

### A special case: Competitive focus

Decisions dominated by the shortterm, impulsive self tend to reduce future happiness

- Excessive future discounting
- Finding negative addictions
- 3. Avoiding positive addictions

But, for some, decision training is also important because of the potential for **competitive mastery** resulting from focus.

### Focus in the dual-self model

Long-term
Patient
Planner
Impartial spectator
Deliberative
Cold state

The rider can understand the cumulative benefits of focus over many years.

Short-term
Impulsive
Doer
Passions
Affective/Visceral
Hot state

The elephant gets bored with repetition and wants to move on to the next new experience.

## In standard consumption economics, focusing is often bad

Variety is important because diminishing marginal utility changes preferences. When enjoyment drops, we should switch to another choice.

| Hot Dogs<br>Consumed | Utility from Each<br>Hot Dog |
|----------------------|------------------------------|
| 1                    | +10                          |
| 2                    | +4                           |
| 3                    | 0                            |
| 4                    | -1                           |
| 5                    | -4                           |
| 6                    | -10                          |



# In competition, the cumulative effect of focus may be good...

Diminishing marginal utility

| Hot Dogs<br>Consumed | Utility from<br>Each Hot Dog |
|----------------------|------------------------------|
| 1                    | +6                           |
| 2                    | +2                           |
| 3                    | 0                            |
| 4                    | -2                           |
| •••                  | ***                          |
| 64                   | -40                          |
| 65                   | -45                          |
| 66                   | -50                          |
|                      |                              |



Point where Joey Chestnut ties Kobayashi for the 2007 championship

#### Differential outcome

| from<br>ot Dog |
|----------------|
| )              |
| 1              |
| 2              |
| •              |
| 0              |
| 000            |
| 000            |
| 1              |
|                |

### Focus, enjoyment, and outcomes



Focused practice may result in increased utility due to

- Improved activity
   experience due to
   accumulated skill
   (consumption
   capital)
  - 2. Improved activity

    outcome due to

    cumulative

    experience (human

    production capital)



#### Focus and differential outcomes

Does musical talent exist?

Does athletic talent exist?



Obviously, Yes, Right?

### A contrary argument

A series of findings suggest that, assuming basic dexterity or height, talent is simply the result of accumulated hours of focused practice with appropriate feedback.

So, seriously...

Does musical talent exist?

Does athletic talent exist?

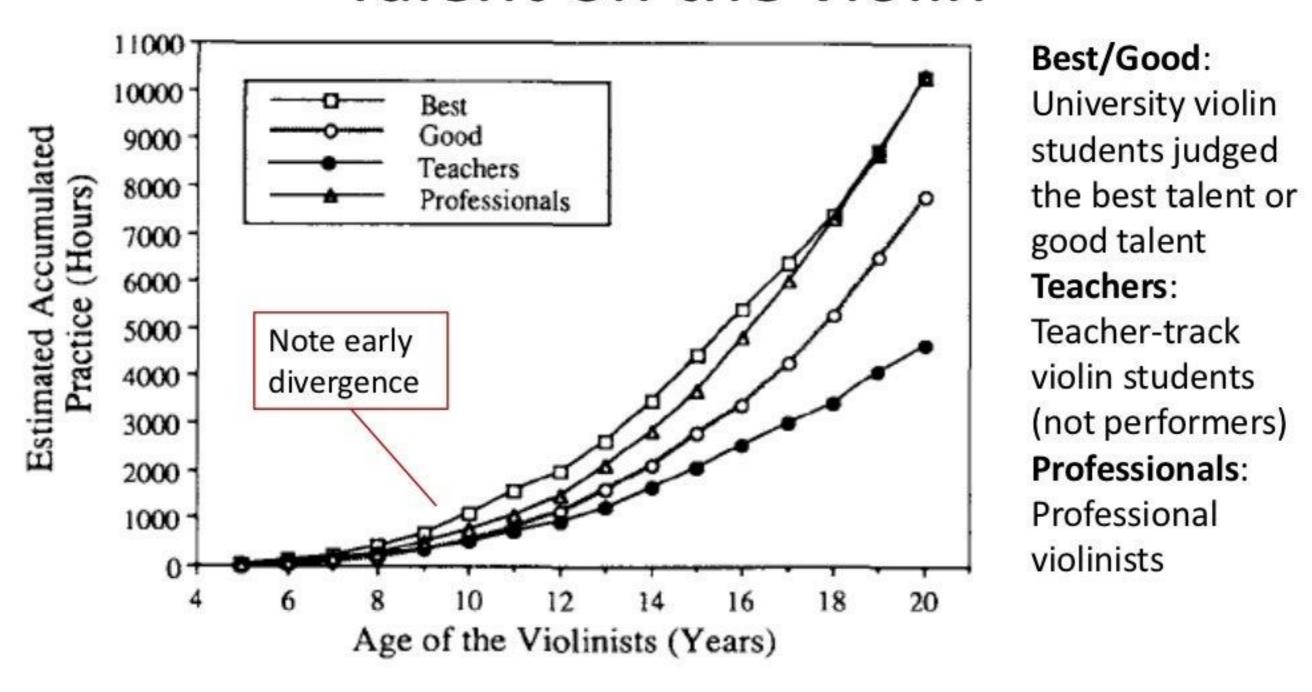


Talent on the violin 1. Professional performers 2. Performance track university violin students judged "best" by professors

Performance
 track university
 violin students
 judged "good"
 by professors
 Teacher track

violin students

#### Talent on the violin

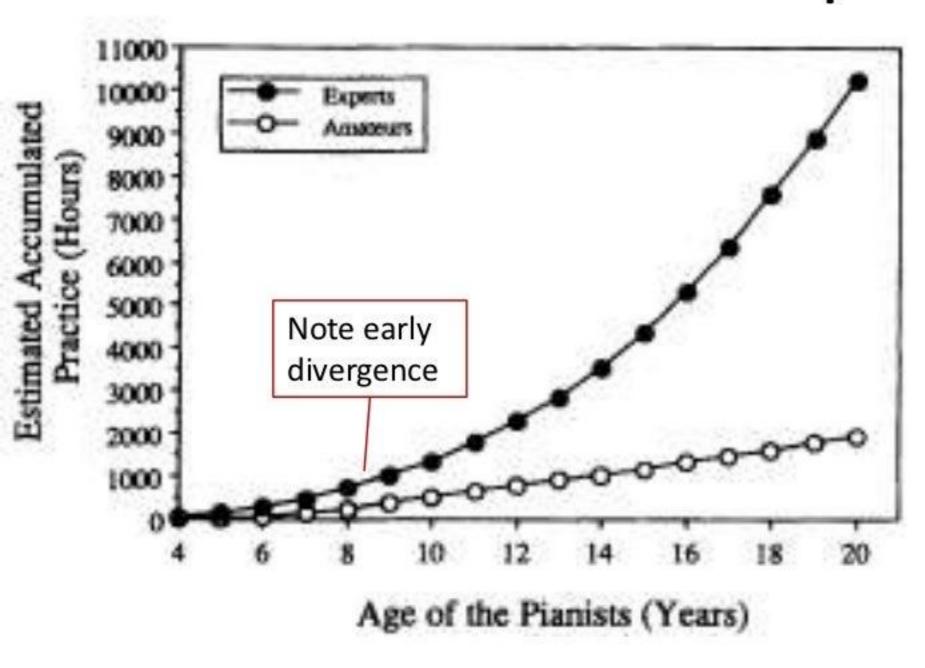


Can you find the talented violinists with fewer hours of practice?

## Adult piano players with 5-20+ years of experience



### Talent on the piano



A retrospective study of expert-level and amateur-level adult piano players with 5-20+years of practice.

Does "talent" seem to be related to hours of practice?

# Innate differences of piano experts?

- There were no differences in general cognitive-motor skills.
- But, there were differences in specific abilities including singlehand movements, mirror-image movements in both hands, and different movements in opposite hands.

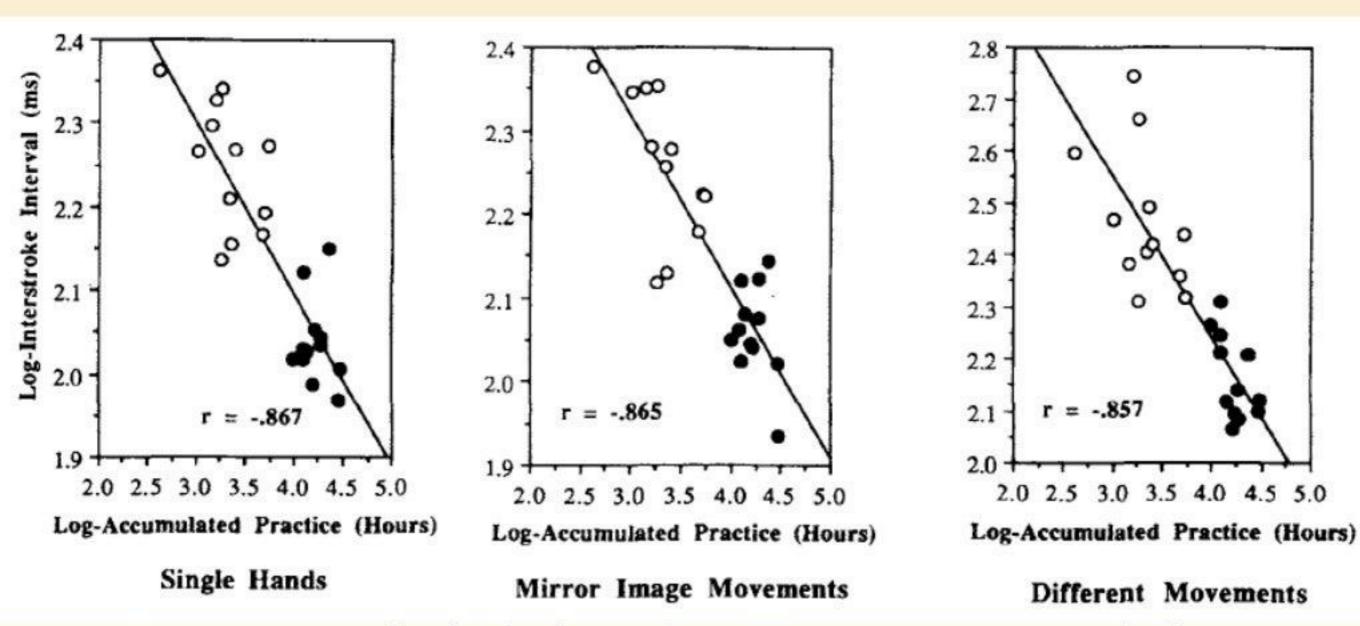


# Innate differences of piano experts?

- Were these specific hand skills
- a) An example of innate talent?
- b) Simply a reflection of accumulated hours of practice?



# Core physical ability differences reflect accumulated practice



Experts are dark circles. Amateurs are empty circles.



### Expertise in soccer

3 groups, all playing in Belgian soccer leagues.

All about 25 years old.

All started playing at about age 5

Helsen, et al. (2000), The roles of talent, physical precocity, and practice in the development of soccer expertise, Journal of Sports

