill Under Pressure Roberto Baggio's 1994 World Cup Final penalty

Nigel Camilleri

This case study attempted to elucidate the psychological underpinnings behind a moment in time of Roberto Baggio's life. There are many theories which could explain Baggio's response to pressure at the moment he choked under pressure during the Italy vs Brazil 1994 World Cup where his final penalty of the tournament 'punched a hole in the sky'. The Biopsychosocial theory, neuroendocrine theory and the Theory of Challenge and Threat States in Athletes transactional theories were chosen given the years of consistent robust published research. The breakdown of the skill which led to the penalty shot going wide over the crossbar was described through the reinvestment theory; deautomization of skill which happens when attentional focus shifts from external to internal, due to the heavy demand on declarative memory. Rational Emotive Behavioral Therapy (REBT) was the chosen therapy for Baggio's hypothetical psychological intervention given the positive evidence it has over other psychotherapies and the role new Rational beliefs play in positively altering the perception of the player under stress.

<https://www.youtube.com/watch?v=gTCCqqb6mSQ>

The 1994 World Cup final, a historic event not just for Brazil's victory but also for Roberto Baggio's missed penalty in the shootout, serves as a poignant case for our study. Baggio a revered figure in Italian football, had been a driving force for his team throughout the tournament. However the intense pressure of the moment led to a rare miss, allowing Brazil to clinch the title. This outcome, while shocking, provides a compelling case for delving into the psychological factors that can disrupt even the most skilled athletes.

Baggio's reflection on the incident highlights his thought process: "As for the penalty, I knew Taffarel always dived, so I decided to shoot for the middle, about halfway up, so he couldn't get it with his feet. Unfortunately I do not know how the ball went up three meters and flew over the crossbar".¹ This case study applies various psychological theories to unpack the mechanisms that led to Baggio's breakdown under pressure.

Dr Nigel Camilleri
MD, MD, FRCPsych(UK), DCP
University of Malta,
Mental Health Services,
Malta

THEORETICAL FRAMEWORK

The biopsychosocial model provides an initial framework for understanding how physical, psychological, and social factors all contribute to performance outcomes in stressful situations.² In Baggio's case, these factors converged in the form of the high stakes of the World Cup final, fatigue from 120 minutes of play, and the expectations of an entire nation. The cognitive appraisal of this situation, in which Baggio likely assessed the penalty kick as a significant threat rather than a challenge, adds another layer to the analysis.

According to Lazarus and Folkman's theory of cognitive appraisal,³ the way an individual perceives and reacts to stress depends on their evaluation of the demands of a situation versus their perceived ability to meet those demands. The Theory of Challenge and Threat States in Athletes (TCTSA) expands on this by focusing on how athletes respond physiologically and emotionally to competitive pressure.⁴ Baggio's situation likely induced a threat state, where his perception of the demands outstripped his resources to cope, leading to a physiological response characterized by increased cortisol levels and heightened vascular resistance.⁵

ANALYSIS

Several key factors likely contributed to Baggio experiencing a threat state rather than a challenge state. First the immense pressure of taking a penalty in the World Cup final would have weighed heavily on any player. This stress was exacerbated by Italy's position in the penalty shootout — Baggio's miss would (and did) seal their loss. Further compounding this was the fatigue from a gruelling match and extra time and the weight of Italy's expectations on his shoulders.

Physiologically a threat state can trigger increased heart rate and vascular resistance while failing to increase cardiac output, ultimately impairing performance under pressure. Research by Mendes and Blascovich highlights that athletes in a threat state show significant changes in cardiovascular response, such as elevated blood pressure, that negatively impact their ability to perform tasks requiring precision, like a penalty kick. These physiological responses, coupled with the psychological stress, likely played a significant role in Baggio's skill breakdown.

Baggio's skill breakdown is also well explained by reinvestment theory, which posits that under

pressure, athletes tend to focus more on the mechanics of their actions rather than allowing automated skills to unfold naturally.⁸ This shift from an external focus (eg, aiming for a particular spot in the goal) to an internal focus (e.g., overthinking the mechanics of the kick) can lead to what is often called "paralysis by analysis." Masters and Maxwell describe this as the 'dechunking' of learned skills, where the automatic sequences of actions break down under pressure.⁹

In Baggio's case, his decision to aim for the middle of the goal, combined with his internal reasoning about Taffarel's tendencies, suggests that he may have been thinking too much about the specifics of the kick, thereby losing the automaticity that usually characterizes expert performance. This kind of cognitive interference is well-documented in studies of athletes under pressure, where conscious monitoring of performance can cause even highly practised actions to fail.¹⁰

Baggio's missed penalty was not just a physical error but likely a psychological response to the enormous stress he was under. The attentional shift from external to internal cues, combined with the physiological impact of being in a threat state, led to a momentary breakdown in his ability to execute the kick. These findings have significant implications for sports psychology and coaching, suggesting the need for interventions that address both the psychological and physiological aspects of performance under pressure.

PROPOSED INTERVENTION: RATIONAL EMOTIVE BEHAVIOURAL THERAPY

Given the complex psychological dynamics at play, Rational Emotive Behavioral Therapy (REBT) emerges as a promising strategy for helping athletes like Baggio manage high-pressure moments. REBT, developed by Albert Ellis focuses on identifying and altering irrational beliefs that lead to emotional distress and underperformance. In high-stakes sports contexts, athletes often adopt irrational beliefs such as 'I must not fail' or 'It would be a disaster if I let my team down,' which heighten anxiety and increase the likelihood of failure. REBT provides a structured approach to challenge and change these beliefs, potentially improving an athlete's performance under pressure.

REBT's ABCDE model helps athletes like Baggio challenge these dysfunctional beliefs. For instance, Baggio may have been thinking, "I cannot miss this

kick, or I will let my country down," which creates a sense of overwhelming pressure (the belief). The consequences of this thought pattern would be heightened anxiety and a threat state, ultimately disrupting his performance (the emotional and behavioural consequence).¹²

By disputing these beliefs through REBT, athletes can shift their mindset from one of demand ("I must not miss") to one of preference ("I would prefer to score, but missing is not the end of the world"). This shift in mindset can have a profound impact on an athlete's performance, reducing anxiety and improving their ability to remain in a challenge state, where they view high-pressure situations as opportunities rather than threats. Studies have shown that such interventions can significantly improve an athlete's performance under pressure, making REBT a promising strategy for managing high-stakes moments in sports.

CONCLUSION

Roberto Baggio's missed penalty in the 1994 World Cup final serves as a powerful case study for understanding the breakdown of sports skills under pressure. By applying the biopsychosocial model, cognitive appraisal theory, and reinvestment theory, we gain insight into how Baggio's shift from automatic to conscious control, exacerbated by his threat state, likely contributed to his failure.

The proposed use of Rational-Emotive Behavioral Therapy (REBT) could offer a valuable approach for helping athletes manage the cognitive and emotional pressures they face during high-stakes competition. By addressing irrational beliefs and shifting athletes toward a challenge mindset, REBT could help prevent future instances of choking under pressure, allowing elite performers to maintain their skills even in the most intense environments.

REFERENCES

1. Engle GL, Romano J The biopsychosocial model: A new approach to medicine. *Psychosomatic Medicine*. 1977;39:(1)17-22.
2. Barker P The child and adolescent psychiatry evaluation: Basic child psychiatry. Oxford UK: Blackwell Scientific Inc.; 1995.
3. Peters D The 5P Framework: A comprehensive approach to case formulation. [Further details not provided in the original text]
4. Baggio R Una porta nel cielo. TEA; 2021.
5. Blascovich J, Mendes WB Challenge and threat appraisals: The role of affective cues. In: Forgas JP, editor. *Feeling and thinking: The role of affect in social cognition*. Paris: Cambridge University Press; 2000. p. 59-82.
6. Lazarus RS, Folkman S *Stress appraisal, and coping*. New York: Springer; 1984.
7. Jones MV, Meijen C, McCarthy PJ, Sheffield D A theory of challenge and threat states in athletes. *International Review of Sport and Exercise Psychology*. 2009;2:(2)161-80.
8. Masters R, Maxwell J The theory of reinvestment. *International Review of Sport and Exercise Psychology*. 2008;1:(2)160-83.
9. Beilock SL, Bertenthal BI, McCoy AM, Carr TH Haste does not always make waste: Expertise direction of attention, and speed versus accuracy in performing sensorimotor skills. *Psychonomic Bulletin & Review*. 2004;11:(2)373-9.
10. Gucciardi DF, Gordon S, Dimmock JA Towards an understanding of mental toughness in Australian football. *Journal of Applied Sport Psychology*. 2010;22:(3)261-81.
11. Dienstbier RA Arousal and physiological toughness: Implications for mental and physical health. *Psychological Review*. 1989;96:(1)84-100.
12. Mendes WB, Blascovich J, Hunter SB, Lickel B, Jost JT Threatened by the unexpected: Physiological responses during social interactions with expectancy-violating partners. *Journal of Personality and Social Psychology*. 2007;92:(4)698-716.
13. Beilock SL, Carr TH On the fragility of skilled performance: What governs choking under pressure? *Journal of Experimental Psychology: General*. 2001;130:(4)701-25.

14. Wulf G, Lewthwaite R, Cardozo P, Chiviacowsky S Triple play: Additive contributions of enhanced expectancies, autonomy support, and external attentional focus to motor learning. *The Quarterly Journal of Experimental Psychology*. 2015;68:(6)1127-40.
15. Ellis A Rational psychotherapy and individual psychology. *Journal of Individual Psychology*. 1957;13:(1)38-44.
16. Wood AG, Barker JB, Turner MJ, Sheffield D Examining the effects of rational emotive behaviour therapy on performance outcomes in elite paralympic athletes. *Scandinavian Journal of Medicine & Science in Sports*. 2018;28:(1)329-39.
17. DiGiuseppe RA, Doyle KA, Dryden W, Backx W A practitioner's guide to rational-emotive behaviour therapy. Oxford University Press; 2013.
18. Turner MJ, Barker JB Examining the efficacy of rational-emotive behaviour therapy (REBT) on irrational beliefs and anxiety in elite youth cricketers. *Journal of Applied Sport Psychology*. 2013;25:(1)131-47.
19. Turner MJ, Slater MJ, Barker JB Not the end of the world: The effects of rational-emotive behaviour therapy (REBT) on irrational beliefs in elite soccer academy athletes. *Journal of Applied Sport Psychology*. 2014;26:(2)144-56.
20. Turner MJ, Allen MS, Slater MJ, Barker JB, Woodcock C, Harwood CG, et al The development and initial validation of the irrational performance beliefs inventory (iPBI). *European Journal of Psychological Assessment*. 2014;32:(3)248-57.
21. David D, Cotet C, Matu S, Mogoase C, Stefan S 50 years of rational-emotive and cognitive-behavioural therapy: A systematic review and meta-analysis. *Journal of Clinical Psychology*. 2018;74:(3)304-18.