



Singapore Falcons – '2025 The year of the Tempo (and some other things)!'

"Tempo runs are the bread and butter of marathon training. Skipping them is like skipping the foundation of your house—you can build something, but it won't hold up when the storm comes." **Des Linden**, Boston Marathon Champion.

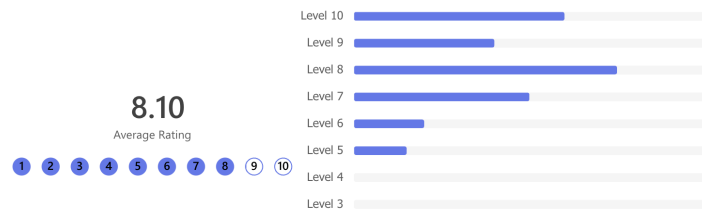
Now, any guesses which training session runners avoid and skip the most?

Some context

Ok, let's rewind the clock a little and start with some positives. Of the 52 runners who completed the first Falcons survey back in August, when we asked how well we were meeting your needs, the average score was 8:10 out of 10 which considering we weren't really doing that much back then, this was a great start! I think it was the free drinks and the friendly faces more than anything else!

4. How well do the Falcons meet your running needs currently? If your rating is below 5 then please suggest how we can improve further down the form.

52 Responses



6. Thinking about our track sessions now, how useful/beneficial are they or have they been to you so far?

51 Responses

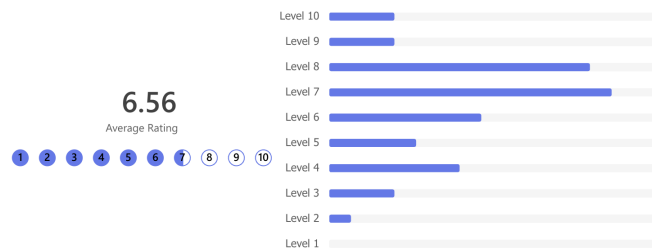


Even more pleasing was the rating out of 10 for how effective the current track sessions were at 8.35. We have worked tirelessly to make them as good as they can be and so that they genuinely can cater for every runner who turns up to our sessions. We reflect, listen, tweak, improve and make iterations. They are now in great shape, thanks largely to our runners and run leads.

When we delve deeper into the findings however, some interesting things unfold, particularly the contrast in the two scores above, the surprisingly low score for question 2 below. Lots of runners hitting 3, 4 and 5 for how happy they were with their own running. Digging further, 50% of you asked for a template training plan, which we have worked on. The most significant piece of the entire survey for me was the 75% of you ranked tempo runs as the main area that you wanted to focus on, ranking track intervals and long runs last. This is again great news, meaning that the track intervals are going well for people, and most seem comfortable with long runs. Two fundamental sessions.

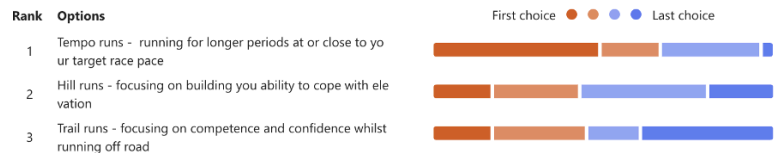
2. Overall, how happy are you with your own level of running at the moment? 1 being the lowest and 10 the highest. If your rating is below 5 then please specify what it is you are not happy with...

52 Responses



12. There are 5 main types of runs that we can add to our training plans. The first is the track sessions that take place on Tuesdays. Please rank the following in order of how much you would like to...

51 Responses



Missing Tempo runs is typical for many runners that have careers, families, other hobbies etc. We hit the track sessions focusing on VO2max as we like the feeling that running fast gives us! We do our long runs well and the easy runs as these are fun. You could even argue that the sessions mentioned above are fun, even the hard Z5 sessions, the endorphin rush at the end of really nailing a tough session is incomparable. But Tempo sessions don't have the glamour, the ease of, the achievement of distance, the relaxed nature of the easy run but they are an essential piece of the jigsaw and if I am honest, this has been the missing piece for me over the past 2-3 years.

This highlights a big-ticket item that we will be banging the drum about this year and now one of our 3 core sessions. It will be a session that we do on a Thursday together if possible. A session that will get better with time as we learn about ourselves and as our ability increases. It will be a session that we mark as 'must not miss' session when writing our plans down or putting them in our calendars. This will be a session that we become better at together, because that's what we do here.

What are Tempo sessions?

Let's unpack what Tempo sessions are first and how they are slightly different to our Z4 track threshold sessions, that have been so popular this year. Tempo runs are essentially geared towards familiarising yourself with a pace that is slightly slower than your target race pace, for longer, sustained periods. Becoming relaxed and as comfortable as you can be at maintaining and sustaining faster paces. We will be building these up in the form of intervals but progressing these to longer continuous tempo runs near your target race pace.

What do the experts say?

Mo Farah (Olympic and World Champion) "Tempo sessions build the strength you need for the final stages of a race. They're about finding and holding that edge of discomfort."

Paula Radcliffe (Former Marathon World Record Holder): "They're the perfect way to train your body to run fast while staying relaxed. That efficiency is what you need for marathons."

Kara Goucher (Olympian and Author) "The tempo run is my go-to work out for building confidence. It's not about racing the clock; it's about finding a strong, sustainable effort."

Joan Benoit Samuelson (Olympic Gold Medalist) "They simulate the controlled intensity of race day. Mastering tempo runs helps you control your energy in races."

Eliud Kipchoge (World Marathon Record Holder): "Training at tempo pace is essential for marathoners. It conditions your body and mind to handle race-day challenges."

Shalane Flanagan (Olympic Medalist and NYC Marathon Winner) "Tempo runs are the foundation of my marathon training. They help me build the stamina to hold a strong pace for long distances."

Des Linden (Boston Marathon Champion) "They're one of the toughest workouts mentally but the most rewarding. They teach you how to push through discomfort and stay steady."

Jack Daniels (Renowned Running Coach): Tempo runs are "the single most effective workout for improving endurance performance."

Pete Pfitzinger (Olympian and Coach): "Tempo runs are a primary way to improve lactate threshold and racing performance for distances from 5K to the marathon."

How are Tempo sessions different from our track Z4 threshold sessions?

They are very similar, and all of these sessions are connected, link together and are to some degree on a sliding scale. Think of how quickly you can move from a Z1 easy walk to a jog, into an easy run, into Tempo pace at sub threshold, then threshold and into Z5/VO2 max and then to all out Z6, yes there is a Z6, I found this out this year at the end of a VO2 max session, when I hit my max HR and my Garmin started making funny noises! Our tempo run progression will begin with Tempo interval sessions that are very similar to Threshold Sessions but are slightly different. They will build up to running continuous tempo runs for 40-60mins. Chat GPT gave the nice summary table below:

1. Intensity

- **Tempo Sessions:** The pace feels "comfortably hard" but not exhausting. You're working below the lactate threshold, allowing sustained effort for longer periods without accumulating significant fatigue.
- **Threshold Sessions:** The pace is more challenging, hovering around the lactate threshold. It's just below the point where lactate accumulates too quickly, requiring more focus and mental toughness.

2. Duration

- **Tempo Sessions:** Last longer (20–60+ minutes) because intensity is lower, emphasizing sustained effort/aerobic efficiency.
- **Threshold Sessions:** Typically shorter (10–20 minutes per interval), as the intensity is higher and demands shorter bouts to prevent excessive fatigue.

3. Rest Periods

- **Tempo Sessions:** These are continuous, steady-state efforts with no rest, mimicking sustained racing conditions.
- **Threshold Sessions:** Often broken into intervals with brief, controlled recovery (active or jog) to allow for repeated high-quality efforts near the lactate threshold.

4. Primary Purpose

- **Tempo Sessions:** Focus on developing **aerobic stamina** and mental focus over sustained efforts. They're particularly beneficial for marathon and half-marathon training.
- **Threshold Sessions:** Specifically target the **lactate threshold**—raising the speed you can sustain before fatigue sets in, which is crucial for shorter races like 10k and half-marathon.

5. Physiological Focus

- **Tempo Sessions:** Improve the body's ability to efficiently use oxygen and fat as fuel, enhancing endurance.
- **Threshold Sessions:** Train the body to better tolerate and clear lactate, delaying the onset of fatigue at faster paces.

6. Mental Challenges

- **Tempo Sessions:** Require maintaining focus over a longer, steady effort. These sessions build mental stamina/discipline.
- **Threshold Sessions:** Test mental toughness by pushing to the edge of discomfort without tipping into unsustainable effort. Precision and focus are critical.

7. Best for Distances

- **Tempo Sessions:** Ideal for preparing for longer distances (e.g., marathon or half-marathon), where aerobic endurance and sustained effort are key.
- **Threshold Sessions:** More beneficial for shorter distances (e.g., 10k or half-marathon) where speed-endurance and lactate threshold are decisive.

8. Example Workouts

- **Tempo Example:** 10km at marathon pace, 40 minutes at ~80% HRmax, 4km tempo repeats
- **Threshold Example:** 4x10 minutes at threshold pace with 1:30 jog recovery.

Getting it wrong and the most common mistakes:



With the above in mind, "It is easy for Tempo runs to spiral into a Threshold session which defeats the point of the workout. You neither get enough tempo work done or a proper threshold session done. Tempo sessions are about discipline." Ben Khoo (Singapore Ironman National Record holder).

The summarised benefits from current research (Chat GPT to summarise - citations below)

Tempo sessions are considered a cornerstone of most training plans by professional runners and coaches. They play a crucial role in building a runner's aerobic capacity, improving lactate threshold, and increasing mental toughness. Here's why tempo sessions are highly regarded:

A Enhances Lactate Threshold

- * The lactate threshold (LT) is the fastest pace you can sustain without accumulating lactate faster than your body can clear it. Improving this threshold means you can run faster and longer without fatigue.
- * How tempo runs help: Running at or slightly below LT pace teaches the body to clear lactate more efficiently and delay fatigue.

B Builds Aerobic Capacity

- * Endurance is dependent on aerobic fitness. Tempo runs help improve oxygen delivery to muscles and strengthen the cardiovascular system.
- * How tempo runs help: Sustained efforts at tempo pace challenge the aerobic system without oversteering it, allowing for consistent progress.

C Bridges Speed and Endurance

- * Success in distance running requires a balance of speed and endurance.
- * How tempo runs help: Tempo sessions operate in the "middle ground," blending faster-than-long-run but slower-than-interval paces, effectively training the body to handle prolonged efforts at a challenging pace.

D Improves Mental Toughness

- * Racing and hard efforts are mentally challenging. Learning to hold a steady "comfortably hard" pace develops focus and resilience.
- * How tempo runs help: They simulate race conditions, teaching you to manage discomfort and maintain effort levels over time.

E Versatility Across Distances

- * Whether training for a 5K, marathon, or ultra, tempo runs can be tailored to suit any race distance.
- * How tempo runs help: For 5Ks/10Ks: Shorter, faster tempo runs improve sustained speed. For marathons: Longer tempo efforts mimic race-day conditions and improve marathon-specific endurance.

F Efficient Use of Training Time

- * Why it's important: Time-strapped runners need effective workouts.
- * How tempo runs help: They provide a high training stimulus in a relatively short session, making them efficient for fitness gains.

How to calculate your tempo pace?


First you will need to know your target pace for the race that you are building for. There isn't a magic formula for calculating this unfortunately, but here is a general rule of thumb that tempo pace should be 10-15s slower per KM than your target race pace. There are many available, but like this one: <https://www.active.com/fitness/calculators/pace>

For me, during this block, I want to achieve a Sub 3 our marathon in Seoul in mid-March. I know this is 4:00 pace. I know if I want to nail this, I need to get comfortable running at this pace for long periods. My Tempo pace therefore will be around 4:10 min/km and Thursdays will be when I spend time becoming comfortable at this pace. Once you know your target race pace, make your tempo pace 10-15s per km slower. If in doubt, a good calculator that helps with your VO2 pace can be found here. <https://www.omnicalculator.com/sports/training-pace>. This will help you choose your group for Thursday's session below <https://docs.google.com/document/d/1yHzkVuef0lsao5xNblJ4o1YYI8u8wPB43Ng78zQbA94/edit?usp=sharing>

Another great tip from Ben Khoo is that you will have a tempo range, some days you will feel at the quick end of that range, some days you won't and that is absolutely ok. Knowing and learning about your range is important.



Falcons Thurs Tempo: 9th Jan 7pm - Evans Rd (Using 5km road loop starting from the track- route: <https://www.strava.com/routes/3309831645698320432>)

	<p>Overall Purpose - Running near your target race pace for sustained, longer periods</p> <p>Session details - 2km repeats @target close to target race pace 2min Z1 jog recovery</p> <p>Calculating tempo pace from target race pace - 10-15s per km slower than race pace for your focus distance,, approx 80% Max HR, Z3-Z4, comfortably hard. Use this to help https://www.omnicalculator.com/sports/training-pace</p> <p>Some tips: Start with a slightly slower pace until you get a feel, it may take some time to get a feel for this pace. Don't get tempted to race each other, even within the same group, your tempo pace will differ, avoid pushing too hard!</p>						<p>Option 2</p> <p>Recovery</p> <p>Easy run</p> <p>Own thing</p> <p>Just here for fun!</p>
	<p>All - 2km warm up chatting pace Z1-Z2 (ask any questions about the session during this so that you are clear)</p> <p>10km focus - 3 x (2km @Tempo pace, 2min Z1 jog recovery)</p> <p>Half Mara - 4-5 x (2km @Tempo pace, 2min Z1 jog recovery)</p> <p>Marathon - 5 x (2km @Tempo pace, 2min Z1 jog recovery)</p> <p>Ultra - 6 x (2km @Tempo pace, 2min Z1 jog recovery)</p> <p>All - 1km warm down together, finish on the track</p>						
Group	Pace Group 1	Pace Group 2	Pace Group 3	Pace Group 4	Pace Group 5	Group 6 - 6-10km run @Tempo pace	Group 7
Pacing	3:45-4:00 min/km	4:00-4:15 min/km	4:15 -4:30 min/km	4:55-5:10 min/km	5:10-5:30 min/km	Your own specific Tempo pace	See above!
Groups Group leads in yellow		Chris					

Thank you for taking the time to read this. Feel free to ask any questions either on our main group or your training subgroup.

References

1. Jack Daniels (2005). *Daniels' Running Formula*.
2. Pete Pfitzinger and Scott Douglas (2008). *Advanced Marathonning*.
3. Greg McMillan (2013). *You (Only Faster)*.
4. Arthur Lydiard (1962). *Running to the Top*.
5. Stephen Seiler & Gøran Ø. Kjerland (2006). "Quantifying Training Intensity Distribution in Elite Endurance Athletes."
6. Véronique Billat (2001). "Lactate Threshold and Training Strategies to Improve Endurance Performance."
7. Norwegian Threshold Model (2020): Gjert & Jakob Ingebrigtsen.
8. John Hadd (2003). "Hadd's Approach to Distance Training."

