HANDS ON DATENVISUALISIERUNG

LETTY, KAREN OTTE

AGENDA HEUTE

▸ Besprechung der Aufgaben

Pause

▸ Arbeiten mit Vektorgraphiken

▸ Fonts, Farben und mehr

▸ (The good, the bad and the don't)

AUFGABEN 3

▸ Vorstellung eurer Visualisierungen / Konzepte

▸ Feedback aus der Gruppe! Was ist gut? Ist die Graphik verständlich? Was fehlt? Was könnte anders gemacht werden?

ARBEITEN MIT VEKTORGRAPHIKEN

VEKTORGRAPHIK PROGRAMME

Adobe Illustrator (https://www.adobe.com/):

▸ Industriestandard für das Erzeugen von Vektorgraphiken

Affinity Designer (https://affinity.serif.com/) :

▸ Kostengünstigere Alternative zu Adobe Illustrator

InkScape (https://inkscape.org/):

▸ Kostenlose Alternative zu Adobe Illustrator, u.U. höhere Lernkurve

Microsoft PowerPoint:

▸ Unterstütz einiges an Vektorgraphikoperationen

FONTS,
FARBEN UND MEHR

RESSOURCEN – FARBEN

▸ Fertige Farbpaletten und Farbschemas:
https://coolors.co/generate
https://colorpalettes.net/
https://www.design-seeds.com/
https://colorbrewer2.org/
https://www.instagram.com/mr.pugo/

RESSOURCEN – FARBEN

▸ Selbst auswählen / generieren:
https://en.wikipedia.org/wiki/List_of_RAL_colors
https://www.materialpalette.com/
https://mycolor.space/
https://www.colorhexa.com/

RESSOURCEN – FARBEN

▸ Gradienten generieren:
https://colorbox.io/
https://mycolor.space/
http://paletton.com/

RESSOURCEN – FONTS

▸ https://fonts.google.com/

▸ https://www.1001freefonts.com/

▸ https://www.dafont.com/de/

▸ https://fonts.adobe.com/fonts

▸ https://www.cufonfonts.com/

▸ https://www.myfonts.com/WhatTheFont/ Fonts identifizieren

RESSOURCEN – ICONS (UND ILLUSTRATIONEN)

▸ https://fontawesome.com/

▸ https://icons8.com/

▸ https://thenounproject.com/

▸ https://symbolikon.com/

▸ (https://biorender.com/)

▸ (https://undraw.co/illustrations)

THE GOOD

VORWORT

Was eine gute Visualisierung ausmacht hängt von vielen Faktoren ab.

▸ Kontext

▸ Erwartungshaltung

▸ Medium / Technologie

JOURNAL STYLE GUIDES

ACS Publications
Most Trusted. Most Cited. Most Read.

Guidelines for Table of Contents/Abstract Graphics

Updated July 30, 2020

A graphic must be included with each manuscript for display in the table of contents (TOC) and the abstract. This graphic should capture the reader's attention and, in conjunction with the manuscript title, should give the reader a quick visual impression of the essence of the manuscript without providing specific results.

Quelle: https://pubsapp.acs.org/paragonplus/submission/toc_abstract_graphics_guidelines.pdf

JOURNAL STYLE GUIDES

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reader a quick visual impression of the essence of the manuscript

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Examples of Good and Poor TOC/Abstract Graphics

Authors are encouraged to examine a current issue of the journal for appropriate examples of TOC/abstract graphics. Some examples of good and poor TOC/abstract graphics are provided below.

GOOD GRAPHICS
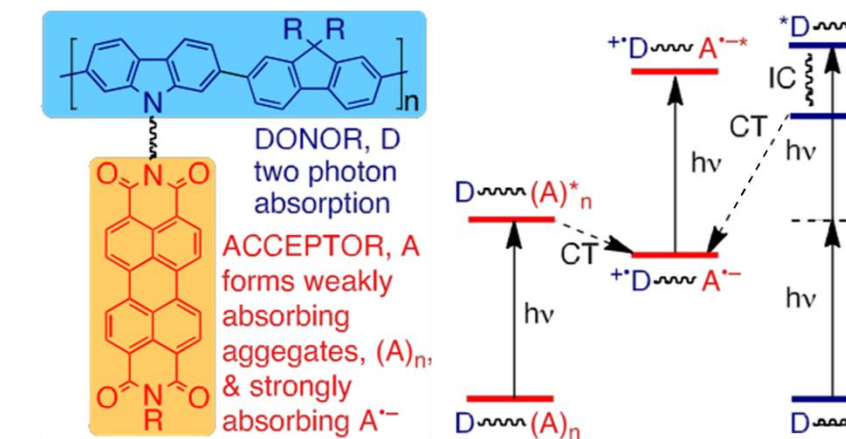
This graphic has a good balance of images and description. All of the type is crisp and easy to read.
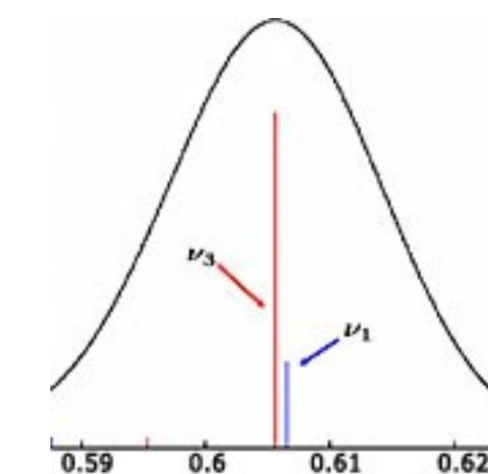
This graphic is simple and appealing.
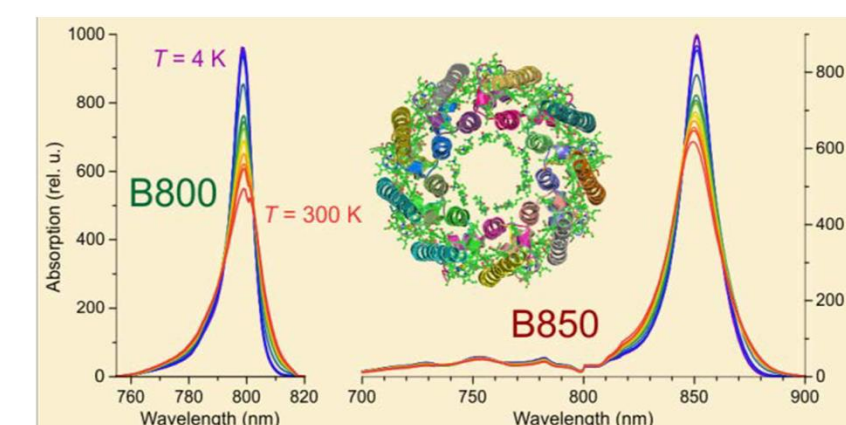
Appealing use of color and graphs. Even the smallest type is good quality and readable.

POOR GRAPHICS
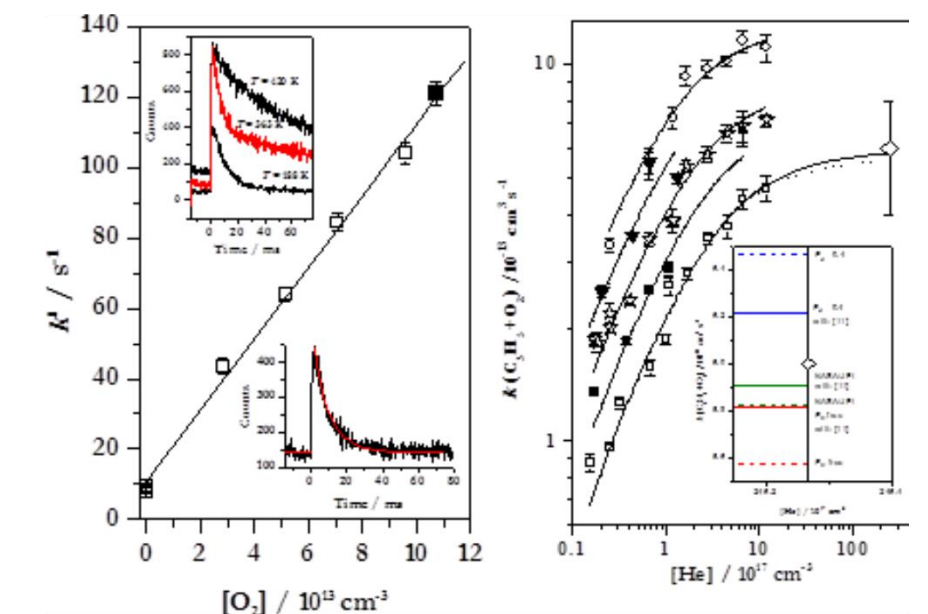
Graphic is very cluttered and most of the fonts are too small or faint to be readable.
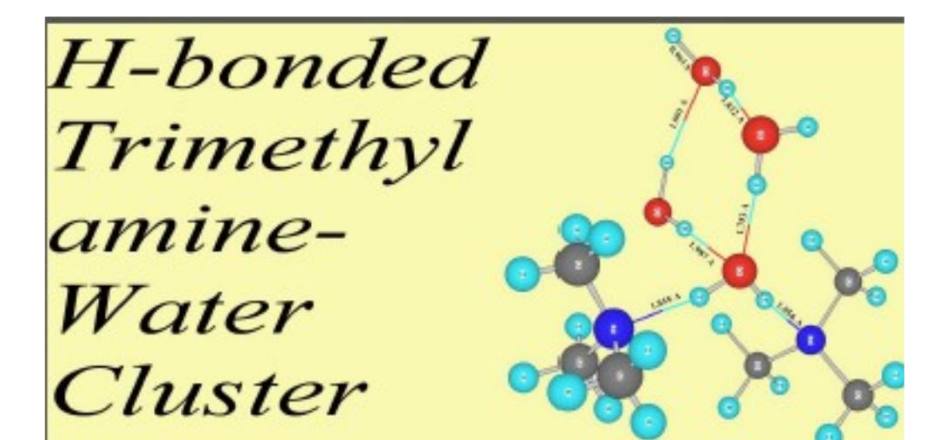
The font is too big, the image says nothing about the article, and the type on the image is unreadable.
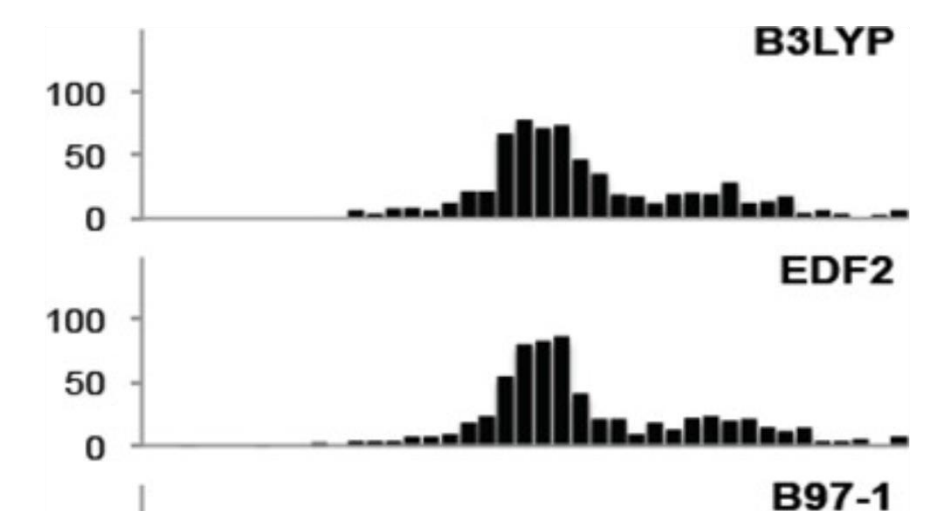
Graphic is uninteresting and not informative.

MINIMALISMUS

Quelle: https://www.darkhorseanalytics.com/blog/data-looks-better-naked

Quelle: https://www.nationalgeographic.com/magazine/2019/08/graphic-shows-past-50-years-of-global-human-migration/

SAMMLUNGEN

▸ https://www.informationisbeautifulawards.com/

▸ https://www.economist.com/graphic-detail/

▸ https://www.nationalgeographic.com/ data points series

▸ https://twitter.com/nytgraphics
https://twitter.com/PostGraphics
https://twitter.com/ReutersGraphics
https://twitter.com/PostGraphics
https://twitter.com/ftdata
https://twitter.com/WSJGraphics

INTERAKTIV

- https://codex-atlanticus.it/#/

- https://ig.ft.com/coronavirus-global-data/

- https://www.nytimes.com/interactive/2015/01/09/sports/the-dawn-wall-el-capitan.html

- https://www.zeit.de/politik/deutschland/2019-09/bundestag-jubilaeum-70-jahre-parlament-reden-woerter-sprache-wandel#s=frauenquote
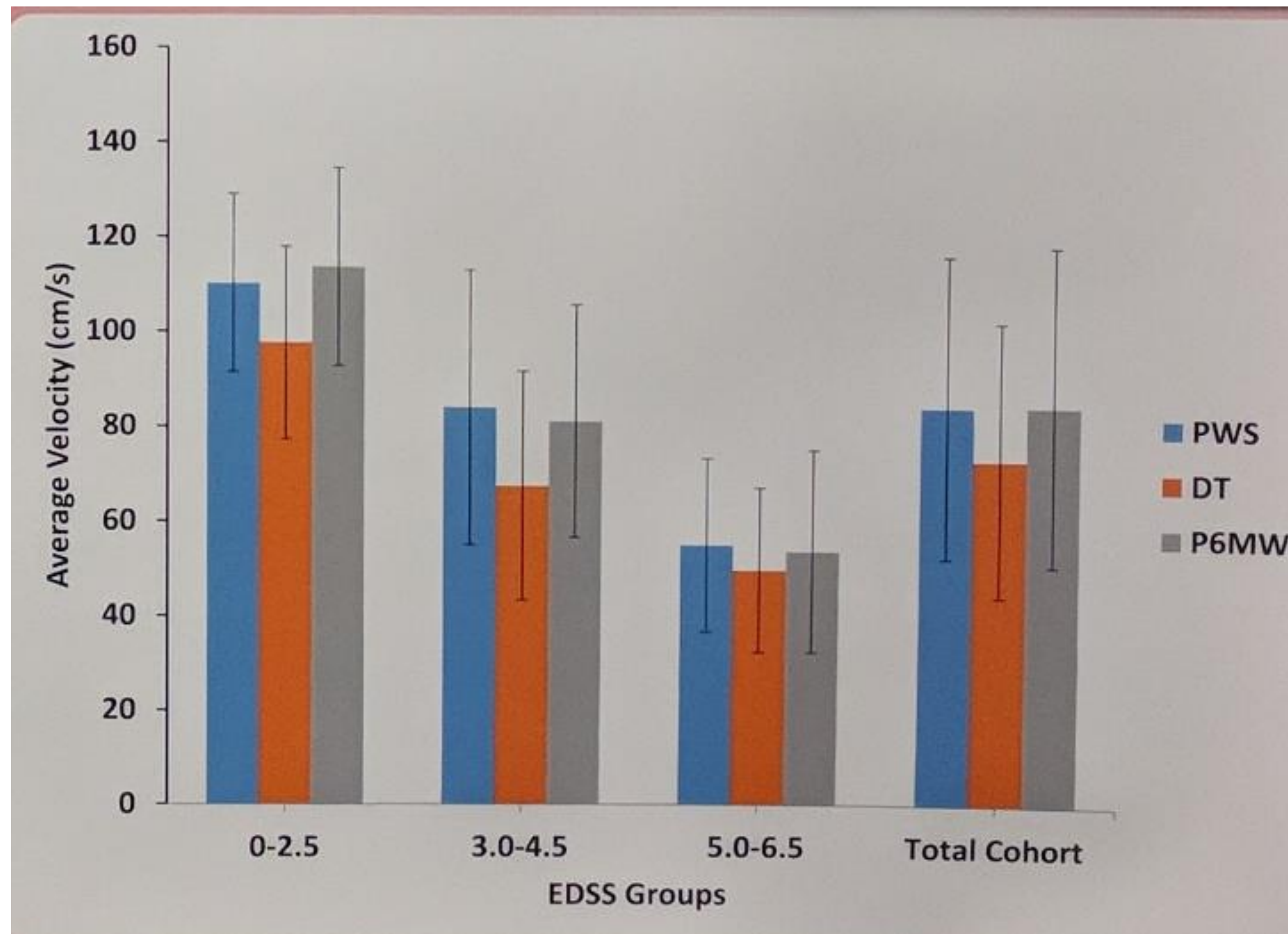
- https://graphics.reuters.com/JAPAN-AGING/010091PB2LH/index.html

THE BAD

TABELLEN

| Table 1: % Change P-Values from 2 tail unequal variance t-test (Patient vs Control)							
Significant p<.05 Not Significant= NS		Cadence (steps/min.)	Gait Cycle Time (sec.)	Step Length (cm.)	Stride Width (cm.)	Total D. Support %	Velocity (cm./sec.)
PWS -> DT	Low	NS	NS	NS	NS	0.018	NS
	Medium	NS	NS	NS	NS	0.028	NS
	High	NS	NS	0.030	NS	0.024	NS
	Total	NS	NS	NS	NS	0.021	NS
PWS -> SMW	Low	NS	NS	NS	0.001	NS	NS
	Medium	NS	NS	NS	NS	NS	NS
	High	NS	NS	NS	NS	0.026	NS
	Total	NS	NS	NS	0.012	0.021	NS

TABELLEN

Table 2: Significant changes in MS population between PWS and P6MW RWW

EDSS Groups ↓	Velocity (cm./sec.)	Step Length (cm.)	Total D. Support %	Stride Width (cm.)	Gait Cycle Time (sec.)	Cadence (steps/min.)	FAP
0-2.5	NS	NS	NS	S	NS	NS	S
3-4.5	NS	NS	NS	NS	NS	NS	NS
5-6.5	NS	NS	NS	NS	NS	NS	NS
All	NS	NS	S	S	NS	NS	NS

WARUM BAR CHARTS? BOXPLOT

WARUM BAR CHARTS? EINZELWERTE

Fig. 2: Specificity and sensitivity per algorithm
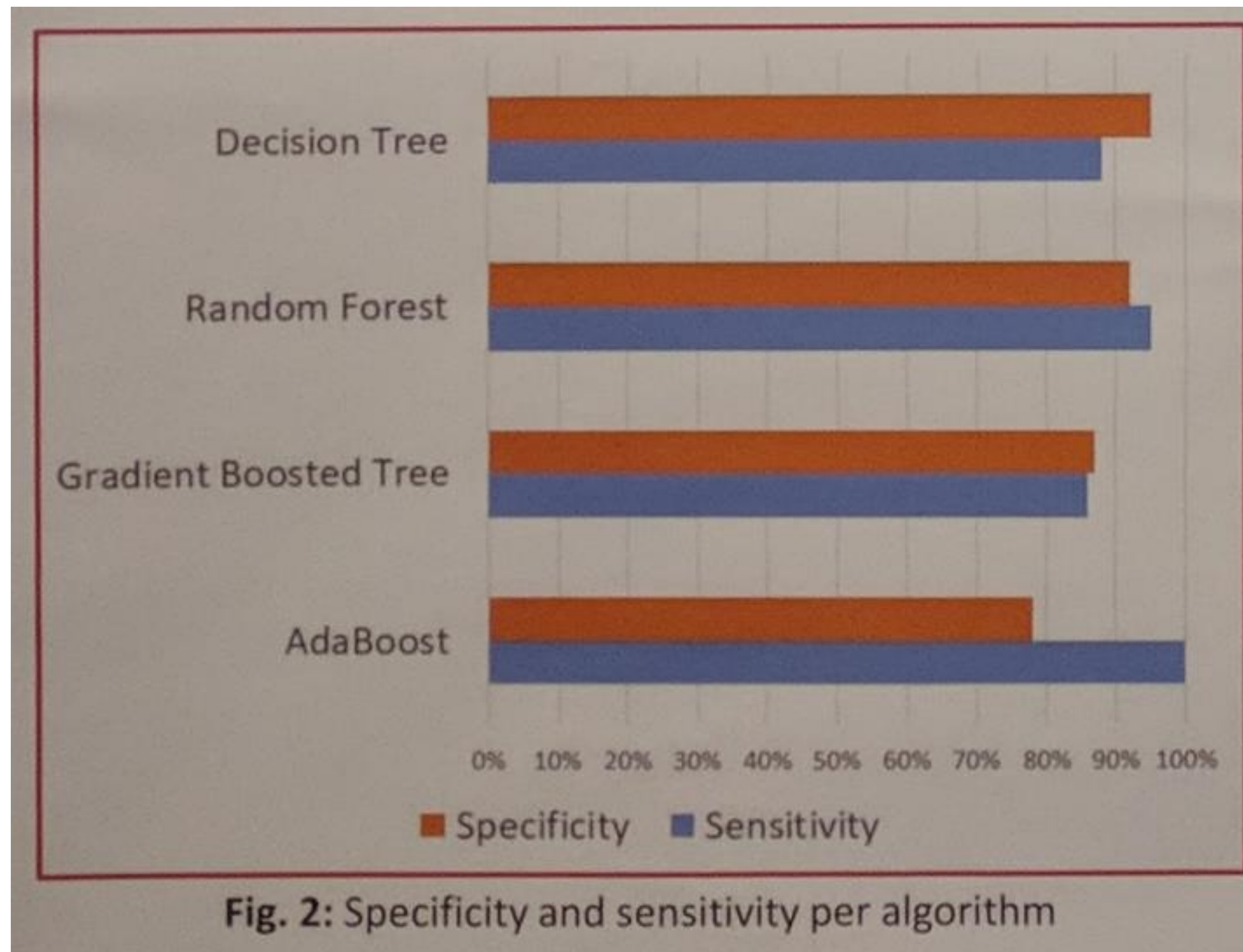
WARUM BAR CHARTS? ORDNUNG
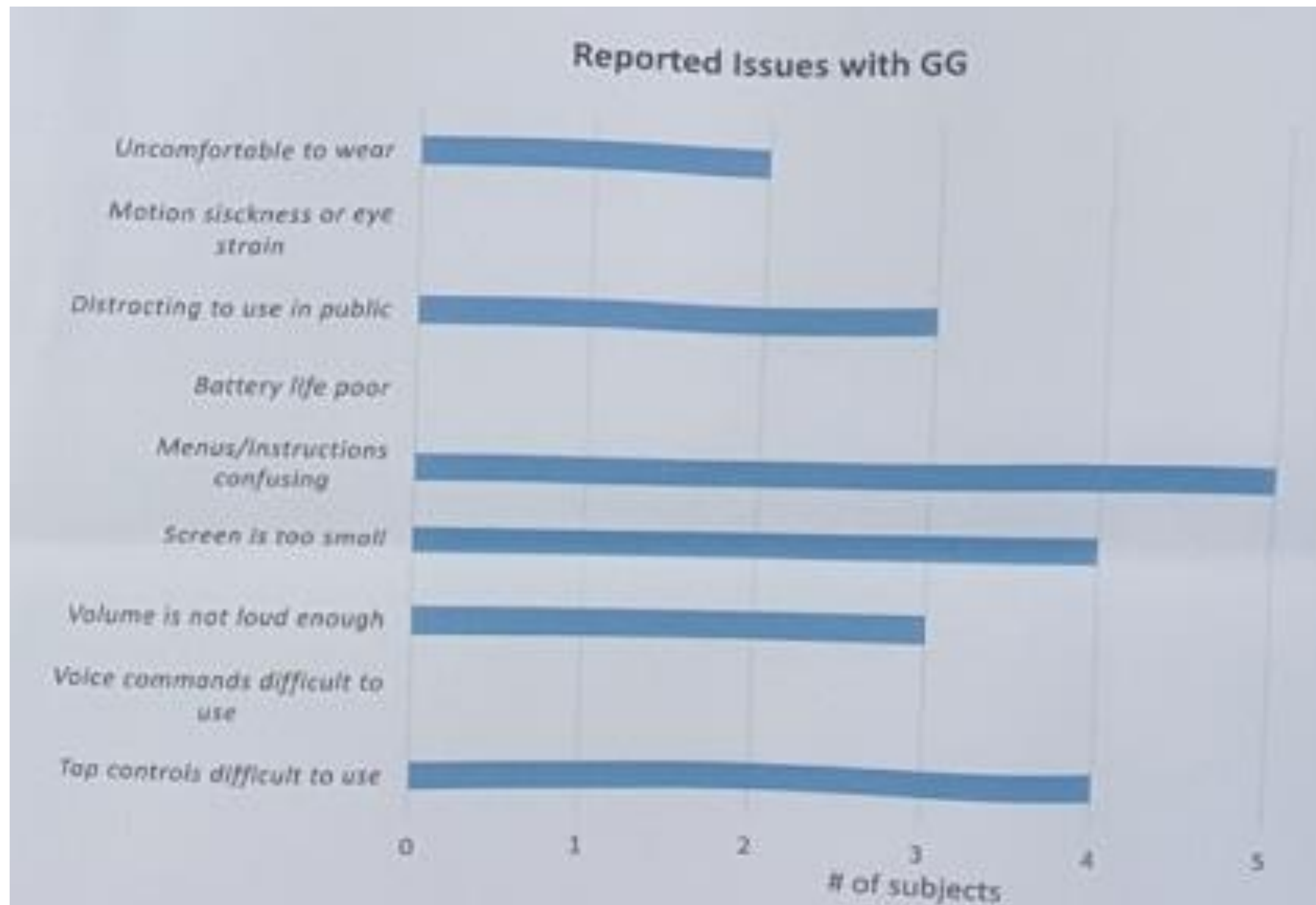
WARUM BAR CHARTS? ABSTÄNDE

KEIN KUCHEN

ABLAUFLABYRINTHE

ES GEHT BESSER

▸ https://informationisbeautiful.net/beautifulnews/
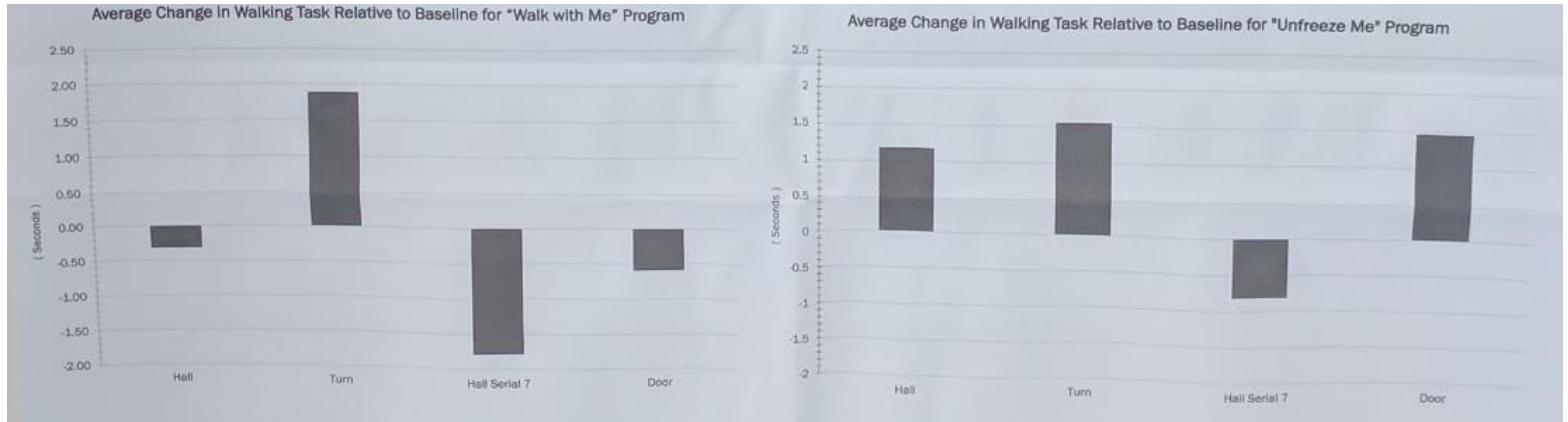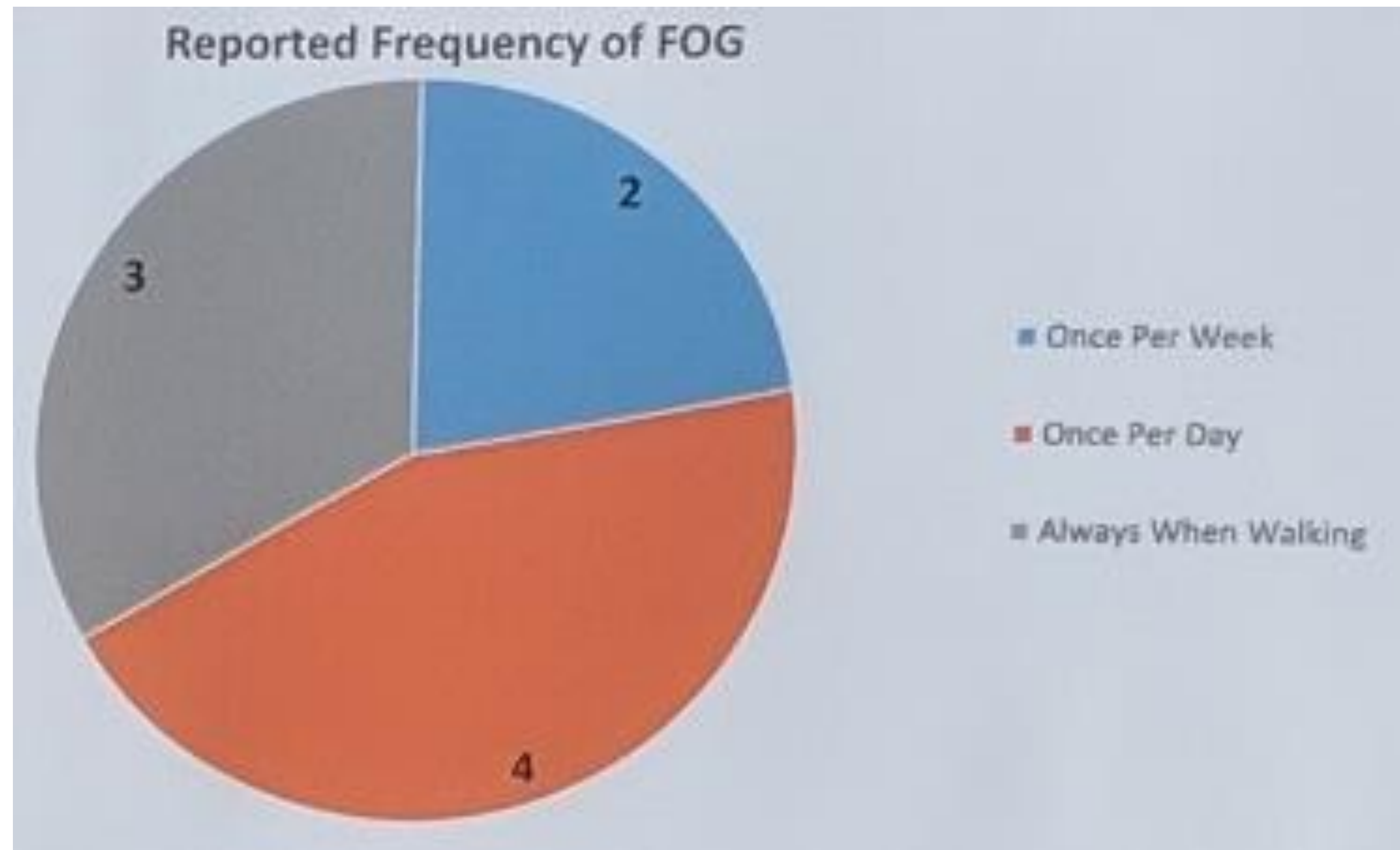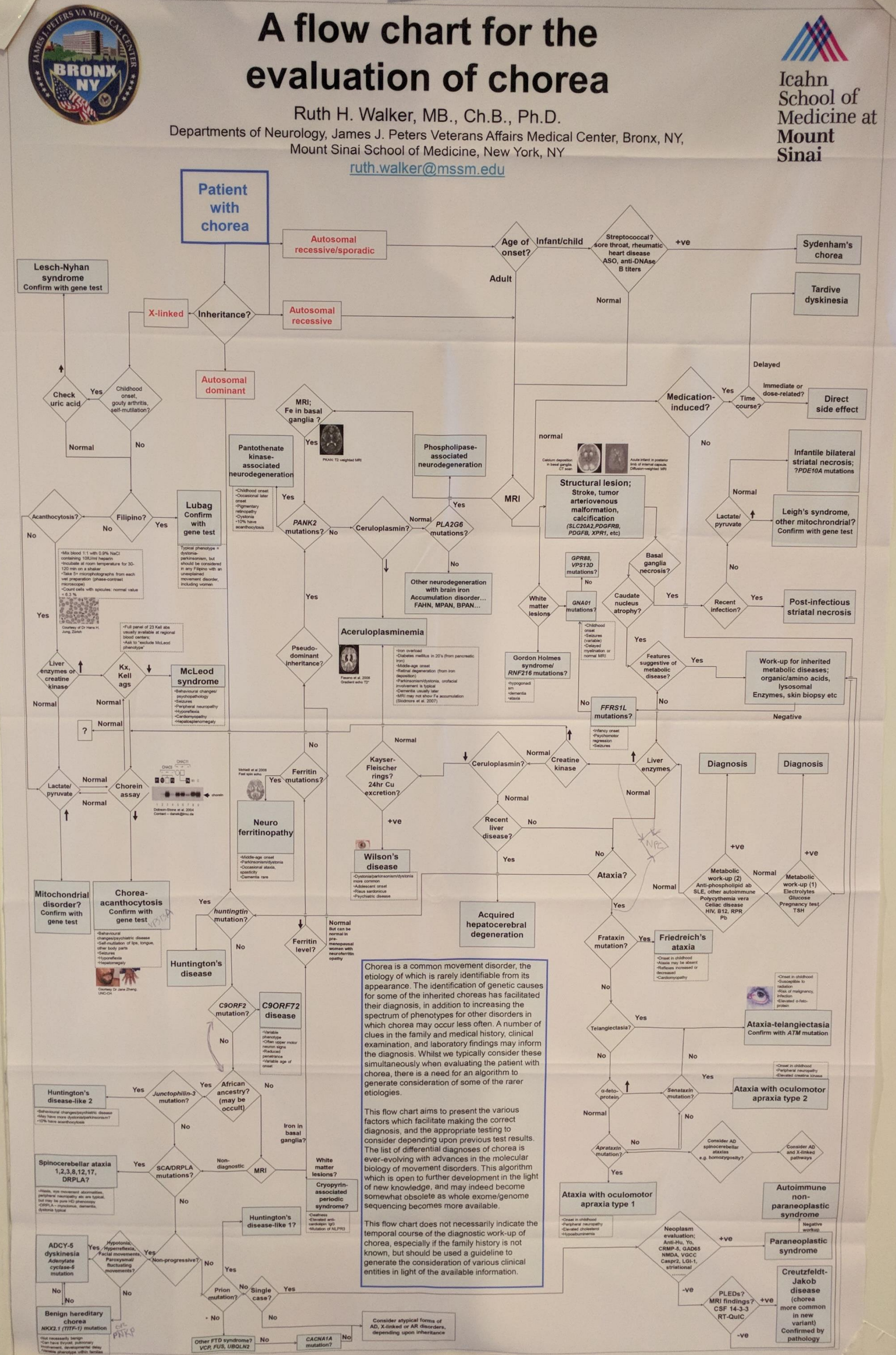
Children in Pre-School Programs Stay in Education Longer, Earn Higher Incomes

America's 'Head Start' program supports kids from birth to age 5 in:

early learning

health

family well-being

Increase in rate of high school graduation

+4%

Chance of earning above the poverty line

+6%

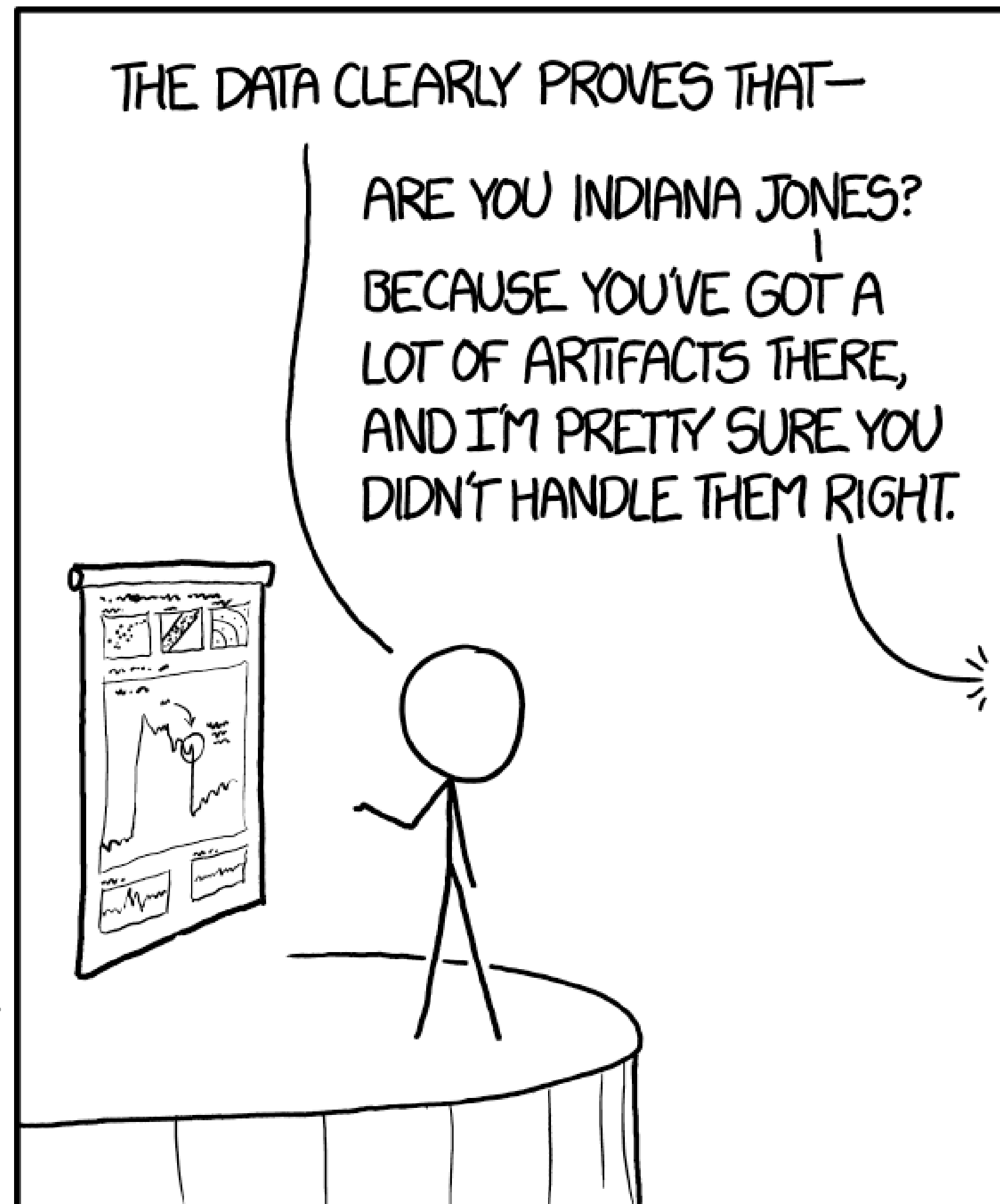Payoffs are greatest for women, Blacks and Hispanics, helping those who need it the most.

beautifulnews

source: Journal of Labor Economics

THE DON'T

LUSTIGE, SCHLECHTE GRAPHIKEN

- https://viz.wtf/

- https://www.welt.de/satire/article161643356/Die-besten-Statistiken-der-Welt.html

- https://twitter.com/TerribleMaps

DATEN ANALYSE FEHLER

▸ https://www.tylervigen.com/spurious-correlations Korrelation ist nicht gleich Kausalität

▸ https://www.data-to-viz.com/caveats.html

▸ https://www.theguardian.com/world/interactive/2012/may/08/gay-rights-united-states

XKCD COMICS
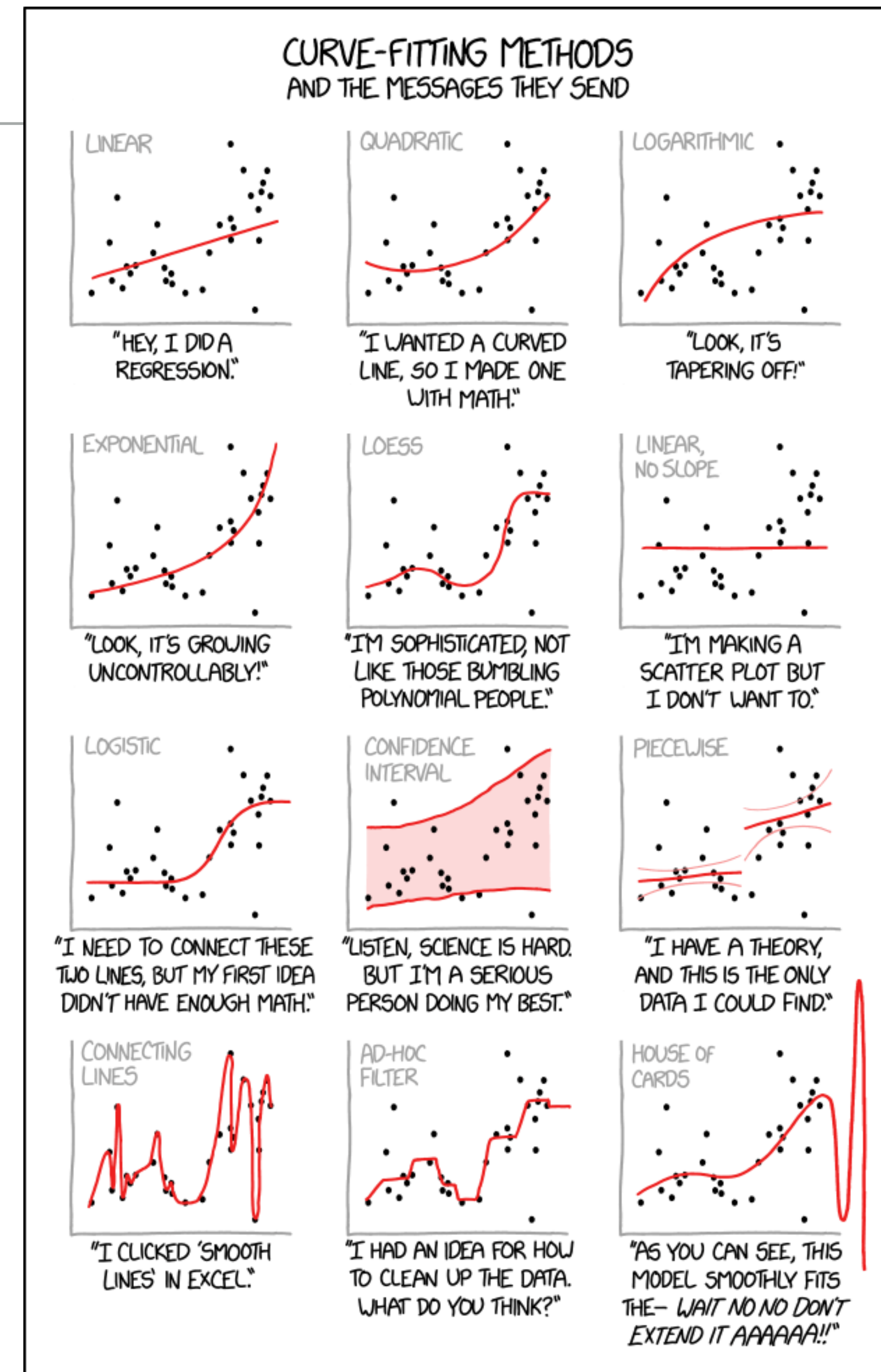
VIELEN DANK

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