

Exploring contextual factors for management and prevention of running-related injuries: runners and experts' perspectives

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ABSTRACT

Running is one of the most accessible and popular physical activities worldwide; however, injuries are the main barrier to sustaining running practice. While quantitative studies have explored prevalence and risk factors, a critical gap exists in understanding subjective experiences, perceptions and contextual influences on injury management and prevention. This qualitative study aimed to explore the perspectives of runners and experts regarding injury perception, management and prevention, as well as the contextual influence of these processes. Using a secondary data analysis approach, this study drew from qualitative semistructured interviews with Chilean runners (n=15) and running experts (n=6). Thematic analysis, guided by an interpretivist approach, uncovered intrinsic factors (identity, motivation, stress and self-learning) and extrinsic factors (environment, information sources, marketing, peer advice, professional guidance, racing, stereotype and clothing) that shaped runners' behaviours. Less experienced runners associated injury risk with asphalt surfaces, faced challenges in discerning online information reliability and found motivation in peer advice. Experts emphasised the multifactorial nature of running-related injuries, including previous injuries and training-related factors. Both groups acknowledged a global tendency among runners to resist rest when discomfort arose. This research contributed to a nuanced understanding of injury perception, management and prevention, bridging scientific knowledge with individual experiences. Clinicians may use this information to enhance the therapy alliance and set realistic expectations about the runner's rehabilitation process.

INTRODUCTION

Running, a widely embraced form of physical activity,¹ holds numerous health benefits.^{1 2} If managed well, running is a low-cost way to promote physical activity.^{3 4} However, musculoskeletal overuse injuries are highly prevalent in runners—ranging between 20% and 85%.^{5 6} While quantitative studies have made substantial contributions to our understanding of the prevalence and risk factors of running-related injuries,^{6–9} there remains

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Running is a popular activity with many health benefits. Still, overuse injuries are common, and while quantitative studies have identified multifactorial risk factors, there is a gap in understanding runners' subjective experiences and self-management strategies, particularly in diverse types of runners, professional experts and contexts.

WHAT THIS STUDY ADDS

⇒ This study highlights key themes around how runners with different experience levels perceive and manage injuries, emphasising how personal experience, expert guidance and environmental context may shape their perspectives on injury prevention and recovery strategies. Professionals' views and experiences are also explored. The study presents a framework illustrating the dynamic feedback loop of injury management strategies, emphasising resilience-building, self-management and learning from past injuries.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The insights can inform the development of targeted educational and preventive programmes for runners, focusing on improving injury recognition and management strategies. Policymakers and organisations can use the findings to promote evidence-based guidelines for running safety and injury prevention.

a critical gap in comprehending the subjective experiences, perceptions and contextual factors that influence the management and prevention of these injuries.

Verhagen *et al* explored how recreational runners manage injuries, proposing a framework linking load to injury and the self-regulatory process controlling this pathway.¹⁰ They suggest that prevention should enhance runners' self-regulation when handling complaints and injuries. Peterson *et al* found that male recreational runners prioritise self-management over professional advice for

training loads, fitness and injuries.¹¹ While insightful, these findings mainly reflect experienced male runners from developed countries.

This qualitative study aimed to explore the perspectives of Chilean runners (with various levels of experience) and experts regarding injury perception, management and prevention, as well as the contextual factors influencing these processes. Our findings may contribute to developing targeted interventions and strategies for effective self-management and prevention of running-related injuries among Chilean recreational runners, considering that running is Chile's third most practised physical activity.¹²

METHODS

Study design

This study used a secondary data analysis of qualitative semistructured interviews from a previous study.¹³ In brief, the previous study followed a sequential explanatory mixed methods approach aimed at identifying profiles of runners from a diverse range of factors. The qualitative phase aimed to further explore the beliefs and behaviours related to running practices and injuries particular to each previously identified runner profile. In our current analysis, we explored the perspectives of runners and experts regarding injury perception, management and prevention, and the contextual factors that modify the management and prevention of running-related injuries. To do so, we used an inductive thematic analysis underpinned by an interpretivist approach.

Participants

A detailed description of the recruitment process of runners for the qualitative component is presented in the previous publication.¹³ In brief, a convenience sample of Chilean runners (n=15) was randomly selected from a previous quantitative study (n=821) and invited to participate in semistructured interviews. Our previous study classified participants into four running profiles (beginner, basic, middle and advanced).¹³ Additionally, a convenience sample of six running experts who had not participated in the previous study was invited to participate. Experts were considered professionals with >5 years of clinical experience in fields related to running practice, such as sports medicine, physiotherapy, coaching or sports marketing. They were selected based on their association with national sports institutions, participation in scientific societies and/or track record. Five professions were included: sports physician (n=2), physiotherapist (n=1), nutritionist (n=1), running coach (n=1) and sports marketing (n=1).

Data collection

All interviews were conducted in Spanish face-to-face by three professionals trained in qualitative research (sociologists, two women and one man) between April and May 2016. Consistency between interviewers was ensured using training sessions with the principal investigators (MB and

JLZ), regular meetings to discuss any issues arising during the interview process, using a detailed and semistructured interview guide with predefined questions and follow-up prompts and pilot testing the interviews, including audio recording and initial transcription checking. No previous relationship or interaction was established between the participant and the interviewer, and data were collected conveniently for the participant (eg, workplace, cafe and training place). In this study, running-related injuries were not predefined to allow participants to describe their experiences in their own terms. This approach aligns with the qualitative methodology used to explore subjective injury perceptions. A guide was used to structure the interviews and covered aspects such as running practice, motivations, beliefs about injury risk factors and preventive strategies and the role of physiotherapists in rehabilitation and prevention (online supplemental file 1: runners guide; online supplemental file 2: experts guide). The duration of semistructured interviews ranged between 25 and 35 min. The Consolidated Criteria for Reporting Qualitative research-32¹⁴ checklist was used as an a posteriori quality assessment tool (online supplemental file 3).

Data analysis

All the semistructured interviews were audio recorded and then subsequently transcribed verbatim. The analysis involved a primarily inductive, reflexive thematic analysis process, as Braun and Clarke described.^{15–17} This was conducted to identify the key themes in the transcriptions. Experts were analysed together as one group. Six phases of thematic analysis were performed¹⁵: (1) familiarising with the data by reading through the entire dataset; (2) generating initial codes including line-by-line coding as needed; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the finalised analysis and report. All interviews were open-coded independently by trained qualitative researchers (MB, SR-A and RV-R) and discussed between them to reach a consensus on the main codes. This process was independent of the analysis conducted for the previous publication. Subsequently, CB provided expert input and independently coded four interviews (two runners and two experts) to validate the analysis. CB was not familiar with the data and did not participate in any state of previous analyses related to the first published study. During a meeting, MB and CB agreed on the codes, and new categories were developed from their discussion. Then, MB finalised the analysis of the rest of the interviews. During three meetings, MB and CB discussed the final codes and established the main themes. The analysis results were then validated by SR-A, who was familiar with the interviews. All researchers are native Spanish speakers, except for CB (Portuguese), but with an understanding of Spanish. MB and CB translated the codes and themes into English, which the rest of the team cross-checked.

Table 1 Demographics and running description of runners and experts

	Sex—females (F), males (M)	Age (years)	Years of experience	Previous injury*
Runners				
More experienced (R1, R2, R3, R4, R5, R6, R7)	3 F 4 M	2 males: 25–34 2 males: >34 2 females: 25–34 1 female: >34	≥3 years running	100% yes
Less experienced (R8, R9, R10, R11, R12, R13, R14, R15)	4 F 4 M	2 males: 18–24 1 male: 25–34 1 male: >34 1 female: 18–24 2 females: 25–34 1 female: >34	≤2 years running	87.5% yes
Experts				
(E1) Running coach	1 M	–	14 years	–
(E2) Sports physiotherapist	1 M	–	22 years	–
(E3) Sports physiotherapist	1 M	–	11 years	–
(E4) Sports physician	1 F	–	25 years	–
(E5) Sports dietician	1 M	–	20 years	–
(E6) Sports marketing	1 M	–	10 years	–

*Experts were not directly asked about their personal injury history, as the study focused on their professional expertise in injury management and prevention.

RESULTS

Description of participants

Demographic and running characteristics of runners and experts are shown in [table 1](#). During the analysis, it was clear that there was a difference in the perspectives of more and less experienced runners. Using the previous study as a reference, we described the results based on two categories of runners: ‘more experienced’ (>3 years of running experience) (n=7) and ‘less experienced’ (≤2 years of running experience) (n=8). Numbers distinguish participants as runners (eg, R1, R2... R15) or experts (eg, E1, E2... E6).

Thematic analysis identified five main themes related to the research question: (1) diverse perceptions of running injuries: navigating risk, experience and definitions; (2) multifactorial causes of running injuries: training, biomechanics and conditioning; (3) navigating injury management: self-reliance, professional care and lessons from experience; (4) building injury resilience for injury prevention: preparation, adaptation and learning from experience; and (5) contextual drivers of behaviour: the interplay among identity, experience and external influences. Online supplemental file 4 summarises themes, subthemes, codes and exemplary quotes for the five main themes.

Diverse perceptions of running injuries: navigating risk, experience and definitions

This theme captures the variations in how injuries are perceived by runners and experts while also reflecting the nuances of experience, medical definitions and

risk acknowledgement. It emphasises the complexity of understanding injuries in the context of running, which is shaped by individual experience, expert knowledge and societal perspectives on the risks associated with the sport (online supplemental file 4).

Injuries and complaints are not the same

There was a difference in the perception of injury between more and less experienced runners. More experienced runners report that complaints are part of the runner's life and training process, distinguishing between discomfort and actual injuries. They describe injuries as setbacks that demand attention, while complaints are seen as manageable aspects of training (R6 [Q1], R1 [Q2], R2 [Q3]).

Complaints disappear after 24 hours of rest [...] So that tells me that... that's the thermometer I have to say, ah OK, it's part of the effort, let's say, it's nothing more (R6 [Q1]).

Conversely, less experienced runners often define injury as any complaint that stops them from running, potentially influencing how they respond to pain (R11 [Q4]).

Both groups described their injuries using medical and biomechanical terminology, often referencing specific clinical diagnoses (R4 [Q7]). Some runners directly incorporated clinicians' explanations when discussing their injuries (R5 [Q8], R14 [Q9]):

And he (the clinician) began to tear the elastic, and there he told me, well, this is a ligament, if you are

tearing it, it suddenly cuts, and when it is cut, you have to operate. (R14 [Q9]).

Experts reinforced this knowledge, noting that runners often develop awareness of high-risk injury locations through experience and professional guidance (E4 [Q10]).

Acknowledgement of the risk

Experts predominantly view injury in the context of recognising the inherent risks and physical complaints associated with running. Some experts assert that running may not be universally suitable, emphasising the need for individual evaluation before adopting running as an exercise, especially in the case of marathon running (E2 [Q11]):

Evaluation by relevant people is necessary to determine if running is the right sport. (E2 [Q11])

There is a dual perception that running contributes positively to overall health but also exposes individuals to a heightened injury risk. Experts reinforced this concern, particularly regarding long-distance running:

Running 42 kilometres is not beneficial for the body. (E6 [Q12])

More experienced runners acknowledged the risk of injury and potential damage from running a marathon (R7 [Q13], R3 [Q14]). However, runners also expressed divergent views on injury risk, challenging the notion that running itself is a direct cause of injuries:

Running is falsely associated with knee damage; it is untrue. (R1 [Q15])

Experts emphasised the role of education in mitigating injury risk, highlighting the need for runners to be well-informed about injury prevention (E3 [Q16]).

Multifactorial causes of running injuries: training, biomechanics and conditioning

This theme encompasses the complexity of injury causation described by runners and experts, highlighting the interplay of training practices, biomechanical factors and physical preparedness. It reflects both the experiential insights of runners and the professional perspectives of experts while pointing to the multifaceted nature of injury risk in running (online supplemental file 4).

Exceeding physical limits

More experienced runners emphasised the risk of exceeding physical capacity and the consequences of pushing beyond their personal limits (R7 [Q17]). Less experienced runners also acknowledged the peril of ignoring bodily signals, highlighting how continuing to run despite pain sometimes led to injury (R9 [Q18]):

I ran, felt pain, kept going until I got injured. (R9 [Q18])

Experts echoed these concerns, emphasising that recognising warning signs and managing load progression is crucial in preventing injuries (E3 [Q24]).

Training-related factors

More experienced runners identified overtraining and inadequate preparation as key contributors to injury, citing deviating from training plans (R6 [Q19], R4 [Q20]) and inadequate competition preparation (R3 [Q22]), which was also reported by experts (E1 [Q21], E5 [Q23]). Less experienced runners also recognised that preparing too quickly for a competition increased injury risk but often lacked a clear understanding of structured training progression (R3 [Q22]).

Health-related factors

Experts identified running injuries as multifactorial, with previous injuries as the primary risk factor (E3 [Q24]). Additionally, they noted that self-medication in training, akin to imitating practices without understanding, is a detrimental trend among runners (E1 [Q21]). Another expert suggested comprehensive medical examinations before starting running, particularly for those with comorbidities E4 [Q25]):

Obese individuals starting to move should undergo tests like spinal X-rays, bone densitometry, stress tests, insulin curve study, blood count, thyroid exam, and blood pressure check. (E4 [Q25]).

Biomechanics

Both groups of runners recognised biomechanical factors as central to injury risk, particularly the role of footwear, running technique and joint loading (R1 [Q27], R6 [Q29]). One runner noted that wearing improper shoes led to excessive knee and ligament strain (R14 [Q26]). Additionally, they described how suboptimal running technique, rather than the sport itself, is often responsible for injury (R1 [Q27]).

Experts further emphasised that biomechanics-related injury risks are multifactorial, encompassing movement alignment, training surface and abrupt changes in the running distance (E2 [Q28]):

Frequency, type of surface, footwear, footstrike, etc... Also, abrupt changes in distance may lead to injury due to anatomical problems. (E2 [Q28])

Lack of physical conditioning

Runners and experts discussed strengthening and physical conditioning as key factors influencing injury risk. More experienced runners emphasised that not engaging in strength training and neglecting running technique increased susceptibility to injuries (R6 [Q29]). Less experienced runners highlighted the combination of inadequate stretching and warm-up as contributing factors (R11 [Q30]).

Navigating injury management: self-reliance, professional care and lessons from experience

This theme highlights that management strategies are closely linked to the factors contributing to injuries, with runners often relying on prior experience and self-learning mechanisms. These strategies tend to favour self-management techniques over seeking professional care, except in specific circumstances where consultation is deemed necessary (online supplemental file 4).

Self-management versus seeking help

Runners tended to resist resting when facing discomfort or potential injury. Less experienced runners often underestimated potential damage and continued training despite symptoms (R10 [Q33]):

I didn't take the weight and kept jogging; I think it was my mistake to keep jogging too. (R10 [Q33])

Both groups engaged in self-management techniques to deal with their pain and injuries (R4 [Q31], R12 [Q32]). Seeking consultation with a doctor and physiotherapist is generally viewed as a way to confirm the injury's presence and determine recovery time and prognosis (R4 [Q34]). However, runners delayed seeking care due to the potential recommendation of rest, especially when an important race or goal is approaching (R5 [Q35]).

Perceptions of physiotherapy and medical care

The diversity in experiences of healthcare among runners was noted, with satisfaction levels varying based on the personalization of physiotherapy care and the expertise of clinicians in running-related injuries, noting that treating injuries from running differed significantly from treating injuries in other sports (R4 [Q38], R1 [Q39]). Some runners expressed frustration when receiving generalist medical advice, particularly when recommendations focused on changing the sport (R3 [Q37]):

I went to the orthopaedist, I don't know... and after that, it continued, and then it was like... as if they were like: Are you sure running is for you? Like, what a drag, why... why don't you look for another sport? But the truth is, I like running. (R3 [Q37])

Interestingly, the expert group did not provide specific observations regarding managing runners' injuries.

Impact of previous experience on injury management

More experienced runners recognised that injury experiences offered valuable lessons in self-care and management, allowing them to refine their strategies over time (R1 [Q41]):

You learn more with injury experience than with a team. (R1 [Q41])

These runners described how they had better understood what worked for them, integrating techniques, such as applying heat or cold, massage, stretching and adjusting training according to tolerance (R3 [Q40]).

Building injury resilience for injury prevention: preparation, adaptation and learning from experience

This theme encapsulates the emphasis on physical and training preparedness, the adaptation of training routines and the value of learning from past injuries for injury prevention. It reflects the evolving depth of prevention strategies between less and more experienced runners while incorporating the role of education and multidisciplinary approaches highlighted by experts (online supplemental file 4).

Physical preparedness and readiness for training and competition

Experienced runners mentioned the importance of appropriate training preparation for competition, whereas less experienced runners did not explicitly mention this aspect (R1 [Q42]). They discussed key areas such as better preparation, training consistency, gradual increase in training load and strengthening and physical strengthening (R3 [Q43], R6 [Q44]):

You have to prepare your body to avoid having injuries...if you do not exercise your muscles, it will continue to appear. (R6 [Q44])

Runners also highlighted the importance of seeking advice from healthcare professionals or a coach to train properly and prevent injuries. Experts reinforced that adequate physical preparation, strengthening and proper training progression were crucial for injury prevention (E1 [Q45], E5 [Q46]):

You must run with good physical preparation and an adequate weight. (E5 [Q46])

Additionally, experts emphasised the necessity of multidisciplinary collaboration in managing and preventing sports injuries, recognising the value of input from coaches, physiotherapists, physicians and psychologists (E5 [Q47]).

Variation in training routine and surface

Both groups of runners mentioned that combining different running surfaces, such as trail running, helped prevent injuries. The primary reason for this was the reduced impact associated with running on trails, which allowed them to continue training while minimising load (R6 [Q48], R10 [Q49]):

In the end, many runners go to the trails because they are trying to find a way to continue doing this but without injuring themselves so much. (R6 [Q48])

Less experienced runners also expressed concerns about avoiding hard surfaces, particularly cement and asphalt, to prevent injuries (R11 [Q50]).

Learning from previous injuries and experiences

More experienced runners described preventive strategies in greater depth, whereas less experienced runners mentioned them to a lesser extent. Interestingly, only

one runner reported no previous injury experience and did not mention any prevention strategies (R13).

Both groups identified common strategies, such as improving running technique and selecting appropriate shoes to prevent injuries (R1 [Q51], R10 [Q52]). However, less experienced runners placed greater emphasis on footwear selection, while more experienced runners framed technique adjustments as lessons learnt from past injuries:

I say this from experience, that is, it happened to me many times until I corrected it [running technique], and it hasn't happened again. (R1 [Q51])

Less experienced runners also highlighted stretching and warm-up as preventive measures (R11 [Q53], R12 [Q54]). Experts reinforced the importance of prior experience in shaping prevention strategies and emphasised that education should be a shared responsibility among athletes, professionals and the media (E3 [Q55], E6 [Q56]).

Contextual drivers of behaviour: the interplay among identity, experience and external influences

The theme captures how runners' behaviours and attitudes are shaped and reshaped by their context, interactions and experiences over time (figure 1). As runners gain experience, their learning is influenced by both intrinsic and extrinsic factors (online supplemental file 4).

Intrinsic factors, such as identity, motivation, stress and self-learning, played a key role in how runners perceived and managed injuries. Experienced runners identified strongly with their running identity, which motivated them to return quickly to running despite injuries (R1 [Q57]). The enjoyment of running and its physical, psychological and social benefits were widely recognised, with experienced runners emphasising performance goals (R1 [Q59]). However, stress from injury—particularly fear of losing progress—added complexity to injury management, as runners struggled to balance rest and training (R9 [Q62]). Self-learning was also key in shaping

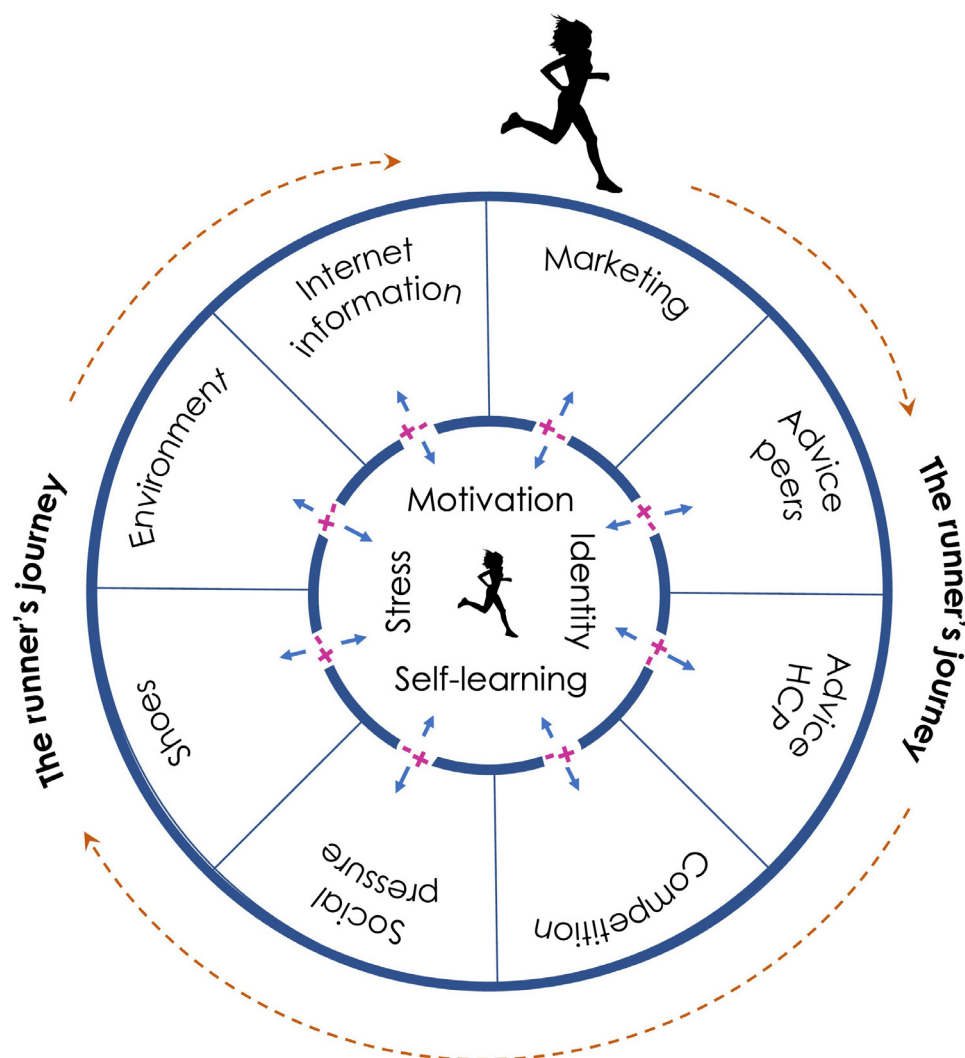


Figure 1 Intrinsic and extrinsic contextual factors that change the runner's behaviour(s) regarding the management or prevention of running-related injuries. HCP, healthcare professionals.

injury management strategies, with some runners recognising the importance of listening to warning signs (R9 [Q63]).

Extrinsic factors also influence behaviour. The internet provided abundant injury-related information, but runners struggled to assess its accuracy (R4 [Q64]). Marketing promoted running as a lifestyle, reinforcing its appeal (R2 [Q65]). Peer advice strongly motivated less experienced runners (R8 [Q66]), while health care professionals were primarily consulted for injury management. However, many runners perceived rest-based advice as frustrating, whereas experts viewed excessive rest as detrimental (R7 [Q67], E3 [Q68]). Racing shaped both groups' goals, reinforcing their drive to keep running (R8 [Q69]). The stereotype of disciplined, goal-oriented runners also influenced attitudes towards injuries, with less experienced runners emphasising the importance of sport-specific footwear (R11 [Q72]).

DISCUSSION

This study explored the perspectives of runners and experts on the perception, causes, management and prevention of running-related injuries. Central to our findings is the influence of runners' experience on their understanding and response to injuries, a crucial aspect in formulating prevention and management strategies. Five main themes were identified: (1) diverse perceptions of running injuries; (2) multifactorial causes of injuries; (3) injury management strategies; (4) building resilience for injury prevention; and (5) contextual behavioural drivers.

Perception of running injuries influences prevention and management

Experienced runners demonstrated a nuanced understanding of injuries, distinguishing transient discomfort from significant issues that hinder running. This distinction highlights the expertise gained over time, guiding self-management and preventive strategies. Conversely, less experienced runners often equated discomfort with injury, which could lead to either overcaution or neglect. Previous studies^{10 18} align with our findings, highlighting how runners differentiate between 'niggles' and severe injuries, with definitions shaped by their impact on participation.

Our findings emphasise that runners' perceptions of injuries and management strategies are highly individualised and influenced by their running history, previous injury experiences and personal and lifestyle factors. Understanding these perceptions is crucial for developing tailored injury prevention and management programmes that resonate with runners' experiences and needs. For example, the awareness regarding injury perception mentioned by experienced runners can be empowered by education or health professionals' guidance. However, professionals must also understand that runners want to self-manage, necessitating a shift from a

paternalistic approach to empowering runners to actively manage injury.

The variance in injury management strategies between the two groups of runners offers an intriguing insight into acquiring prevention knowledge. More experienced runners tend to employ a combination of self-management techniques and professional consultation, leveraging their injuries as learning opportunities. This proactive approach to injury management and the subsequent accumulation of preventive knowledge contrast with less experienced runners' reactive strategies, often characterised by a delayed response to injury symptoms.

Figure 2 presents a conceptual framework illustrating the dynamic interactions among runners' injury perceptions, self-management strategies and contextual influences to further synthesise these findings. It depicts how injury experiences shape evolving prevention and treatment approaches, highlighting key external (peer support, professional guidance, environment) and internal (motivation, identity, experience) influences. Rather than implying causality, the model reflects a continuous feedback loop, showing how runners integrate insights and adapt injury management strategies over time.

Causes and prevention of injuries

Our study emphasises the multifactorial nature of running injuries, particularly on training-related factors, physical conditioning and biomechanics. Understanding the causes of injuries directly informs the prevention strategies reported by runners. These beliefs echo findings from previous studies,^{10 11 13 19} which highlight the importance of proper training loads and conditioning for injury prevention.

While runners strongly believe in the importance of footwear and biomechanics, current evidence does not robustly support these as major injury risk factors.^{20–22} For instance, a Cochrane review²³ found limited evidence linking specific footwear to reduced injury risk. This gap between beliefs and evidence highlights the need for educational initiatives to align runners' practices with current scientific insights.

Due to marketing, personal experiences and social influences, runners may perceive footwear as critical. Many prioritise fit, comfort and gait analysis, reinforcing beliefs in its protective role in injury prevention.²⁴ Commercial advice—promoted by brands and social media—shapes expectations despite conflicting evidence. Research suggests runners rely on personal experiences and trusted sources such as coaches or peers rather than empirical data.²⁵ Further research is needed to explore how these perceptions influence injury rates and prevention strategies.

Efforts such as Dhillon *et al*'s online educational module²⁶ on running footwear are important in bridging this gap, though the long-term impact on behaviour remains uncertain. Research on online interventions

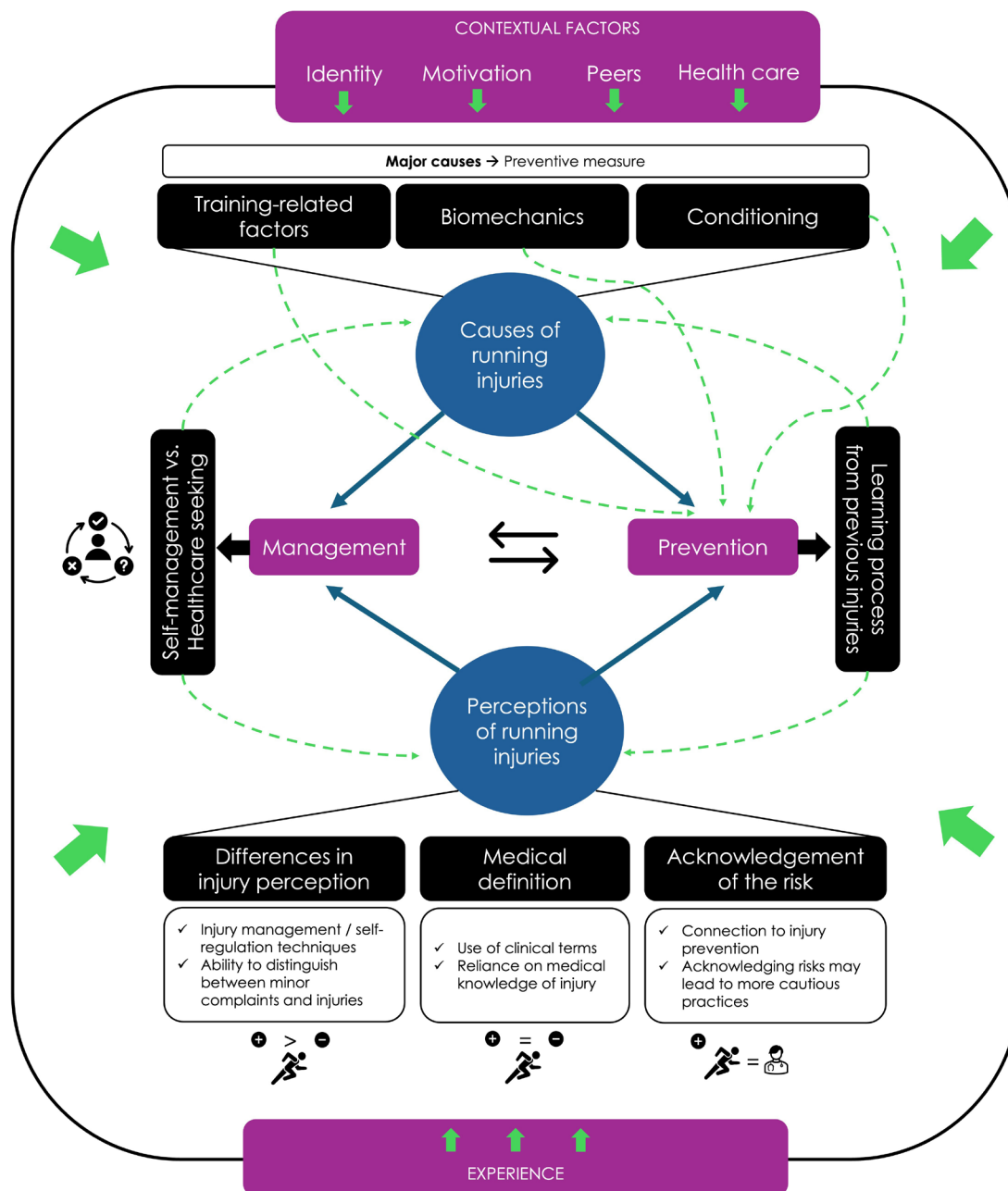


Figure 2 The dynamic feedback loop of running injury perception, management and prevention strategies. The symbols represent differences between more (+) and less (–) experienced runners, illustrating how their perspectives and decision-making processes evolve over time.

suggests limited effects on reducing injury rates,^{27 28} particularly among runners with a history of injuries. These findings highlight the importance of co-designing interventions with end users to ensure alignment with their needs and preferences.

Future studies should evaluate the long-term outcomes of tailored educational strategies, focusing on changes in behaviour, training practices and injury rates. Incorporating behaviour change principles and accommodating cultural diversity are essential for enhancing the accessibility and impact of such interventions. Interestingly, our participants framed injuries predominantly within

a physical and biomedical context, potentially reflecting the broader biomedical culture in Chile.

Clinical implications

The efficacy of self-management and prevention strategies highlights the importance of clinicians' understanding of runners' beliefs and perceptions. Effective communication fosters a collaborative therapeutic alliance, enabling the cocreation of tailored interventions that resonate with runners' values and experiences.²⁹ By aligning educational and therapeutic approaches with runners' beliefs, clinicians can enhance adherence

to interventions, foster proactive injury prevention attitudes and support long-term health and performance goals. This dual approach of education and treatment positions clinicians as both care providers and educators, empowering runners to take an active role in managing and preventing injuries.

Limitations and strengths

Several limitations warrant consideration. First, the specificity of our sample—recreational runners and experts from a major Chilean urban setting—may limit the direct applicability of findings to other populations and cultural contexts. Factors unique to Chile, such as urban running environments, healthcare access and socioeconomic conditions, may not reflect runners' experiences in other regions. Future research in diverse settings and different levels of running experience is needed to explore universal and context-specific aspects of running injuries.

Second, as a secondary analysis, this study relied on previously collected qualitative data, limiting real-time probing of emerging themes. While providing valuable future studies, we should prioritise primary data collection to explore self-management strategies between injury-prone and injury-resilient runners. Since the data were collected years ago, perceptions and injury management strategies may have evolved with changes in running culture, technology and education. To mitigate bias, findings were validated through multidisciplinary consensus meetings, enhancing confirmability and rigorous interpretation.

Third, our study aimed to generate knowledge applicable to comparable contexts rather than statistical generalisability. Reflexive thematic analysis^{16 17} prioritises subjective experiences, emphasising meaning-making over numerical representation. This approach allowed for a nuanced exploration of runners' and experts' experiences, yielding analytically generalisable findings transferable to other sports and clinical settings. Sample size adequacy was assessed based on the diversity of experiences captured, aligning with current qualitative research recommendations.^{30 31}

A key strength of this study is its inclusive recruitment strategy, capturing diverse perspectives from runners with varying levels of experience, injury histories and socioeconomic backgrounds. Additionally, our focus on runners' lived experiences highlights the importance of user-centred approaches in injury prevention and management. The multidisciplinary research team further enhanced the credibility of the findings by incorporating sports medicine, physiotherapy, public health and qualitative research expertise, ensuring a comprehensive and nuanced interpretation of the data.

CONCLUSION

This study explored how runners and experts perceive, manage and prevent running-related injuries, highlighting the influence of experience, self-management strategies and contextual factors. More experienced

runners distinguished between discomfort and injury, using proactive self-management and expert guidance, whereas less experienced runners responded with uncertainty or delay. A key finding was the discrepancy between runners' beliefs and scientific evidence, particularly regarding footwear and biomechanics. This highlights the need for educational strategies integrating scientific insights with runners' lived experiences to improve injury prevention approaches.

These findings suggest that enhancing communication among runners, healthcare providers and coaches could foster more effective injury prevention and management. Encouraging evidence-based yet personalised strategies may help runners make informed decisions while maintaining their autonomy in self-management.

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Data availability statement All data relevant to the study are included in the article or uploaded as supplementary information.

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