

Effects of a Brief Mindfulness and running programs on mindfulness skills and well-being among trained runners

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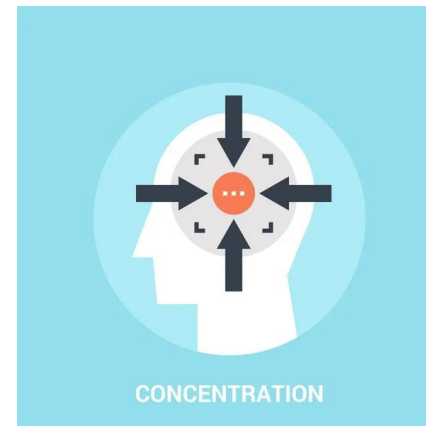


**EUROPEAN COLLEGE
OF SPORT SCIENCE**

FEELTHERUN PROJECT




Potential Benefits of Mindfulness in Sport

- Athletes sometimes experience disruptive thoughts and feelings in training and competition
- They can hardly focus on their goals or sensations
- Mindfulness-based interventions (MBI) can help to:
 - develop attention and emotion regulation
 - decrease anxiety
 - increase well-being



Benefits of Mindfulness in sport

- Recent studies have shown that MBI **improves mindfulness skills** in athletes (Altinyelken et al., 2020; Doron et al., 2020; Goisbault et al., 2022).

		AWARENESS	ACCEPTANCE	REFOCUSING
Doron et al., (2020)	Badminton		NS	NS
Goisbault et al., (2022)	Baskett-ball	NS		NS
Tebourski et al., (2022)	Table tennis	NS	NS	

- Among long-distance runners, a recent meta-analysis demonstrated the benefits of MBI for increasing **well-being** (Myall et al., 2023).
- Runners could benefit from refocusing in high-intensity training sessions by reducing unintentional mind-wandering (Salmon et al., 2010)

Limitations of Current Mindfulness-based Interventions

- MBI interventions usually proposed:
 - long mindfulness sessions times
 - low-intensity endurance training (e.g., Ullrich-French & Cox, 2021) .
- Well-designed randomized controlled trial mindfulness interventions are required to be confident in these results

The Novelty of the Present Intervention

- **Brief** session time (max 30 min) for 8 weeks
- It was built in **high-intermittent interval training (HIIT)** that can lead to unpleasant and negative experiences.
- It was a **randomized controlled trial** with follow the CONSORT guidelines.
- The trained runner **sample was** relatively **large**
- It was implemented **into the running training session**

Main Hypothesis

Runners of the MBI group (in contrast to the control) will demonstrated increased mindfulness skills and well-being.



Modules of the “FeeltheRun” programme

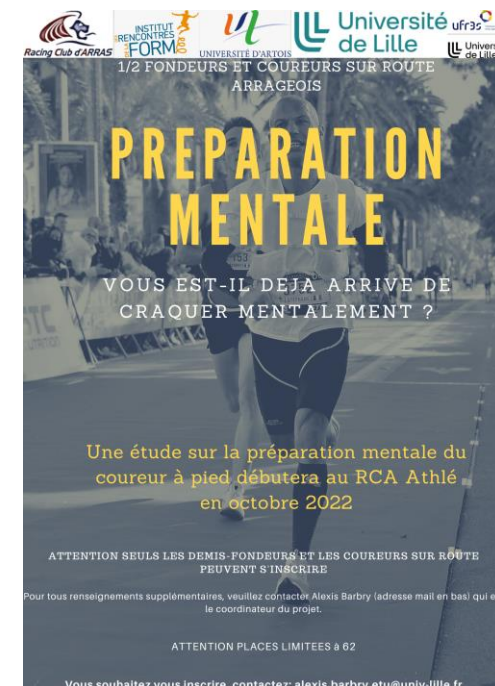
Module 1:
PSYCHOEDUCATION

Module 2:
GOAL SETTING

Module 3:
AWARENESS

Module 4:
ACCEPTANCE

Module 5:
REFOCUSING



(Based on Doron et al., 2020; Goisbault et al., 2022)

Content of the FeeltheRun programme for experimental group

MODULE	WEEK	GOALS
PSYCHOEDUCATION	1	Learning about their mental functioning.
GOALS SETTING	2	Promoting engagement and setting up SMART goals related to running.
AWARENESS	3-4	Raising awareness of sensations, thoughts, emotions, and distractions
ACCEPTANCE	5-6	Acceptance of discomfort during intense exercise
REFOCUSING	7-8	Construct a routine to refocus after distractions.

Content of Control Group Materials

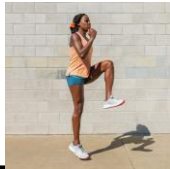
Sports Nutrition



Muscular strengthening
for runners



Drills runners



Stretching for
Runners



Introduction to
relaxation



Shoes with
carbon blade



Methodology

Participants

- Mindfulness group: N= 30 ; Age = 41.1 years \pm 14.5 ;
- Control Group: N= 25; Age = 42.2 years \pm 14.8

Procedures

- *8 weeks MBI (mindfulness based intervention) incorporated into running program*
- *Mindfulness and well-being measures:*
 - *baseline*
 - *after 4 weeks*
 - *after 8 weeks*

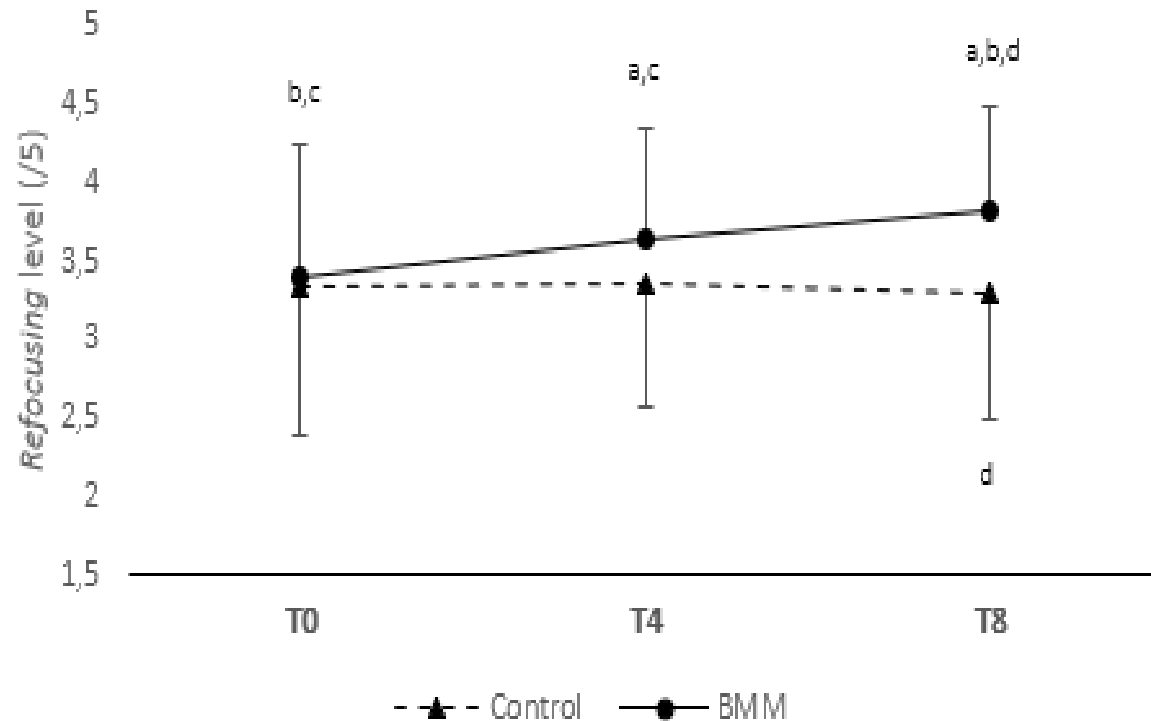
Instruments (all alphas > 0.70)

- Mindfulness Inventory for Sport (MIS, Thienot et al., 2014)
- Well-being (Diagnofeel, Barbry et al., 2021; Carton & Fruchart, 2015)
 - Manifestations of well-being
 - Regulation of well-being (through social support, seeking pleasure, physical activity, problem-solving, distancing, and isolation)



Results: Mindfulness - Refocusing

Refocusing over time and group

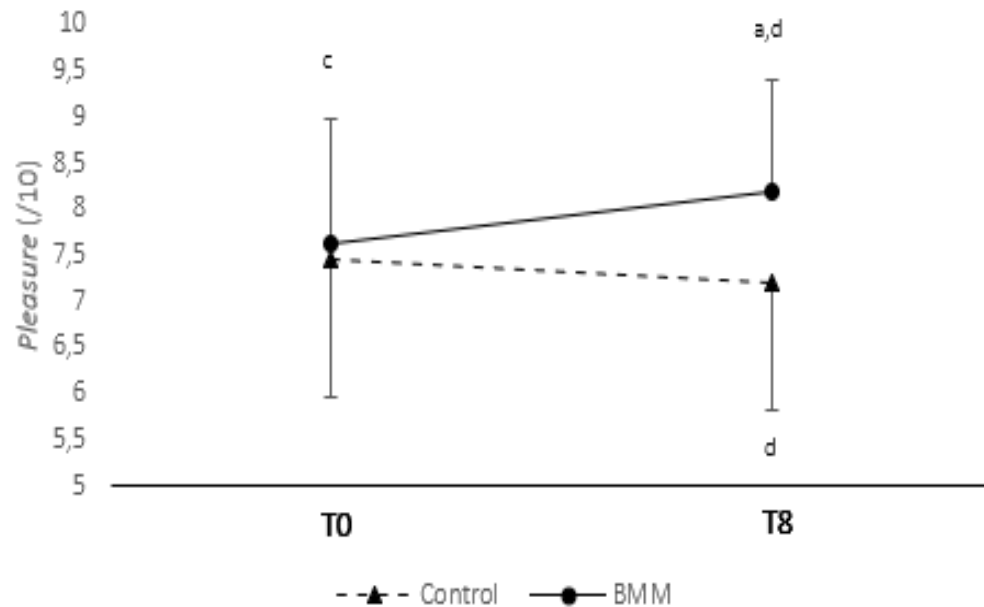


Refocusing: Time*Group interaction:
 $F(1.57)=4.05, p=0.03, \eta^2=0.07, d=0.72.$

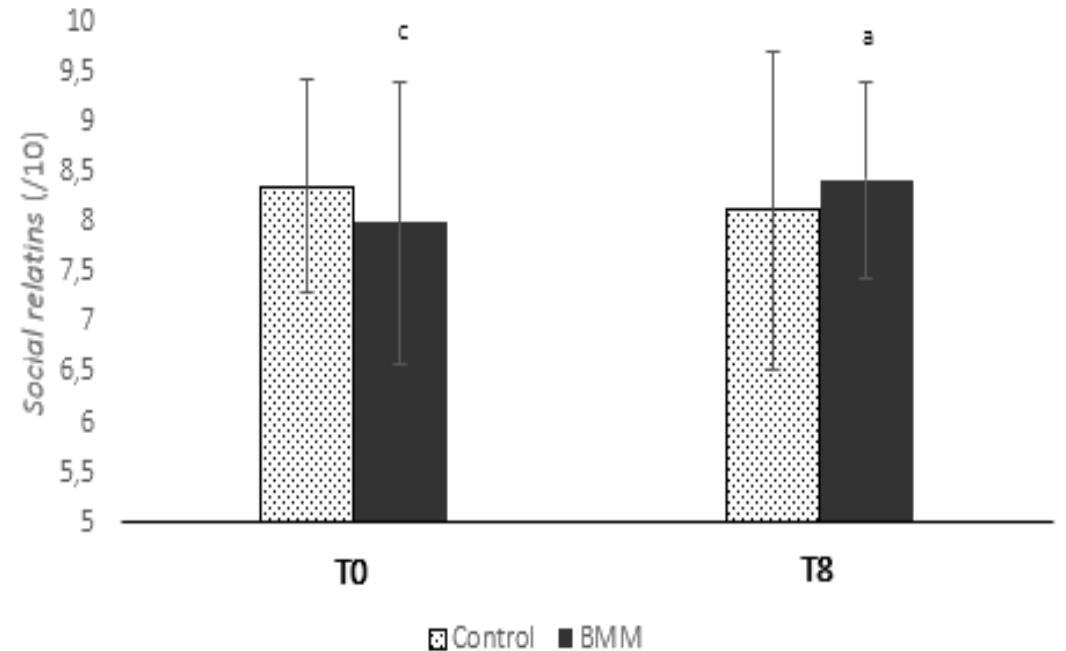
LEGENDS. ^asignificantly different from T0 ($p \leq 0.05$), ^bsignificantly different from T4 ($p \leq 0.05$), ^csignificantly different from T8 ($p \leq 0.05$), ^dintergroup differences ($p \leq 0.05$), baseline (T0), 4 (T4) and 8 weeks (T8).

Results for Well-being

Pleasure (regulation) over time and group



Social relations over time and group



time*group interaction $F(1) = 4.35$; $p = 0.04$, $\eta^2 = 0.08$.

time*group interaction $F(1) = 4.97$; $p = 0.03$, $\eta^2 = 0.09$

LEGENDS. ^asignificantly different from T0 ($p \leq 0.05$), ^bsignificantly different from T4 ($p \leq 0.05$), ^csignificantly different from T8 ($p \leq 0.05$), ^dintergroup differences ($p \leq 0.05$), baseline (T0), 4 (T4) and 8 weeks (T8).

Discussion

- **Main results:** Participants in the intervention group benefitted from refocusing for mindfulness skills, and pleasure, social relations for psychological well-being.
However, they did not show other mindfulness and well-being-related benefits
- Several **strengths of the present methods** can be mentioned: randomized controlled trial (RCT) following consort guidelines, active control group, high-intensity training.
- **Main limitations:** no qualitative measurement. No control when runners were not present at training session, that those performed the running trainings prescribed by the coaches.

Thank you!

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