Anderson Capstone Presentation: slide reference notes

1. 2020 Proposed Age Graded Marathon Standards.

* I initially set out to analyze the 2020 proposed age grade standards for the marathon.
* Thought it was particularly relevant because
  + It is an upgrade year (approx. every 5 years upgraded); sure enough, new tables have been proposed by have not been approved yet.
  + We find ourselves in a unique situation with gyms closed and races canceled. In the midst of stay-at-home orders, motivation is especially needed.
* My end goal was to identify weaknesses and propose modifications.

2. The time standards for women 32+ are markedly faster.

In analyzing the proposed standards, I saw a striking increase in difficulty in time standards for older women.

[have chart in python and excel…not sure I have a preference.]

This graph shows the changes between the 2015 marathon time standards and the proposed 2020 standards for each age. Men’s standards are in blue and women’s in orange. The x axis is age and the y axis is time in minutes. Each column represents a change in time. Columns rise above the x axis—there are only two of them—represent an increase in time. That is, for females ages 18 and 19, the proposed standard is easier because time is added to the standard. Columns that fall beneath the x-axis—all male ages and female ages 20-85- - represent a decrease in the time standard. That is, the proposed standard in more difficult because time is subtracted from the standard. For example, the proposed standard for 70 year old women decreases the time by 4 minutes, meaning the 70 year old would have to run the marathon 4 minutes faster than the current standard. The proposed standard for 70 year old males is just under 1 min (53 seconds). The 70 year old male would have to run 53 seconds faster than the current time. [Add this as example on chart as float in.]

The reasons for these proposed changes is two-fold. First, the many single-age world records for the marathon have fallen since the 2015 update. This includes the men’s and women’s overall world records. The women’s overall record was broken in 2019 at the Chicago Marathon. The women’s by 81 seconds and the men’s by 78.

Second, is the age factor itself. A goal in creating the age standards is to draft a smooth curve. [Explain.]

As you can see on the chart, the proposed standards for women starting around age 30 exponentially became more difficult then the men’s. For example, the proposed women’s standard for age 50 amounted to x seconds (versus x seconds for men), and for age 70 amounted to x seconds (versus x seconds for men). This paints a clearer picture on how the time standards have changed. It shows the number of seconds change for each gender and age from the 2015 standards to the proposed 2020 standards. All ages for males and females received a more difficult time--except for females 5-19, who received a more relaxed time. These changes result from the combination of the time standard (in this case, the male and female world records) being lowered and the age factor being altered.

3. I looked at the single age marathon records and saw marked improvement since 2015. Single age records are the fastest known times run by someone of a particular age on a certified, eligible marathon course. [Explain certified and eligible.]

There are women’s single age marathon records for ages 6-90 and 92 (86 ages). 34 were set since the last AG updates (2015). 39.53%

4. Plotted the Boston Marathon 2019 results and saw the AG % of older women runners higher than younger ones (and men?)

This shouldn’t be the case. The AG standards, in theory, should level everyone out.

5. The line is pretty level for men in Boston 2019.

For men in the 2019 Boston Marathon, it’s pretty level.

6. PLACEHOLDER: Other years? Men and women.

7. AG Percentages of BQs: Too Difficult for Women 60+

Women need to be progressively faster starting around age 45 and then need to be Regional Class runners starting ages 64, 68-69, and 70-81, and National Class starting at age 82.

Men need to be Regional Class runners from age 82 on.

8. Theory: Older women are underrepresented in the Boston Marathon because their BQs are too challenging.