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Reps for your event
…and how to manipulate them

Before we start…

some things to consider?

- Event specifics (tactics and pace)
- Ability (athlete)
- Age (teen to vet)
- Time of year (periodising)
- Speed (Date pace)
- Recovery (How much and why)
- Distance (How long and why)
- Reps (How many and why)
- Sets (How many and why)
- Purpose and potential benefits (over/under training)
- Weather (can the intent of session still be done?)

Reps come in many different guises… there are vast alternatives

As an example, an 800m runner can do 400m reps and so can a Marathoner … however, the difference can be diverse as well as the speed, volume and recoveries with the outcomes being poles apart … and that's just reps on a track … there are many more surfaces and the uniqueness of a road, grass, sand circuit.

We're nearly ready to go, but…

Let's not over-complicate things!

I will offer many examples and variations, however your input is vital, so please feel free to ask questions and give opinions as we go along.

We will discuss some of the many variations...

First though, let's have a brief overview of how reps can be utilised...

● Slower than race pace speed
● Race pace speed
● Faster than race pace speed
● Short recoveries
● Medium recoveries
● Long recoveries
● Voluminous reps
● Reps broken up by sets

...and there's much more...

- Reps with 'float' recoveries
- Reps with decreasing recoveries
- Reps with differential paces(s)
- Reps that involve fast starts, cruise, fast finish
- Reps that involve many changes in pace
- Reps with different distances (pyramid or similar)

- Reps may be done on track, roads, trails, grass and even sand … variety is good. Not everything needs to be done on the flatness of a track … hills and underfoot conditions can make huge changes in perceived effort and energy levels.

Time restraints

If we went through every rep distance and variation, this presentation would last until the early hours … of Wednesday!

Therefore, I will give examples of middle/long and road/cross country events into some purposeful and 'joined-up' speak … let's hope so …

Repetitive strain

Let's start with 200m reps …

An 800m runner may use these as:
3x4x200m with 30sec and 5-6min sets @ 'date race pace'
A Marathoner would rarely attempt 200m reps but…
40-60x200m at half-marathon pace with a 100m 'float' at
marathon pace may be a nice change from the
mundaneness of tarmac as a stand-alone session?

The 800m example is attempting to improve speed
endurance whereas the Marathoner is expanding strength
endurance and improving their aerobic capacity.

Our 800m runner has much more in the locker though…

In the winter months, 2x8x200m with 45sec rec @ 1500m pace may be a good way of keeping some pace going while still utilising the aerobic system purposefully without any alarming rises in lactate.

Put the above session into the context of other surfaces …

Road:

Use a slight incline/decline

Grass:

The softness and forgiving nature of the surface will put some resistance to the perceived effort

Sand:

Hard sand can replicate good grass, however softer sand can give a much different aspect to the session where speed is not the main criteria and lower/upper leg cadence along with posture are the main ingredients.

All athletes tend to complain about wind resistance on the track, but many very rarely mention it on the roads … Therefore, wind must only blow on the track!!
Strong winds may change a session from speed to strength endurance, but it's all good training … the stopwatch doesn't lie … or does it?

Not all sessions will be run at a constant pace or with short recoveries or voluminous reps.

Any session can be basically broken down into:
Aerobic or Anaerobic and within these 'zones' it can be categorised as …
● Speed
● Speed Endurance
● Strength Endurance

Now, this is where you come into play!

Discuss some summer examples for our 800m runner and let's say they have a 2min PB and are wanting to target 1:58 … this time 400m reps.

400m reps:

- 2x4x400m in 58sec with 2min rec 5-8min sets
- 4x400m in 57sec with 5min rec
- 2x4x400m with 200m in 30sec, final 200m in 27sec
- 3x3x400m, 100m @800m pace, 200m @1500m pace, 100m @800m pace with 2-3min rec
- 8-10x400m in 64sec with 80-90sec rec

Great! Now let's move on to 1500m, 5000m/10,000m and Marathon … still 400m reps

Now let's look at 400m reps examples for other events:

Staple 1500m session:
- 10-12x400m in 60sec with 60-80sec rec

5000m session:
- 16x400m in 64sec with 60sec rec

Marathon session:
- 16-20x400m in 66sec with 200m 'float' in 50-60sec

All events …
- 60sec effort (20sec on flat, 20sec uphill, 20sec on flat)

800m reps:

800m runners will very rarely do reps over this distance although they may be incorporated into winter conditioning.

1500m sessions:

- 4x800m in 2:02 with 2min 30sec recovery
- 2x800m in 1:56 with 6-8min rec
- 6x800m (400m in 66sec, 400m in 58sec) 3min rec

5000m sessions:

- 6-8x800m in 2:12 with 2min rec
- 6-8x800m (300m @1500m pace, 300m @5000m pace, 200m @ 1500m pace) with 3min rec

Marathon session:

- 12-16x800m @ Marathon pace with 50sec rec
- 12-16x800m @ Half-Marathon pace with 75sec rec

1600m/mile reps:

1500m session:

● Some may do mile reps in the winter months on roads/grass… 4-6xmile @ 5k pace with 3-4min rec

5000m session:

● 3x1600m @ race pace with 5min rec

Marathon session:

● 6-10xmile @ Half-Marathon pace with 5min rec (typically roads)

We could keep going with reps over 2000m and even 3000m, but let's concentrate on the more common reps done down week-in, week-out at the club … we haven't even mentioned 300m, 500m, 600m, 700m, 1000m … why do these instead of the 'even' figures?

Planning a block of training or a specific session …

Keep referring back to the criteria on the earlier slides and simply ask why am I doing this session?…

- *Event specifics (tactics and pace)*
- *Ability (athlete)*
- *Age (teen to vet)*
- *Time of year (periodising)*
- *Speed (Date pace)*
- *Recovery (How much and why)*
- *Distance (How long and why)*
- *Reps (How many and why)*
- *Sets (How many and why)*
- *Purpose and potential benefits (over/under training)*
- *Weather (can the intent of session still be done?)*

What we are trying to do is build an aerobic base first and foremost and then add in the variables of speed, speed endurance and strength endurance in indeterminable ratios which are dependent on the time of year and event specifics.

So now, another task!

As a coach discuss with your colleagues some sessions that involve for an 800m runner with specifics involving pace, number of reps, distance, recoveries and sets (if needed):
● Speed
● Speed Endurance
● Strength Endurance

Speed

This can have different applications to a specific event … however, it is still the ability to run as fast as you possibly can (sprint)! Athletes talk about doing speed work and a 10x300m session. Not speed … that is speed endurance …

Therefore, 'Flying 40m' is speed and gives the athlete to run at their top speed without any restraints from lactic acid …
● Run 20m at '800m' pace and then explode over 40m and repeat 5-6 times with reasonable recovery … involves good form and utilising what 'fast twitch fibres' you have available … it's a wake-up call!
● Run 30/30/30m … 1500m pace, 800m pace and then boom!

These are often done at the end of a session and is the only 'pure speed work' that is done.

Speed Endurance

The ability to run at speed (pace) for a prolonged period despite the build-up of lactic acid. This form of training helps the athlete to buffer lactate and thus perform better.

● 10x300m with 45-60sec rec at race pace or slightly faster. Therefore, our 2min 800m runner will be targeting reps in 44sec.
● 6x500m with 80sec rec at race pace or slightly faster. A 4min 1500m runner will be targeting reps in 79sec.
● 8x600m with 90sec rec at race pace or slightly faster. A 15min 5000 runner will be targeting reps in 1min 46sec

Strength Endurance

The ability to produce strength over a long period of time with a minimal decrease in efficiency. It involves working against resistance to develop strength and endurance. Although more commonly used in weight related training, it is nevertheless a staple type of work for distance runners. The shorter middle distance events use this work mainly in the winter months.

● 16x400m with 60sec recovery at around race pace or slightly slower. A 30min 10,000m runner will target 72sec laps.
● 20x800m with 60-90sec recovery at around race pace or slightly slower. A 2hr 25min Marathoner will target 2min 46sec reps.

Other forms of rep sessions

We haven't included grass, road or sand sessions. However, the 'equivalent' rep sessions can be replicated on these surfaces where time is the primary factor and not the distance run including hills.

So … where you do sessions on grass (as examples):
300m reps run 45secs.
400m reps run 60sec.
600m reps run 90sec.
800m reps run 2min 20sec.
1000m reps run 3min.
1200m reps run 3min 40sec.

All with the same recoveries as on the track.

Mixed distance reps …

Although most rep sessions stick to the same distance, there are instances where you can mix it up to achieve an end-result …

5x400m with 80sec rec, 5x300m with 60sec rec,
5x200m with 30sec rec … all @ 1500m pace … OR …

5x400m with 50sec rec @ 3k pace,
5x300m with 70sec rec @ 1500m,
5x200m with 30sec rec … @ >1500m pace

1x800m @ 3k pace with 2min rec,
2x200m @ >1500m pace with 30sec rec,
1x600m @ 3k pace with 90sec pace,
2x200m @ >1500m pace with 30sec rec,
2x400m @ 3k pace with 60sec rec,
2x200m @ >1500m pace with 30sec rec,
1x300m @ 100%.

Conclusion

As I said at the start, this presentation could last forever!
As well as mixed distance reps, there are also mixed terrain sessions where you start on the track, move to grass and then back to track … but that's another presentation for another time!

If you have any questions, now is that time …

THANK YOU FOR YOUR TIME TONIGHT

I WISH YOU ALL SUCCESS … HAPPY COACHING!