

# Effort management in short trail running : qualitative analysis by self-confrontation



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# Background

One of the world's  
fastest-growing sports

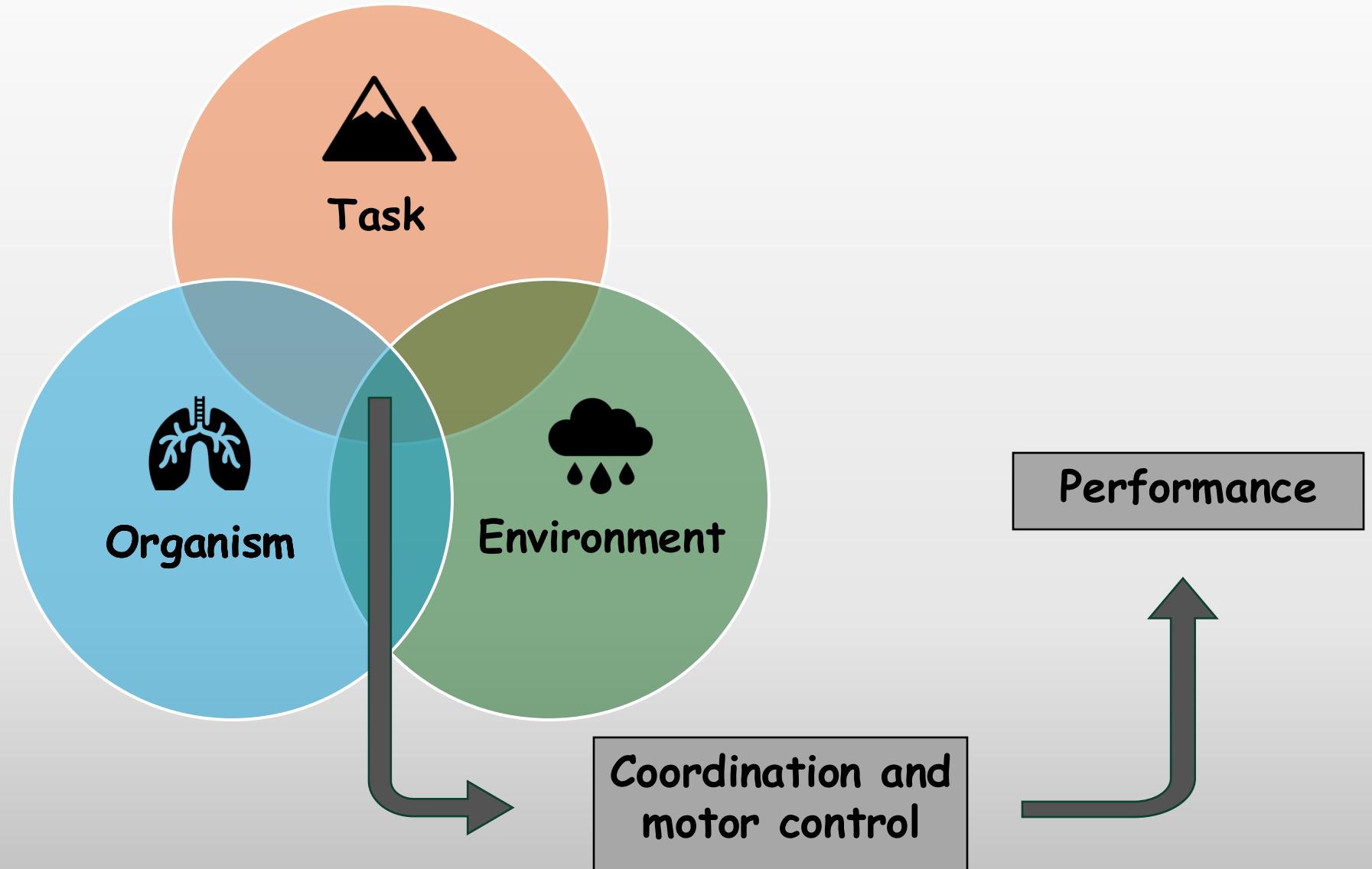
Varied topography and  
running conditions

Performance  
predictions more  
difficult to achieve

Many physiological  
and biomechanical  
factors studied

But performance is  
multifactorial  
(Glazier, 2017)

# Grand Unified Theory (Glazier, 2017)



# Background

Self-organization plays a key role in performance

Lack of studies on decision-making and effort management

Few qualitative trail studies in the literature

Research based on Rochat's study on long trail running (Rochat, 2017)

Approach using the self-confrontation method (Theureau, 2010)

# Objectives



Contribute to the development of knowledge in the field of short trail running

Identify and describe the main effort management strategies employed by trail runners

Understand how these strategies are used according to constraints and critical events encountered during the race

# Method : population

## Features

- 7 trail runners
- Aged 18 to 55
- Taking part in a trail running race
- Not injured
- Oral expression skills

## Gender

- 4 men
- 3 women

## Level

- 2 beginners
- 3 intermediates
- 2 advanced

## Objectives mentioned

- Perform
- Aim for the top
- Have fun
- Make the transition from track to road

# Method : equipment



Garmin® Watch  
(Forerunner  
945)

GoPro  
(Hero 9)



Chest strap

Stryd Power  
sensor



# Method : procedure and data collection

```
graph LR; A[Participation in a trail running race] --> B[Self-confrontation interview with the participant]; B --> C[Full interview transcript]; C --> D[Coding and illustration with verbatim]; D --> E[Thematic and sub-thematic analysis];
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Participation  
in a trail  
running race

Self-  
confrontation  
interview with  
the participant

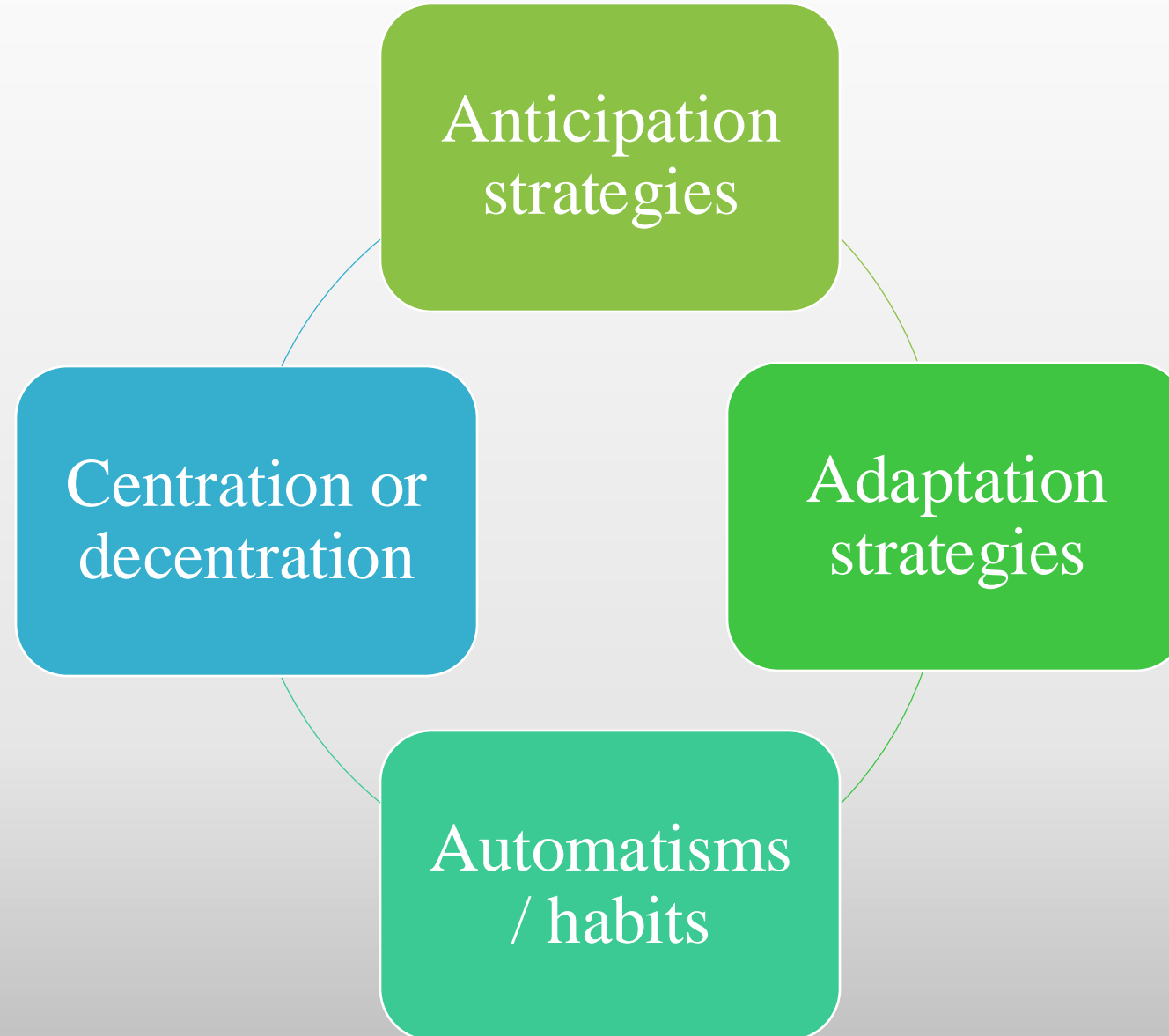
Full interview  
transcript

Coding and  
illustration  
with verbatim

Thematic and  
sub-thematic  
analysis



# Results : 4 main decision-making strategies



# Results : sub-themes concerned by the strategy

- Running pace
- Running style
- Trajectory and route choices
- Placement in relation to others
- Equipment
- Nutrition and hydration
- External interactions
- Well-being and comfort
- Preparation and training
- Goal and performance

# Results : key moments of the race

Uphills management

Downhills management

Managing difficult times

Managing technical passages

Refreshment stands

Flow time

# Results : uphill management



Everyone switches from running to walking



Different triggers observed through self-confrontation :



Relying on one's own feelings



Setting a visual goal



Copying other runners



# Results : refreshment stands



Everyone wants to lose as little time as possible



Seen as a reassuring way to eat, talk to others, find your place in the race



Different strategies observed through self-confrontation :



Know which food to choose and restart quickly so as not to break your rhythm

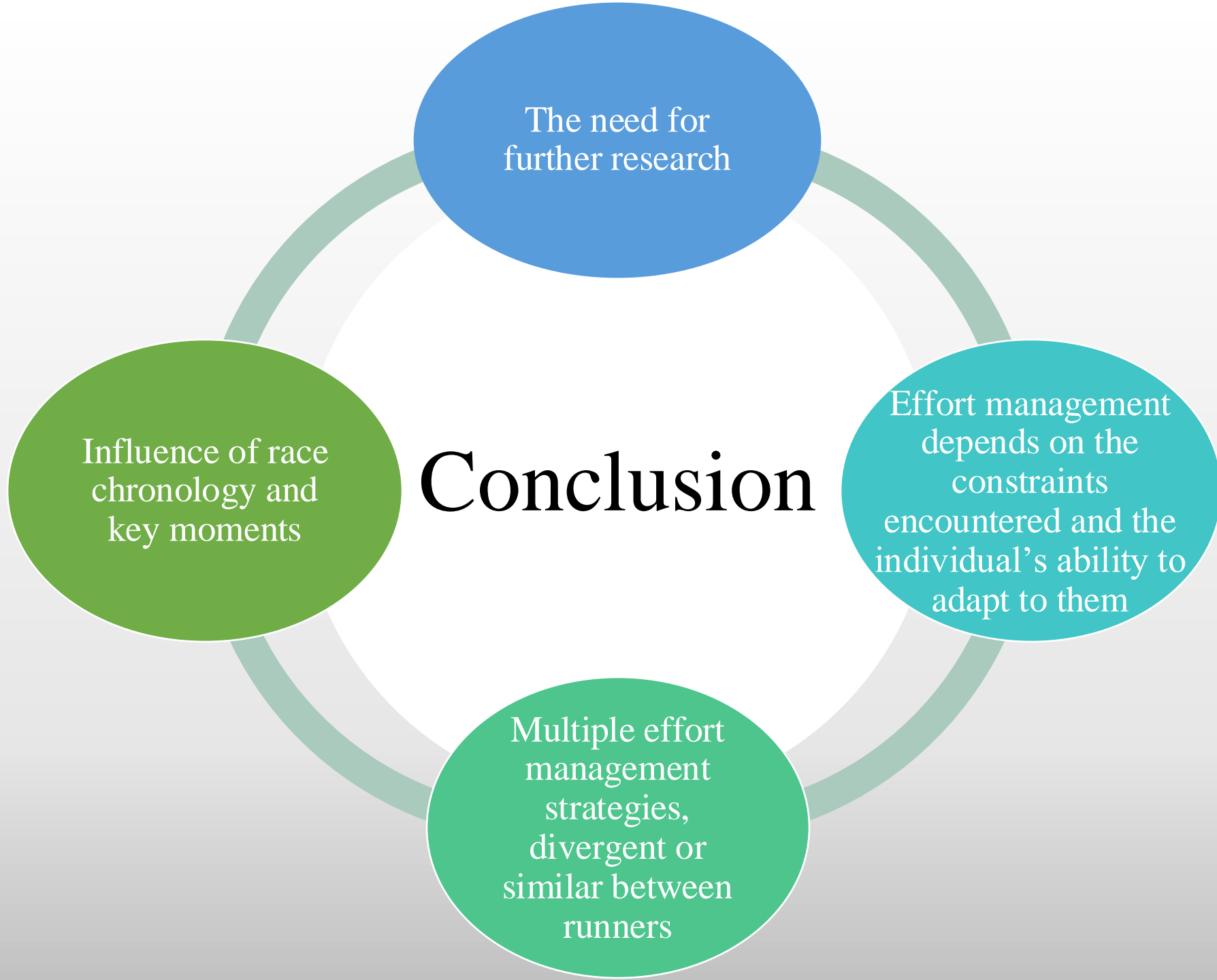


Some are forced to stay longer because of a lack of energy



Some don't stop at all





# References

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Thank you for your attention !