How can we explain the relation between app use and physical activity and health?

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Introduction

“Dam tot Damloop”

50,000 participants

6.4 and 16 km run

Recreational runners

DIFFERENCES BETWEEN **APP USERS** AND **NON-APP USERS**

IN **PHYSICAL ACTIVITY, PERCEIVED HEALTH** AND **LIFESTYLE**, AND **SELF-IMAGE**

16KM
Running event

INCREASE RUNNING PHYSICAL ACTIVITY

57,8% 42,2%

FEEL HEALTHIER

57,2% 42,8%

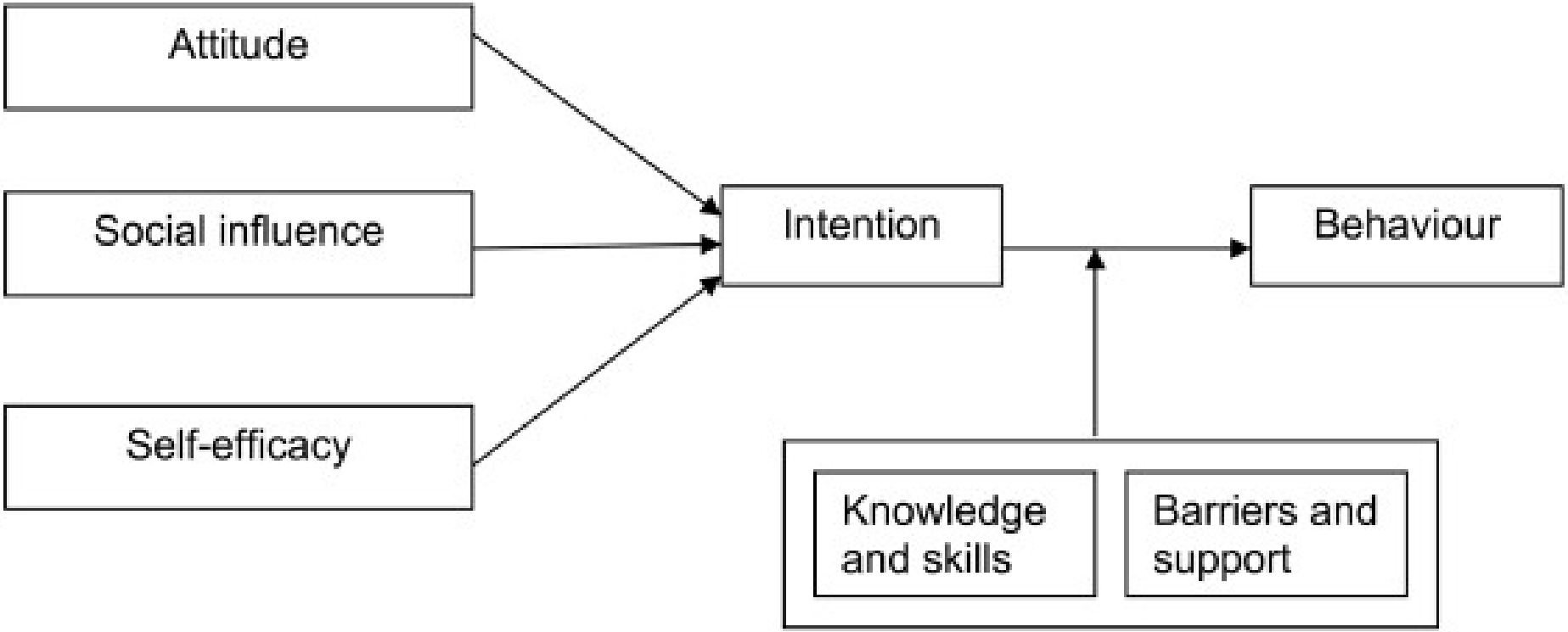
Introduction

How can we explain this?

?

- More physically active
- Healthier lifestyle
- Higher intention to maintain behavior

ASE model


Attitude
Social influence
Self-efficacy
Intention
Behaviour
Knowledge and skills
Barriers and support

Functions


3G
8:15 AM
Cancel
Share This Run
Post
I just finished a 3.1mi with a pace of 10'00" with Nike+ Running
Gearing up for the 5k this Sunday! So stoked! Comment on this post!!!
Share Map to the Web
Yes, I would like to share a map of my route and location to the web.
Learn More About Friend Tagging


2:48 PM
RunKeeper
30:37
GPS
7.12 mph
421 cal.
Stop
Pause

Aims

1. Determine the attitude, social influence and self-efficacy of running app users

2. Determine which functions app users prefer

Methods

- Recreational running event 16 & 6.4 km (n = 1,670, response rate 38.8%)
- Online survey
  - Age (years)
  - Gender (M/F)
  - BMI (kg/m²)

Methods

- Attitude (Likert scale 1-7)
- Social influence (Likert scale 1-7)
- Self-efficacy (Likert scale 1-7)
- Importance of app functionalities (1-4)

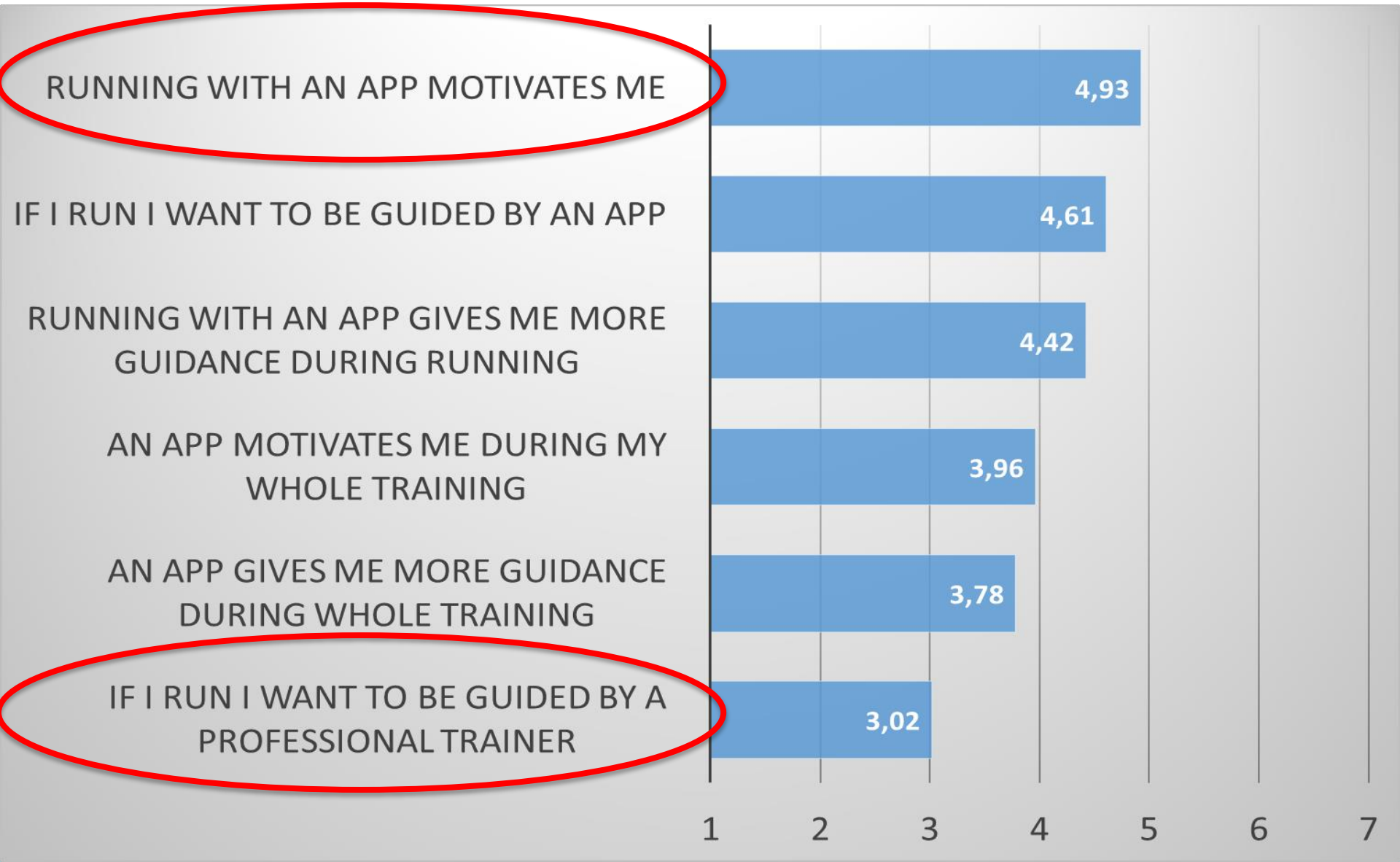
Analysis

- Selection of app users
- Descriptives
- Top 3 most and least important

Subject characteristics

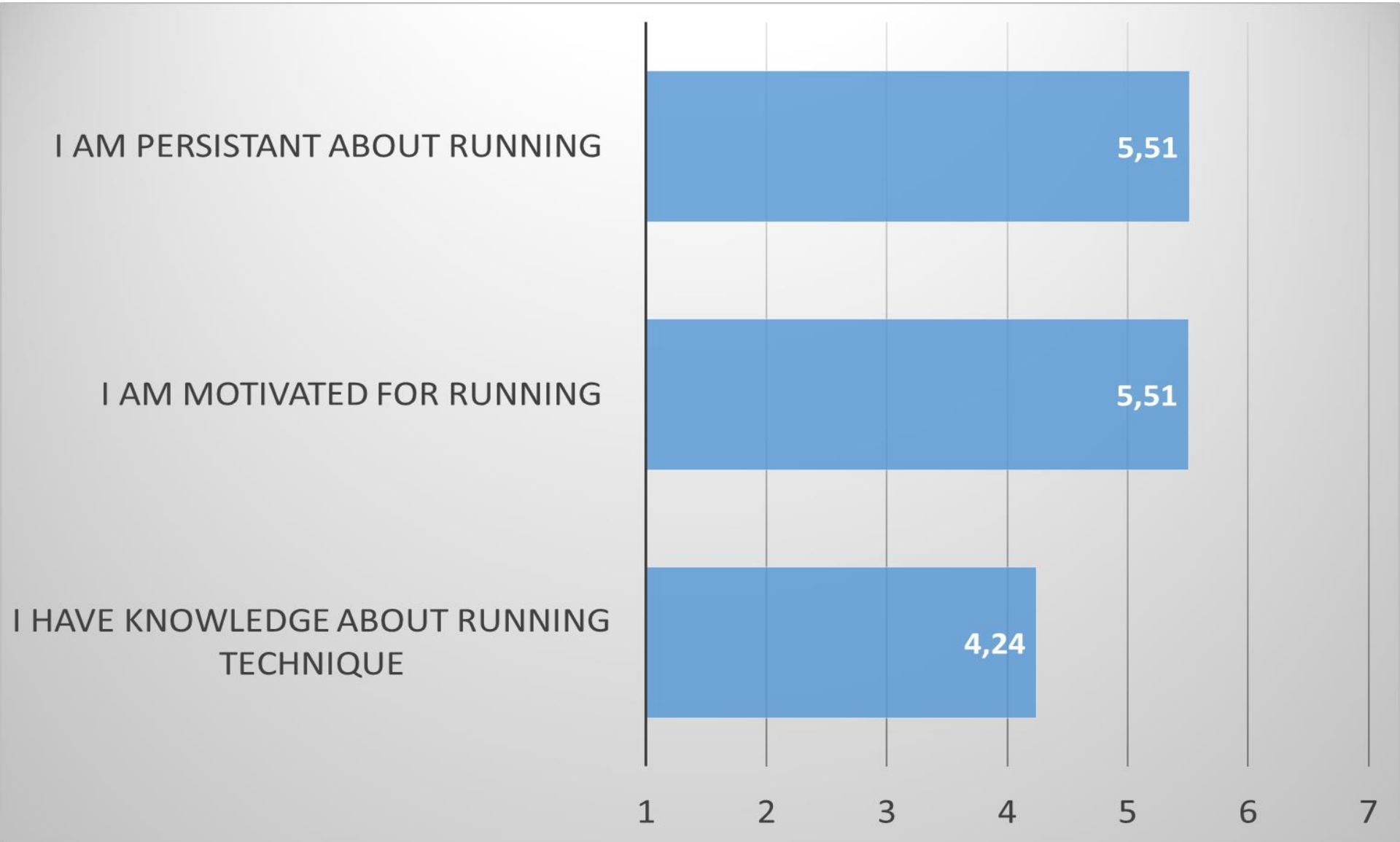
		N (%)
Gender	Male	333 (45.9)
	Female	393 (54.1)
BMI	Underweight (BMI < 19 kg/m^2)	22 (3.7)
	Normal weight (BMI 19-25 kg/m^2)	342 (57.3)
	Overweight (BMI >25 kg/m^2)	233 (39.0)
		Mean ± SD
Age	(years)	39.3 ± 9.7

Attitude


RUNNING WITH AN APP MOTIVATES ME
4,93
IF I RUN I WANT TO BE GUIDED BY AN APP
4,61
RUNNING WITH AN APP GIVES ME MORE GUIDANCE DURING RUNNING
4,42
AN APP MOTIVATES ME DURING MY WHOLE TRAINING
3,96
AN APP GIVES ME MORE GUIDANCE DURING WHOLE TRAINING
3,78
IF I RUN I WANT TO BE GUIDED BY A PROFESSIONAL TRAINER
3,02
1
2
3
4
5
6
7

Social influence

Self-efficacy



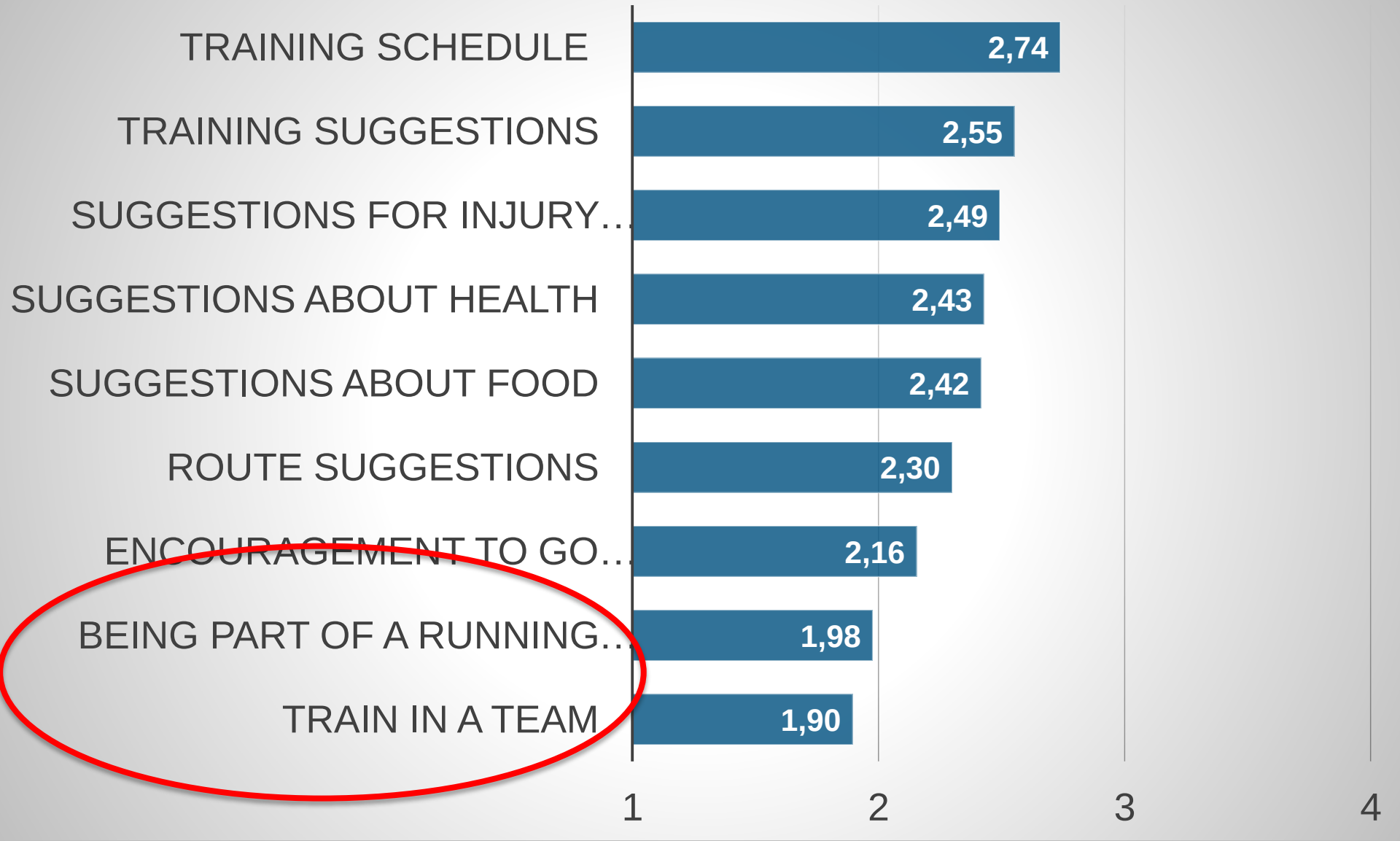
3 most applicable

1. I am persistant about running
2. I am motivated for running
3. Running with an app motivates me

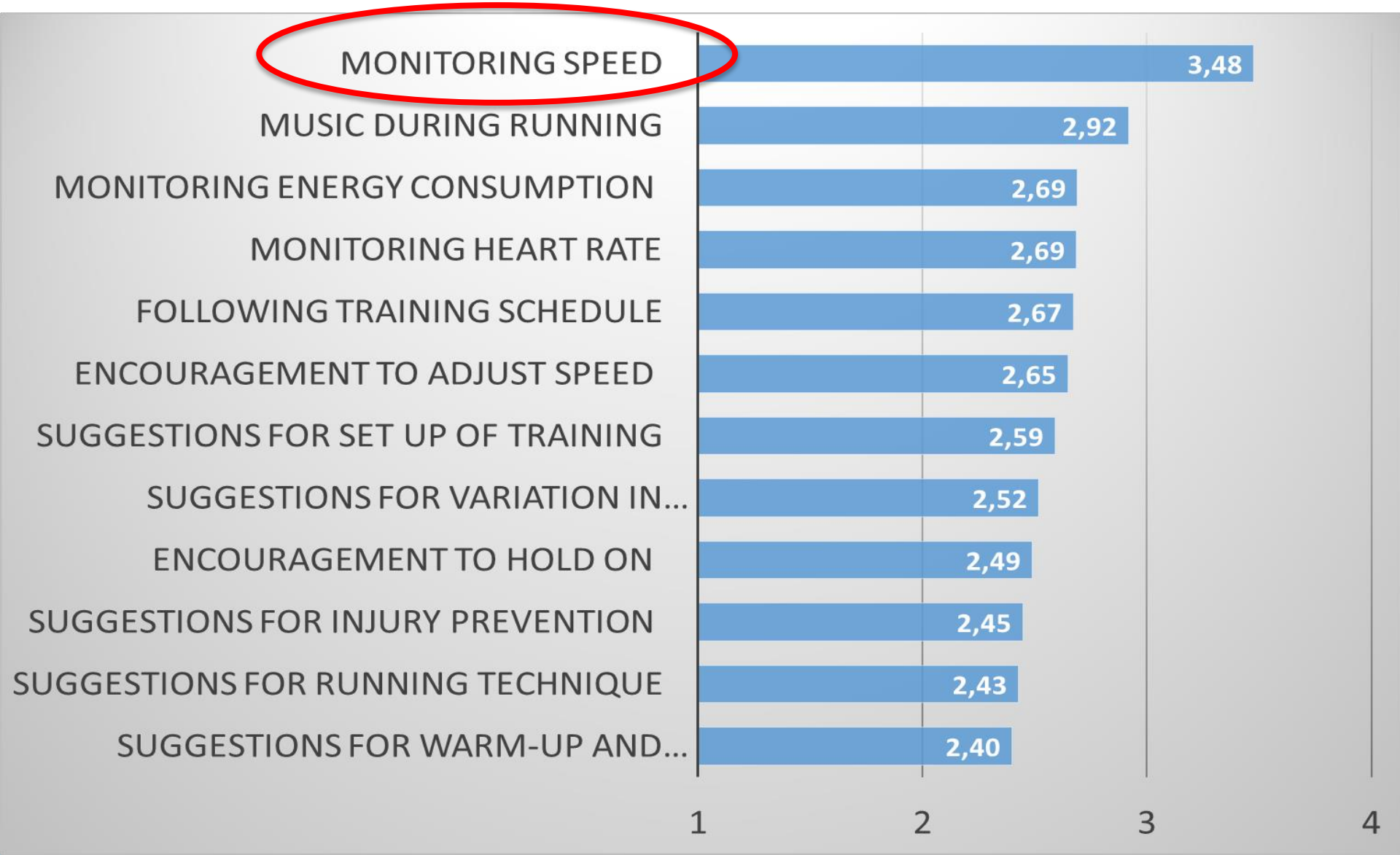
3 least applicable

1. Via a running app I am part of a running community
2. If I run I want to be guided by a professional trainer
3. Family members who run use app

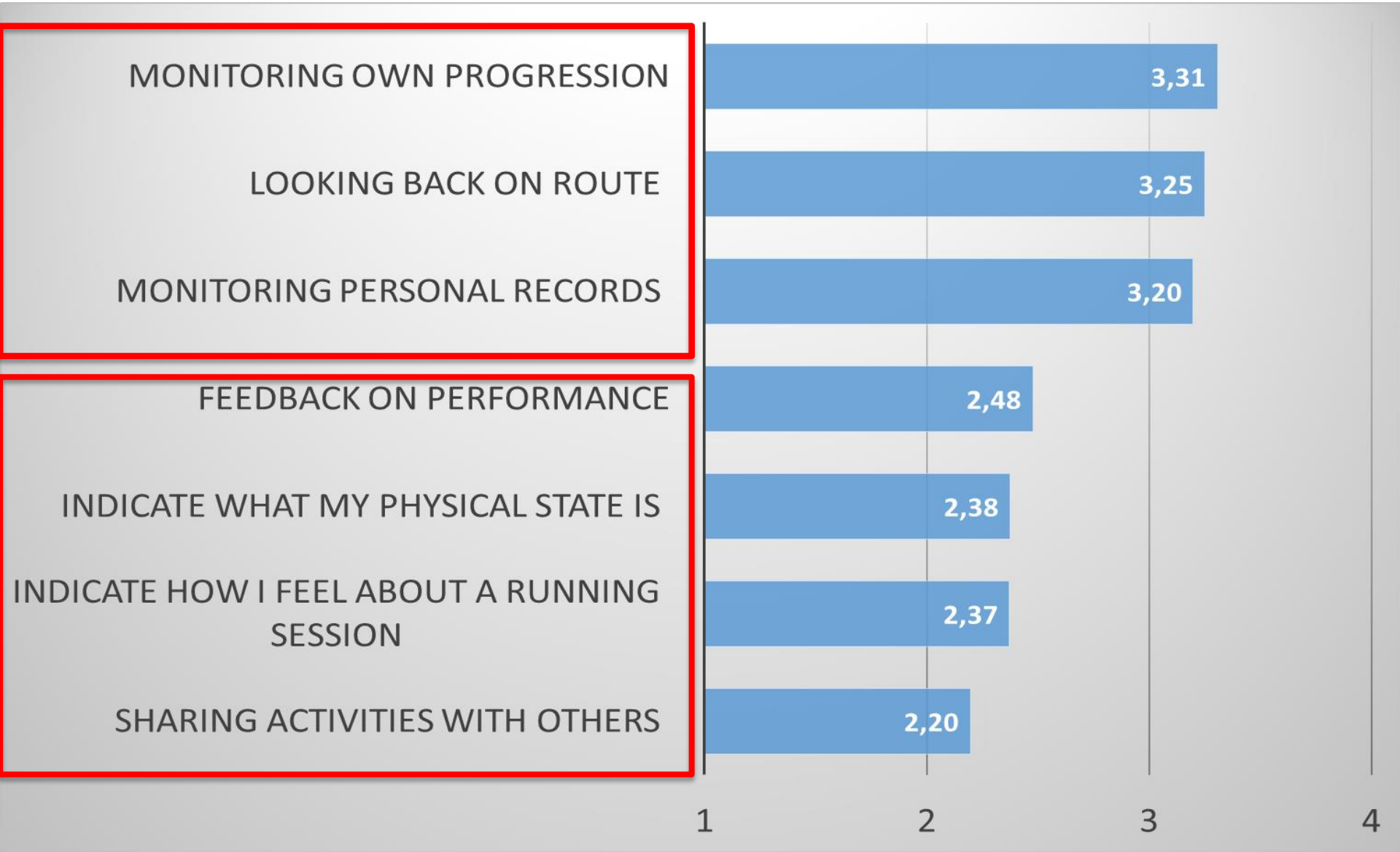
Functions prior to running



Functions during running



Functions after running



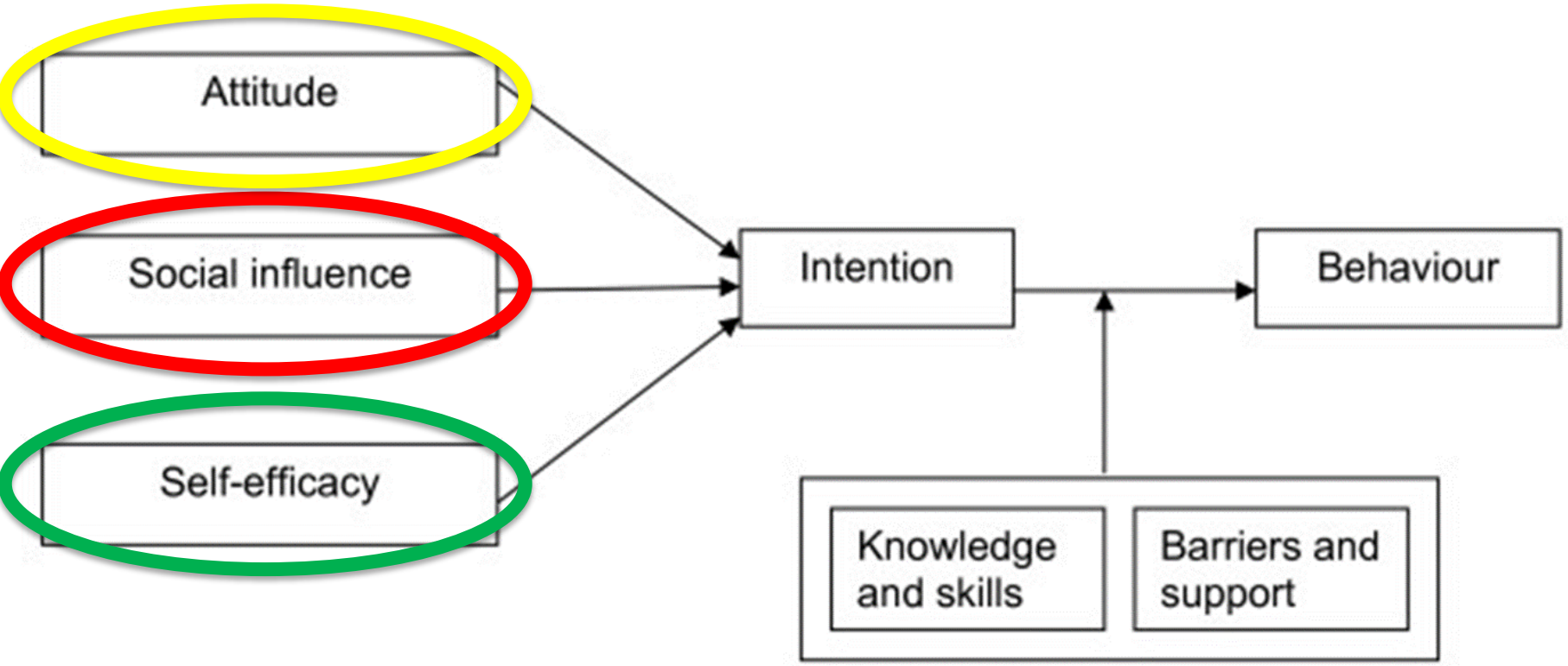
4 most important

1. Monitoring speed
2. Monitoring progression
3. Looking back on route
4. Monitoring personal records

4 least important

1. Train in a team
2. Being part of a running community
3. Encouragement to go running
4. Sharing activies with others

Conclusion I ASE



Conclusion II functions

- Monitoring = important
- Sharing data, running community, train in team = not important

Discussion

- Do current app functions match with what people want?
- Apps mostly not evidence based (Direito 2014; West 2012; Cowan 2014)
- Advice: adjust current apps
- Self-efficacy & apps

Take home message

Ultimate goal: develop evidence based app for specific groups

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