

The 2014 CHIditarod Sabotage Report



Each winter, the great beast of humanity that is the CHIditarod darkens the streets of northwest Chicago for an entire Saturday, cloaking the town in costumes, charity, and mayhem. All of this is done in the name of fighting hunger in the Chicagoland area and establishing deep, emotional bonds with our local bartenders.

While the baubled regalia of CHIditarod racers inspires the child (and the idiot) in all of us, and the humanitarian efforts of the participants deserves a celebration that only the CHIditarod can contain, it is the position of the race organizers that the *mayhem* component of the annual CHIditarod race and food drive merits closer scientific scrutiny. This is the purpose of the Sabotage Report—a scientific scrutator that contains said scrutinization and science-ness herein. Also charts, because charts. Occasionally monkeys.

METHODS

Following the 2014 CHIditarod, racers were emailed a link to an online survey that was designed to capture their impressions of the race. Racers were asked to provide basic demographic information, rate the quality of their experiences regarding various elements of the race, and report incidents of sabotage and bribery in which they took part. In 2014, 186 racers responded to our survey. Their responses are being analyzed here.

The data supplied in these surveys were coded into a number of binary (1/0 or “yes”/“no”) variables:

- Whether the racer reported being a victim of sabotage
- Whether the racer reported dishing out sabotage to other teams
- Whether the racer reported bribing a judge or other CHIditarod official
- Whether the racer was male or female
- Whether the racer was 21-24 years old or 25+ years old.
- Whether the racer was racing in the CHIditarod for the very first time.

These data were used to compare the likelihood of racer shenanigans (sabotage and bribery) across differences in age, gender, and racing experience. Specifically, we used a Chi-squared¹ test to compare the relative risk of dishing out or being a victim of sabotage across different groups (like across male participants vs. female, or experienced racers vs. first timers).

In addition to these statistical analyses, we also read through numerous narrative accounts of the sabotage and bribery that racers shared with us. Sabotage techniques are always creative, but they are also learned, repeated, and improved from year to year. Patterns in the types of sabotage unleashed evolve from year to year. To analyze the character of sabotage at the 2014 CHIditarod, we read through racers' narrative accounts and coded the types of sabotage they reported into different, well-established sub-genres of sabotage and determined the relative frequency with which each type of sabotage occurred.

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.

Monkeys were not involved in the preparation of this report. Except Survey Monkey. We used that service to run our surveys, but that's not actually a real monkey. It's just a name. Don't get overly excited.



This monkey was not included, which is why he looks so bummed about the whole thing.
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¹ **CHI²-DITA-WHAT?** Briefly, a Chi-squared test compares two statistical, binary (i.e. “yes” or “no”) 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 quantified with a value known 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**. (Don't ask me why it's called that. I just work here.) 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 groups. There is a lot more math behind a Chi-squared test, but this information is all you need to read and make sense of the tables in this report.

THE 2014 RACER PROFILE

So, who raced with the CHIditarod gang in 2014? A whole bunch of you's, that's who. We estimated the average age of the 2014 CHIditarod racer to be 31.5 years old, though we had participants as young as 21 (cause it's a drinking game, duh) and as ripened as 53 years of age. It also may interest you that there were more ladies than dudes in the CHIditarod in 2014. In earlier years, the gender split, according to self-report, had been pretty much 50-50. This year, however, the womenfolk squeaked ahead representing an estimated 53% of CHIditarod participants.

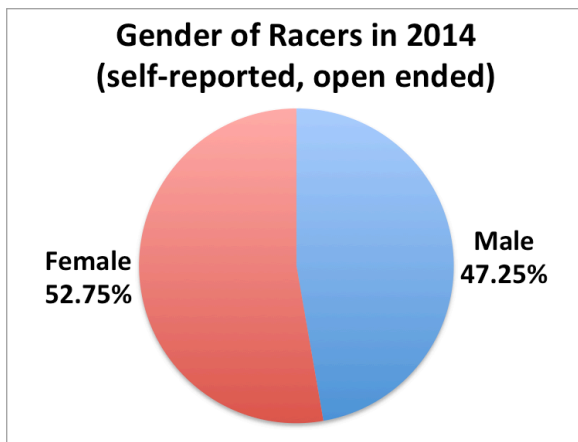
The average level of experience among 2014's participants was 2.5 previous CHIditarod races. This means that a lot of people who showed up to the race had done this before and knew what to expect. However, this average is affected by the fact that we have some *very* experienced racers in our midst—people who have run the Chiditarod six, seven, even *eight* times! The bar graph representing the number of CHIditarods each participant has been in as a racer shows that the vast majority of CHIditarod racers are first-timers.

In other words, this means that there is a whole lot of experience in the crowd, but it isn't evenly distributed among the whole crowd.

In other words, unless you are from the Action Squad, the Derailers, Deer Pong, El-Coholics, Drag Stars, or “3 Girls, A Stache, and a Tail”, you are the 99%.

Average Racer Age and CHIditarod Experience

	Average	Min	Max	SD
Racer age	31.5	21	53	6.06
No. of CHIditarods experienced as a racer	2.49	1	8	1.08
No. of CHIditarods experienced as a spectator	0.25	0	5	0.69
No. of CHIditarods experienced as a volunteer	0.02	0	2	0.18



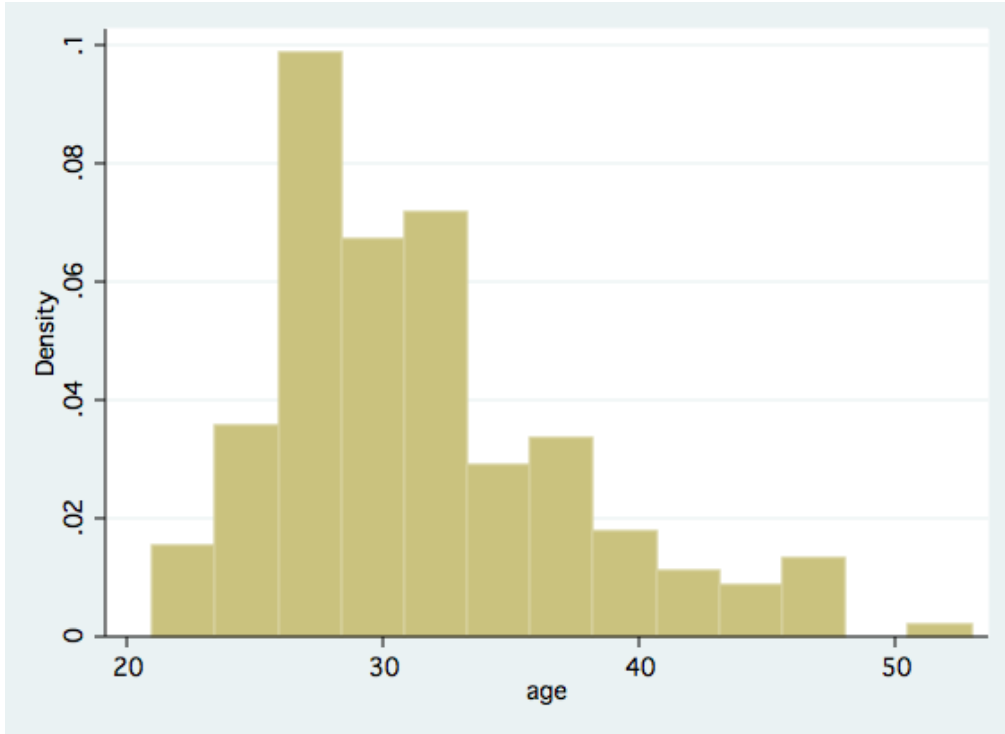
Responses supplied to this open-ended question and the how we coded them:

Coded as Female: female, woman, lady, F, femal

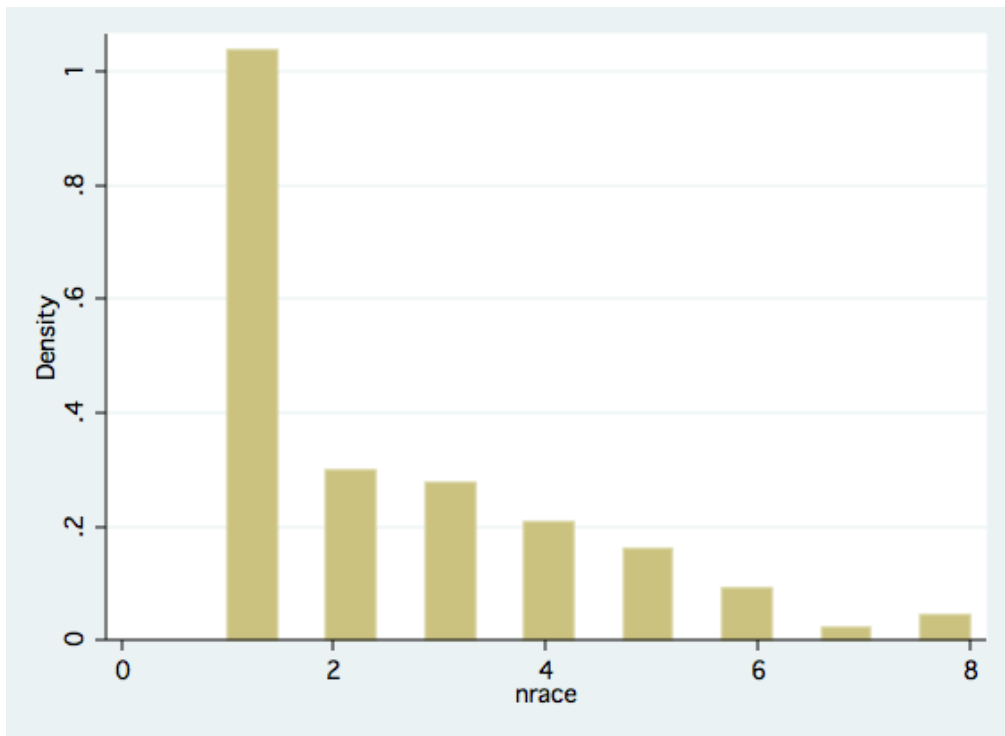
Coded as Male: male, dude, male leaning, M, man

Responses left blank: 4

Racer Age, by Frequency



Number of CHiditarods Experienced as a Racer, by Frequency



THE FACE OF SABOTAGE: A PROFILE OF CRIMES AGAINST CARTS IN 2014



Alas...

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Whelp, y'all were busy causing chaos and strife on the streets of Chicago in 2014. Below is a list of all of the categories of sabotage reported by both victims and saboteurs at the 2014 CHIditarod. This list is, of course, based on self-report, which means that this is only the sabotage you were willing to brag about. If something went super wrong and you brought CHIdita-shame upon your team with a massive sabotage failure, you might not have reported it here, which means that we won't know about it.

In survey-space, no one hears you screw up... unless you have too many bottles of High Life and drunk dial us to cry about the fact that you're a failure. Then we know.

Here's a description of all the different kinds of shenanigans you told us you got up to:

- **Cart bondage** – Zip-tying carts together, duct taping carts to telephone poles, u-locking carts together, and other sort of physical restraints.
- **Manipulation of a cart's orientation in the fabric of space-time** – Cart hiding, cart stashing, cart tipping, cart hanging-from-the-tracks-of-the-Blue-Line, etc.
- **Theft of cart components or of props essential to costume design and/or character development** – Theft of artistic components, like decorations and art pieces, or technical components, like ropes and steering mechanisms, from carts.
- **Ironic food-based sabotage** – Despite the fact that this is a *food drive*, someone has decided that the peanut butter, molasses, whipped cream, shaving cream, or other viscous fluids in their possession were better situated on your cart or your person instead of in their original containers.

FYI – food-based sabotage is totes against the rules. Because obviously.

<http://www.chiditarod.org/sabotage-guidelines/>

- **Creative/happy sabotage** – Someone has surreptitiously applied glitter, stickers, and My Little Ponies to your cart. Shenanigans.
- **Disabling wheels** – Applying obscene amounts of duct tape, metal brackets, screws and nails, or any other nefarious hardware product 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.
- **Barrier methods** – Physically blocking carts with your physical body, your teammate's body, or your cart. Cart ramming and cart jousting are included in this category as well.

- **The embiggening of cart mass** – 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.

**The Relative Frequency of Different Kinds of Sabotage
As Reported by Victims and by Saboteurs**

	No. of incidents reported by Victims of Sabotage		No. of incidents reported by Saboteurs	
		%		%
Cart bondage	14	22.2%	20	35.1%
Altering cart orientation in space-time	3	4.8%	5	8.8%
Theft of cart components or props	7	11.1%	2	3.5%
Ironic food-based sabotage	2	3.2	1	1.8%
Creative and happy sabotage	4	6.3%	6	10.5%
Disabling wheels	22	35.0%	10	17.5%
Psy ops	3	4.8%	7	12.3%
Barrier methods	6	9.55	5	8.8%
Cart mass embiggening/Adding weight	2	3.8%	1	1.8%
TOTAL	63	100%	57	100%

In 2014, the most common forms of sabotage *by far* were cart bondage and wheel disabling. This is a major shift from 2012, when the most common forms of sabotage reported were cart bondage and sticky, food-based sabotage. Wheel disabling has really come into its own this year; more than 1/3 of sabotage victims who completed our survey said that the dignity of their cart was assaulted in this way.

THE SCIENCE OF SABOTAGE

In 2011, we found a statistically significant difference in the amount of sabotage received by first-time racers. The next year, in 2012, our data no longer supported 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 was about the same in each group. Our hope is that this change happened because first-time racers are coming to the CHIditarod more informed in the art of sabotage prevention, treatment, and actualization.

In 2014, we saw the same thing. All told, around 1/3 of all racers reported being victims of sabotage. About the same number of racers reported dishing out sabotage as well. There was no appreciable difference between the two groups, which means that being a first time racer appears to have no affect on whether or not you caused or received sabotage during the race.

However, well more than half of you, both first timers and experienced racers alike, tried to bribe the judges along the way—usually with alcohol and baked goods...or alcohol AND

baked goods...or fake moustaches. According to the survey, these attempts were generally successful in currying the judges' favor and gaining some advantage.

Sigh. This is Chicago. What do you expect?

% of racers who ...	First time racers	Return racers	p-value for the difference in risk	Did science find any measurable difference between the two groups?
Were victims of sabotage	36.14%	28.74%	0.3020	No.
Were active saboteurs	31.33%	27.59%	0.5928	No.
Bribed officials	54.04%	62.07%	0.6059	No.

We looked at a gender breakdown of sabotage and bribery as well, because the 2012 survey revealed that men were nearly 50% more likely to dish out sabotage than women, even though men and women were equally likely to be victims of sabotage.

This year, we found no appreciable difference. A larger percentage of men were victims of sabotage this year, but the p-value was HUGE (0.2745, which is way bigger than the 0.05 needed to find a statistically significant association), so that difference is just an illusion.

% of racers who ...	Identified as male	Identified as female	p-value for the difference in risk	Did science find any measurable difference between the two groups?
Were victims of sabotage	37.18%	29.21%	0.2745	No. It's an <i>illusion</i> , Dad!
Were active saboteurs	30.77%	28.09%	0.7044	Nope.
Bribed officials	60.26%	61.80%	0.8385	Definitely not.

We also took a moment to look at the relative frequencies of sabotage across different age brackets among our racers. We divided all of our racers into two groups: those 21-24 years old and those 25 years old and older. We found that a much larger proportion, more than half, of participants who are not yet 25 years of age were victims of sabotage, where as less than 1/3 of the participants 25 years or older suffered sabotage against their team. The p-value for this difference is 0.0848. Since it's larger than 0.05, we can't say for sure that this is a statistically significant difference, but it seems likely that there is some kind of relationship here. A significant correlation might appear with a larger sample size.

In regard to dishing out sabotage, we can conclude *with statistical significance* that there is most definitely a relationship between age and acting as a saboteur. Young participants aged 24 and younger are nearly twice as likely as participants 25 years and older to dish out sabotage against their competitors.

Younger racers appear to be more likely to bribe judges, but this relationship isn't statistically significant, which means that we can't rule out the possibility that you are all equally corrupt(able).

% of racers who ...	Were 21-24 years old	Were 25 years old or older	p-value for the difference in risk	Did science find any measurable difference between the two groups?
Were victims of sabotage	53.87%	30.57%	0.0848	Pretty likely.
Were active saboteurs	53.85%	27.39%	0.0442	Yes.
Bribed officials	76.92%	59.24%	0.2098	No.

CONCLUSIONS

A few useful conclusions can be gleaned from this data:

- 1) CHIditarod racers are diverse in terms of age and gender. We're happy about this. We hope that people of all ilks and backgrounds continue to come out to play with us.
- 2) The majority of racers every year continue to be first time racers.
- 3) Neither race experience nor gender seem to have an effect on whether or not you dish out sabotage or fall victim to sabotage.
- 4) Younger racers are more likely to be saboteurs.
- 5) Y'all all love giving the judges free beers. This works to your advantage.

RECOMMENDATIONS

As the 2015 CHIditarod draws near, remember that this is all in good fun and for a much bigger purpose.

Come prepared, guard your cart, ask the judges or bike marshals for help when you need it. Keep some scissors and work gloves in your backpack, keep a smile on your face, and don't do anything that your mother told you not to.

Thanks for being part of the CHIditarod! We're happy you decided to share your shenanigans with us.

MUSH!!



A noble cart contemplates its future...
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