



2012 Sabotage Report

Hello, boys and girls. It has been nearly a year since we cracked open a can of PBR and sat down at the old ‘puter to do some completely unnecessary, and yet entirely fascinating, statistical analysis of the sabotage that occurs during the Chiditarod. We finally got around to doing it this year, and we have some interesting things to share.

METHODS

Every year, racers are sent an email link to a survey, where we ask them to wax poetic about their race experiences. Some of the questions involve sabotage. Racers were asked if they were victims of sabotage and if they were saboteurs acting against another team. Racers are then prompted to give a descriptive, narrative account of these encounters. In 2012, 252 individual racers responded to our survey. This is the data being analyzed here.

To do this analysis, we set up the following coding schemes: racers were categorized according to the number of years they had raced in the Chiditarod. Those running their first race were coded as “newbies.” Those running their second (or higher) race, were considered “experienced racers.” We then coded all of the sabotage information in a binary fashion. Did you suffer sabotage? Yes/No. Did you dish out sabotage? Yes/No.

We also went back to the narrative accounts of sabotage that were given, and we coded these events based upon patterns that emerged. We then determined the relative frequency with which each type of sabotage occurred. Yay tables!

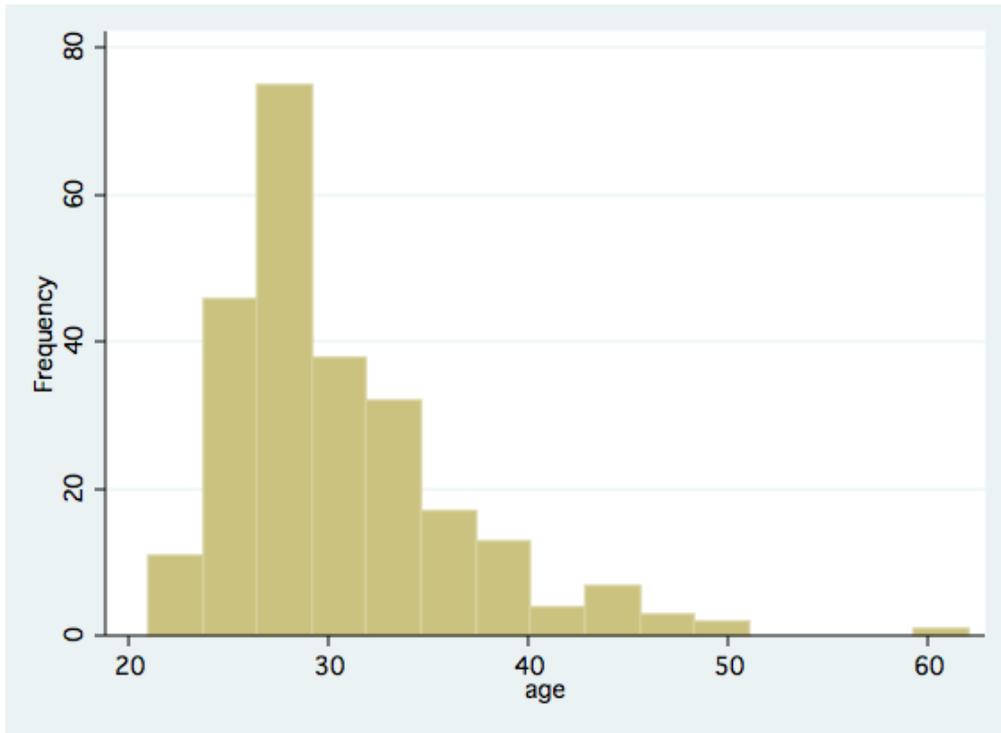
All of the data was cleaned and coded using Microsoft Excel 2011 for Mac, v 14.1.0 (and also MY MIND!). All descriptive statistics and statistical analyses were generated using Stata/IC 10.1 for Macintosh.

THE 2012 RACER PROFILE

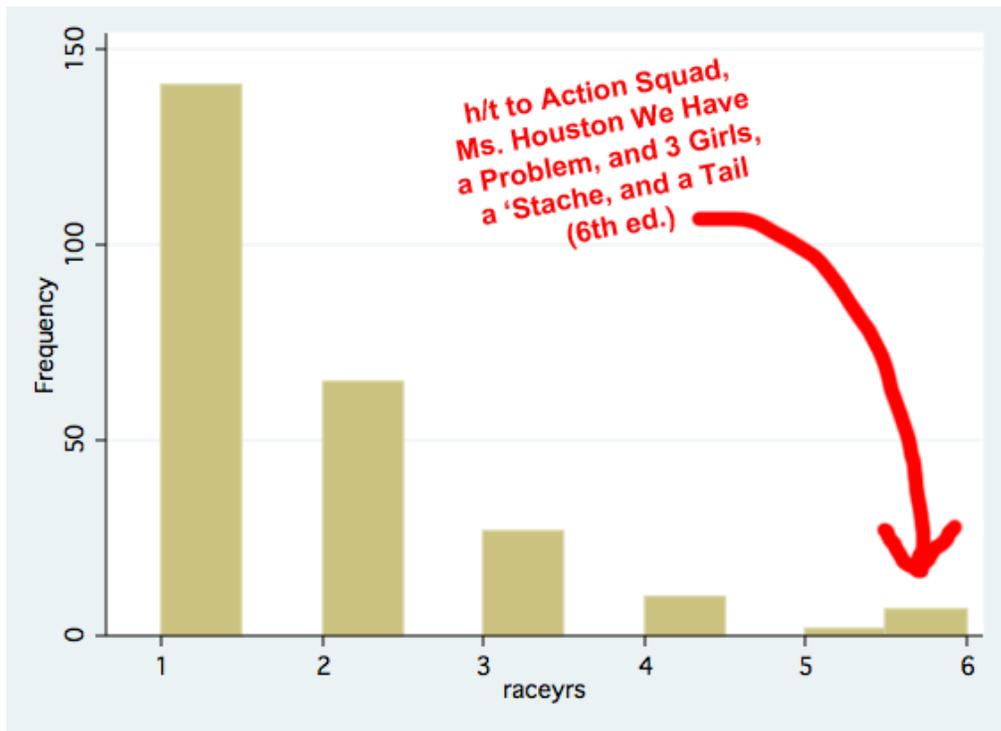
So, who raced in 2012? A whole friggin’ lot of you, that’s who. If you want more detailed information, see the fun tables and infographics below.

| | Average | Min | Max | SD |
|---|---------|-----|-----|------|
| Racer age | 30.5 | 21 | 62 | 5.82 |
| No. of Chiditarods experienced as a racer | 1.76 | 1 | 6 | 1.14 |
| No. of Chiditarods experienced as a spectator | 1.30 | 1 | 6 | 0.77 |

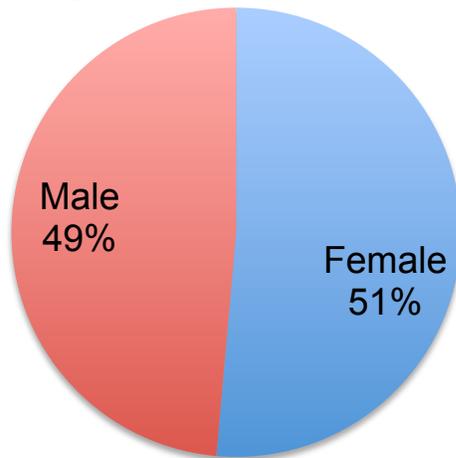
Racer Age, by Frequency



Number of Chiditarods Experienced as a Racer, by Frequency



Gender Breakdown (Self-Reported, Open-Ended)



Responses supplied to this open-ended question and the how we coded them:

Coded as Female: f, female, woman, I am a lady

Coded as Male: m, male, make, dude, ManBoy, Blue Man, I'm a Man! Spelled M.A.N.! A main!!!!

Responses left blank: 2

TYPES OF SABOTAGE REPORTED -or- THE VOODOO THAT YOU DO

After reviewing the data from the 2012 Chiditarod Racer survey, it was determined that none of the reported sabotage incidents deviated from the taxonomy developed in the 2011 Chiditarod Sabotage Report...with one exception. This year saw the development of the Friendship Locks, which were super clever, but also kind of sucked for a lot of people, and there were mixed feelings about the whole thing. There were also lots of people who were really into duct taping carts to trees. No idea what that's about. I'm not your therapist.

Anyway, to borrow a phrase from one of our racers, the "good old fashioned chain and cinderblock," which had previously been considered to be within the **Tying or Locking Up of Carts** category, has clearly taken on a legacy of its own, and especially as the locking up of carts became more intense. So, we gave the cinder block trick its own category for the count.

Below are descriptions of the nine different forms that we understand sabotage to have taken during the 2012 Chiditarod race:

- **They tying up or locking up of carts** – This includes everything from zip-tying carts together, duct taping carts to telephone poles, saran wrapping carts, U-locking carts, and other varieties of cart bondage.
- **Cart hiding and stashing** – Your cart has been relocated to the back of the bar, the other side of the street, the dumpster, to the second story of the building, etc.
- **Theft of food or cart components** – Theft of food donations from carts; theft of artistic components, like decorations and art pieces, or technical components, like ropes and

steering mechanisms, from carts. Also vandalism, including paint and major re-branding of your cart at the whim of other teams.

- **Repurposing Sticky Substances** – The relocation of peanut butter, molasses, whipped cream, shaving cream, Vaseline, or a variety of other viscous fluids onto your cart or your person.
- **Creative/Happy Sabotage** – Someone has surreptitiously applied glitter, stickers, and My Little Ponies to your cart. Or you got a face full of flour. Shenanigans.
- **Disabling Wheels** – Applying obscene amounts of duct tape or some other bulky material to shopping cart wheels for the purposes of hindering their movement and making the cart a real pain in the butt to drag along. Great Stuff foam and liquid adhesive also counts.
- **Psy Ops** – This is creative sabotage that is intended to trick other teams into thinking that it is to their advantage to violate the rules of the race and/or sending people on wild goose chases. This includes switching around street signs, handing out fake “skip a checkpoint” coupons, etc.
- **Petty Theft** – We deeply regret that this happened in 2011. BUT NOT IN 2012! Cause we are adults, bitches!
- **Weighting the Carts** – Placing cinder blocks, concrete, bricks, your teammate, small children, or other significant weights into the cart of your enemies and/or tying them to said cart.

Given this juicy and satisfying information, we were able to determine how much of each kind of sabotage was reported by victims and by saboteurs. Note that these incidents, as reported by victims and by saboteurs, do not match up. In some instances, it was very clear when a victim and a saboteur were reporting the same event. Many times, though, this was not the case. We are unable to give you an exact account of what happened, only what people claimed they did, and what people claimed they experienced at the hands of others.

Also, all y’all saboteurs who filled out your survey saying you never kiss and tell...that’s a dirty lie, cause last time I checked, 97>70. I’m not sayin’, I’m just sayin’, Y’all be proud of the mayhem you unleash.

| | No. of incidents reported by Victims of Sabotage | | No. of incidents reported by Saboteurs | |
|---------------------------------------|--|--------|--|--------|
| | | % | | % |
| Locking or Tying Up of Carts | 39 | 55.71% | 37 | 38.14% |
| Hiding or Stashing of Carts | 1 | 1.43% | 3 | 3.09% |
| Theft or Defacing of Cart Components | 8 | 11.43% | 5 | 5.15% |
| Repurposing of Gross Substances | 33 | 47.14% | 13 | 13.40% |
| Creative and Happy Sabotage | 9 | 12.86% | 16 | 16.49% |
| Disabling Wheels | 12 | 17.14% | 15 | 15.46% |
| Psy Ops | 2 | 2.86% | 4 | 4.12% |
| Petty Theft | 0 | 0.00% | 0 | 0.00% |
| Weights (Concrete/Bricks) in the Cart | 5 | 7.14% | 4 | 4.12% |
| | | 100.00 | | 100.00 |
| TOTAL | 70 | % | 97 | % |

IS SABOTAGE (GIVING *OR* RECEIVING) RELATED TO RACER EXPERIENCE OR SATISFACTION?

Spoiler alert! Really, no. It doesn't seem to be. Read on to learn how we came to this conclusion.

This year, we ran the same sort of statistical analysis as we did in the 2011 Sabotage Report. Here's a recap what that analysis is and how it works:

The...major variables in question...are coded as binary variables; we are able to compare the distribution of giving or receiving sabotage across first-time and experienced racers with a basic Chi-squared test.

CHI²-DITA-WHAT? Briefly, a Chi-squared test compares two statistical distributions to each other (in this case all the responses from first-timers and all the responses from experienced racers). The Chi-squared test quantifies how similar or different those two distributions are from each other. This comparison is given as a risk-ratio—i.e. the chance that you will dish out sabotage if you are a first-time racer versus the chance that you will dish out sabotage if you are an experienced racer. The Chi-squared test also allows us to calculate how likely it is that increasing the sample size (i.e. having 1,000 survey respondents rather than only 94) would reveal these two distributions to be essentially the same. In other words, the test also calculates how likely it is that any difference that we see between the two groups is spurious, or pure chance. The statistical term for this likelihood is called the p-value. If a p-value is calculated at 0.01, then there is a 1% chance that any difference in the compared distributions is caused by chance based on bias in the sample; if the p-value is 0.5, there is a 50% chance that the difference is pure chance. It is generally accepted that if a calculation has a p-value of 0.05 or less, it is considered “statistically significant.” Anything higher than 0.05 means the evidence is considered inadequate to support the conclusion that there is a real difference between the two groups¹.

This year, we coded five major variables as binary, or yes/no, variables: whether a racer was a victim of sabotage, whether a racer was a saboteur, whether a racer was a newbie, whether a racer would recommend the Chiditarod to their friends, and whether a racer hopes to return to Chiditarod this year (in 2013).

In 2011, we found a statistically significant difference in the amount of sabotage received by first-time racers. Based on that data, we concluded that newbies were more likely to fall victim to sabotage. **Our numbers from 2012 no longer support this conclusion. We found no statistically significant relationship between being a newbie and giving or receiving sabotage of any kind.** In fact, the percentage of people who dished out and received sabotage is about the same in each group. There was also no statistically significant difference between the percentage of newbies who would recommend the Chiditarod to friends and want to come back next year and experienced racers who would do the same.

¹ If you want to read more about the Chi-squared test and how it works, this website is a good resource: <http://math.hws.edu/javamath/ryan/ChiSquare.html>

| % of racers who ... | First time racers | Return racers | p-value for the difference in risk |
|---|-------------------|---------------|------------------------------------|
| Were victims of sabotage | 52.47% | 47.12% | 0.3975 |
| Were active saboteurs | 48.09% | 49.04% | 0.8853 |
| Would recommend Chiditarod to their friends | 95.08% | 97.89% | 0.2753 |
| Would race in the Chiditarod next year | 74.38% | 82.11% | 0.1752 |
| Are total bad-asses | 100% | 100% | <0.001 |

To reiterate, racers responded to our survey questions in about the same ways for each of these categories, regardless of whether or not they were first time racers or experienced racers.

IS SABOTAGE RELATED TO GENDER?

Spoiler alert! If you are a victim, no. If you are a saboteur, yes indeedlie-doodlie.

On a hunch², we also wanted to see if there were any gendered differences in the gender make-up of sabotage victims and saboteurs. We ran two additional chi-squared tests to see if there was any relationship between gender and being a victim and between gender and being a saboteur.

Falling victim to sabotage appears to have no relationship with gender.

| | Female | Male | All Racers |
|--------------|--------|--------|------------|
| Victim | 62 | 56 | 118 |
| Not a Victim | 59 | 58 | 117 |
| Total | 121 | 114 | 235 |
| Risk | 0.5123 | 0.4912 | 0.5021 |

Risk Difference = -0.0212
[95%CI: -0.1067, 0.1491]

p-value = 0.7457

Above is a contingency table for the number of racers who were and were not victims of sabotage, according to whether they were male or female. We can see that about 50% of both men and women fell victim to sabotage, and the difference between that risk (calculated here as about 2% in favor of the women) is *far* from statistically significant.

But...

Being a saboteur IS related to gender. Saboteurs are more likely to be male.

² Type I error be damned!

| | Female | Male | All Racers |
|----------------|--------|--------|------------|
| Saboteur | 48 | 66 | 114 |
| Not a Saboteur | 73 | 48 | 121 |
| Total | 121 | 114 | 235 |
| Risk | 0.3967 | 0.5789 | 0.4851 |

Risk Difference = -0.1823
[95%CI: -0.3080, -0.0565]

p-value = 0.0052

Above is another contingency table, this time representing the number of racers who reported acting as saboteurs according to whether they declared themselves male or female. Not only is the percentage of male saboteurs (57.89%) much higher than women (39.67%), but the p-value for this calculation is 0.0052, which means that this relationship is statistically significant; it is *highly* unlikely that this pattern arose due to chance. The risk ratio of men to women is

$$0.5789 / 0.3967 = 1.459$$

which means that, according to this survey, **men are 45.9% more likely than women to be active saboteurs during the race.**

CONCLUSIONS

First, we have a great representation among our racers in terms of age and gender. We're happy about this. We really hope you guys keep coming out to play. We like you.

Second, sabotage continues to get more and more creative every year. Racers force us to re-think our sabotage taxonomy every year, because they keep doing crazier and crazier stuff.

Third, the trend that we thought we were seeing—of first time racers falling victim to sabotage more often—seems to be disappearing. Either we were wrong the first time around, or newbies are coming to the race wiser and more prepared, or racers are getting more equitable with their wanton destruction.

Fourth, since we have more males reporting acts of sabotage than females, we can assume one of two things. Either there really are more male saboteurs than female, or men just like telling their war stories in the survey more than women do. So, women, you are either much nicer, or less of a braggart. Either way, you win.

RECOMMENDATIONS

1) Always keep in mind:

- We do this for our fellow Chicagoans who suffer from food insecurity.
- We do this together because we are stronger together, as a community, than we are as individuals.
- We do this for each other and with each other because we are all equally rad.
- It's all in good fun!

2) Buck up, campers, and keep being excellent to each other.

Mush!