Context

This dataset is composed of powerlifters who've competed in the United States at raw, full-power events from 2015 to now. All data was aggregated from OpenPowerlifting (see acknowledgments below) to create a smaller dataset with relevant American information. Use this dataset as a means to conduct EDA on American powerlifters and answer questions you may have on discrepancies among powerlifting community in the USA.

Content

The file is composed of 38 columns of information such as basic lifter information, weights lifted, and competition location to select from. The following sub-sections provide a breakdown of each category in the dataset, as provided by OpenPowerlifting's README.txt document that accompanies downloading their dataset.

Name

Mandatory. The name of the lifter in UTF-8 encoding.

Lifters who share the same name are distinguished by use of a # symbol followed by a unique number. For example, two lifters both named John Doe would have Name values John Doe #1 and John Doe #2 respectively.

Sex

Mandatory. The sex category in which the lifter competed, M, F, or Mx.

Mx (pronounced *Muks*) is a gender-neutral title — like Mr and Ms — originating from the UK. It is a catch-all sex category that is particularly appropriate for non-binary lifters.

Event

Mandatory. The type of competition that the lifter entered. For the purposes of this dataset, all event values will be SBD for lifters who've competed in events testing their squat, bench, and deadlift

Equipment

Mandatory. The equipment category under which the lifts were performed. For the purposes of this dataset, all values will be Raw, as it contains information about lifters who utilize minimal equipment

Age

Optional. The age of the lifter on the start date of the meet, if known.

Ages can be one of two types: exact or approximate. Exact ages are given as integer numbers, for example 23. Approximate ages are given as an integer plus 0.5, for example 23.5.

Approximate ages mean that the lifter could be either of *two* possible ages. For an approximate age of n + 0.5, the possible ages are n or n+1. For example, a lifter with the given age 23.5 could be either 23 or 24 -- we don't have enough information to know.

Approximate ages occur because some federations only provide us with birth year information. So another way to think about approximate ages is that 23.5 implies that the lifter turns 24 that year.

AgeClass

Optional. The age class in which the filter falls, for example 40-45. These classes are based on exact age of the lifter on the day of competition.

AgeClass is mostly useful because sometimes a federation will report that a lifter competed in the 50-54 divison without providing any further age information. This way, we can still tag them as 50-54, even if the Age column is empty.

BirthYearClass

Optional. The birth year class in which the filter falls, for example 40-49. The ages in the range are the oldest possible ages for the lifter that year. For example, 40-49 means "the year the lifter turns 40 through the full year in which the lifter turns 49."

BirthYearClass is used primarily by the IPF and by IPF affiliates. Non-IPF federations tend to use AgeClass instead.

Division

Optional. Free-form UTF-8 text describing the division of competition, like Open or Juniors 20-23 or Professional.

Some federations are *configured* in our database, which means that we have agreed on a limited set of division options for that federation, and we have rewritten their results to only use that set, and tests enforce that. Even still, divisions are not standardized *between* configured federations: it really is free-form text, just to provide context.

Information about age should not be extracted from the Division, but from the AgeClass column.

BodyweightKg

Optional. The recorded bodyweight of the lifter at the time of competition, to two decimal places.

WeightClassKg

Optional. The weight class in which the lifter competed, to two decimal places.

Weight classes can be specified as a maximum or as a minimum. Maximums are specified by just the number, for example 90 means "up to (and including) 90kg." minimums are specified by a + to the right of the number, for example 90+ means "above (and excluding) 90kg."

Squat1Kg, Bench1Kg, Deadlift1Kg

Optional. First attempts for each of squat, bench, and deadlift, respectively. Maximum of two decimal places.

Negative values indicate failed attempts.

Not all federations report attempt information. Some federations only report Best attempts.

Squat2Kg, Bench2Kg, Deadlift2Kg

Optional. Second attempts for each of squat, bench, and deadlift, respectively. Maximum of two decimal places.

Negative values indicate failed attempts.

Not all federations report attempt information. Some federations only report Best attempts.

Squat3Kg, Bench3Kg, Deadlift3Kg

Optional. Third attempts for each of squat, bench, and deadlift, respectively. Maximum of two decimal places.

Negative values indicate failed attempts.

Not all federations report attempt information. Some federations only report Best attempts.

Squat4Kg, Bench4Kg, Deadlift4Kg

Optional. Fourth attempts for each of squat, bench, and deadlift, respectively. Maximum of two decimal places.

Negative values indicate failed attempts.

Fourth attempts are special, in that they do not count toward the TotalKg. They are used for recording single-lift records.

Best3SquatKg, Best3BenchKg, Best3DeadliftKg

Optional. Maximum of the first three successful attempts for the lift.

Rarely may be negative: that is used by some federations to report the lowest weight the lifter attempted and failed.

TotalKg

Optional. Sum of Best3SquatKg, Best3BenchKg, and Best3DeadliftKg, if all three lifts were a success. If one of the lifts was failed, or the lifter was disqualified for some other reason, the TotalKg is empty.

Rarely, mostly for older meets, a federation will report the total but not *any* lift information.

Place

Mandatory. The recorded place of the lifter in the given division at the end of the meet.

Values are as follows:

* Positive number: the place the lifter came in.
* G: Guest lifter. The lifter succeeded, but wasn't eligible for awards.
* DQ: Disqualified. Note that DQ could be for procedural reasons, not just failed attempts.
* DD: Doping Disqualification. The lifter failed a drug test.
* NS: No-Show. The lifter did not show up on the meet day.

Wilks

Optional. A positive number if Wilks points could be calculated, empty if the lifter was disqualified.

Wilks is the most common formula used for determining Best Lifter in a powerlifting meet.

Tested

Optional. Yes if the lifter entered a drug-tested category, empty otherwise.

Note that this records whether the results *count as drug-tested*, which does not imply that the lifter actually took a drug test. Federations do not report which lifters, if any, were subject to drug testing.

Federation

Mandatory. The federation that hosted the meet.

Note that this may be different than the international federation that provided sanction to the meet. For example, USPA meets are sanctioned by the IPL, but we record USPA meets as USPA.

The full list of valid Federation values is defined by [modules/opltypes/src/federation.rs](https://gitlab.com/openpowerlifting/opl-data/blob/master/modules/opltypes/src/federation.rs). Comments in that file help explain what each federation value means.

ParentFederation

Optional. The topmost federation that sanctioned the meet, usually the international body.

For example, the ParentFederation for the USAPL and EPA is IPF.

Date

Mandatory. The start date of the meet in [ISO 8601 format](https://en.wikipedia.org/wiki/ISO_8601). ISO 8601 looks like YYYY-MM-DD: as an example, 1996-12-04 would be December 4th, 1996.

Meets that last more than one day only have the start date recorded.

MeetState

Optional. The state, province, or region in which the meet was held.

MeetName

Mandatory. The name of the meet.

The name is defined to never include the year or the federation. For example, the meet officially called 2019 USAPL Raw National Championships would have the MeetName Raw National Championshps.

Acknowledgements

The data used in this dataset was aggregated entirely from the [OpenPowerlifting project](https://www.openpowerlifting.org/). Special thanks to the OpenPowerlifting team for compiling all this information.

You may download a copy of the data at <https://gitlab.com/openpowerlifting/opl-data>.

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