

Speedrunning in Videogames

Figure 1

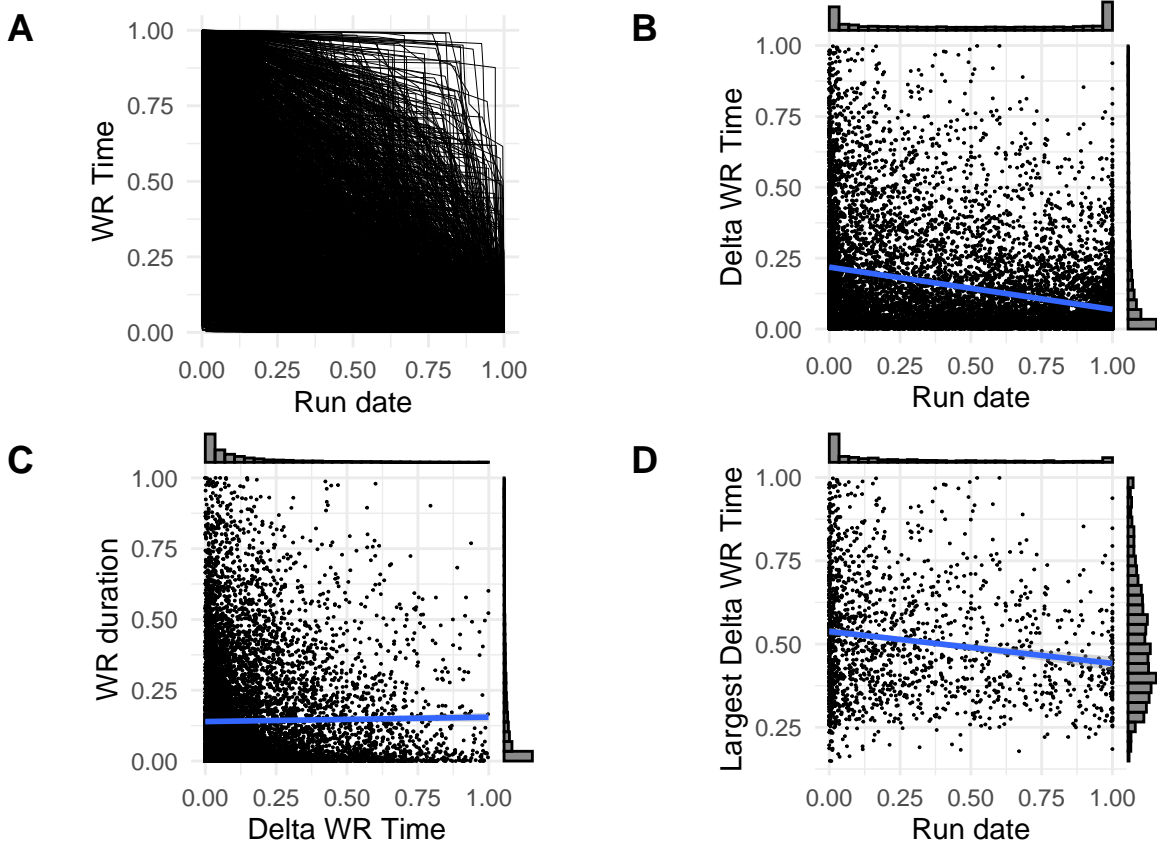


Figure 1: Evolution of world records. A) The progression of all speedrunning records. The world record time is standardised (y-axis), such that 1 represents the speedrunning time of the first record and 0 represents the speedrunning time of the current record. The date when the record was set is standardised (x-axis), such that 0 represents the date at which the first record was set and 1 represents the date at which the current world record was set. B) The impact of new records diminishes as time passes. Delta WR Time is calculated as the difference in time of a given record and the time of the previous record. C) The impact of a record does not predict its duration. WR duration is calculated as the difference in run date between a given record and the ensuing record. D) The time reduced by the most impactful records decreases as time passes. For each game, the most impactful record is identified and its Delta WR Time is plotted against the time at which it was set.

Figure 2

Figure 3

Figure 4

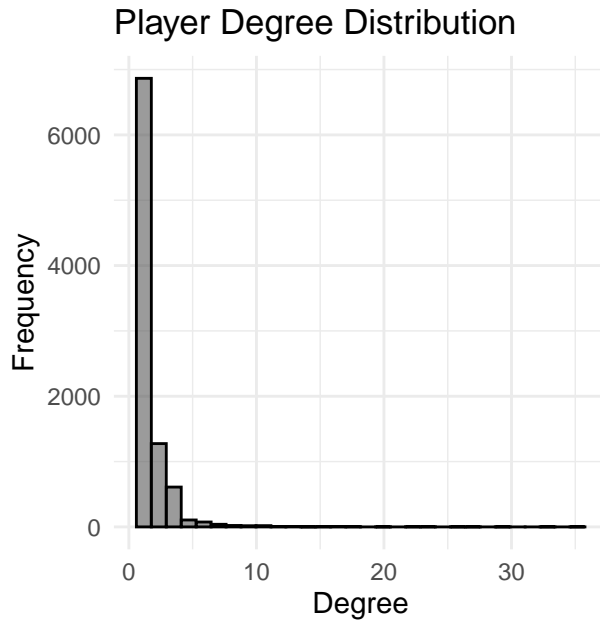
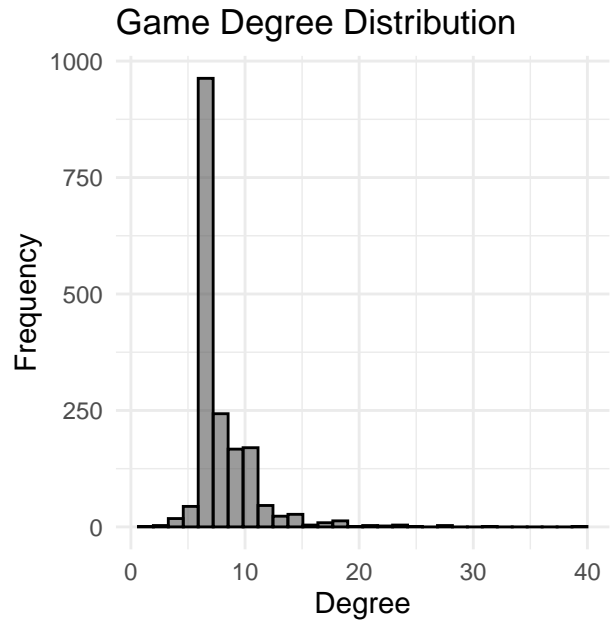
A**B**

Figure 2: The speedrunning network. A) Degree distribution of players. Players with high degree are those which set records in multiple games. B) Degree distribution of games. Games with high degree are those where many players set a record. Note that data was wrangled such that only games with at least five set records were included in the dataset.

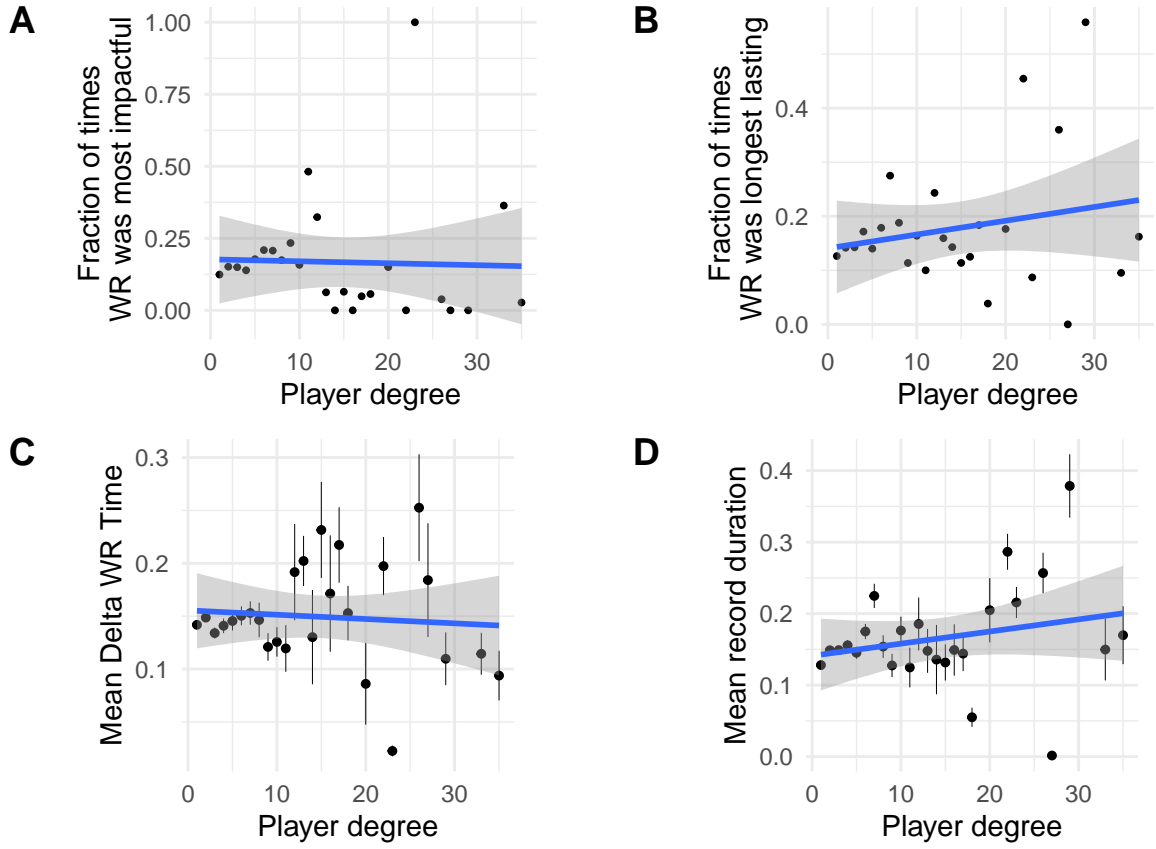


Figure 3: The effect of player degree on record impact and duration. The degree of a player does not affect the probability of setting the most impactful (A) or longest lasting (B) records, nor the average impact (C) or duration (D) of a record.

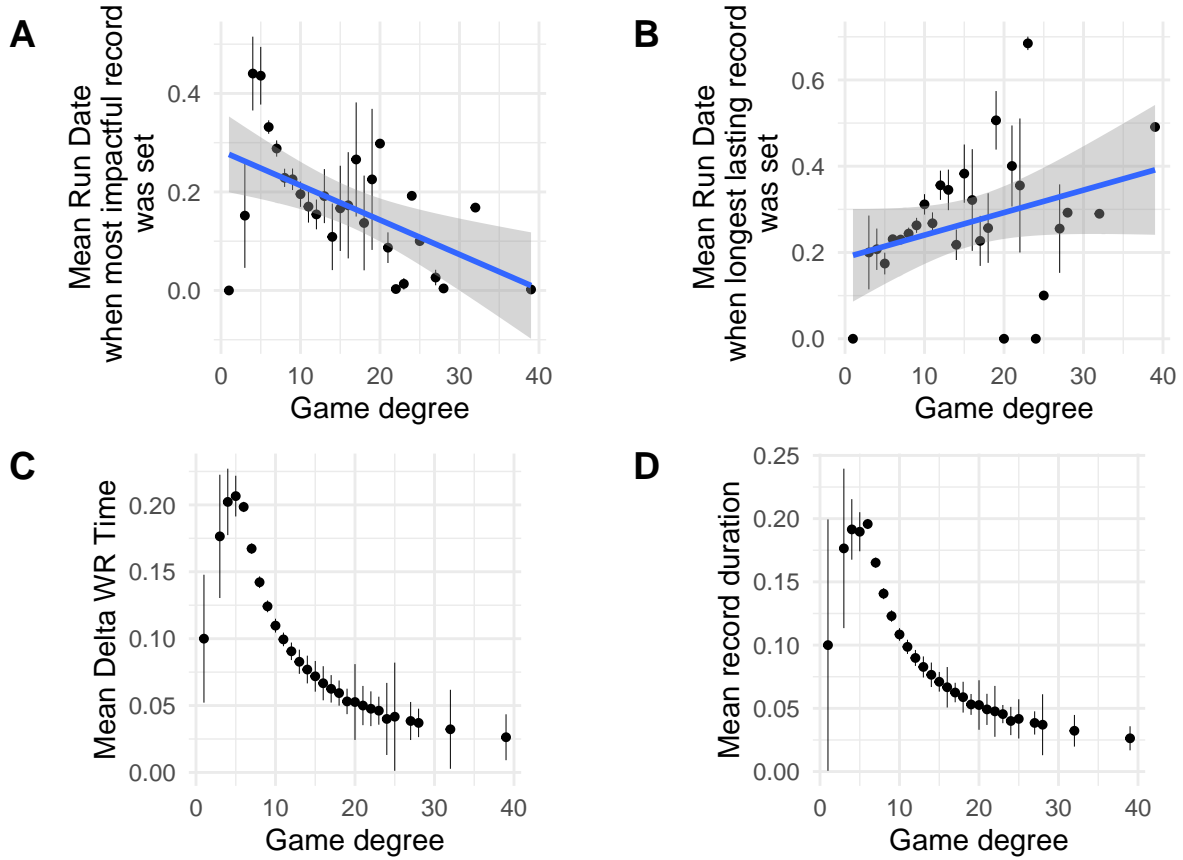


Figure 4: The effect of game degree on record impact and duration. A) Games with higher degree tend to have impactful records set early on. B) Games with low degree tend to have long lasting records set early on (note, this is marginal). Games with high degree have on average records of low impact (C) and low duration (D).