

RESEARCH ARTICLE

The need-thwarting ecology of officiating: A qualitative study of burnout among Greek basketball referees through a Self-Determination Theory Lens

Supplementary Files

COREQ (Consolidated Criteria for Reporting Qualitative Research) 32-item checklist

“The Need-Thwarting Ecology of Officiating: A Qualitative Study of Burnout among Greek Basketball Referees through a Self-Determination Theory Lens”

Checklist based on: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. International Journal for Quality in Health Care. 2007;19(6):349-357. doi:10.1093/intqhc/mzm042

No.	Item	Guide question / description	How the item is addressed in the manuscript	Location in manuscript
Domain 1: Research team and reflexivity				
1	Interviewer/facilitator	Which author/s conducted the interview or focus group?	All semi-structured interviews were conducted by the lead author. Single-interviewer design was chosen to maximise consistency of probing and rapport across cases.	Materials and Methods, Data Collection (p. 9, lines 17–18)
2	Credentials	What were the researcher's credentials? E.g. PhD, MD	The lead author holds the relevant graduate research credentials in sport psychology / educational research methods, with prior peer-reviewed publication on basketball referee burnout. Senior author(s) hold doctoral qualifications in sport science and research methodology.	Title page (p. 1); author affiliations and credentials provided on the title page (removed for blinded review; will be confirmed at production)
3	Occupation	What was their occupation at the time of the study?	Lead author: academic researcher in sport and exercise psychology / educational research. Co-authors: faculty members affiliated with university departments of physical education and sport science.	Title page (p. 1); author occupations provided on the title page (removed for blinded review; will be confirmed at production)
4	Gender	Was the researcher male or female?	The lead author who conducted the interviews is male. The composition of the wider research team includes both genders. The implications of researcher gender for interpretation, particularly given the predominantly male sample, are acknowledged in the Strengths and Limitations section.	Title page (p. 1; author gender confirmed at production); Strengths and Limitations (p. 37, lines 27–31; p. 38, lines 1–22) for discussion of sample gender composition
5	Experience and training	What experience or training did the researcher have?	The lead author had prior scholarly familiarity with basketball officiating and burnout research, including a published scoping review on the topic, and had received formal training in qualitative methodology and reflexive thematic analysis. Reflexive notes were kept throughout fieldwork and analysis to monitor the influence of this prior familiarity on questioning and interpretation.	Materials and Methods, Data Collection (p. 9, lines 24–30)

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6	Relationship established	Was a relationship established prior to study commencement?	No personal or professional supervisory relationship existed between the interviewer and any participant prior to the study. Participants were known to the lead author only through prior professional contact within the basketball-officiating community, and this prior familiarity is acknowledged as both a recruitment resource and a potential interpretive influence in the reflexivity statement.	Materials and Methods, Data Collection (p. 9, lines 25–30)
7	Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	Participants were informed at recruitment and again before each interview that the lead author was conducting doctoral / academic research on burnout in basketball officiating, that the study used Self-Determination Theory as an interpretive framework, and that the research aimed to inform support strategies for referees rather than to evaluate them individually. Participants were also informed of the lead author's prior peer-reviewed publication on the topic.	Materials and Methods, Participants and Sampling Strategy (p. 8, lines 21–23); Data Collection (p. 9, lines 25–30)
8	Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	Reflexive notes documented the lead author's assumptions about officiating pressure, institutional evaluation, and burnout. The lead author's prior familiarity with the field was treated as both a resource for informed probing and a potential interpretive bias, and the SDT framework was deliberately introduced only as a sensitizing lens after inductive coding, to avoid predetermining participants' meanings. The critical realist epistemological positioning is explicitly stated.	Materials and Methods, Design and Epistemological Positioning (p. 6, lines 22–31; p. 7, lines 1–11); Data Collection (p. 9, lines 24–30)
Domain 2: Study design				
9	Methodological orientation and theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	Reflexive thematic analysis (Braun and Clarke, 2006; 2019; 2022) within a critical realist epistemology. Self-Determination Theory (Ryan and Deci, 2017) was used as a sensitizing interpretive framework, not as a coding template.	Materials and Methods, Design and Epistemological Positioning (p. 6, lines 22–31; p. 7, lines 1–11); Data Analysis (p. 11, lines 1–3)
10	Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	Criterion-based purposive sampling within a maximum-variation logic, informed by a preliminary quantitative screening stage (online questionnaire with MBI and adapted BIR instruments) used as a sampling resource rather than as an analytic strand.	Materials and Methods, Participants and Sampling Strategy (p. 7, lines 16–30; p. 8, lines 14–23)
11	Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	Participants were approached via the Hellenic Basketball Referees Federation (O.D.K.E.) network, by email and direct professional contact. Consent for the screening phase and consent for the interview phase were obtained separately. Eligible individuals from the screening were re-approached for explicit interview consent with full briefing.	Materials and Methods, Participants and Sampling Strategy (p. 8, lines 14–23)

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No.	Item	Guide question / description	How the item is addressed in the manuscript	Location in manuscript
12	Sample size	How many participants were in the study?	Ten (10) active referees of the Greek national basketball leagues. Sample size was justified using the five dimensions of information power (Malterud et al., 2016): focused study aim, high sample specificity, theoretical anchoring through SDT, strong dialogue quality, and case-oriented analytic strategy.	Materials and Methods, Participants and Sampling Strategy (p. 7, lines 21–30; p. 8, lines 1–13)
13	Non-participation	How many people refused to participate or dropped out? Reasons?	Sixty (60) referees were invited to complete the screening questionnaire; thirty (30) returned completed screenings. Twenty (20) referees were therefore non-respondents at the screening stage; no formal reasons were collected, consistent with the screening's function as a sampling resource. From the screening pool, eligible information-rich cases were re-approached for interviews and all ten approached individuals consented. No participant dropped out during or after the interview phase.	Materials and Methods, Participants and Sampling Strategy (p. 8, lines 14–16)
14	Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	Interviews were conducted in private and quiet settings to protect confidentiality and support open disclosure. Face-to-face interviews took place in mutually agreed private locations, and remote interviews were conducted via Zoom or Microsoft Teams from private settings on both sides.	Materials and Methods, Data Collection (p. 10, lines 4–8)
15	Presence of non-participants	Was anyone else present besides the participants and researchers?	No third parties were present at any interview. For remote interviews, both interviewer and participant confirmed they were alone in a private location before recording began.	Materials and Methods, Data Collection (p. 10, lines 4–8; private settings imply absence of third parties)
16	Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	Ten active basketball referees of the Greek national leagues (nine men, one woman), registered with the Hellenic Basketball Referees Federation (O.D.K.E.). Age range 30 to 49 years ($M = 40.8$, $SD = 5.81$). Refereeing experience 12 to 27 years ($M = 18.10$, $SD = 4.86$). Sample included referees from Category A and Category B evaluation tiers, with employment conditions varying (full-time, part-time). Data were collected during the 2024–2025 competitive period, following ethical approval (No. 1681; 2024-10-16).	Materials and Methods, Participants and Sampling Strategy (p. 7, lines 21–26)
17	Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	A semi-structured interview guide with open-ended questions covering four domains (perceived burnout-related pressures, physical and psychological consequences, social and professional effects, and motivational meanings relevant to autonomy, competence, and relatedness) was developed and pilot tested prior to the main fieldwork. Pilot testing led to minor refinements in wording, sequencing, and follow-up prompts without changing the substantive focus.	Materials and Methods, Data Collection (p. 9, lines 18–23; p. 10, lines 1–2 and lines 11–12 for pilot)
18	Repeat interviews	Were repeat interviews carried out? If yes, how many?	No repeat interviews were carried out. The single-interview design was consistent with the focused study aim and the case-oriented reflexive thematic analysis approach.	Materials and Methods, Data Collection (p. 9, lines 17–30; p. 10, lines 1–26; single-interview design implicit throughout)

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No.	Item	Guide question / description	How the item is addressed in the manuscript	Location in manuscript
19	Audio/visual recording	Did the research use audio or visual recording to collect the data?	Yes. All interviews were audio-recorded with participants' explicit written permission. In-person interviews used an Android voice-recording application (Voice Recorder); remote interviews used the built-in recording functions of Zoom or Microsoft Teams. Video was not retained for remote interviews; only the audio track was used for transcription.	Materials and Methods, Data Collection (p. 10, lines 4–7)
20	Field notes	Were field notes made during and/or after the interview or focus group?	Yes. The lead researcher kept reflexive notes during and after each interview, documenting assumptions, field proximity, possible influence on questioning and interpretation, and analytic hunches. These reflexive memos were subsequently linked to specific cases, codes, and themes within the NVivo project to support audit-trail transparency.	Materials and Methods, Data Collection (p. 9, lines 24–30); Data Analysis (p. 12, lines 14–16)
21	Duration	What was the duration of the interviews or focus group?	Approximately 30 to 45 minutes per interview.	Materials and Methods, Data Collection (p. 10, line 4)
22	Data saturation	Was data saturation discussed?	Data saturation as a fixed analytic endpoint was not used as a criterion of quality, consistent with the reflexive thematic analysis tradition (Braun and Clarke, 2019; 2022), which considers saturation problematic when applied to interpretive, meaning-focused analysis. Sample adequacy was instead justified through information power (Malterud et al., 2016).	Materials and Methods, Participants and Sampling Strategy (p. 7, lines 26–30; p. 8, lines 1–13 for information power); Quality and Trustworthiness (p. 12, lines 20–22 explicitly states saturation not used as fixed endpoint)
23	Transcripts returned	Were transcripts returned to participants for comment and/or correction?	Transcripts were not returned to participants for comment, and member checking was not used as a criterion of credibility. This is consistent with the reflexive thematic analysis position that meaning is constructed through analytic work rather than verified by participants (Braun and Clarke, 2022). Confidentiality and pseudonymisation were prioritised given the small, professionally identifiable population.	Materials and Methods, Data Collection (p. 10, lines 20–22 for cross-checking against the Greek source); Quality and Trustworthiness (p. 13, lines 4–6 for member checking not used)
Domain 3: Analysis and findings				
24	Number of data coders	How many data coders coded the data?	Coding and theme development were conducted primarily by the lead author. Consistent with reflexive thematic analysis, intercoder reliability statistics were not calculated and no fixed codebook was treated as a quality requirement. Credibility was instead strengthened through structured peer debriefing, in which emerging interpretations and theme boundaries were scrutinised by co-authors to surface blind spots and refine analytic clarity.	Materials and Methods, Data Analysis (p. 11, lines 3–4 for lead researcher as primary coder); Quality and Trustworthiness (p. 12, lines 22–30; p. 13, lines 1–3 for peer debriefing)
25	Description of the coding tree	Did authors provide a description of the coding tree?	Yes. The NVivo coding tree is documented and provided as transparency material. Table 1 summarises the six RQ1 parent themes and their contributing coded subthemes; Table 2 summarises the five RQ2 parent themes and subthemes. Appendix Figures A1 and A2 present the NVivo node hierarchies for RQ1 and RQ2 respectively. Appendix Figures A3 and A4 present the NVivo coded reference views illustrating coded excerpts and coverage.	Results, Table 1 (p. 15, beginning line 11; full table follows on pp. 15–17) and Table 2 (p. 22, beginning line 8; full table follows on pp. 22–23); Appendix Figure A1 (p. 52), Figure A2 (p. 53), Figure A3 (p. 55), Figure A4 (p. 55)

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No.	Item	Guide question / description	How the item is addressed in the manuscript	Location in manuscript
26	Derivation of themes	Were themes identified in advance or derived from the data?	Themes were derived inductively from the data. Coding and theme development followed Braun and Clarke's six-phase reflexive thematic analysis framework. Five identifiable audit-trail-supported steps moved from semantic line-by-line coding (Step 1; 138 initial codes), through latent re-coding (Step 2), code clustering into 22 candidate subthemes (Step 3), candidate theme construction into 11 themes (Step 4), and theme refinement around central organising concepts (Step 5). Self-Determination Theory was introduced only after inductive coding, as a sensitizing interpretive framework, not as an a priori coding template.	Materials and Methods, Data Analysis (p. 11, lines 1–13 for Braun and Clarke six-phase framework; p. 11, lines 25–32; p. 12, lines 1–13 for the five-step coding-to-themes pathway)
27	Software	What software, if applicable, was used to manage the data?	NVivo version 15 (Lumivivo). NVivo functioned as an organisational and traceability tool: construction of hierarchical coding nodes; writing of analytic and reflexive memos; retrieval of coded extracts; matrix coding queries for participant-by-theme mapping; and logging of node renaming, merging, and splitting decisions across analytic iterations. NVivo was not used as a co-analyst or as a mechanism of validity confirmation.	Materials and Methods, Data Analysis (p. 11, lines 11–23)
28	Participant checking	Did participants provide feedback on the findings?	Participant (member) checking on findings was not used as a criterion of credibility, consistent with the reflexive thematic analysis position (Braun and Clarke, 2022). Credibility was instead pursued through reflexivity, transparency, analytic coherence, evidentiary grounding, structured peer debriefing, and the maintenance of an explicit audit trail through NVivo memos and matrices.	Materials and Methods, Quality and Trustworthiness (p. 13, lines 4–6)
29	Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	Yes. Verbatim participant quotations are presented throughout the Results section to illustrate each theme and subtheme, with neutral identifiers (P1 to P10) used to protect confidentiality. Each quotation is anchored in a participant identifier; potentially identifying contextual details were removed or generalised at transcription. Selected quotations were cross-checked against the original Greek source text to minimise loss of idiomatic meaning.	Results, all theme subsections: RQ1 themes (p. 17, line 30 through p. 21) and RQ2 themes (p. 23 through p. 29); each quotation identified with neutral participant identifiers (P1 to P10)
30	Data and findings consistent	Was there consistency between the data presented and the findings?	Yes. Each theme narrative in the Results section is grounded in extended participant quotations before any Self-Determination Theory interpretation is layered on top. The process-oriented synthesis paragraph at the start of Results, the SDT interpretation within each theme, and the integrative Appendix Table A1 are all consistently grounded in the quoted participant data. NVivo matrix coding queries (Appendix Figures A5 and A6) document the distribution of coded references across cases.	Results (pp. 14–29, with theme narratives grounded in quoted participant data); Appendix Table A1 (introduced p. 29, line 14; integrative matrix follows on pp. 29–32); Appendix Figure A5 (cross-referenced p. 13, line 21; full figure p. 56) and Figure A6 (cross-referenced p. 13, line 25; full figure p. 56)

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No.	Item	Guide question / description	How the item is addressed in the manuscript	Location in manuscript
31	Clarity of major themes	Were major themes clearly presented in the findings?	Yes. Six major themes for RQ1 (Emotional Ambivalence and Performance Pressure; Emotional and Cognitive Strain; Institutional and Evaluation Pressure; Criticism and Burdened Resilience; Physical Demands and Health Issues; Work-Life Conflict) and five major themes for RQ2 (Emotional and Psychological Strain; Physical Strain and Health Impact; Social and Family Life Interference; Institutional and Interpersonal Pressure; Commitment, Amotivation, and Loss of Identity) are clearly presented with bolded subheadings, opening narrative, supporting quotations, and SDT interpretation.	Results (p. 14, line 3 onwards): six RQ1 themes presented pp. 17–21 with bolded subheadings; five RQ2 themes presented pp. 23–29
32	Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Yes. Contributing subthemes for each parent theme are tabulated in Tables 1 and 2 with NVivo Sources and References counts as transparency indicators. Divergent and minor accounts are explicitly discussed within each theme narrative (e.g., the cautious framing of role identity strain rather than total identity loss within the Commitment, Amotivation, and Loss of Identity theme; the distinction between scheduling-related social restriction and psychological social withdrawal within the Social and Family Life Interference theme). The participant-by-theme matrices (Appendix Figures A5 and A6) document variation in thematic emphasis across the ten cases.	Results, Table 1 (pp. 15–17) and Table 2 (pp. 22–23) with NVivo Sources and References counts as transparency indicators; Appendix Figures A5 and A6 (p. 56) for participant-by-theme matrices; divergent and minor accounts discussed within each theme narrative on pp. 17–29

(B) NVivo 15 tables and figures documenting the coding framework, theme structure, and data extracts

Table S1. NVivo coded themes and contributing codes (subthemes) for research question 1 (factors contributing to burnout)

Research question 1 theme (parent node)	Contributing codes (subthemes)	NVivo sources ^a	NVivo references ^b	Representative quote
Emotional ambivalence and performance pressure	Anxiety and stress related to decision-making, emotional fatigue, emotional fatigue from interactions, mental drain and stress management, preparation and decision-making pressure, stress and anxiety	9	29	"I feel like I am putting on armor before a battle, not like I am getting ready for a game." (Participant 3, personal communication, 13 May, 2025)
Emotional and cognitive strain	Enjoyment and satisfaction, pressure before and during matches, pressure from performance expectations, responsibility and excitement	8	18	"The need for proper decision making and good performance in every match certainly greatly affects the psychological state of a referee." (Participant 10, personal communication, 24 May, 2025)
Institutional and evaluation pressure	Anxiety over observation and evaluation, institutional pressure and criticism, pressure from evaluation and institutions	7	13	"The evaluation and observation process increases this pressure." (Participant 10, personal communication, 24 May, 2025)

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Table S1. (Continued)

Research question 1 theme (parent node)	Contributing codes (subthemes)	NVivo sources ^a	NVivo references ^b	Representative quote
Criticism and burdened resilience	Criticism and resilience, criticism and response	5	8	"Criticism is inevitable but difficult... after the match, I analyze my performance and talk to colleagues." (Participant 5, personal communication, 16 May, 2025)
Physical demands and health issues	Physical and emotional exhaustion, physical exhaustion, physical exhaustion and training demands	6	13	"On a physical level, the days with consecutive matches are exhausting, especially on weekends." (Participant 10, personal communication, 24 May, 2025)
Work-life conflict	Balancing professional and personal obligations, conflict between personal life and refereeing duties, family and personal obligations affecting performance, impact of financial concerns	7	21	"Travel to matches and irregular hours come into conflict with family and social obligations." (Participant 10, personal communication, 24 May, 2025)

Notes: ^aSources refers to the number of participants in which the node appears; ^bReferences refers to the number of coded excerpts in NVivo.

Table S2. NVivo coded themes and contributing codes (subthemes) for research question 2 (perceived consequences of burnout)

Research question 2 theme (parent node)	Contributing codes (subthemes)	NVivo sources ^a	NVivo references ^b	Representative quote
Commitment, amotivation, and loss of identity	Commitment to refereeing, coping mechanisms and passion, love for refereeing and perseverance, professional ambitions and development	7	14	"I have thought many times about quitting, but the financial factor and the love for basketball have prevented me." (Participant 7, personal communication, 19 May, 2025)
Emotional and psychological strain	Emotional and mental exhaustion, emotional exhaustion and pressure, emotional resilience and adaptation	10	34	"I have experienced moments of emotional exhaustion, frustration, and self-doubt." (Participant 5, personal communication, 16 May, 2025)
Institutional and interpersonal pressure	Injustice and disappointment, injustice and meritocracy issues, meritocracy and recognition issues, negative effects of competition, pressure and cooperation challenges, pressure and criticism	9	20	"Failure to recognize effort and contribution affects my peace of mind." (Participant 7, personal communication, 19 May, 2025)
Physical strain and health impact	Physical exhaustion and strain, physical strain and fatigue	6	26	"In games with great intensity and noise from the stands, I have noticed headache and dizziness." (Participant 1, personal communication, 07 May, 2025)
Social and family life interference	Social and family life challenges, isolation and lack of support, relationship challenges, social isolation	8	35	"The referee does not have a free weekend to spend with family, and this creates pressure and distance." (Participant 9, personal communication, 22 May, 2025)

Notes: ^aSources refers to the number of participants in which the node appears; ^bReferences refers to the number of coded excerpts in NVivo.

Table S3. Integrative matrix linking RQ1 factors to RQ2 perceived consequences

RQ1 factors (themes)/RQ2 consequences (themes)	Emotional and psychological strain	Physical strain and health impact	Social and family life interference	Institutional and interpersonal pressure	Commitment, amotivation, and loss of identity
Emotional ambivalence and performance pressure	Anticipatory anxiety and decision load heighten rumination and self-doubt after matches, sustaining emotional exhaustion (P3, P10)	Sustained arousal and stress responses manifest somatically, including headaches, dizziness, and tension symptoms in intense games (P1, P9)	Pregame and post-game cognitive spillover reduces psychological availability for social life and recovery time, reinforcing withdrawal (P2, P10)	Perceived need for flawless performance increases sensitivity to criticism and perceived injustice when outcomes depend on single decisions (P3, P10)	Repeated fear of errors and performance scrutiny weakens professional meaning and increases thoughts of withdrawal or scaling back (P7, P10)
Emotional and cognitive strain	Chronic cognitive load and emotional labor reduce regulation capacity, increase frustration, irritability, and mental fatigue (P5, P7)	Prolonged concentration and stress interact with physical fatigue, reducing recovery and amplifying bodily wear after demanding games (P5, P10)	Reduced enjoyment and satisfaction narrow leisure engagement and contribute to progressive social constriction (P2, P3)	Heightened emotional reactivity under pressure destabilizes cooperation with coaches and players and increases conflict escalation risk (P7)	Loss of enjoyment and perceived overload erode motivation, shifting commitment from attraction to obligation (P7, P1)
Institutional and evaluation pressure	Monitoring and evaluation amplify anxiety, reduce perceived control, and intensify emotional exhaustion when mistakes carry consequences (P3, P7, P10)	Mandatory tests and continuous readiness expectations increase strain and perceived overload, especially with dense schedules (P7, P10)	Time demands from institutional procedures compete with family and social roles, increasing absence and tension at home (P10, P9)	Evaluation regimes may be experienced as unfair or political, reinforcing perceived injustice and meritocracy concerns (P7)	Lack of recognition and punitive evaluation logic increases discouragement and quitting ideation, especially when progression stalls (P7, P1)
Criticism and burdened resilience	Aggressive or unfair criticism fuels distress and self-doubt, while limited outlets increase internalization of pressure (P2, P3, P5)	Criticism-laden environments increase physiological arousal during matches, contributing to tension and fatigue states (P1, P9)	Stigma and fear of “showing weakness” reduce help-seeking and promote isolation and withdrawal from support networks (P3)	External criticism from stakeholders translates into strained cooperation and more confrontational interactions on court (P7, P10)	Persistent negative feedback undermines professional identity and perceived efficacy, increasing disengagement risk (P7, P1)
Physical demands and health issues	Accumulated fatigue reduces perceived competence and readiness, increasing mental strain and vulnerability to self-doubt (P5, P10)	Overload and limited recovery produce pain, muscle fatigue, and slower recovery, experienced as a “wearing down” of the body (P3, P10)	Physical depletion reduces capacity for social participation and increases preference for rest and withdrawal after matches (P7, P2)	Physical underpreparedness heightens pressure in interactions and may worsen communication under stress, increasing conflict proneness (P7)	When physical strain threatens continuity or progression, referees reevaluate goals and consider reducing involvement (P10, P7)
Work-life conflict	Spillovers from work and family stress reduce focus and increase mental fatigue, sustaining distress and rumination (P9, P10)	Sleep restriction and time compression increase physical exhaustion and impair recovery, especially after late travel (P2, P9)	Repeated absence and time scarcity generate relationship strain, reduced social contact, and feelings of isolation (P2, P9, P10)	Work and family pressures can intensify sensitivity to institutional criticism and perceived unfair treatment, escalating frustration (P7, P10)	Financial dependence and limited alternatives create entrapment dynamics, delaying exit but increasing burnout load and disengagement (P7, P10)

Abbreviation: RQ: Research question.

Name	Files	References
☐ (RQ1) Factors contributing to burnout	10	172
☐ (Theme) Institutional and evaluation pressure	7	13
☐ (Theme) Emotional and cognitive strain	8	18
☐ Enjoyment and satisfaction	2	2
☐ Pressure before and during matches	5	7
☐ Pressure from performance expectations	5	6
☐ Responsibility and excitement	2	3
☐ (Theme) Physical demands and health issues	6	13
☐ (Theme) Work-life conflict	7	21
☐ Balancing personal and professional obligations	4	7
☐ Balancing professional and personal life	3	3
☐ Conflict between personal life and refereeing duties	3	3
☐ Family and personal obligations affecting performance	4	6
☐ Impact of financial concerns	2	2
☐ (Theme) Criticism as a pressure source and mental resilience	5	8
☐ (Theme) Emotional ambivalence and performance pressure	9	29

Figure S1. NVivo node hierarchy for research question (RQ) 1, showing themes and codes

Name	Files	References
(RQ2) Perceived consequences of burnout	10	193
(Theme) Commitment, amotivation, and loss of identity	7	14
(Theme) Emotional and psychological strain	10	34
(Theme) Institutional and interpersonal pressure	9	20
Injustice and disappointment	1	2
Injustice and meritocracy issues	2	2
Meritocracy and recognition issues	1	2
Negative effects of competition	2	3
Pressure and cooperation challenges	4	4
Pressure and criticism	6	7
(Theme) Physical strain and health impact	6	26
(Theme) Social and family life interference	8	35
Family and social life challenges	3	5
Isolation and lack of support	5	9
Relationship challenges	3	4
Social and family life challenges	6	8
Social isolation	5	9

Figure S2. NVivo node hierarchy for research question (RQ) 2, showing themes and codes

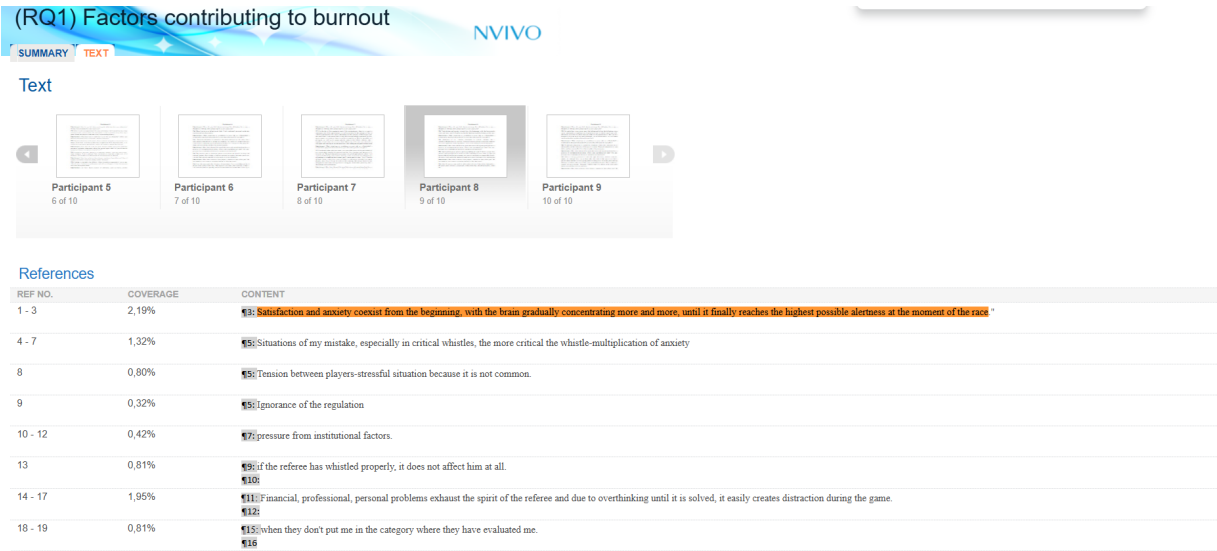


Figure S3. NVivo coded reference view for research question (RQ) 1, illustrating coded excerpts and coverage within the “Text” source

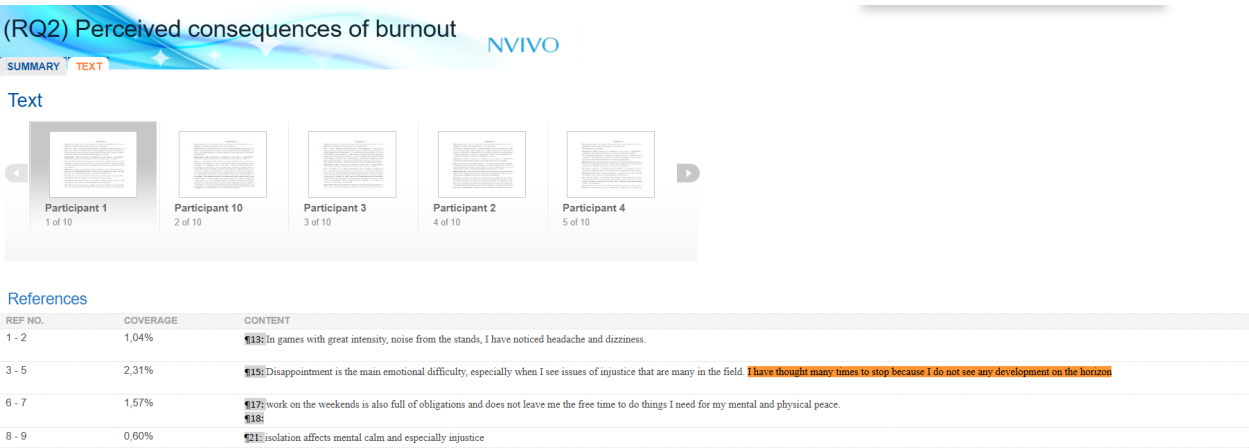


Figure S4. NVivo coded reference view for research question (RQ) 2, illustrating coded excerpts and coverage within the “Text” source

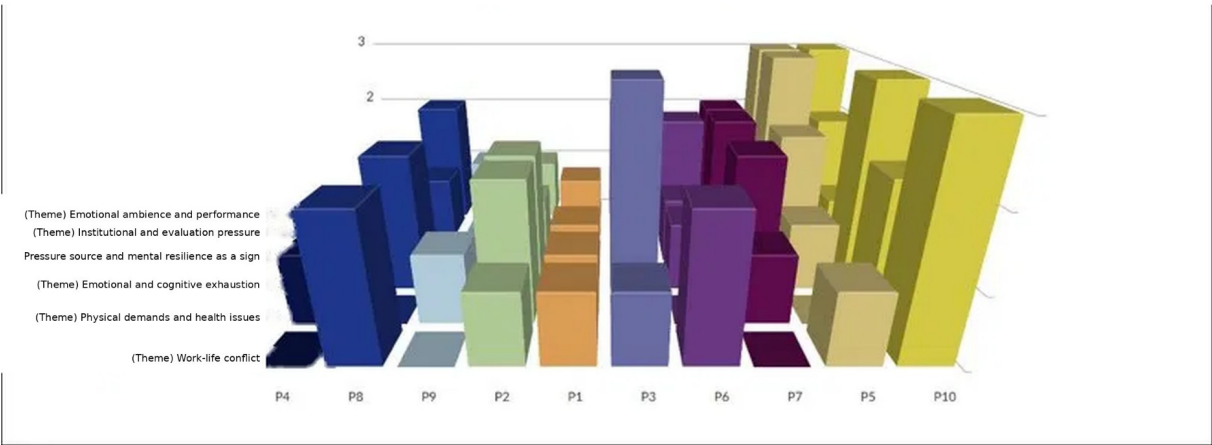


Figure S5. NVivo matrix coding query for research question 1, showing distribution of coded references across participants and parent themes. Counts are traceability indicators only and should not be interpreted as quantitative evidence of prevalence, saturation, or theme importance.

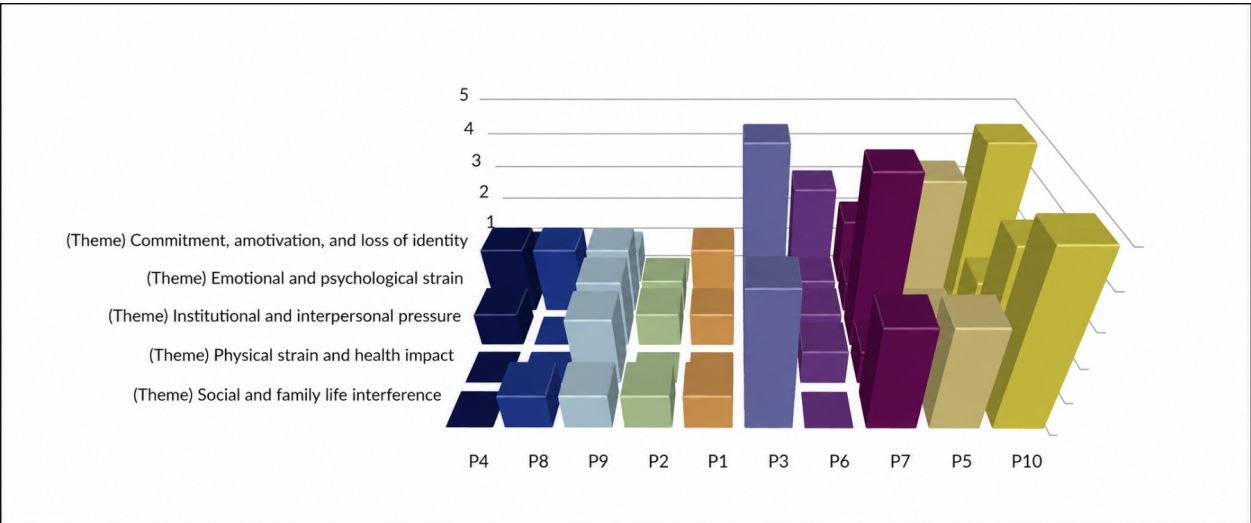


Figure S6. NVivo matrix coding query for research question 2, showing distribution of coded references across participants and parent themes. Counts are traceability indicators only and should not be interpreted as quantitative evidence of prevalence, saturation, or theme importance.