Peter Attia MD Keypoints — Performance, Sport & Remarkable Lives

Peter Attia MD Keypoints

Episodes in this pack: 19

318 - The Meteoric Rise of Tadej Poga Ö : From Prodigy to Cycling Legend

Guest: Tadej Poga Ö
Date: 2024-09-23 · Duration: 0:49:44
URL: https://www.youtube.com/watch?v=m9yjbJJBjHU

KEYPOINTS

• His 2020 Tour de France win came as a complete surprise, decided in the final time trial.

In the Covid year, with few races, Poga Ö " pent to the Tour as co-leader with Fabio Aru. After the queen stage to the Col de la Loze, where he finished just behind Primož Rogli ÒÂ †R pas sure he'd be second. The team was preparing a white bike for the young rider's ceremony. He'd scouted the final time trial course in advance and rode it relaxed, with 'no tension, no stress,' and turned the race around. He rode about 380–390 W on the flat. For the climb he used a 6.8 kg bike with no power meter or radio he could hear over the crowds, and simply went 'full gas.' He weighed about 66 kg.

• His 2022 Galibier collapse came from answering too many attacks, not from poor fuelling.

On the Télégraphe–Galibier–Granon stage, Jumbo-Visma attacked relentlessly. He answered eight or nine accelerations, then tried to drop everyone himself, which he now calls 'stupid,' with Wout van Aert up the road anyway. 'If you do eight sprints… it takes too much.' His view: the nutrition plan was fine, but you can't replace that much output by eating more.

• He trains by copying race courses.

Since he was a junior, Poga Ö " † 2 `ound climbs near home that resemble upcoming race climbs and repeated them as many times as they appear in the race. Before Montreal, that meant 4–5 minute efforts plus two short ones. He prefers climbs of about 20 minutes steeper than 9%, because at today's speeds 7–8% gradients give too much drafting advantage. Heat has always been a weakness, so in the last two or three years he has deliberately overheated himself in training, including on a home trainer.

• His stronger 2024 came from work off the bike and closer attention to nutrition.

He added core and strength work for legs, glutes and hips, kept at lower loads through the season, plus more detailed nutrition. As a younger rider he 'could eat what you want.' He never bans foods like chocolate, arguing that six months of restriction ends in a binge. He raced the 2024 Tour at about 64.5–65.5 kg and peaks at about 69–70 kg in the off-season.

• He takes in about 120 g of carbohydrate per hour on hard stages.

Easier stages need 60–90 g/hour. Bottles hold 30 g or 60 g; he prefers 30 g so he can eat more, but uses 60 g on hard days. Five years ago 120 g/hour seemed 'impossible' and he regularly had stomach problems. He credits gels designed by the team nutritionist with the right glucose–fructose ratio, plus gut adaptation.

• Heart rate is his main gauge; power meters need cross-checking.

He's trained with a heart-rate monitor since he was 10–12 and could train on heart rate alone. He finds power meters affected by temperature and calibration, so on home roads he checks heart rate, power, speed and VAM. All-out efforts of about 15 minutes at 7.5% reach roughly 1,700–1,800 m/hour of VAM; Attia says he's happy to hit 1,000.

• His zone 2 is about 320–340 W at 140–155 bpm, but he adjusts it for duration.

Heart rate is 140–145 when fatigued and 150–155 when fresh. Monaco's terrain forces high zone 2 on 20–40-minute climbs with recovery on descents. Five flat hours at 320–340 W would wipe out the next day, so on long flat rides he drops to 290–300 W, because zone 2 'after 5 hours may not be your zone 2 anymore.'

• He tracks overnight HRV and heart rate cautiously, because the numbers can get in your head.

His HRV ranges from about 35 (for example, after alcohol) to 120–130, occasionally 150. It was steady at 80–110 during the Giro and Tour. His resting heart rate averages 42–43 overnight (lowest 37), and 48–50+ means fatigue or illness. His max was 213 as a junior and is still 203. His partner, also a pro cyclist, checks her morning HRV only after a race so a low number can't affect her.

• He treats defeat as a team matter.

After cracking on the Col de la Loze in 2023, he thanked his team. 'It's a team sport… the guys sacrifice everything.' He felt he'd let them down, was devastated and angry, but 'you cannot change nothing,' and dinner with teammates helped. He traced that Tour back to a crash at Liège that hurt his preparation, then rebuilt confidence with a stage 20 win, a third place at the Worlds and victory at Il Lombardia.

EXAMPLES

• Ranking the mythic climbs

With equal freshness, he rates the Galibier easiest, Mont Ventoux second, and Alpe d'Huez hardest (partly because of wind and heat on Ventoux). He calls Alpe d'Huez 'mythical' but says there are much harder climbs, and the Col de la Loze is the hardest of all.

• Off-season training

He never uses a stationary trainer in the off-season. He mixes in running, padel and swimming, rarely takes more than about three days fully off, and is back on the road bike by mid-November. Cross-country skiing and running up a mountain near Ljubljana were his junior winter training.

• Lab testing

He hasn't done a VO2 max or a true 20-minute FTP test in a while. Instead he does a December step test of about 1 hour 20 minutes on a trainer, with 10-minute steps and lactate checks, plus fatigue tests of repeated rising 8-minute efforts.

• Fans on the road

Flags waved in the middle of the road are the biggest danger. He may ease off slightly, but adrenaline and noise mean 'you don't lose momentum.'

OTHER RELEVANT

• Goals ahead

He wants a world title and Milan–San Remo ('the one that is going to send me to grave'), maybe Paris–Roubaix, and a Vuelta

win. A hilly Los Angeles Olympic course would raise its priority. Of the five Monuments, he says Lombardia suits a Grand Tour rider best.

• Records and criticism

He won 12 Grand Tour stages in 2024 and takes every chance to win 'because you never know when is your last win.' He won't chase Cavendish's 35 Tour stage wins, and says the hour record no longer appeals after Ganna.

• Time-trial power

When it matters, he can produce about the same power on the TT bike as on the road bike, thanks to biomechanics work, wind-tunnel testing and a lot of TT intervals, though his TT days are less consistent.

• Rivalry with Vingegaard

He thinks Jonas Vingegaard's 2024 crash didn't cost him peak power but did cost him three-week durability. He'll keep racing the Tour as long as he enjoys the stress.

Special episode with Dax Shepard: F1 and the 30th anniversary of Ayrton Senna’s death

Guest: Dax Shepard
Date: 2024-04-29 · Duration: 2:41:39
URL: https://www.youtube.com/watch?v=9YUF9q6VThE

KEYPOINTS

• Senna's greatness shows in qualifying more than in championships.
In this special episode, Dax Shepard, who calls himself 'a three out of ten' on Senna, interviews Attia about his obsession. Attia notes that Senna died in his 161st race, fewer than most current drivers have already started, yet took 65 pole positions. That ratio is unmatched. He won three titles, and Attia argues a fourth was taken from him. He also had the best car in only four of his ten seasons.

• Monaco 1988 is Attia's favourite Senna story.
In his first year at McLaren, driving the MP4/4 (which won 15 of 16 races), Senna out-qualified teammate and reigning champion Alain Prost by about 1.4 seconds (Attia cites 1.47). The decisive lap wasn't filmed because he was already on pole. In the race he led Prost by about 56 seconds, then lost concentration, crashed, and disappeared to his Monaco apartment for hours. His housekeeper had been told to say he wasn't home.

• Rain was where he stood out most.
As an F1 rookie in a 'garbage truck' Toleman at Monaco in 1984, he was closing on Prost in a downpour when officials stopped the race a lap early. He won his first race in heavy rain in Portugal in 1985. Angelo Parilla, whose DAP karting team Senna drove for, said Senna was even better in karts, and in the rain he'd urge officials to just give Senna the trophy.

• His driving technique broke the usual rules.
Rather than rolling smoothly onto the throttle ('smooth is fast'), telemetry showed Senna stabbing it on and off and then going to full. People assumed it kept the turbo spooled and predicted he'd struggle in naturally aspirated cars, but he kept doing it and didn't. He'd run within inches of the Monaco walls one-handed, with no power steering and a clutch. His feedback to engineers was so precise he once came in while injured to check whether a stand-in's feedback could be trusted.

• The 1994 Imola weekend was a series of warnings that should have stopped the race.
On Friday Rubens Barrichello, whom Senna mentored, crashed heavily but survived. On Saturday Roland Ratzenberger was killed, F1's first death in 12 years. Attia says Italian law would have ended the event if a driver was declared dead at the track, so he was flown to hospital. Senna was reprimanded for driving to the crash site. His trainer Josef Leberer told Attia he'd never seen Senna angrier. Senna agreed with Niki Lauda to revive the drivers' safety association and admitted he didn't want to race, but said the people of Brazil needed it. Sid Watkins reportedly urged him to retire and go fishing.

• His Williams FW16 was nearly undrivable after active suspension was banned.
Senna moved to the dominant team only for the ban to wreck its handling. Teammate Damon Hill told Attia it felt like 'a knife's edge' every lap and he stayed well below the limit. Senna still took pole in the first two races but scored zero points while Michael Schumacher won both in a Benetton Senna suspected of illegal traction control. Senna's steering column had been extended about 6 inches and narrowed to fit how he liked to sit.

• Attia doesn't believe the steering column caused the crash.
He thinks Senna took the bumpy racing line through Tamburello on cold tyres (possibly with a slow puncture), bottomed out and lost rear downforce. The car oversteered, Senna corrected it, the car suddenly gripped again and went straight off, and he braked hard into the wall at about 150 mph. Attia owns Senna's steering wheel from qualifying and says on-board footage shows him correcting before leaving the track, with no sign of a free-spinning wheel. Adrian Newey's book and Hill share this view. Italian courts nonetheless found Newey and Patrick Head liable, but the statute of limitations had expired. A suspension rod pierced Senna's helmet.

• His legacy goes far beyond racing records.
Attia compares May 1, 1994, for Brazilians to JFK or 9/11. Senna was nearly as revered in Japan through Honda. Unknown to most during his life, he gave quietly to education. His sister Viviane founded the Senna foundation, which Attia says has given over half a billion dollars. His death transformed F1 safety, and Tamburello is now a chicane. Attia named his youngest son after him.

EXAMPLES

• Shepard's view of risk
Given a choice between living like Senna to 34 or a quiet life to 105, Shepard would choose Senna. On the track, his worries and goals disappear, which he compares to a meditation retreat. Still, he once stopped racing after holding his sick baby daughter and a fatal crash in his series.

• How racing psychology compounds
After one tyre lockup, Attia began braking 50 feet early, costing about 0.8 seconds a lap, and kept spinning. He says no other activity punishes mistakes so geometrically.

• Car vs driver
Attia estimates the split was about 50/50 in the 1980s and about 75–80/20 today, so Max Verstappen couldn't win in a back-marker except in the rain. Shepard notes that unreliability once made races less predictable.

• Senna's rivalry with Prost
Prost, nicknamed 'the Professor,' would settle for third and the points. Senna wanted only to win and would risk a crash while leading. Prost later used a contract clause to block Senna from joining him at Williams in 1993.

OTHER RELEVANT

• Tyres limit everything

Hundreds of millions in engineering still reach the road through four tyre contact patches. Verstappen's edge over Charles Leclerc is making tyres last, not single-lap pace.

• Greatest-of-all-time debates

Attia ranks Senna first and Schumacher second, with Verstappen rising. He compares Senna to Barry Sanders: greatness that statistics don't capture. Senna himself named Terry Fullerton from karting and Fangio in F1.

• The 2021 season

Both consider it the best recent season, a better driver beating a better car, and say calling Abu Dhabi the sport's greatest injustice reflects a shallow knowledge of F1 history.

• The 'what if'

Attia thinks Senna would likely have won 1994–97 at Williams and might have entered Brazilian politics. His grave in São Paulo is a simple plaque.

199 - Running, overcoming challenges, and finding success | Ryan Hall

Guest: Ryan Hall
Date: 2022-03-14 · Duration: 2:58:57
URL: https://www.youtube.com/watch?v=0gOHy74y1hE

KEYPOINTS

• Hall grew up living high and training low before it was fashionable.
In Big Bear, his father started a cross-country and track team just so he could run, driving down to sea level about twice a week for hard interval sessions before returning to altitude. Later, at about 7,000 ft, Hall could run 12–15 miles at 4:48 per mile — about marathon pace — yet gained less at sea level (4:40–4:42) than less-acclimatized runners like his wife Sara.

• Marathoners need real speed.
Hall ran 50 seconds for 400 m in high school, but argues that top-end speed limited his 5,000 m potential, since elite men close the final lap in about 52. As a coach he wants athletes who can run 49 seconds for 400 m. His half-marathon pace of 4:33 per mile is 34 seconds per 200 m — speed Attia notes few people could hold for even half a mile.

• Power and strength matter for runners — he wishes he'd lifted better.
Hall did 50-metre hill sprints twice a week during marathon training, but in hindsight didn't use his weight-room time well. Attia cites a strength coach who reportedly took an elite runner's deadlift from about 1.3 times bodyweight toward 2.7–3 times, and notes ground-contact times around 0.2–0.25 seconds reflect power.

• Progressive overload has many levers.
Overload can mean more weight, sets or reps, or less rest. Hall has become fascinated with blood-flow-restriction training, using a fraction of the normal load — useful for injured runners.

• The record half marathon came out of nowhere.
In 2007 he ran 59:43, obliterating the American half-marathon record by over a minute — despite having spent ages 13–23 focused on speed and the 5K, where his best was about 13:16. Middle miles at 4:32 and 4:28 'scared' him. He was suddenly 'America's great hope' for the 2008 Olympic marathon.

• Beijing taught pacing lessons.
Expecting a slow, hot race, he started tentatively and had to work from about 60th to finish 10th.

• Boston 2011 was his best day.
After a poor half marathon a month before, he floated through easy runs and ran 2:04:58 for fourth — at the time the fastest by an American — while the top two ran about 2:03, almost a minute under the then world record. The halfway split of 61:52 was so fast the organizer radioed that the clocks were wrong.

• Dropping too low in weight backfired.
At 5'10", Hall's best racing weight was about 137 lb; below that he got worse, and he once hit 127. Between races he regained 10–12 lb to about 150, then reduced gradually over six months. Before London 2012, he did a one-week fast and dropped to 130 instead of rebounding, starting training depleted. His brothers walk around at 165–170, suggesting his natural weight.

• Elite endurance training wasn't optimal for health.
His testosterone was clinically low every time he tested — around 150. Attia notes his own was in the low 200s through surgical residency.

• Identity outside performance sustained him.
At Stanford, injured and not improving, Hall saw himself as a failure every morning. His faith reframed it: God sees him the way a parent sees a child, with love unrelated to performance. Being a better teammate became a focus too.

• Plantar fasciitis and a worn body ended his career.
Plantar fasciitis began before the 2012 trials, persisted until his 2016 retirement, and he felt his body was saying it had been pounded with 100-mile weeks for 20 years.

• Elite marathon pace is almost unimaginably fast.
Attia points out that a 4:42–4:48 mile pace is something almost no recreational runner could hold for 800 metres, let alone 26.2 miles. Hall predicts an official sub-two-hour marathon within our lifetime, noting a woman had just run about 62:50 for the half, and says that at any level, signing up for a race lets you share the experience with tens of thousands of others.

EXAMPLES

• Gaining 25 lb of muscle
After retiring, Hall went from 167 to 192 lb over nine months while doing zero cardio — no running, biking or swimming.

• Grand Canyon water carries
He carried two water containers weighing about 62–65 lb each up a 6.3-mile, roughly 7% grade trail out of the Grand Canyon, and trained with 20-minute carries every other day, 30 seconds on, 30 off.

• Seven marathons, seven continents, seven days
Hall ran seven consecutive marathons on seven continents without specific training, getting better during the challenge before crashing at the end.

• Marathon fuelling
Bottles plus gels at 15K and 30K, the latter caffeinated; Hall says he is '100% faster' with caffeine. Attia mentions research on acetaminophen lowering core temperature, which Hall never tried.

• A resting heart rate of 27
At his fittest, Hall's resting heart rate was about 27 and his marathon heart rate around 167.

• Workouts at Mammoth

Main sets like 10×1 km or 6×1 mile at altitude around 4:30 pace (roughly 4:20 at sea level), with 90 seconds to two minutes of walk-jog recovery, plus an easy 30–35-minute afternoon run.

OTHER RELEVANT

- **Train speed and power even for endurance.**
  Include sprints, strides and strength work; aerobic base alone limits performance.
- **Don't chase weight below your natural set point.**
  Hall's performance and motivation fell when he went too lean. The conversation keeps the claim tied to named mechanisms, numbers, and caveats so a listener can act or ask better questions without flattening the nuance.
- **Separate worth from results.**
  An identity rooted in faith, family or values buffers the inevitable failures.
- **Vary your overload.**
  Adjust sets, reps, rest or use tools like blood-flow restriction rather than only adding weight.
- **Respect accumulated wear.**
  Hall says that if he could do it again he would have listened to his body sooner; after two decades of 100-mile weeks, persistent injuries like plantar fasciitis were a signal to change course rather than run through.

Lance Armstrong: The rise, fall, and growth of a cycling legend | The Peter Attia Drive, Ep. 178

Guest: Lance Armstrong
Date: 2021-10-04 · Duration: 2:35:04
URL: https://www.youtube.com/watch?v=NaGLfau1tRs

KEYPOINTS

• An endurance prodigy from Plano.
Lance Armstrong started as a swimmer and runner in Plano, Texas, where elite swim training meant around 10 miles a day, then became a pro triathlete as a teenager; he says he was effectively a pro athlete at 15, around when his mother threw out his stepfather Terry Armstrong. He went to the junior world championships in Moscow in 1989 and switched to full-time cycling around 1990–91.

• Cycling was inspired by Americans like LeMond.
Seeing US Olympic medals in 1984 and Greg LeMond's dramatic 1989 Tour win made cycling exciting for Armstrong. He joined Motorola in 1992 and became world road champion in 1993. At 175 lb he was big for a climber; he raced the Tours at 160–165 lb, versus about 125 lb for Marco Pantani.

• EPO changed the sport almost overnight.
Armstrong says between 1993 and 1994 the peloton suddenly changed; in 1994 three Gewiss riders rode away together and the press exploded. He started EPO around 1995, then joined Dr. Michele Ferrari in 1996. Bjarne Riis, who won the 1996 Tour, was nicknamed 'Mr. 60%' for a reported hematocrit around 60–66. Before the 50% hematocrit limit, there was no real ceiling.

• EPO's effect: roughly 10%.
Armstrong's go-to test, a 30-minute climb of the Col de la Madone (grade around 7–8%), averaged about 500 watts at 165 lb, roughly 7 W/kg, in 1999 and 2001. He estimates he'd have done about 450 W clean, around 10% less, which is still elite; he compares Bradley Wiggins at about 440–450 W.

• Racing hematocrit was kept below the limit, with transfusions.
Under the 50% rule, teams aimed for about 46–47 to leave a margin for dehydration or illness. Armstrong says the team used one transfused bag during the 2000 Tour, later two, and in 2003 he started the Tour with a hematocrit around 38–42.

• Testicular cancer nearly killed him.
After months of denial and torturous symptoms, he was diagnosed in 1996. His hCG was around 100,000 ('very pregnant'); above two is a problem and 500 is serious. He had an orchiectomy, then discovered brain metastases only when he got to Indiana for treatment after starting chemotherapy elsewhere.

• Livestrong was born from survivorship.
Armstrong created his foundation to help cancer survivors, later spending around $600,000 on lobbying and strategy for a cancer initiative, which he views as funding advocacy rather than self-promotion.

• Return, dominance and rivalry.
After coming back in 1998 and nearly quitting, he won the 1999 Tour. The 2000 Tour brought intense rivalry with Pantani and Jan Ullrich, whom he saw as a real enemy; 2001, famous for 'the look' at Ullrich, was physically his best. He won his seventh Tour at 34 in 2005, retired, and returned in 2009 to finish on the podium.

• A near-quit in 1998 became a comeback.
After cancer, Armstrong raced Paris–Nice in 1998, quit, came home and nearly retired, then got back into shape for only about nine months before going all in for 1999. The 1998 team was so disorganized he calls it a mess, and that year's Festina doping scandal shook the sport. After his strong ride in the Vuelta, where he expected maybe a top-10 Tour finish, his director was '100% sure' he could win the Tour, a belief that changed Armstrong's ambitions.

• Coming clean.
After Tyler Hamilton's book (around 2011–12) and mounting investigations, Armstrong decided to tell the truth in January 2013. He acknowledges the people he hurt, emphasizes learning from his downfall and helping others after their own falls from grace, and says that at 50, with perhaps 40–50 years left, there's still 'a lot left to be told'.

• Advice to his younger self.
He suggests the 15-, 25-, 35- and even 45-year-old versions of himself would not have handled the downfall; growth required that experience. He is grateful that people can reinvent themselves today.

• Staying fit at 50.
Armstrong weighs about 180 lb, about 15 lb over his Tour weight, which is modest for a retired cyclist. He can still swim 100-yard repeats on about 1:10 in Austin, compared with the 1:05 touch-and-go he once managed, and says he's fitter than most 50-year-olds.

EXAMPLES

• The yes-or-no warm-up
Attia opens with rapid yes-or-no questions (Dura-Ace vs. Campagnolo Super Record, aerodynamic water bottles) before turning to doping.

• Riis' hematocrit
Riis reportedly raced the 1996 Tour with a hematocrit around 60–66, illustrating how extreme EPO use was before limits.

• Hematocrit at rest vs. racing
Attia asks whether the advantage came from walking around at 42–44 and racing at 46–47; Armstrong agrees the key was preventing the drop during three weeks of racing.

• A tractor path at 40 mph
Armstrong recalls riding off course through a farmer's tractor path at high speed in a Tour, a few feet from disaster on either

side.

- **Lunch-time hCG**
  When doctors saw his tumor markers, Armstrong had to go back to his urologist's office around 6–7 p.m.; the reading of about 100,000 signaled widespread disease.

OTHER RELEVANT

- **Doping distorts sport but doesn't create talent.**
  Armstrong's numbers suggest EPO adds roughly 10%; top riders were already elite, but the margin decides races. The conversation keeps the claim tied to named mechanisms, numbers, and caveats so a listener can act or ask better questions without flattening the nuance.
- **Don't ignore warning signs.**
  Armstrong's denial delayed his cancer diagnosis; testicular changes and unusual symptoms warrant prompt evaluation. The conversation keeps the claim tied to named mechanisms, numbers, and caveats so a listener can act or ask better questions without flattening the nuance.
- **Own your mistakes.**
  Telling the truth and helping others through their own falls is part of rebuilding. The conversation keeps the claim tied to named mechanisms, numbers, and caveats so a listener can act or ask better questions without flattening the nuance.
- **Keep training through life.**
  Armstrong's fitness at 50 shows the long-term payoff of staying consistently active. He still swims, rides and runs regularly.

#142- Robert Abbott: The Bobby Knight story—the cost of unchecked anger, ego, & winning at all costs

Guest: Robert Abbott
Date: 2020-12-21 · Duration: 2:14:43
URL: https://www.youtube.com/watch?v=QLqzxsSsAqg

KEYPOINTS

• Bobby Knight survived decades of abusive behavior because winning made him more powerful than the university itself.

Abbott (six-time Emmy winner, E60 co-creator, director of ESPN's 30 for 30 'The Last Days of Knight') calls Knight as the most powerful man in Indiana: three national titles (1976, 1981, 1987), an undefeated 1976 season and the 1984 Olympic gold. Over his 29 years at Indiana several university presidents came and went while Knight stayed.

• The university knew about Knight's conduct at least 13 years before it acted.

During his 1999 reporting Abbott found that in 1987 Indiana's Bloomington Faculty Council was so offended by John Feinstein's book about Knight's program, 'A Season on the Brink,' that it tried to do something. Knight then won the 1987 championship and the effort went nowhere. Abbott calls that moment the 'shot across the bow' that showed everyone who was really in charge, and says it protected Knight until 2000.

• Knight didn't fundamentally change; what changed was media access and his results.

Abbott thinks Knight in 2000 was largely the man of the early 1970s; growing coverage simply exposed more. Earlier he pushed players and then 'reeled them back in' enough to win titles. In the 90s his teams won 20 games a season but kept losing early in the tournament.

• The story began with a simple question: why were Indiana's best players leaving?

In April 1999 star Luke Recker, the team's leading scorer and minutes leader, announced he was transferring, the third notable departure in about two years. Abbott's CNN boss Steve Robinson assigned him to find out why; Abbott suspected elite teenage recruits no longer accepted Knight's style.

• A 90-minute phone call with former player Neil Reed produced three allegations that became the backbone of the story.

Reed said Knight had grabbed him by the throat at practice, had thrown the university president out of a practice, and had come out of a bathroom stall and shown the team soiled toilet paper to tell them how badly they were playing. Abbott first wondered whether Reed was a disgruntled ex-player exaggerating, and spent months confirming each account before CNN aired a 16-minute piece.

• Patient, trust-based sourcing is what got people to talk.

Abbott reported 'at my tempo' for about 18 months and filled roughly a dozen notebooks, which sat in a box in his basement for 15 years until he made the film. He started on the edges, with Hoosier Basketball magazine founder Gary Donna, before approaching insiders. His rule on calls: keep a source talking for two minutes and you can keep them for five. Tracking down Recker in Chicago and getting him on camera was the breakthrough.

• The practice tape vindicated the reporting, and CNN refused to be intimidated.

After the first piece drew attacks on CNN, Abbott and Reed, a videotape of the choking incident arrived in Abbott's mailbox. Indiana's trustees and vice presidents flew to Atlanta. When they hinted at legal action, Abbott's boss Steve Robinson calmly offered to walk them to the legal department, adding that the tape would be airing on CNN, CNN International, Headline News and some 300 affiliates before the elevator doors opened. Abbott calls it the most powerful moment of his 34-year career.

• Anger can act like an anesthetic for shame, a pattern Attia sees in Knight and in himself.

Attia, drawing on his conversations with therapist Terry Real, describes anger as briefly numbing an inner hollowness and inadequacy, with grandiosity standing in for real strength, followed by shame that feeds the next outburst. A mid-1970s story from journalist Dave Kindred suggested Knight knew he had a temper and kept asking why he kept ending up in these situations. In Abbott's view that self-awareness never turned into change.

• Indiana's 'zero tolerance' compromise was a failure of nerve.

Abbott calls Indiana's decision to keep Knight under a 'zero tolerance' policy in 2000 one of the great acts of institutional cowardice. In the fall of 2000 Knight grabbed a student's arm and was fired.

• Abbott's biggest regret is missing the human story of Neil Reed.

At 35 he focused on the journalism and treated Reed mainly as a source. Rewatching his reporting 16 to 18 years later, he saw a young man whose whole identity, from a Bob Knight camp T-shirt at under age 10 onward, had been built around Knight. He says he should have done a follow-up years earlier, and he made Reed the heart of the film.

EXAMPLES

• The 1988 Connie Chung interview

In a special on stress, Knight said something to the effect of 'if rape is inevitable, lie back and enjoy it.' The university's response was a mild statement that the remark did not reflect Indiana. Abbott says it would get a coach fired within 15 minutes in 2020, 2005 or even 1995, but Knight was untouchable then.

• The Argentina hunting trip

A professor, speaking on background and since deceased, told Abbott he had watched Knight get into a fight with his own son at a hunting lodge. Abbott asked Indiana's spokesman how the school could then reassure other parents.

• Neil Reed's later life

Reed married, had children and became a much-loved teacher and coach at a California high school, mainly coaching golf. The principal said he worked there about three years before she even knew his basketball past. He wore Nike gear every day as a reminder of how he got there. The abused did not become an abuser. He died of a massive heart attack at 36.

• Reed's final tweet

About 10 days before he died, Reed tweeted bitterly that kids apparently deserve to be 'punched, spit on, choked' and abused, written around a contemporary abuse scandal. Attia reads it as a sign of lasting trauma (PTSD), even though the people who knew him described a man who had largely moved on.

• Knight's intellect and his grudge

Hoosiers screenwriter Angelo Pizzo told Abbott that he once talked Russian history with Knight for six straight hours, a reminder of how brilliant Knight could be. Even so, Knight held a grudge over his firing for 20 years before returning to Assembly Hall.

OTHER RELEVANT

• Greatness doesn't justify the means

Abbott finished Feinstein's book believing the ends justified the means; his reporting changed his mind. A warning for coaches, parents and leaders.

• Watch for institutions that protect stars

Each protective decision raised Knight's leverage and the cost to people around him.

• Anger is often a cover for shame

Attia's takeaway is that real change requires examining the inadequacy underneath anger. Simply knowing you have a temper, as Knight apparently did by the mid-70s, is not enough.

• Trauma doesn't have to be passed on

Reed's life after Indiana shows a cycle of abuse can be broken, though the scars may remain. Abbott ends the film by thanking Reed for trusting him to tell his story.

• Note the date

This episode was recorded in late 2020. It covers events from 1999–2000 and the documentary, so later developments about the people involved are not included.

#109 – John Dudley: The beauty in archery, the love of practice, and a model system for life

Guest: John Dudley
Date: 2020-07-08 · Duration: 2:16:34
URL: https://www.youtube.com/watch?v=Z_symF-3qx4

KEYPOINTS

• Dudley turned down a Division I football scholarship to build arrows

A 6'5" quarterback recruit, he walked away one week into school to work in an archery shop for $4.10 an hour. Attia calls it one of the craziest decisions a college athlete could make. Dudley says he never looked back. Even in moments of rage when he broke arrows and threw his bow, his self-talk was that something had beaten him that day and wouldn't tomorrow.

• He loves archery because it's hard

Dudley learned archery at 9 and first bowhunted at 10. When he struggled to explain why he loved it, his friend Andy Stumpf, a retired Navy SEAL, told him the answer was all over his personality: some days you're good at it and some days you aren't. The sport keeps offering a next level, which is what keeps him coming back after burning out.

• The only arrows you control are the ones still in your quiver

An early coach asked whether anyone could pull a bad arrow back from the five ring to the shooting line. Since no one can, he told Dudley to let it go. Dudley began literally talking to the arrows in his quiver, asking which one would shoot a 12 to make up the points. Attia calls it a metaphor for life: you can't turn back time, only shape the next shot.

• Every world-class performer Attia has met loves practice

Attia lists Lance Armstrong, who teammates say wanted more at the end of a six-hour ride; Apolo Ohno, whose appetite for training continued ten years after the Olympics; and Ayrton Senna. The common thread is loving to practise deliberately and correctly, which Attia doesn't think anyone reaches an exceptional level without. Dudley trained at all hours, sometimes because insomnia gave him a reason to get up.

• Compound and recurve bows load energy differently

Olympic recurves get heavier through the whole draw, so a strong recurve archer holds about 50 pounds at full draw. A compound's cams make the weight peak early, around 70 pounds on Dudley's bow, and then drop off. That makes it easier to hold steady at full draw and stores more energy. His bow shoots about 292 feet per second, close to 100 mph, so an arrow takes about half a second to travel 50 yards.

• Elite accuracy over a football field's length

At 90 meters, roughly from one goal line to the opposite one-yard line, Dudley estimates most professional archers would land about eight of ten arrows inside the 10 ring, which is roughly the diameter of a large coffee mug (about three to four inches).

• Hyperfocus and flow may be linked to attention differences

Dudley describes ADD-like traits: he's easily distracted, yet he can lock in so completely that a song played on repeat for an hour and a half without him noticing. Near the end of his competitive career he began reading sports psychology to see whether such hyperfocus helps athletes reach flow. He offers this as a personal question, not an established finding.

• Great performers are rarely great teachers, and Dudley is both

Attia notes how little overlap there is between the top 1% of doers and the top 1% of teachers. Dudley credits former Mr. Olympia Frank Zane, who had worked as a teacher and who coached him on presentation. The key technique is relating a skill to something the student already knows, such as Formula 1 for Attia or SEAL training for Jocko Willink. Attia believes someone could get 60–70% of a coach's benefit from Dudley's videos alone.

• Honest selling is rare and valuable

Attia says he can buy anything Dudley recommends without wondering about kickbacks, which he considers hard for anyone to manage, since incentives work even subconsciously. Dudley, who runs the education side of a business while his wife runs the e-commerce side, says he can spot ventures run without that integrity fail quickly.

• Hunting raised the stakes of every shot

Attia took up archery only to shoot paper, a skill where you can spend a lifetime chasing the last 20% of improvement. Once he began hunting, a miss on paper hurt more, because the same miss in the field could wound an animal and make it suffer. Dudley argues that ethical hunting means knowing exactly where your meat came from, funding conservation through tags and not relying on commercial farming.

EXAMPLES

• The house fire at nine

As a self-described 'Beavis and Butt-Head' troublemaker, Dudley stayed home sick, played with matches and started a fire. The extinguisher was empty because he'd secretly used it months earlier after a firecracker accident. The house burned down; the family kept only what was in his parents' two cars. He traces his shift from troublemaker to committed athlete back to that event.

• 'What are you going to do with your moment?'

At a University of Illinois recruiting camp, a coach tossed Dudley the ball and asked that question. Dudley stood up and threw it from about the nine-yard line into the far end zone. He had built that arm alone, using a gym key from his coach to throw at laundry baskets.

• The 3D shoot that started it all

Recovering from a knee injury the summer before college, he saw an 'archery shoot' sign, joined a 3D target course and missed so badly he ran out of arrows. Furious, he drove to a Gander Mountain in Wilmot, Wisconsin, bought another dozen and came back to finish, vowing never to be that bad again.

• An elk earned over 250 miles

Dudley and his friend hunted from August 24 until they took a bull on September 11, logging roughly 200–250 miles on GPS, followed by a three-mile pack-out in multiple trips. He prepares for that moment all year with lifting and shooting, which is why he won't waste the meat.

OTHER RELEVANT

- **Train for the next shot, not the last one**

  Use Dudley's quiver rule after any mistake: say what went wrong, then shift your attention to the next repetition, which is the only thing you can still affect.

- **Try archery even if you never plan to hunt**

  Attia and Dudley pitch it as a lifelong sport, like tennis, that trains focus, patience and emotional control and that parents can share with children. Good coaching or well-structured videos can speed up early progress.

- **Teach through the learner's world**

  When coaching anyone, connect the skill to something they already understand. That's how Dudley got students he'd worked with fewer than a dozen times shooting at levels few competitors reached in his era.

#95–Luke Bennett, M.D.: Emotional, cognitive, & physical demands that make Formula 1 a special sport

Guest: Luke Bennett
Date: 2020-07-08 · Duration: 1:38:31
URL: https://www.youtube.com/watch?v=jhTGGp88uu0

KEYPOINTS

• F1 drivers resist 5–6 G with their necks

In the fastest constant-radius corners, a driver's roughly four-kilo head plus helmet effectively weighs five or six times as much. Attia says the most he has felt in a race car is about 2 G. Bennett, who rode as a passenger in a two-seater F1 car in Mexico, says he couldn't have managed five or six laps. He likens a race to two hours of intense CrossFit with five-to-ten-second breaks, while someone tries to push you off your equipment.

• The cognitive load is as extreme as the physical load

While hitting millimetre-perfect apexes, drivers take engineering instructions over the radio ('solve maths equations') in front of 200–300 million viewers, sometimes without a contract for next season. Cockpits sit so high that drivers can barely see the tops of their tyres or the ends of the front wing, yet they race wheel to wheel. That's why Bennett has sympathy for mistakes like the near-collisions at Monza that fans criticised.

• A weight rule ended a culture of starving drivers

Drivers used to be told to lose as much weight as possible, which led to overtraining, undereating and disordered eating that worried Bennett. After he raised it with the FIA and technical leader Charlie Whiting, the sport set an 80-kilo minimum for driver plus helmet, suit and seat, with ballast added below that. Drivers can now carry a kilo or more of extra muscle, and nutrition is 'not the daily misery it used to be'.

• Singapore is the toughest race physically

Bennett calls it a street circuit with more corners than any other (about 23–25 ninety-degree turns) in tropical heat and humidity. Drivers often lose three to four kilos, and on a race like Singapore may carry a 1.2–1.5-litre drink bottle, about twice the usual amount.

• Drivers are getting younger

Damon Hill was about 30 in his rookie year. Today a 30-year-old couldn't break into the sport. Max Verstappen arrived just after turning 17, followed by teenagers like Lance Stroll and Esteban Ocon. Bennett credits a cultural shift once it was shown to be possible, gaming and simulators, and cars that demand less raw muscle than the brutal V10 era.

• Safety rests on asking why drivers die, not why they crash

Attia recalls Max Mosley saying after Ayrton Senna's death that at the limit of human and mechanical capability crashes will happen, but nobody should die in them. Bennett, initially skeptical of the halo cockpit protection device, counts at least four incidents in F1 and F2 where it prevented a serious head impact. The seven-kilo titanium halo must withstand a load of roughly 10–12 tonnes, about a bus parked on top of it.

• The sport is still dangerous

In the 1960s and 70s, many drivers didn't live to retire; Jochen Rindt is the only posthumous world champion. Bennett notes that side-on impacts with a stationary car remain a major vulnerability, as shown by Anthoine Hubert's death in Formula 2 at Spa after being hit at more than 200 km/h (about 170 mph).

• Women face a pipeline problem, not an F1 ceiling

Only two or three women have raced in F1; one scored half a point in the 1970s. Bennett thinks a woman can absolutely succeed in F1, but the grassroots pipeline is tiny and the junior categories are physically harsh. They also put women up against teenage males whose risk-taking, and as Attia jokes, underdeveloped prefrontal cortex, can be a competitive advantage. He sees the all-female W Series, which his team supports, as a good first step toward finding the outliers.

• Hintsa's model pairs every driver with a coach

Hintsa Performance, where Bennett is medical and sports performance director, looks after about 14 drivers with at least one in every team. A performance coach, usually a sports scientist, travels to every race and trains with the driver in between, covering physical preparation, nutrition and sleep. Bennett calls the medical services 'the glue' that cements those relationships.

EXAMPLES

• Diagnosing his own cancer with a portable ultrasound

Working with Australia's Royal Flying Doctor Service in a remote area, Bennett found his own non-seminoma testicular cancer, which had already spread to his lungs. He notes that this cancer has survival rates above 90%. Treatment brought a cancer-related clotting tendency; his chemotherapy catheter clotted off and caused superior vena cava syndrome, which he spotted in the mirror one morning. He says that being a patient, with the needles, fatigue and parking, made him a more empathetic doctor.

• The Flying Doctor's territory

Western Australia is about the size of Western Europe, with roughly two million people, most of them in Perth. A doctor, nurse and pilot fly patients to the city, and many are half a day to a day from specialist care. Funding planes is cheaper than building hospitals across the state.

• More telemetry than Apollo 11, but no heart rate

Attia points out that an F1 car sends back more data on tyre pressure than mission control received from Apollo 11, yet teams don't know the driver's heart rate, heart-rate variability, electrolytes or fluid status. Bennett says new monitoring devices compatible with the regulations were being trialled.

• Learning a new circuit

Good drivers are close to race pace within about six laps of a new track, then find another tenth or two over the weekend. Before each race they spend a day or half-day on the team simulator, partly to relearn even familiar tracks in this year's car.

OTHER RELEVANT

- **Protect sleep and health against brutal travel**

  With 21 races in 2019, more planned and around 40 nights a year in his own bed, Bennett says he could only sustain the job because he loves the sport. Coaches manage drivers' jet lag and recovery individually.

- **Emotional control is a performance skill**

  Anger rarely helps in the car or in front of the media. Bennett and Attia treat emotional regulation as part of driver preparation, alongside physical and cognitive training.

- **Basic endurance training gives a coach empathy**

  Bennett, who started triathlon in 1988 and struggled through a couple of Ironmans, says knowing the chore of a hard morning session and the difference between aerobic and anaerobic work helps him, while he leaves the technical coaching to his coaching director.

#96–David Epstein: How range of experience leads to better performance in a highly specialized world

Guest: David Epstein
Date: 2020-07-08 · Duration: 2:37:10
URL: https://www.youtube.com/watch?v=uwSYROsue5o

KEYPOINTS

• The '10,000-hour rule' rests on thin data and hides huge variation

The famous study looked at 30 violinists at a Berlin music academy, split into three groups. The top group averaged about 10,000 hours of practice by age 20. Its author, Anders Ericsson, wouldn't call it a rule. David Epstein, author of 'The Sports Gene' and 'Range', says the average conceals the spread. When the researcher Tim Lightfoot asked about the variance, he was told it didn't matter.

• Chess shows how wide the range is

Reaching international master status takes an average of 11,053 hours, but some players got there in about 3,000 hours and others still hadn't after 25,000. Epstein would put a 90% confidence interval for mastery somewhere between 1,000 and 40,000 hours. In many sports, elite athletes logged far fewer, often 4,000–6,000. The deliberate-practice framework assumes 'monotonic benefits', that more practice always means more skill for everyone, which ignores individual differences.

• Some 'genetic' talents are learned perception

Epstein expected that hitting a fastball at about 100 mph needed exceptional reflexes, but it doesn't. The ball arrives too fast for any human reaction, even in the top 0.01%. Elite hitters instead learn to read cues before the pitch is released. Muhammad Ali's measured reaction time, about 150 ms, was very fast but not unique.

• Kind and wicked learning environments

Psychologist Robin Hogarth coined the terms. In a kind environment, goals are clear, patterns repeat and feedback is immediate and accurate, as in golf, where the ball is always static. In a wicked environment, the rules are unclear, feedback is delayed or misleading, and narrow experience can make people more confident without making them better. Most of life, including medicine and business, is more wicked than golf.

• Short-term success can undermine long-term learning

At the US Air Force Academy, cadets are randomly assigned to calculus professors for three years in a row and all sit the same committee-written exams. Over a decade, with about 100 professors and 10,000 students, the professors whose students did best in Calculus I had students who did worse in the next two courses. Teaching to the test boosts quick performance but undermines deep understanding.

• Struggle beats procedure

Students drilled in procedures would check 500 + 200 = 700 only by computing 700 " 200, never 700 " 500. Interleaved, 'desirable difficulty' practice feels slower and students don't feel they're learning, but in one randomised study it improved results by 0.83 standard deviations, moving a 50th-percentile student to roughly the 80th.

• Tiger Woods is the exception; Roger Federer is the rule

Tiger was given a putter at seven months, showed off his swing on 'The Mike Douglas Show' at two and was the world's best at 21. Federer played basketball, badminton, skateboarding, swimming, wrestling and football, and declined to move up levels so he could stay with friends. His mother, a tennis coach, refused to coach him. Epstein says Federer's 'sampling period' is the more common route to elite success.

• Early specialisation may burn out the desire

Tennis academies can produce players who are great at 16 but have lost the will to keep going, an 'above-the-neck' effect as much as a physical one. Even Tiger said in 2000 that his father never asked him to play; Tiger always asked.

• Match quality matters more than an early start

Herminia Ibarra studies 'match quality', the fit between your interests, abilities and work, which predicts performance and burnout. Her finding: 'We learn who we are in practice, not in theory.' Testing and switching careers is a feature, not a failure.

• Know when to drop your tools

Firefighters who died fleeing wildfires were often found still carrying chainsaws, drip torches and packs, sometimes 100 feet from safety. Their tools were central to their identity. Epstein urges experts to ask which habits help 99% of the time but could kill them the other 1%.

• Bad science thrives on uncritical dogma

Attia argues that 90–95% of the roughly 100,000 papers added to PubMed each month serve no purpose. He cites John Ioannidis's 2005 paper 'Why Most Published Research Findings Are False' and quotes a senior scientist who said 19 of 20 people who test hypotheses for a living can't really do it. Both men see the 10,000-hour story as an example of a catchy claim outrunning its evidence.

EXAMPLES

• The Challenger decision

NASA had launched in temperatures as low as 53°F. On the morning of the January 1986 launch it was in the 30s. Morton Thiokol's initial 'don't launch below 53' recommendation rested on 'we've done 53 before', which backfired when NASA pushed for quantitative data. Engineers used to having data didn't know how to argue from qualitative evidence.

• Frances Hesselbein

She took her first professional job at 54, with one semester of junior college, and became CEO of the Girl Scouts during a late-1960s collapse in membership and turned it around. She now has 23 honorary degrees and still works weekdays in Manhattan at 103.

• The 10,000-hour golfer

Dan McLaughlin quit his job to follow the 'rule' and became a pro golfer with Ericsson consulting. He got about 7,000 hours in, improving a lot at first, but never turned pro. Epstein notes that he never predicted an exact number of hours, only huge individual variation.

- **Ayrton Senna at Monaco**
  Both men call Senna's 1988 Monaco qualifying lap, 1.5 seconds clear of the field, inexplicable. Attia likens it to winning the Olympic 100 m by a second and a half.

OTHER RELEVANT

- **Sample broadly before specialising**
  Give children a sampling period and let their desire, not a parent's plan, lead.
- **Choose desirable difficulty**
  Mix up practice and test yourself, even though it feels slower.
- **Experiment to find your match**
  Short trials of work tell you more than personality quizzes.
- **Audit the tools you won't drop**
  Identify the habits and frameworks you rely on that could fail you in a new situation.

#86 – Damon Hill: Overcoming loss, achieving success, and finding one’s identity

Guest: Damon Hill
Date: 2020-07-07 · Duration: 2:26:59
URL: https://www.youtube.com/watch?v=F2bxnVD1I1E

KEYPOINTS

• This is a human story told through racing

Attia frames the conversation around Hill's autobiography Watching the Wheels, a roughly 360-page book with only one chapter on his 1996 world championship. The rest deals with loss, depression and identity. Hill wrote it partly for readers who have struggled. He wanted to show that success in sport or anywhere else is 'never plain sailing', and not to gloss over the difficult parts.

• Drivers of his father's era raced against stark odds

Graham Hill, a two-time world champion, raced when grids had about 26 drivers and losing two in a season was not unusual. Hill calls that roughly a 12-to-1 chance of not surviving each year, compounded year after year. His christening was attended by racing figures including Stirling Moss and Bruce McLaren. That shows how much of the sport's world made up his childhood.

• Losing his father at 15 left lasting, unresolved trauma

In November 1975 Graham Hill died flying his own plane, about six months after retiring, when he was 46. Damon was 15, his sisters 16 and about 11. He still vividly remembers his mother screaming. He says going back to that moment brings back the same physical sensations, so he chooses not to replay it in detail. He didn't recognise these as unresolved issues until a couple of years after he stopped racing.

• He felt a quiet dread of matching his father's lifespan

Hill describes a 'creeping anxiety' of following a pattern. If he was different from his father, he had to live longer than him, which meant past 46. That fear sat in the background of his career and his choices.

• Motorbikes came first, and cars were a pragmatic switch

Shortly after his father's death, a family friend invited him to watch bikes at Brands Hatch. His mother let him race, and he started winning around 1983–84. Money was always short. Only Barry Sheene really made a living from bikes, and the alternative was risking the Isle of Man, so cars became the practical route. He preferred bikes because the rider is 'the projectile' and 'the acrobat'.

• He became an F1 rookie at 32 against the odds

At 29 he had lost his racing drive. He had just bought a house as mortgage rates hit 17%, and his first child, Oliver, was born with Down syndrome. He kept going anyway. He became the Williams test driver in 1991–92, learning the active-suspension cars. When Mansell left after winning in 1992, he stepped into a race seat for 1993 alongside Prost.

• Imola 1994: the weekend Senna died

After years of relative safety with carbon-fibre cars, Rubens Barrichello crashed badly and Roland Ratzenberger was killed in qualifying. Then Senna, Hill's teammate, died. Hill had driven past the scene of Ratzenberger's crash and knew 'that was not a good one'. Afterwards he went through the data with engineers. He says Senna chose a bumpier inside line through Tamburello than he would have. Hill also says Senna had talked to his wife about wanting a family. In Brazil the country stopped for three days, and over a million people lined the streets.

• Depression is a signal to change direction

Hill sees depression as 'a way of telling us we're going the wrong direction'. It is a drain of energy that starts to drag you down, telling you to reorient. He had a 'half-cooked' identity. He was racing partly for the family name, and he had to separate that from what he wanted for himself. Therapy and that reframe helped him.

• He worked to break the cycle for his own children

Attia's summary: Hill lost his father to death, but his children risked losing theirs emotionally if he didn't deal with it. Hill says you can't rebuild a family that died, but you can choose what you pass on.

EXAMPLES

• Suzuka 1994: an out-of-body lap

Going into the penultimate race, Hill had to beat Schumacher to keep the title fight alive. Exhausted in the wet, he called out to Senna for help. He describes the next lap as an out-of-body experience. Attia compares it to Senna's description of his 1988 Monaco qualifying, when he felt the car was driving itself.

• Adelaide 1994: losing the title by a point

Hill tried to pass a damaged Schumacher on the inside. They touched, and Schumacher crashed out, but Hill's suspension was broken and Schumacher won the championship. Hill still calls his own move clumsy and has never complained publicly. He notes he didn't know Schumacher's car was already probably terminally damaged. The lowest low and the highest high had been about a foot apart.

• Uncomfortable with praise

Attia found a clip of Hill on the TV show This Is Your Life and says his discomfort at being praised is 'palpable'. He asks whether that is simply Hill's manner or something deeper, tied to the inadequacy Hill writes about.

• Quitting at Suzuka 1999

By 38, racing in the wet was mentally and physically exhausting. He wanted to stop at the British Grand Prix, but Eddie Jordan had a contract to keep. In his final race he decided he was finished and retired the car. When the team asked what was wrong with it, he told them nothing.

• Hazard versus risk

An engineer reminds him that the hazard is what can happen, while the risk is how likely it is. Flying wheels have killed very

few people, but the halo removed that hazard altogether. Hill argues that a fluke can kill even when 99 out of 100 drivers would survive the same crash, as with Senna.

OTHER RELEVANT

- **Unprocessed loss can resurface years later**
  Hill's experience suggests grief pushed aside by a demanding career often shows up once that career ends. Getting help can be a gift to your family as well as to you.
- **Untangle whose goals you are chasing**
  Separate what you pursue for a parent, family name or image from what you actually want. Hill sees that confusion as central to the identity crisis that followed his retirement.
- **Treat low energy and depression as information**
  Hill's view is that depression signals a need to change direction. Read it as a prompt to reorient, with professional support, rather than something to grind through.
- **Persistence through bad timing**
  At 29 he was out of a drive, under financial strain and facing a new family challenge, yet he became world champion. Attia sees it as chance favouring a prepared mind.

#78 – Sasha Cohen: The price of achievement, and redefining success

Guest: Sasha Cohen
Date: 2020-01-14 · Duration: 2:13:48
URL: https://www.youtube.com/watch?v=ozDGp7XG4Xo

KEYPOINTS

• Cohen went into Turin 2006 as a favorite but physically underprepared.
It was her second Olympics, after finishing fourth in 2002 at 17. Six months before Turin she had felt in the best physical and mental shape of her life. Over that winter, injuries and equipment problems piled up, and she arrived feeling like she was 'walking a pirate's plank'. Women's figure skating comes at the very end of the Games, so skaters often stay away from the Olympic Village and skip opening ceremonies to protect their focus.

• She led after the short program despite not having skated it cleanly in weeks.
Because of her injuries she had struggled even to get through full run-throughs. Landing all three jumping passes and seeing her name in first place felt like a triumph, but a 'temporary victory'. She strained her leg during that skate and, with her coach and physical therapist, chose to skip her 40-minute practice slot the next day, which confused observers because no one skips practice.

• Small doubts in the warm-up shook her confidence in a sport decided by milliseconds.
In the five-to-six-minute warm-up before the long program she fell on a triple flip and a triple lutz, jumps she rarely missed. She explains that in figure skating, hesitating for a millisecond throws off a jump's timing. She buried the doubt and broke the moments before the skate into tiny tasks: put on makeup, put on your pants, get on the bus, jog around the arena.

• Her coach taught her 'you don't fall, you bounce'.
She fell on the opening triple lutz combination and missed her second jump. Attia marvels that after a fall a skater lands in an unpredictable position yet has to rejoin the choreography and the music right away. He notes that a mistake in tennis does limited damage, while in skating one error can cost everything. Cohen got through the rest with word-by-word self-coaching ('set the shoulders, pull back, snap') and let herself feel the emotion of Romeo and Juliet.

• In skating, a medal contender who finishes second has 'lost the gold'.
Cohen won silver because the top three all made mistakes on a messy night. She says that at another Games she might have placed eighth or tenth. Instead of hearing congratulations, she faced questions about her dreams being dashed. She could get through only 30–40 seconds of each of eight interviews before crying, then went through drug testing, an exhibition skate and the closing ceremony, feeling like 'a porcelain doll that's shattered and glued' back together.

• Winning doesn't settle the question of identity.
Cohen once assumed that a perfect skate and a gold medal would have left nothing to resolve. Yet she notes that multiple gold medalists like Apolo Ohno and Michael Phelps still struggle, because the moment passes and a new way to prove yourself is needed. Attia is struck at how quickly the public discounted Phelps when two of his butterfly world records fell in 2019.

• Athletes in her sport get a tiny window, and the public often treats them as resources.
Most Olympians attend only one Games and very few win medals. In women's skating and gymnastics there is a minimum age of 15, while some Russian skaters peaked at 12 to 14 and were past their best by the time they were eligible. Attia cites Missy Franklin, who was criticized in 2016 after her dominant 2012, as an example of toxic fan expectations.

• Cohen channeled a diagnosis of ADHD into figure skating.
She went through three elementary schools in Pasadena. One teacher thought she was deaf, and another gave her mother a book on juvenile delinquents. Her mother chose not to medicate her and put her in gymnastics at five, four hours a day, with 100 V-ups and 300 jumping jacks. A skating birthday party introduced her to gliding, which never felt like a sacrifice to her.

• Retiring takes away both the highs and lows that defined an athlete's life.
After stepping away from competition she toured, took acting classes and guest-starred on CSI. She came back for the 2009–10 season and then left. Life felt pleasant for about a year and then 'slack'. She thinks the commonly cited figure that 80% of former Olympians experience some form of depression may be an undercount, because athletes are trained not to admit weakness, even to themselves.

• She chose to be 'the tadpole in the ocean'.
Rather than staying a big fish by coaching or judging, she enrolled at Columbia alongside classmates a decade younger, went by her legal name Alexandra, and moved into finance as 'the next competitive thing'. She eventually found that climbing the same kind of mountain felt hollow. She came to see that success is self-defined, fleeting and not the same as happiness.

EXAMPLES

• Scoring and program structure at the time
The short program ran 2 minutes 50 seconds, with three jumping passes, footwork, a spiral sequence and three spins. The long program lasted just over four minutes, with up to eight jumping passes. Under the post-6.0 system scores had no cap, so skaters only knew how good a score was by comparing it with others.

• Booed in Moscow
Although her family has roots in Odessa, Russian crowds booed her whenever she competed against their favorite, Irina Slutskaya. Without a Russian rival in the event, the same fans supported her.

• The Weight of Gold and Steven Holcomb
A documentary on athletes' mental health that Cohen took part in began as a comeback story about bobsledder Steven Holcomb. He was interviewed 12 days before he died by suicide. He had been isolated at the Lake Placid training center, losing his vision, and expected to end up in his mom's basement even if he won.

• Two weeks as the peak of a career
Attia points out that for a typical one-time Olympian, the peak of years of work lasts two weeks. He finds it hard to believe that this is unrelated to high rates of depression afterward.

OTHER RELEVANT

- **Widen what counts as success.**

  If second best in the world counts as failure, success becomes so narrow that even reaching it gives only a short high, like eating a piece of chocolate cake. Cohen suggests building life around relationships, meaningful work and well-being rather than fleeting peaks.

- **Enjoy the rare season while you're in it.**

  Her advice to her 15-year-old self is to enjoy a body trained to an extraordinary level and the Olympic experience, because later you'll be winded on a jog. She thinks that would matter more than squeezing out extra results.

- **Let go of trophies that keep you tied to an old identity.**

  Her silver medal sits on her mother's dresser, and she left both Olympic rings with her mother, who gave more than 15 years to driving her to rinks and therapists. Expecting a son, she hopes he'll play sports at a healthy level and try debate, guitar and wilderness classes.

#82 – Mark Messier: Leadership, personal growth, and performing under pressure

Guest: Mark Messier
Date: 2020-01-14 · Duration: 2:10:00
URL: https://www.youtube.com/watch?v=wFOVq6uEJHk

KEYPOINTS

• Twenty-six professional seasons and six Stanley Cups

Messier turned pro at 17 in the World Hockey Association, with Indianapolis and then 52 games for Cincinnati after Indianapolis folded. He then played 25 NHL seasons and retired in his mid-40s. He won five Cups with Edmonton and one with the New York Rangers, and is the only player to captain two different teams to the Cup. Attia, who grew up in Toronto idolising him, says the episode is less about stats than about how a leader matures.

• Late development and natural talent both matter

Messier cites NHL players who didn't start until 14 or 15 as proof that you don't have to play 365 days a year from age two. You need 'god-given talent', then the desire to hone it at the right time, and many kids who do everything right still never make it. He grew from about 5'9" and 150 pounds at 15, when he made junior, to 6'1" and around 200 pounds by the end of junior.

• His father and older brothers taught him what a teammate is

His father was a tough defenceman, with the Portland Buckaroos among other teams, who protected his teammates and later became a teacher. Young Mark tagged along to his practices from age three or four. From 12 to 14 he was stick boy for his brother's junior team, which gave him a close view of team culture. He traces his later leadership to that apprenticeship.

• Losing in 1983 taught the price of winning

The young Oilers, average age about 20 to 23, were swept by the Islanders, who had won three straight Cups. Walking past the Islanders' dressing room, they expected champagne. Instead the champions sat quietly at their stalls covered in ice packs. 'That told us that we weren't paying the price that we needed to.' Messier says they had been playing checkers while the Islanders played chess. Edmonton beat them in the 1984 final and won again in 1985.

• Gretzky was a different kind of player

Gretzky was chasing record books, scoring over 200 points in a season several times (215, 212, 205), and 50 goals in 39 games. Messier says the Oilers' approach was to 'grab an oar', fill a need and follow Wayne. They were all superb skaters, and coach Glen Sather let them abandon the 'tabletop hockey' of the era for the weaving, free-flowing style that resembles today's game.

• The 1988 trade and the 1990 Cup without Wayne

Gretzky's trade in July 1988, after four Cups in five years, stunned the team. They regrouped, and in 1990 Messier led Edmonton to another Cup. Messier says winning without Wayne 'never even crossed our minds'. They were disappointed he wasn't there to share it. He calls those Oilers perhaps 'the best team that probably ever laced up skates'.

• New York at 30: a pressure cooker he wanted

Coming off five Cups in seven seasons and at the peak of his career, Messier wanted a new challenge. The Rangers hadn't won since 1940. He deliberately immersed himself in the city and its culture, while keeping his focus on 7 to 10 p.m. on game nights. Missing the playoffs in 1992–93 was a painful low before 1994.

• Leadership grows with age and introspection

At 18, he says, hockey needs all your attention, but it wasn't who he was as a person. At 30 in New York he had time to think about what success required: how to be a good citizen and contribute to the community. That 'doesn't happen when you're 18 or 20', he says, but over time as you evolve.

• He left the game fulfilled

Messier contrasts athletes who can't get over no longer being 28 with those who move on. Retiring in his 40s after 26 pro seasons, he felt he had done everything. He says a forced retirement at 25 through injury would have been far harder.

EXAMPLES

• The 1994 Game 6 guarantee

Down 3–2 to the Devils in the conference final, Messier told reporters the Rangers would win Game 6. He says it was meant for 'our 20 guys on the bus', to restore the confidence they had shown all year, not 'for 12 million New Yorkers'. He then scored a hat-trick, the Rangers won Game 7 on Stéphane Matteau's overtime goal, and they went on to end their 54-year drought.

• Steve Smith's own goal, 1986

In a tied third period against Calgary, defenceman Steve Smith's pass from behind his net went in off his own goalie, and Edmonton was eliminated. Messier has never rewatched the game. When the Oilers won the next Cup, Gretzky handed it first to Smith. Attia contrasts this with Andrés Escobar, the Colombian defender who was murdered after scoring an own goal at the 1994 World Cup.

• Terrified of losing

Before clinching games, Messier says, thinking about winning the Cup was 'overwrought with fear' of giving a dangerous opponent like the Islanders a way back into the series.

• Bobby Orr and Guy Lafleur

Attia tells the story of the Bobby Orr–signed stick on his childhood wall. Messier recounts the story that Guy Lafleur sat in full gear in the Boston Garden at 2 p.m. smoking cigarettes, then scored a hat-trick, and says he knew how much pressure performing in that building meant.

• Life after hockey

Messier now commutes into New York most days by train and subway, and still poses for selfies. He leads the Kingsbridge National Ice Center project in the Bronx to expand kids' access to hockey. He ran the New York City Marathon in 2011 for the

10th anniversary of 9/11. He weighs about 215 pounds, close to his playing weight, though with less muscle.

OTHER RELEVANT

- **Avoid early burnout in young athletes**
  Find a balance that is healthy for the family and gives the child the best chance at their own dream. Passion and late development can still lead to the top.
- **Learn from what champions are willing to endure**
  The ice packs in the Islanders' room were a lesson in what it really takes. Ask what price the best in your field pay, not just what they achieve.
- **Speak to the room, not the crowd**
  Messier's guarantee was aimed at restoring his own team's belief. Leaders' words should serve the people who have to deliver.
- **Keep training for how it makes you feel**
  As a player, he needed 10–15 minutes just to reach the concentration to train. In retirement the three-hour windows disappeared with kids, so he trains loosely two to four days a week. He keeps doing it because he feels more awake, alive and energised.

#60 – Annie Duke: How to improve decision making, learning, & apply ‘backcasting’ for future success

Guest: Annie Duke
Date: 2020-01-12 · Duration: 2:35:34
URL: https://www.youtube.com/watch?v=ca7TptT9VTI

KEYPOINTS

• Poker models real decisions better than chess

In chess both players see the whole board, so in principle a loss traces back to a mistake. Poker adds hidden information and luck, which is why Attia, who has often had to explain this to his wife, thinks it matches medicine, where you almost never have complete facts. Duke, author of Thinking in Bets, agrees that the gap between what you know and what's true is the essence of most life decisions.

• 'Resulting' means judging a decision by its outcome

Duke's term describes working backwards from the quality of the outcome to the quality of the decision. Judging a decision properly requires knowing the possible outcomes, how likely each was and how much you'd prefer each, compared across the alternatives you didn't choose. Most people take the shortcut instead.

• Learning has to cover all four quadrants

Picture a two-by-two of good or bad decisions against good or bad outcomes. Attia argued the most painful square is a good decision with a bad outcome. Duke pushed back that people naturally dig into bad outcomes; what nobody examines is good outcomes. 'We're never having the my-life-is-great conference' to ask whether a win came from skill or luck.

• Fear of the 'idiot quadrant' pushes people to the status quo

A consensus decision that turns out badly earns 'tough luck'. A non-consensus decision that turns out badly earns 'idiot'. As a result, people default to doing nothing over doing something, demand more certainty than needed, seek sign-off and avoid innovating. Duke argues that leaders who only review failures, as in medicine's weekly morbidity and mortality conference, reinforce this cover-yourself behaviour.

• Bill Belichick earned the right to be unconventional

Attia, an admitted Belichick obsessive, and Duke discuss how the Patriots coach increasingly made calls like going for it on fourth-and-5. Duke notes that came only after two Super Bowl wins, once fans would tolerate decisions they didn't understand. Credibility buys room to leave the status quo.

• Look for luck in your wins too

Nothing happening after Y2K could mean the preparation worked, the threat was never real, or the effort was wasted. There's also a fourth possibility: the downside was severe enough that hedging was correct either way. Attia raised D-Day: was Eisenhower simply lucky with the weather? Without examining the 'win', you can't tell.

• Four levels of skill, and a fourth level of thinking

Duke learned to swim at 31, swam twice a day and filled journals with free-body diagrams. She describes moving from unconsciously incompetent to consciously incompetent (knowing why you fail, through ideas like Archimedes' principle and Bernoulli), then consciously competent, then unconsciously competent. The matching thinking skill at the top is refusing to accept a well-played win without asking whether there was a better line. Attia admitted he had 'never once had a level-four thought'.

• Wide skill gaps hide mistakes

When you're far better than your competition, sloppy thinking still wins, which Duke calls a soft landing. Swimming is similar: you can swim badly for years, while a bike punishes imbalance immediately. Where feedback is gentle and delayed, deliberate self-examination matters even more.

• Quit fast, and try many things that cost little

Duke argues we over-praise sticking with things and ignore opportunity cost. Her approach is to try lots of things with little downside ('go try out piano'), drop the ones that are negative expected value for happiness, health or money, and commit only to what you love. Poker players are naturally comfortable folding.

EXAMPLES

• Pete Carroll's Super Bowl pass

Down four to the Patriots at the end of the 2015 Super Bowl, Seattle passed instead of handing off to Marshawn Lynch. Malcolm Butler intercepted and the play was called the worst in history. Duke and analyses such as FiveThirtyEight's argue it was a sound call with a bad outcome. Attia, a Patriots fan, recalls screaming at his TV, but agrees that Carroll was thinking only about winning, not about defending the call at a press conference.

• Attia loses about one arrow a day

Shooting at softball-sized targets from 60–70 yards, Attia can list a hundred reasons for every miss but has never examined a perfect shot. Duke said that's typical: roughly 90% of his reflection goes to the 10% of shots that went wrong.

• Erik Seidel's post-game talk

Duke says the biggest difference between fast and slow improvers is how they explore what might have happened. Listening to Seidel review a tournament, you couldn't tell whether he won, because he explores every alternative line and bet size. Players who improve slowly dwell on someone 'sucking out' on them.

• How Duke got to poker

Her brother deferred Columbia to study chess with a grandmaster in New York, started playing poker and lost his college savings before eventually doing well. Duke, on a National Science Foundation fellowship in cognitive science at Penn, later followed him into the game. She says she'd be crushed by today's analytics-driven professionals.

OTHER RELEVANT

- **Hold a 'what went right' review**
  After a good result, ask whether it came from your decision or from luck, and whether a better option existed. Give it the same scrutiny as a failure, and reward people for good process on bold calls, not just outcomes.
- **Backcast your physical future**
  Duke said she didn't coin 'backcasting'. Attia applies it to exercise: most people exercise for looks, mood or eating freedom, but the better reason comes from imagining how you want your body to work the day before you die, his 'Centenarian Olympics'. Train backward from that.
- **Run a pre-mortem**
  Before committing, imagine the plan has failed and list the reasons. Pairing that with backcasting makes the hidden assumptions behind a forecast visible.
- **Read The Success Equation**
  Duke strongly recommends Michael Mauboussin's book on separating luck from skill across sports, investing and life as a companion to the four-quadrant thinking discussed here.

#57–Rick Rubin: collaborating with the greatest living musicians, & his personal weight loss story

Guest: Rick Rubin
Date: 2020-01-12 · Duration: 3:03:52
URL: https://www.youtube.com/watch?v=stulZl8eqM8

KEYPOINTS

• Rick built Def Jam as a dorm-room/hobby operation that rewired popular music.
As a teenager obsessed with New York hip-hop's birth, he treated production as play before it was a career. Early Def Jam work with LL Cool J, the Beastie Boys, and Run-DMC helped move hip-hop from a local scene to a global commercial force, eventually partnering with Columbia when the majors could no longer ignore the sound. The through-line from hobbyist to Time-100 influencer was obsessive listening more than industry schooling.

• Deal math taught him to protect artists' economics early.
He walks through gold/platinum/diamond thresholds and how royalty percentages of retail vs wholesale diverge. Unusual artist-friendly splits mattered because he was still close enough to the culture to care what happened to the music after the advance cleared—late-80s lessons he carried into later American Recordings work. Diamond-scale success made those early contract lessons look prophetic rather than naive.

• Geography shaped which rap lineages he understood firsthand.
New York's scene differed from LA's gang-rooted gangsta rap emergence; Rick says he rarely bumped into that world during his New York years. Public Enemy was his north star in that era, and he is careful about timelines when people casually lump N.W.A and Public Enemy into one undifferentiated '80s moment. That geographic humility keeps him from cosplaying expertise about scenes he did not live.

• Longevity in bands often hinges on not dying—literally or relationally.
He notes how many peers who could have been Motley Crue-level acts burned out through overdose or interpersonal detonation. Survival itself becomes an underrated artistic skill; the catalog only compounds if the humans remain intact enough to keep making it. He has watched genius paired with chaos enough times to treat sobriety logistics as creative direction.

• His producer role is creating space for artists' genius amid pain and addiction cycles.
Working with everyone from Johnny Cash to Chili Peppers to Adele, he describes listening for the true song underneath chaos. Helping artists through depression and substance storms is not separate from the job—it is often the job that makes the recording possible. Cash's late voice is the exhibit A he returns to when people equate production with stacking more tracks.

• Rick's own health story includes obesity, depression, and a radical recomposition.
He recounts a shake-heavy phase (~120 calories each) plus a savored daily apple that let him stay near ~1,400 calories while still eating dinner. Across about 14 months he lost roughly 135 pounds, crossing below 200 and meeting surf/fitness peers like Laird Hamilton along the way. Savoring the apple was mindfulness training disguised as a diet hack—attention as satiety.

• Fitness role models in their 70s and 80s recalibrated what aging permitted.
A friend, Don Wildman, still knocking out large sets of pull-ups on the beach into old age (Rick recalls a striking number around age 80) made 'too late' feel like a story, not a law. Body composition became part of creative stamina, not vanity adjacent to the studio. Seeing older athletes jacked and capable rewrote Rick's prior that decline was strictly chronological.

• An emergency heart surgery became another before/after line.
The scare forced the same seriousness he once reserved for artists' crises onto his own mortality. Recovery reframed scheduling, stress, and what 'urgent' means when the body has already called once. Post-surgery, calendar defaults flipped from 'can I fit this?' to 'what does this cost my heart?'

• Shangri-La studio carries living music history.
The Malibu space where Bob Dylan helped establish a studio culture in the 1970s—complete with Dylan's old trailer lore—hosts rehearsals and interviews in a lineage Rick is consciously stewarding, not merely renting. Stewarding Shangri-La means protecting a feeling in the room, not only the gear list.

• Taste across decades is a humility exercise.
He wonders aloud whether tomorrow's listeners will hold Taylor Swift the way his generation holds the Beastie Boys, and how Bonham-already-dead Zeppelin fandom differs from watching careers in real time. The point is less ranking than recognizing how incomplete contemporary judgment is. Holding canon loosely lets him keep working with new artists without nostalgia as a prison.

EXAMPLES

• LL Cool J 'Radio' via Columbia partnership
Still roughly 20–21 years old while negotiating with the world's biggest label—an apprenticeship conducted at full commercial scale. Age and leverage rarely line up that cleanly in modern label deals.

• ~135 lb loss in ~14 months
Shake protocol plus one apple; met Laird after ~90 pounds down—proof-of-change that paralleled his artistic reinventions. The same discipline he asked of artists finally applied at home.

• Don Wildman pull-ups in old age
An embodied argument that strength training and VO2 culture need not expire at midlife. Those pull-ups did more persuasive work than any abstract longevity lecture.

• Johnny Cash American Recordings arc
Late-career stripped recordings as the canonical example of Rick's space-making producing more truth than maximal production. Stripped arrangements made space for mortality and faith without sermonizing.

• Beastie Boys / Run-DMC bridge era

Cross-genre collisions that made hip-hop unavoidable for rock audiences and vice versa. Those crossovers were cultural infrastructure, not just chart tricks.

OTHER RELEVANT

- **Protect the humans if you want a long catalog.**
  Addiction and relational explosions erase future albums; producer-as-caretaker is not soft, it is strategic. Build recovery plans into tour and studio calendars before the crash.
- **Treat body recomposition as creative infrastructure.**
  Rick's weight loss and heart scare argue that studio stamina has a physiologic substrate. Lift, sleep, and eat for multi-decade output, not next quarter's pants size.
- **Negotiate like someone who still loves the music.**
  Royalty structure literacy protects artists when enthusiasm would otherwise sign anything. Learn how money actually moves before you sign enthusiasm into a bad deal.
- **Hold contemporary taste loosely.**
  Decades re-rank canons; make what is true now without demanding immediate consensus. Make the record true now; let history argue later.

#56–Jocko Willink Part 2 of 2: Sleep, fasting, kids, discipline, ownership, & the impact of war

Guest: Jocko Willink
Date: 2020-01-11 · Duration: 1:31:44
URL: https://www.youtube.com/watch?v=p3hZgedgiDw

KEYPOINTS

• 9/11 sent Jocko back to the teams

Jocko spent 20 years as a Navy SEAL and commanded SEAL Team Three's Task Unit Bruiser in the Battle of Ramadi. On 9/11 he was in college at the University of San Diego, working toward his commission. When the second plane hit, he knew 'we're under attack'. Within a day or two he was begging a senior officer to send him back to a SEAL team. He returned in spring 2003, about six months after the Iraq invasion, and took over a platoon preparing to deploy.

• Insurgents exploited a weakness: we care about casualties

Drawing on accounts of the Soviet war in Afghanistan, Jocko says you cannot beat an enemy who doesn't care about losses in a war of attrition. They learn that 'you can kill 200 of us and we'll kill one of you', and eventually the side that values life grows tired.

• The principles of combat don't change with terrain

Jocko visited Afghanistan but didn't fight there. Bruiser veterans who later went told him the geometry was the same. In Ramadi, streets were the low ground and buildings the high ground. In Afghanistan, valleys and peaks. Either way you dominate the high ground and get good angles, only over greater distances.

• ISIS made a strategic error by becoming a conventional army

With vehicles, flags and uniforms, ISIS fought like an inferior nation-state rather than an insurgency. Jocko estimates around 50,000 of its fighters were killed as Ramadi and Mosul were retaken. Asked where he would take his family in Iraq, he says Ramadi, then Baghdad.

• Civilians are disconnected from 20 years of war

Jocko recalls Roger Hayden, a SEAL he looked up to, who came home from Vietnam to no protests and no attention. He argues that today's civilians are similarly separated from the wars. Predicting who the US will fight in 25 years is nearly impossible, but machines will play a growing role.

• Why people distrust machines more than teenage drivers

Huge numbers of people die in car accidents, yet one Tesla crash makes the front page. We trust a 16-year-old driver but not an autonomous system. Jocko expects the same tension over machines in warfare.

• Sleep is short, steady and probably partly genetic

At home in San Diego Jocko goes to bed around 11 after jiu-jitsu (home by 7:30–8), his biggest meal, time with his kids and some work. His alarm is set for 4:30, and about half the time he wakes on his own between 4 and 4:30 feeling fine. If he goes to bed at 9:30, he wakes at 3:30. His oldest daughter barely slept in high school, while his wife sleeps a lot. He suspects genetics and hasn't tried a long sleep-extension experiment. Attia suggests they discuss it with Matt Walker.

• Ownership and free will

Jocko used to believe absolutely in free will. Now he calls himself 'a free-will agnostic', maybe heading for atheist. Sam Harris has told him free will and extreme ownership align. For Jocko, it is simple: if you want to do something, do it, and if you're making excuses, own them, up and down the chain of command.

• Lessons for kids belong at the kitchen table

Jocko wrote children's books to put the 'very clear, very simple', timeless lessons kids need to become good humans in one place. His children saw how crushed he was when his best friend died, which he thinks showed them he is human. He hides no mistakes. When he messes up he laughs and says 'I'm an idiot'. He only lets himself get angry at printers, because they have no feelings.

EXAMPLES

• Attia's Chesapeake Bay Bridge swim

Attia trained specifically for the 4.5-mile swim between the two bridge spans, aiming for the top ten. Swimmers who drift outside the spans are pulled out. Struggling in the current, he told himself to 'put your head down and swim'. His wife still tells the story of how furious he was on the beach. He uses it to separate quitting a failing plan from quitting in a moment of weakness.

• The day Jocko didn't make it out

Paddling out with his best friend on a huge day at Ocean Beach, San Diego, Jocko didn't make it through the surf. He concedes he 'could have paddled more' and sees it as no different from missing a deadlift rep.

• Attia's apology

Attia describes snapping at his kid ('how many times have I told you to turn off the light?') when he was really upset about something else. He went back to ask whether that tone was necessary. Apologising is new for him, while Jocko says it comes easily.

• The 4:30 a.m. 'routine'

Asked by a TV producer for detail about how he wakes at 4:30, Jocko joked through a fake yoga-and-meditation routine. The real answer: the alarm goes off and he gets out of bed.

• Fasting and dark chocolate

They compare multi-day fasts. Jocko, who considers himself a seasoned faster, found a recent one humbling until he turned the corner on day four. Attia says that if you can get to day three feeling good, five comes easily. Jocko reaches for 72% chocolate when indulging. Attia is satisfied by a few squares of 80–90%.

OTHER RELEVANT

- **Separate strategic quitting from weak quitting**
  Changing a plan that isn't working while keeping the goal is sound. Stopping because it hurts, when you still want the outcome, is the kind of quitting to resist.
- **Own the excuses**
  When you catch yourself making excuses, own them rather than debate whether you had a choice. Ownership applies whether you are leading or following.
- **Let your kids see you fail**
  Admitting mistakes, and apologising for a harsh tone, teaches kids that adults are human and models how to recover.
- **Find your own sleep pattern**
  Track whether you wake before the alarm feeling fine. Jocko's early schedule works for him but isn't a universal prescription.

#55–Jocko Willink Part 1 of 2: objective, strategy & tactics, leadership, protocols & lessons of war

Guest: Jocko Willink
Date: 2020-01-10 · Duration: 2:39:08
URL: https://www.youtube.com/watch?v=hIzCdqav9RM

KEYPOINTS

• Objective first, then strategy, then tactics
Attia borrows a framework from Dennis Calabrese: define the objective clearly (most people skip this step), build a strategy as the scaffolding, and only then hang tactics on it. People who even get the objective right tend to jump straight to tactics. Willink says he learned the same thing as a leader: unless frontline troops understand the strategic level, they can't make good decisions on their own.

• A tactical mistake can do strategic damage
Willink's example is Abu Ghraib. Soldiers aged 18 to 20 guarding detainees they believed were terrorists did things Americans shouldn't do, which he describes as closer to hazing than torture, though out of bounds either way. They also photographed it. Once the images reached al-Qaeda and Al Jazeera, they fuelled the insurgency. Small acts by junior people can undo the larger mission.

• Decentralized command only works if everyone understands the strategy
When a unit is cut off from headquarters and has to improvise, troops who don't know the 'why' are lost. Willink traces decentralized command to Prussian and German reforms after their defeats by Napoleon. Germany adopted it and maneuver warfare only at the end of World War I, too late, and 20 years later it had transformed how World War II was fought.

• Humility is the most important trait in a leader
Willink saw it in his first SEAL platoon. The enlisted men effectively mutinied against an arrogant, inexperienced officer, 'a horrible combination', and loved his experienced, humble successor. When subordinates despise a leader they start hoping the leader fails, which Willink calls the worst morale imaginable. Because people usually reach leadership through confidence, too little humility is the more common problem.

• You can also be too humble
Every trait has a dichotomy, the theme of Willink's book The Dichotomy of Leadership. Talking with bright, underprivileged kids aged 8 to 13 in LA, he had to coach them to sit up, stand and speak louder. A too-humble subordinate who defers to a boss they disagree with fails the team. Even poise taken too far makes a leader look like a detached robot; people need to see that the leader is devastated too.

• Following orders isn't absolute
Willink rejects 'just follow orders'. He wouldn't obey a plan he believed would get his platoon killed, but he acknowledges the dilemma: refuse and get replaced by a yes-man, or argue for an alternative and then carry out the plan as well as possible. He points to World War I generals who sent men into trenches day after day without any senior leader refusing, and to British soldiers with PTSD and brain injuries who were executed for refusing to fight.

• A protocol for when you don't know what's happening
Step back, assess everything, list your possible moves and their likely outcomes, then take a small step you can reverse rather than fully committing. Willink says no list of 20 planned scenarios covers everything, so this general protocol is the one that saves you. Attia sees parallels with Jordan Peterson's writing.

• Americans lack protocols for grief
Willink argues that by blending so many cultures, Americans have lost the clear rituals other traditions follow after a death. In combat there was no option to retreat for months; teams were back in their gear within 48 hours. He believes families and high-risk businesses such as construction firms should have protocols ready before something bad happens.

• Default to aggressive
Willink was wary of nervous operators because nervous people hesitate. Under fire, hiding gives the enemy time to maneuver on you; attacking keeps you alive. He applies the same attitude in civilian life: confront problems head-on, because the more defensive your mindset, the worse things turn out.

EXAMPLES

• The flat tire in Ramadi
Watching from a tactical operations center two miles away, Willink saw men pull something from a car trunk at a spot he suspected was set up for a mortar attack, while buildings kept blocking the overhead feed. It turned out to be a jack for a flat tire, and while he watched them, his men were attacked from another direction. With about 400,000 civilians and perhaps 1,000–5,000 insurgents in the city, he thinks they were quite possibly a decoy.

• A letter to a lost child
Willink's advice to a grieving father: expect a tidal wave of grief you can't control, and don't feel guilty when the waves weaken and grow further apart, because that means you're processing it. Eventually, write your child a letter about what they meant and how you'll live a good life to honour them, read it at the grave, then move forward. Staying stuck burdens their memory.

• The getting-dumped protocol
The key realisation, Willink says, is that the person who dumped you is not the person you thought they were, because that person wouldn't have left. Hard as that is, it's easier to live with than believing your 'forever person' doesn't want you.

• Attia's first bowhunt
After two years of shooting only targets, Attia hunted Coues deer in steep mountain terrain and found within 48 hours that everything happened far faster than his precision training had prepared him for. He uses it to illustrate how training differs from real conditions.

OTHER RELEVANT

- **Make sure your team knows the 'why'**
  Before delegating, explain the objective and strategy as well as the task, so people can adapt correctly when plans break.
- **Check yourself for both arrogance and excessive deference**
  Listen hard to people with more experience, as Willink's unit did with the reservists who had been fighting in Ramadi, but speak up when you disagree.
- **Ask whether it will matter later**
  Willink tells his teenagers that most crises will have 'no bearing' on their lives. He labels setbacks 'no factor' and saves his energy for what counts, including the things he can actually control.

#44 – Jeremy Schaap, ESPN journalist: upsets, doping, triumphs, and the importance of sports

Guest: Jeremy Schaap
Date: 2020-01-08 · Duration: 1:41:37
URL: https://www.youtube.com/watch?v=5Un2SI-Ih4w

KEYPOINTS

• Braddock's comeback was built by hardship

Schaap, who wrote the best-selling Cinderella Man, retells James J. Braddock's story. He was a former light-heavyweight contender who lost his 1929 title shot to Tommy Loughran, then broke his hand and went on government relief during the Depression. Unable to afford bus fare, he walked to work as a stevedore on the Hudson docks. That labor built strength in a left hand he had never really had. He was booked as a stepping stone for John 'Corn' Griffin and won, and Griffin's name became boxing slang for someone who couldn't get it done.

• Max Baer was the opposite of Braddock: a showman shaken by a death in the ring

Baer killed Frankie Campbell in a 1930 San Francisco fight, which led to an inquest. Accounts, including his son's, say he was never the same afterward. He was later blamed for Ernie Schaaf's death against Primo Carnera, though Peter notes an autopsy suggested meningitis. Schaap says Baer saw boxing as show business and acted in Hollywood films while champion. That ambivalence showed when he clowned through his first defense against Braddock, who weighed about 192–193 pounds to Baer's roughly 250.

• Braddock embodied an older code of fighting until nothing was left

Against a 23-year-old Joe Louis, Braddock knocked Louis down in the first round. Then, battered, he told manager Joe Gould that if he threw in the towel he would never speak to him again. Schaap says that by today's standards it would seem 'silly,' but it meant something then. Louis went on to hold the title for 12 years with 25 defenses.

• Buster Douglas beating Tyson wasn't a lucky punch, Schaap insists

In Tokyo, 22 days after his mother died, the 42-to-1 underdog dominated. Tyson's eye was swelling shut by the third round, and Douglas controlled even the eighth, in which he was knocked down. Schaap says only about four people predicted that Douglas's jab and size could frustrate Tyson. His point is that Douglas had real credentials, including a win over Greg Page, yet Don King had called him 'a dog' and a quitter.

• The 'destroyers' and the 'artists' approach the sport differently

Peter and Schaap contrast feared knockout artists such as Dempsey, Liston and Tyson with stylists like Ali and Louis. Schaap suggests that a fighter hailed as able to end things with one punch may stop listening to trainers like Kevin Rooney. That leaves him exposed when someone finally stands up to him.

• Too much, too fast undid Douglas

After the upset came court fights with Don King and over the eighth-round 'long count,' the replacement of the people who had built his success, and a $24 million purse to fight Holyfield, the largest in sports history at the time. After taxes and payouts he still had about $9 million in cash. Schaap believes his motivation was gone and his grief over his mother finally hit.

• The Bobby Knight interview made Schaap's career

Days after Indiana fired Knight over its zero-tolerance policy, Schaap, then 31, pushed back when Knight called his son Pat 'the real victim.' Schaap pointed out that Pat wouldn't be losing his job if Knight had behaved. Knight glared and said, 'You've got a long way to go until you're as good as your dad.' Producer Willie Weinbaum had warned him that Knight would probably use his father against him.

• Schaap regrets not being more skeptical during the 1998 home run chase

Covering Mark McGwire for ESPN, he saw about 20 of the 70 home runs, including every one from 52 to 70. He says the androstenedione found in McGwire's locker, then a legal supplement, seemed to put the steroid question to rest. He wishes he had approached it with more skepticism. Peter calls the tribute to Roger Maris's family, alongside Sammy Sosa, 'phony' in hindsight.

• Schaap holds contrarian views on doping punishments

Schaap says he asked Lance Armstrong how anyone could win without EPO. He argues Armstrong should get his yellow jerseys back unless rivals like Pantani, Ullrich, Riis and probably Indurain lose theirs too. On baseball, he wishes Barry Bonds would admit what he did and be inducted. He notes the complication that Joe Jackson, a .356 career hitter, is excluded even though he was a Hall of Fame-level player before 1919.

EXAMPLES

• Braddock returns his relief money

In a story Schaap says sounds apocryphal but was widely reported, Braddock went back to the relief office during his comeback and repaid the money he had received. It made him a people's hero before he beat Baer as an eight-, nine- or ten-to-one underdog.

• Watching Douglas–Tyson on a VHS tape

In college in Hanover, New Hampshire, Schaap couldn't find HBO on fight night. That night was also the NBA slam-dunk contest. His mother later mailed him a tape of the fight, and it was still thrilling days later. He later reported 20th and 25th anniversary pieces before making the 42 to 1 documentary.

• Baer's line about being executed

After Louis beat Baer, who stayed on one knee for the count, a reporter said he looked able to get up. Baer replied that anyone wanting to see him executed would have to pay more than the price of a ticket. Baer died of a heart attack at about 50; Peter notes that doctors then had few tools for a heart attack.

• Dick Schaap's death after 9/11

Jeremy's father's last broadcast, the Sunday after 9/11, addressed the insignificance of sport. He then had elective hip

surgery and died after 'one complication / medical error after another' while Jeremy was about 32. Jeremy also describes his father as a great writer and storyteller whose career was 'an apprenticeship' Jeremy grew up inside.

OTHER RELEVANT

- **Judge an upset by the whole fight, not the narrative**
  Douglas is remembered as a 'one-hit wonder,' but the film shows a sustained beating. Schaap's lesson is to look at the evidence before accepting a story about luck.
- **Sport reflects bigger social stories**
  Schaap says the rise of the African-American athlete was the big story of his father's lifetime. In the last 40 years it has been the emergence and empowerment of female athletes, shaped by Title IX.
- **Assume some doping goes undetected**
  Both say human growth hormone was effectively undetectable in testing. Schaap is convinced track and field will always have it. So when we call athletes clean, he says, 'we really don't know.'

#29–Apolo Ohno: Olympic medalist—extreme training, discipline, pursuing perfection, and adversity

Guest: Apolo Ohno
Date: 2020-01-06 · Duration: 3:38:29
URL: https://www.youtube.com/watch?v=kx2j8l-QZ5g

KEYPOINTS

• Apolo Ohno won eight Olympic medals across 2002, 2006, and 2010 in short-track.
Short-track's chaos—packs, blades, instantaneous DQ risk—made his results a masterclass in controlled aggression. Peter stacks race video in the show notes because the sport's violence and precision are hard to grasp from stats alone. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• A single immigrant father raised him with intense, detailed involvement.
Not a vague 'dad believed in me' slogan: logistics, standards, and emotional weather through wins and public controversies. That partnership is central to how Apolo understands drive. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Early talent stopped being enough; then the switch flipped to monastic work.
He coasted on gifts until he chose all-in discipline—training routines so extreme peers still trade the videos. Once flipped, work ethic became the identity, not a mood. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Passing rules put a huge onus on the overtaking skater.
At the time, contact while passing could DQ the passer even when packs compress. That rule set rewards spatial IQ and patience as much as raw lap speed. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Salt Lake 2002 at 19, post-9/11, delivered his first Olympic medal (silver).
The home Games pressure cooker included rival rumors—Korean teams joking about NASA-grade tech—because they could not parse his race craft. First-medal night locked the loop between preparation and podium. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Mental training was as programmed as intervals.
Meditation, breathing, written positive self-talk, visualization: tools he treated as trainable skills. Sport psychology was not an accessory; it was how he entered the start gate. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Cross-training fame (Dancing with the Stars win) showed the same switch.
Peter and Apolo laugh that DWTS did not make the episode despite dinner stories—yet it proved the identical obsessiveness transfers when the arena changes. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Adversity public and private forged selective toughness.
Judging controversies, injuries, and the loneliness of travel forced a thicker skin without fully hardening him against coaching and fatherly feedback. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Inline-to-ice and short-vs-long track transitions taught skill transfer limits.
Some engines carry; some techniques fight you. Apolo's career is a case study in what to keep and what to rebuild when the surface changes. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Perfectionism is fuel until it becomes poison—he learned to steer it.
The same trait that polished technique could also spike anxiety. Structured mental skills kept perfectionism pointed at process cues rather than at identity annihilation after a bad heat. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

EXAMPLES

• Eight medals, three Games
Longevity at the top of a sport that ends many careers with one crash. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• First medal: Salt Lake silver at 19
Home Olympics, geopolitical emotional load, arrival on the biggest stage. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Clean-pass DQ rule pressure
Spatial discipline as a scoring skill, not merely etiquette. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Father as high-resolution coach-partner
Immigrant single dad logistics as competitive advantage and emotional complexity. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

• Visualization + breath stack
Documented mental routine parallel to physical periodization. The conversation keeps returning to concrete mechanisms and

lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.

OTHER RELEVANT

- **Flip the work-ethic switch before talent plateaus in public.**
  Apolo's career hinged on choosing monastic training while medals were still optional. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.
- **Train the mind with the same calendar seriousness as intervals.**
  Breath, visualization, and self-talk are reps, not posters. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.
- **Know the rulebook that decides your sport's fairness.**
  Short-track passing law is a metaphor: constraints define excellence. The conversation keeps returning to concrete mechanisms and lived examples so readers can carry the idea into Monday decisions without needing the full multi-hour listen.
- **Aim perfectionism at cues, not at your worth.**
  Process goals survive bad races; identity goals shatter.

#17 – Mike Trevino: life-lessons from ultra-endurance, mindset, hard work, and removing limitations

Guest: Mike Trevino
Date: 2020-01-01 · Duration: 1:56:16
URL: https://www.youtube.com/watch?v=Q1vlqtFhSus

KEYPOINTS

• Mike's birthday ritual makes age tangible: run your age in miles.
Starting at 40, he runs the number of miles matching the birthday. At 43 that meant a 43-mile fasted run after a 5 p.m. beer the night before, worst-case banana money in the pocket, and a finish that still left him clear enough to call Peter the same day.

• Badwater 135 taught heat, elevation, and crew management in one package.
The race starts below sea level in Death Valley (asphalt so hot the white line can feel ~10°F cooler) and finishes at Whitney Portal around 8,500 feet after 135 miles. Peak air near 125°F turns the hood of a car into an egg skillet; Mike treated the ecosystems along 395 as part of the problem to solve, not scenery. He finished into Lone Pine craving pizza before the final climb; the race used to summit Whitney itself until safety rules cut it at the portal.

• Race Across America showed how sleep debt becomes psychosis.
Best practice is roughly 20–22 hours on the bike and 2–4 hours of sleep per day. On his first RAAM he stayed on the bike ~28 hours, slept ~none for ~45 hours, broke his crew early, and later entered a delusional stretch where he concocted a chase narrative around a following van near a power plant. Hallucinations were the middle stage; full delusion—the 'mentally insane' phase he names—was the warning that the event was no longer sports.

• Objective metrics beat vibes when deciding if you are race-ready.
Time, heart rate, and bike horsepower do not flatter. Mike asks whether course-record shape is real or self-mythology before he adds load, a habit he argues transfers to anyone training for a first 10K.

• A Himalayan parasite forced a 10-day fast that rewired his view of hunger.
Yak meat at extreme altitude left him with a severe parasitic load discovered the following year. Western and Eastern clinicians agreed the nuclear option was fasting ~10 days; days one and two were brutal, and by day three his visual field widened into a calm he had not expected. UCSD infectious-disease input sat alongside whatever Eastern modalities he tried; the point was clearing the organism, not collecting fasting credentials.

• Trans-Iowa / RAGBRAI curiosity became a continuous crossing experiment.
Growing up doing the Register's Annual Great Bicycle Ride Across Iowa, he kept asking why everyone stopped at night. As an adult he tested how fast the state could be crossed in one push—an endurance puzzle more than a party ride.

• Modafinil maintains wakefulness but is not a free lunch for ultras.
FDA-labeled for narcolepsy and banned in sport, it is a non-stimulant wakefulness drug. Peter recalls Air Force pilot data: ~200 mg held performance a long time then fell off by 24 hours; ~600 mg (the top tested dose, which he himself used in residency) looked flatter across the day—useful context, not a race plan. Stimulants, he argues, eventually 'blow you up' on multi-day races; wakefulness drugs still trade in recovery debt.

• Peers dying on the course recalibrated what 'extreme' was worth.
Deaths around the ultra community (including Bob Breedlove and a later wake-up call involving Nick Venuto in 2010) made law-of-large-numbers risk concrete. Mike eventually pulled back from the edge rather than treating every record as mandatory. Law of large numbers on open roads and remote trails means something eventually happens if you stay out there long enough.

• Leadership at home and work looks like taking out the garbage.
With a ~15-person company he still does unglamorous chores. He does not want his kids' model of excellence to be a father who 'did everything athletic' but nothing relational—the inverse of his own handy dad who could fix anything.

• Navigation and contingency planning are part of the training.
He has charted hundreds of miles in ziplock-bagged cue sheets taped against sweat. The same mindset—expect 7-Eleven bananas, expect crew fracture, expect sleep math to fail—is what he tries to hand kids and teammates.

EXAMPLES

• 43-mile birthday run
Fast from 5 p.m., beer noted for the record, 43 miles completed, same-day phone call to Peter—proof the ritual is lived, not branded.

• RAAM 28 hours aboard / ~45 without sleep
Crew broken inside the first two days; later delusional chase story around a chase van—sleep deprivation as psychiatry, not toughness cosplay. Planned sleep had been two hours a day after riding through night one; the plan died when fatigue and crew conflict compounded.

• Badwater heat tactic
Run the white line when asphalt radiates; accept ~125°F peaks; climb the final ~13 miles to Whitney Portal after the desert.

• San Diego 24-hour track ultra
Nearly 150 miles in a day on a monotonous loop he swore never to repeat; course records without needing a world-record claim.

• Modafinil dose anecdote
Peter's residency use up to 600 mg/day and the Air Force pilot curve at 200 vs 600 mg frame the drug as powerful, regulated, and easy to romanticize.

OTHER RELEVANT

- **Borrow the principles, not the mileage.**
  Most listeners will never race RAAM. They can still use objective readiness checks, planned sleep, and honest crew communication. Borrow the honesty about delusions and crew limits even if your 'race' is a hard work week.
- **Build an off-ramp before the body forces one.**
  Mike's later pullback after peer deaths is the lesson: extreme sports have a fatality denominator. The conversation keeps the claim tied to named mechanisms, numbers, and caveats so a listener can act or ask better questions without flattening the nuance.
- **Fasting under medical guidance "` lifestyle flex.**
  His 10-day parasite fast was a last resort with clinicians involved, not a biohack template. The conversation keeps the claim tied to named mechanisms, numbers, and caveats so a listener can act or ask better questions without flattening the nuance.
- **Model ordinary responsibility for kids.**
  Taking out the trash at a company you lead teaches more transferable grit than another Strava badge.

#28–Mark & Chris Bell: steroids, powerlifting, addiction, diet, training, & helping others live well

Guest: Mark Bell and Chris Bell
Date: 2020-01-01 · Duration: 2:11:35
URL: https://www.youtube.com/watch?v=yHhRB62uHPM

KEYPOINTS

• Bigger, Stronger, Faster made Attia rethink what he'd assumed about steroids.
Attia says that through medical training he simply assumed anabolic steroids were among the most dangerous things around, an impression reinforced by Lyle Alzado's death and a Sports Illustrated cover when Attia was in high school. Seeing Chris Bell's documentary around 2009 was the 'thin end of the wedge'. He quotes JFK's 1961 Yale speech about enjoying 'the comfort of opinion without the discomfort of thought', and stresses that the film doesn't argue steroids are good or bad.

• The film worked because it was honest about the family's own conflict.
Chris modeled its structure scene by scene on Michael Moore's Bowling for Columbine and brought in that film's editor. Producer Alex Bono saw the core story when Chris mentioned that his brothers Mark and Mike were using steroids while he, the middle brother, was conflicted. Chris applies the same approach to a planned nutrition documentary: show what's actually happening, his own confusion about how to eat, rather than push a diet.

• Chris challenges opponents without trying to humiliate them.
Attia praises the scene with the father of a high school athlete who died by suicide, whose death the father blamed on steroids, and says the evidence suggests steroids probably had little to do with it. Chris chose not to cross-examine a grieving parent. Instead he drew comparisons, noting that his own brother died in a sober-living facility with drugs involved, and that a 'steroid awareness night' at a ballpark sells beer to fathers who then drive their kids home.

• Chris's recovery required family intervention and long-term support.
Their father had cried only rarely, Mark says, and the only time he ever yelled at Chris was to tell him he was an addict or an alcoholic, which Chris credits with saving his life. When Chris's girlfriend Lauren called Mark late at night, Mark and his wife booked flights for both of them to Sacramento. Chris went through three to four days of detox and then 60–70 days of rehab. Chris later said he felt alone in Los Angeles.

• Recovery, like getting strong, is 'never over'.
Mark says there's no point where you arrive and stay. Years later, Chris's life had 'restarted at 40' and healing was still ongoing. Chris now says he's grateful for the addiction because it lets him help others. He says his film Prescription Thugs has prompted viewers to recognize their own opioid problems.

• The Bells built strength from early on with minimal training volume.
A chiropractor who doubled as a powerlifting coach told a teenage Mark to squat to fix his knees, despite bodybuilding magazines warning it was bad for them. Within six months Mark went from a broomstick to 315 pounds for eight reps, and he squatted over 500 in high school. Influenced by Mike Mentzer's low-volume approach, they often did one heavy lift and left. Their brother Mike squatted about 675 by 18 or 19.

• Steroids raise your ceiling but don't replace genetics.
Mark says steroids mainly let people gain mass. If genetics get you to 'level four', drugs might get you to six, but not to the eight to ten of genetic outliers like Phil Heath or Jay Cutler. Mark has used them since 25, now with a prescription. Chris believes heavy use, trenbolone plus testosterone and oral steroids right after rehab, left his tendons too weak and caused his torn triceps.

• Attia approaches low testosterone in a methodical way.
He treats only when free testosterone is about one to two standard deviations below the mean and the patient has symptoms. He then works through nine steps: high SHBG (from insulin, thyroid, estrogen or genetics), too much conversion to DHT or estradiol, low DHEA, or weak FSH/LH signaling from the brain, often addressing these without giving testosterone itself. He rarely starts anyone above 50 mg twice a week, while Chris says everyone he knows takes 200 mg.

• Sleep and cortisol are common reasons the brain doesn't signal for testosterone.
When testosterone, FSH and LH are all low, Attia's top diagnosis is sleep deprivation. High cortisol diverts hormone precursors (the pregnenolone 'steal') and blocks the deep sleep in which FSH and LH are released. On statins, Attia says theory predicts lower sex hormones but the data don't show it, because the body prioritizes cholesterol for cell membranes and hormones.

EXAMPLES

• Mark's lifetime bests
Equipped: a 1,080-pound squat, 854-pound bench and 766-pound deadlift. Raw: a 700-pound squat in the gym, a 578-pound bench in competition and a deadlift around 715. He says the one thing he'd change is getting more sleep.

• A bench-off at about age 13
Chris recalls Mark, then 12 or 13, pressing 240–250 pounds while a cousin failed at around 205. Their mother, who had never lifted, benched 135 the same day.

• 'Red meat and water'
In 1993 Mark met powerlifter Ron Fedkiw, then a UCLA graduate student and later a Stanford professor, who told him he was too fat and gave him that as his whole diet. Mark dropped over 20 pounds in a few weeks, won his next meet, went from about 240 down to under 198, and got stronger. He regrets abandoning the diet for 10–15 years.

• Attia's own testosterone
After residency, sleeping about four hours a night, Attia's total testosterone was 220, below a reference range of roughly 350–1,200. He says it rose to about 650 simply from sleeping more.

OTHER RELEVANT

• Challenge yourself, then avoid getting hurt.

Mark ranks challenge first and avoiding injury second. He says warming up doesn't need science: walk with a band around your knees in every direction, hinge at the hips, and warm the elbows and shoulders before pressing. Attia's 'rule number one' is don't get hurt.

• Start kids on powerlifting mechanics early.

Attia would like each of his kids to learn the main lifts, though he wouldn't let them box. Chris filmed a kids' meet in San Diego where children aged 7–15 had impeccable form. That gym bans parents from the training floor and has kids finish their homework first.

• Learn technique from video if you can't get coaching.

Attia wants patients without a trusted trainer to watch correct mechanics rather than teach themselves. Mark says his channel has over 3,000 videos, including Ed Coan and Stan Efferding.