

How Can We Learn to Hack Our Chronobiology? Breaking down the Science of Perfect Timing | Daniel Pink

May 2, 2018

I used to believe that timing was everything. Now I believe that everything is timing. – Daniel Pink

INTRODUCTION

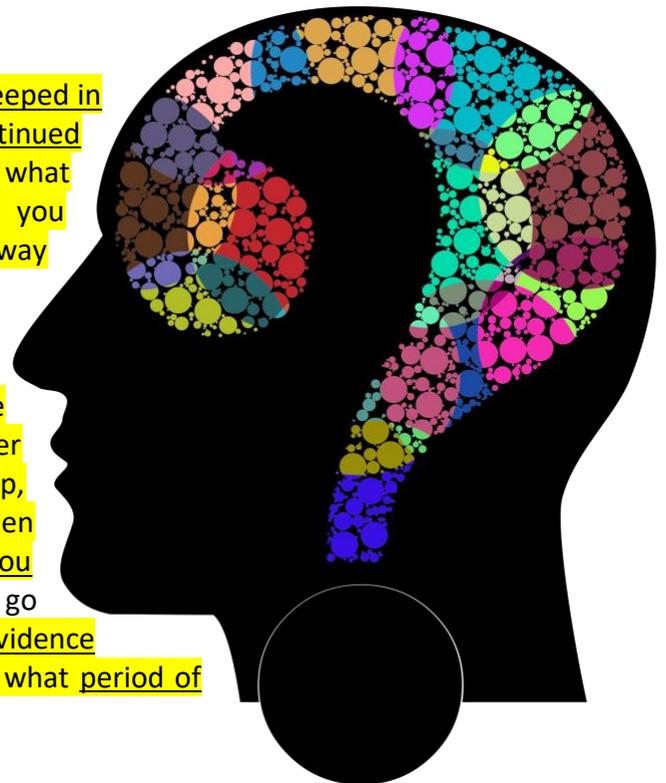
What's up everybody? Welcome to this week's episode of Hidden Forces with me, Demetri Kofinas. Today, I speak with Daniel Pink, the author of numerous, highly acclaimed and best-selling books including his latest, *When: The Scientific Secrets of Perfect Timing*. In addition to his writing career, Pink was also the host and co-executive producer of "Crowd Control," a television series about human behavior on the National Geographic Channel. He also appears frequently on NPR's Hidden Brain, the PBS NewsHour, and other TV and radio networks. He has been a contributing editor at Fast Company and Wired as well as a business columnist for The Sunday Telegraph. His articles and essays have also appeared in The New York Times, Harvard Business Review, The New Republic, Slate, and other publications. For the last six years, London-based Thinkers 50 named him, alongside Michael Porter and Clayton Christensen, as one of the top 15 business thinkers in the world. Pink's TED Talk on the science of motivation is one of the 10 most-watched TED Talks of all time, with more than 19 million views, and his RSA Animate video about the ideas in his book, Drive, has collected more than 14 million. Daniel, welcome to Hidden Forces....

WHY DO I CARE?

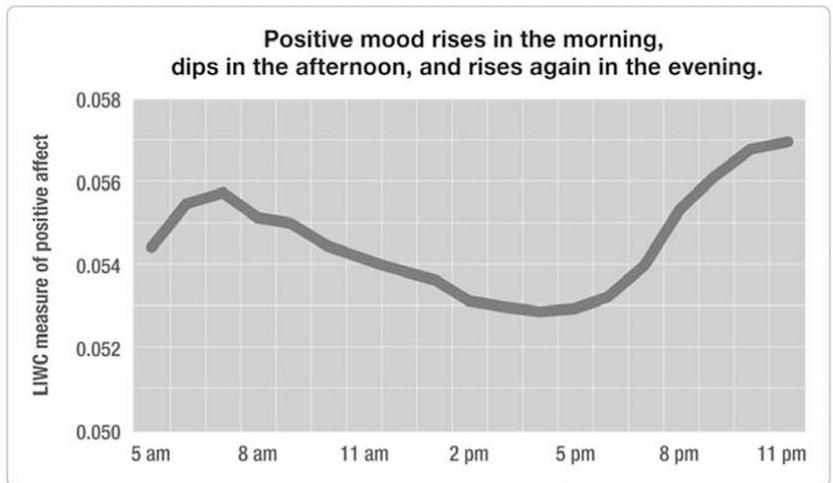
The insights of behavioral psychologists and scientists have infiltrated the mainstream of American life thanks, in large part, to the works of people like Daniel Pink. In his latest book, he tackles a subject that we have explored only from the perspective of the physical sciences: TIME. Learning how time applies to our subjective experience and how we can use knowledge about our chronobiology to optimize our lives is of value to anyone who wants to improve his or her "happiness-function" and sense of personal well-being. I have found that much of what Daniel writes about in applies directly to my own life. I'm excited to share it with the audience today.

THE HIDDEN PATTERN

1. **How?** — How did you get your start writing books steeped in findings from behavioral science? Why have you continued to write about these subjects for so many years and what has kept you going all this time? How have you implemented the things you have learned along the way into your own life?
2. **Twin Peaks** — A consistent phenomenon/theme in your book is this "twin peaks" hypothesis. Whether we are talking about mood or performance, people show a consistent pattern of prematurely peaking after about seven hours from the time they wake up, slumping (the trough) for about two hours, and then peaking again as they near bedtime. First, how did you discover this phenomena? In general, how do you go about finding topics? Second, how has the body of evidence in support of this phenomenon been amassed, over what period of time, and with what level of reliability?

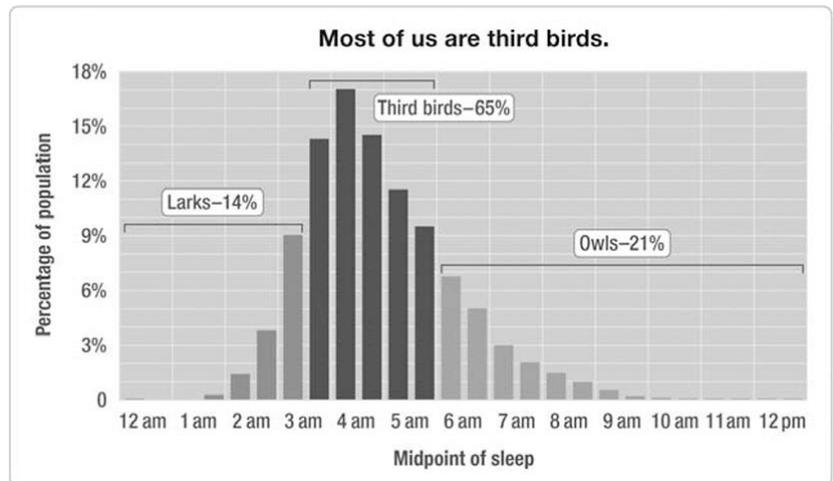


3. **Theory of Vigilance** — One of the theories put forward to explain our enhanced cognitive abilities during the early hours of the day rests on this notion of “vigilance.” What accounts for this higher level of vigilance during the morning hours? What is the theory put forward by evolutionary biologists that explains why we are more alert during this time? Have there been any studies done of primates or other animals that shed further light on this?



4. **Chronobiology** — You break people up into three categories – Larks, Third birds, and Owls – in order to show how the internal clocks of individuals can and do vary. The criteria used to group these individuals depends on when they go to sleep, when they wake up, and what time they tend to wake up most consistently in the middle of the night. For most people, their midpoint is around 3am. What accounts for our chronobiological differences? (genetics, age, etc.) Is the assumption that if we all were to fall asleep and wake up during the hours that are most appropriate for our own circadian cycle that we would perform equally well, or is there an absolute advantage to being more of an early bird or a night owl?

5. **Chronotype** — What are some of the key differences between individuals as they move along the spectrum of early risers to late sleepers? What are the mood/personality trait differences? Are there differences in terms of creativity or cognitive capacity? Are there differences in health? How do we figure out our own chronotype?



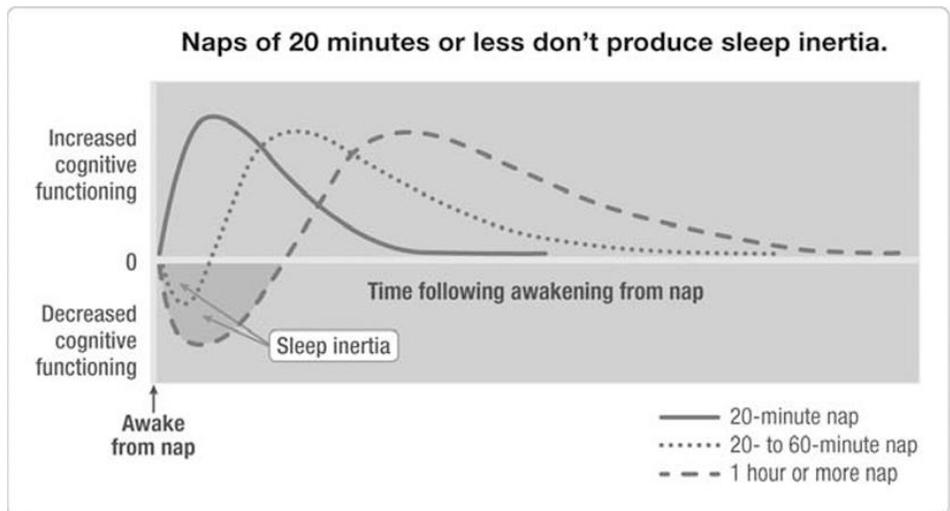
6. **Analysis vs. Insight** — What explains this phenomenon where we perform better in analytic tasks during our morning cycle and better on insight related work heading into our second peak? I have found this to be totally true in my own case. I perform better on cognitive heavy tasks in the morning and get some of my best ideas in the evenings. In fact, this is why I schedule my interviews in the afternoon.

7. **Exercise** — You have some interesting lessons for people looking to apply the science of chronobiology to their exercise or fitness regimen. However, in the book, you seem to break the work and exercise casework apart. What if you integrate the two? I find that the best time for me to work out is in the very early afternoon, exactly because it is my least productive time of the day. Exercise gives me a mood boost that helps push me through the rest of the afternoon and into the evening, but I will peak much earlier as a result. How do your recommendations about when and how to schedule breaks, cognitive-heavy vs. inspiration-heavy work, naps, exercise, etc., change when you combine everything?

	Lark	Third Bird	Owl
Analytic tasks	Early morning	Early to midmorning	Late afternoon and evening
Insight tasks	Late afternoon/early evening	Late afternoon/early evening	Morning
Making an impression	Morning	Morning	Morning (sorry, owls)
Making a decision	Early morning	Early to midmorning	Late afternoon and evening

TIME AND AGAIN

8. **Hacking the Trough** — You offer many suggestions for how people can make the most of the chronobiological trough of the mid-to-late afternoon. The most well-documented piece of advice seems to be the nap. **Talk us through the optimal nap pattern. How do you implement this advice?**



9. **Detachment** — How does detachment fit into the science of timing? **You**

mention the need for “psychological and physical” detachment as important for helping us make the most of our day. I’ve found this to be true for me. **What does the science of “taking breaks” say?**

10. **The Science of Beginnings** — You write in your book about the importance we give to “beginnings.” **Can you lay out the science behind how and why people act differently depending on whether or not they perceive themselves to be at the start of something?**

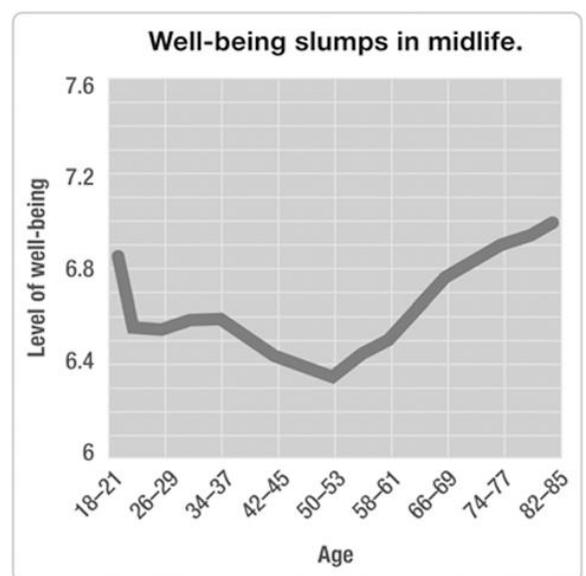
11. **Premortems** — “If I failed, what caused it?” I have often structured questions in this manner when trying to game out ways in which I may be wrong about a given investment that I’ve made. You seem to refer to this as a ‘premortem.’ **How does this idea of ‘premortem’ fit with the science of timing, and how have you implemented this yourself?**

12. **Better First or Last?** — What is the science behind deciding when you are **better off going first or last?**

13. **Mid-life Crisis** — **Why does our self-reported well-being slump in mid-life?** What is the evidence that points to this being biological, assuming that it is a phenomenon that we are convinced exists? **How important of a role to hormones play?** Both men and women experience “menopause” in mid-life.

14. **Muddled Middles** — **How does our perception of time impact the appearance of rough patches in the middle of human activities and its persistence across groups of individuals?**

15. **Duration Neglect** — **What is duration neglect, and how can we use it to our advantage? How important is it that we close strong?** (i.e. this interview)



IN SYNCH

16. **Synch to Boss** — Just as individuals synch their internal clocks (entrainment) to external cues (zeitgebers), **organizations synch the work of individuals to the rhythms of the organization.** In choirs or small teams like rowers, this is often some authoritarian figure (a coach or captain).

17. **Synch to Tribe** — Synching to the tribe requires a deep sense of belonging. In a 1995 study, two social psychologists, Roy Baumeister and Mark Leary, put forth what they called “the belongingness hypothesis.” **Belongingness, they found, profoundly shapes our thoughts and emotions. Its absence leads to ill effects, its presence to health and satisfaction.** Synching to a tribe happens in its own, unique

way. Take the case of the dabbawalas. Pink sites the codes (delivery codes) on their containers, their garb (dress code), and their physical ease and comfort with one another (touch). Or, take the case of the San Antonio Spurs, where **Tim Duncan is famous for touching and hugging team mates.**

18. **Synch to Heart** — You site evidence that choral singing or singing in a group is good for our health. **What is it about synching with a group and forming a sense of belonging that you think (and that the evidence suggests) is benefiting our physiology?** Is this really just telling us that human beings cannot live along – that we need other people in order to survive? (**Man cannot live by bread alone**)
19. **Mission ‘Synch’** — **What lessons can we draw from this research about group synchronization? Are there things that start-ups or corporations can implement in order to advance productivity and well-being in their organizations? Can you give us some examples/tips?**
20. **Living in Flow** — **What did you learn from writing this book? How has writing it changed your life for the better?**

About 5,00 dabbawalas work in Mumbai. Each day they deliver more than 200,000 lunches. They do this six times a week nearly every week of the year with an accuracy that rivals FedEx and UPS. More impressively, they do this without any technology beyond bicycles and trains. The railway schedule is the boss for the dabbawalas. It is the external standard that sets the rhythm, pace, and tempo of their work.

ADDITIONAL QUESTIONS

Top Findings — **What are some of the most interesting findings in behavioral science? What are the findings with the most profound implications?**

Future Research — **Do you have any idea what your next book will be? Has writing this book inspired any interesting new ideas?**

