Periodization & Personalization in Distance and Mid-Distance Training

Jeremy Wilk

Workout Training Intensities

- Threshold Training:
  - Effort: Relatively easy. Should feel controlled, especially in beginning. More of a grinding pain.
  - Longer bouts: tempos, longer fartleks, split tempos, cruise intervals
  - Recovery of 1:3 for cruise intervals up to 1:5 or 1:6 on split tempos
- Interval (VO2) Training:
  - Effort: Intermediate. Between 3k-5k race effort.
  - Intermediate bouts: up to 5 minutes in duration. Ranging from 0.5:1 up to over 1:1 recovery
- Economy Repetition Training:
  - Effort: Relatively high. Mile race effort.
  - Shorter bouts: up to about 2 minutes in duration. Ranging from 1.5:1 up to over 2.5:1 recovery
- Fast Repetition Training:
  - Effort: High. 800m race effort.
  - Very short bouts: Up to 600m with very experienced athletes. Usually less than 400m.
  - Recovery: 3:1 or even above 5:1 or 6:1.

Workout Training Intensities

- Attacking training from different angles
  - Shorter recovery with slightly slower paces and longer recovery with slightly faster paces
- There are many places to find out pace guidelines for each training intensity, but once you pick a method, stick to it, as it’s easier to manipulate training.
  - I stick to the VDOT charts in Daniels’ Running Formula or McMillan Running Calculator
- These should always be taken with a grain of salt though, as you should adjust for conditions:
  - Footing, elevation, elevation changes, temperature, wind, track size, timing in training, etc.
    - I give ranges with my best guess for the desired effort based on current fitness.

Important Things to Keep in Mind

- Always know what you're trying to accomplish from a workout.
  - Don't do workouts just to do them; know why, and how they will benefit your athletes.
- There are many roads to Rome, but the road to take is the one that you understand best.
  - I need to be able to make adjustments if I realize that the athletes aren't where I wanted/expected them to be. It would be very challenging to do this if I just copy/pasted someone else's training and used it for my athletes.
    - Many people write training backwards from the most important meet of the year (which I have done and understand the benefits of), but what do you do if the athletes aren't where you expected them to be when you hit the next cycle/phase, or even when you start?
    - This is why I constantly evaluate where each runner is at and what we need to work on.

Important Things to Keep in Mind

- I have a plan for how I want to progress each runner with training, but I've noticed that if I go too far ahead, things just changed and I ended up completely changing workouts. So now I just save myself the trouble, and don't go more than two weeks in advance.
    - Everyone is different, and even people are different year to year. They may adjust to training differently as they grow and get stronger in training.
- Obviously it's ok to try new things with training and experiment to see what works and doesn't work, but implement it slowly
    - When transitioning in training, slowly turn the wheel, don't jerk it back and forth
- This is why it's important to understand what you're getting out of each workout and know where you're at in training.

Periodization in Cross Country

- Phase 1 - Base Mileage Runs and Absolute Speed Development Focus
  - This begins from the end of their break (after track) until they approach peak weekly mileage
  - Mileage runs to build the base, and sprints to build the pure speed
    - People may need to progress differently when getting back to peak mileage after breaks
    - To work absolute speed do running start sprints of 40-80m, 2-3x per week
      - Working creatine phosphate system. Requires full recovery.
      - The objective is to work on absolute speed, not speed endurance here
- Phase 2 - Lactate Threshold Development Focus
  - Fartleks and shorter tempo's based more on effort than strict paces
  - Progress with total workout volume and intensity of these as they get in better shape
  - Then progress into longer tempos.
  - May also help to add a little volume at interval efforts
    - Progress intensity at the end of fartleks, or have some faster reps at the end of workouts

Periodization in Cross Country

- Phase 3 - Interval (VO2) Development Focus
  - Once they're very strong with the threshold work, progress into interval training.
  - Don't get completely away from threshold workouts, but the interval work becomes the focal point of the training week.
  - Be careful not to overdo it with volume here.
  - If your group goes too fast in the workouts and runs backwards over the second half of the workout, it is likely best to pull them than have them keep digging a hole. They won't get anything out of it from an adaptation standpoint.
- Phase 4 - Championship Season
  - Maintain what you've gained to this point, and sharpen them up. Don't make HUGE changes, but increase the intensity a little bit, drop the volume a little bit, and increase the recovery a little.
  - The objective is to have them feeling strong and confident on race day.

Things to Keep in Mind

- Maintain the progress you made in each previous phase.
- Recuperation/down week every 3rd or 4th week to maximize adaptation.
  - Drop in total volume, not intensity
  - Cycles are usually 3-4 weeks because that's how long it takes the body to fully adapt to training
- I look at the phases more fluidly than many others, as I don't like throwing huge changes at the body.
  - Base each phase length of season and when you want to run fastest.
- Importance of proper pacing
- Faster isn't always better

Periodization in Track (Distance)

- I treat the time between cross and track as a mini-base phase.
  - Build them back up so that you can back down for important meets/championship season.
  - Get the volume higher, work on absolute speed again and slowly incorporate interval work
    - They will feel very good in the beginning, as it isn't very intense and has lower volume.
    - Now is the time to add in new supplemental work, while the work intensity is lower.
    - Slowly build volume and intensity of VO2 as they get more fit and are able to handle.
- Once into indoor track season, I mainly maintain the threshold work. Interval work is the focal point.
- The further into the year we go, the more I like to add in economy repetition work at the end of workouts, but it is never the focal point for the 5k group.
  - Distance guy went from 4:30 to 4:15 in the mile (broke school record) despite not doing a single workout where the focal point was economy repetition work. Most we did was about 1K worth of work at the end of interval workouts.

Periodization in Track (Distance)

- Once it’s approaching championship season, make sure that you also work on gear change work.
  - I have them do cutdown 150’s after mileage on Monday’s of most weeks.
  - But I also add in float-push-float-push intervals on the track too. I do these usually at the end of their workouts to simulate gear changes on somewhat tired legs.
- Make sure that you still have them accessing that speed throughout the year. If you don’t use it, you lose it. Strides on standing recovery with close to full speed (with good mechanics) in the middle.
- I have found that doing a lower volume VO2 workout with some economy repetition work at the end usually leaves the athletes feeling good and confident going into the meet.

Periodization in Track (Mid-Distance)

- Still treat as mini base phase, but more focus on VO2 and economy repetition
  - Every second/third week we will do a threshold oriented workout still
- Get back to doing absolute speed work
  - Quality. 60m sprints, harder strides, cutdown 150's fast (95%) at the end.
- After that, I build up their economy repetition capabilities, then add more and more fast repetition work as needed. Make sure not to overdo it and fry them.
- General rule of thumb is to progress from lower intensity to higher intensity workouts. I pretty much follow this rule with the exception of the absolute speed in the beginning.
- I always play it cautious when constructing workouts
  - Much easier to overdo it with middle distance athletes as they generally like to go faster
  - It's better to be 10% undertrained than 1% overtrained.

Periodization in Track (Mid-Distance)

- Gear change work is important in the middle-distance events as well
  - Float-press-float-press intervals prepare them for changes in the race
- Going into championship racing, I like doing lower volume VO2 work with some economy repetition and even a little bit of fast repetition work at the end.
  - Similar to the distance athletes, this should have them feeling good and confident going into your big meets.

Adjusting Training Mid-Cycle

- If you realize (either through racing or workouts) that the runners need more of a certain type of training, it’s ok to go back to it.
- Training doesn’t need to be 100% perfectly sequenced, because training will never go 100% perfectly to plan.
    - There are so many variables in running (many of which we as coaches have no control over)
    - Your group will not be the same every year, so you must adjust every year

Personalization

- Everyone responds to workouts differently and can handle different intensities
  - Example: Many MD runners can’t handle/don’t get much out of long tempos. Do fartleks, or cruise intervals, and don’t be afraid to allow standing/walking recovery for them. It allows for better quality (which is the focal point of the workout). This can be done even during XC, as it’s all about what they’re getting out of the workout, not exactly what the workout is.
- Some people require more/less time to get back into full volume/intensity
  - Generally the higher the training age/higher peak fitness the athlete has achieved, the lower the time it takes to get back to close to those levels. It’s harder/slower to build up your peak fitness.

Personalization

- Scientifically speaking, interval work is supposed to be 3-5 minutes per repetition, but some people can't make it that far
  - Instead of struggling through reps that long, give them shorter repetitions with shorter recovery
  - The better they get at that, the better your chances of being able to increase the length of the intervals in the future.
- Remember, it's about *what they're getting out of the workout*, not *what the workout is*.
  - If they've gotten all they're going to out of a workout because they're falling apart ⅔ of the way through, pull them. It's unnecessary stress that is limiting the chances of adaptation.
- Be open to learning. Every runner is different, and learning what each person adapts to allows you to write training that will better benefit them in the future.

Questions?

Please feel free to email me at wilkj@northwood.edu with any additional questions (*or potential student-athletes*!)

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