Empirical study of FM4

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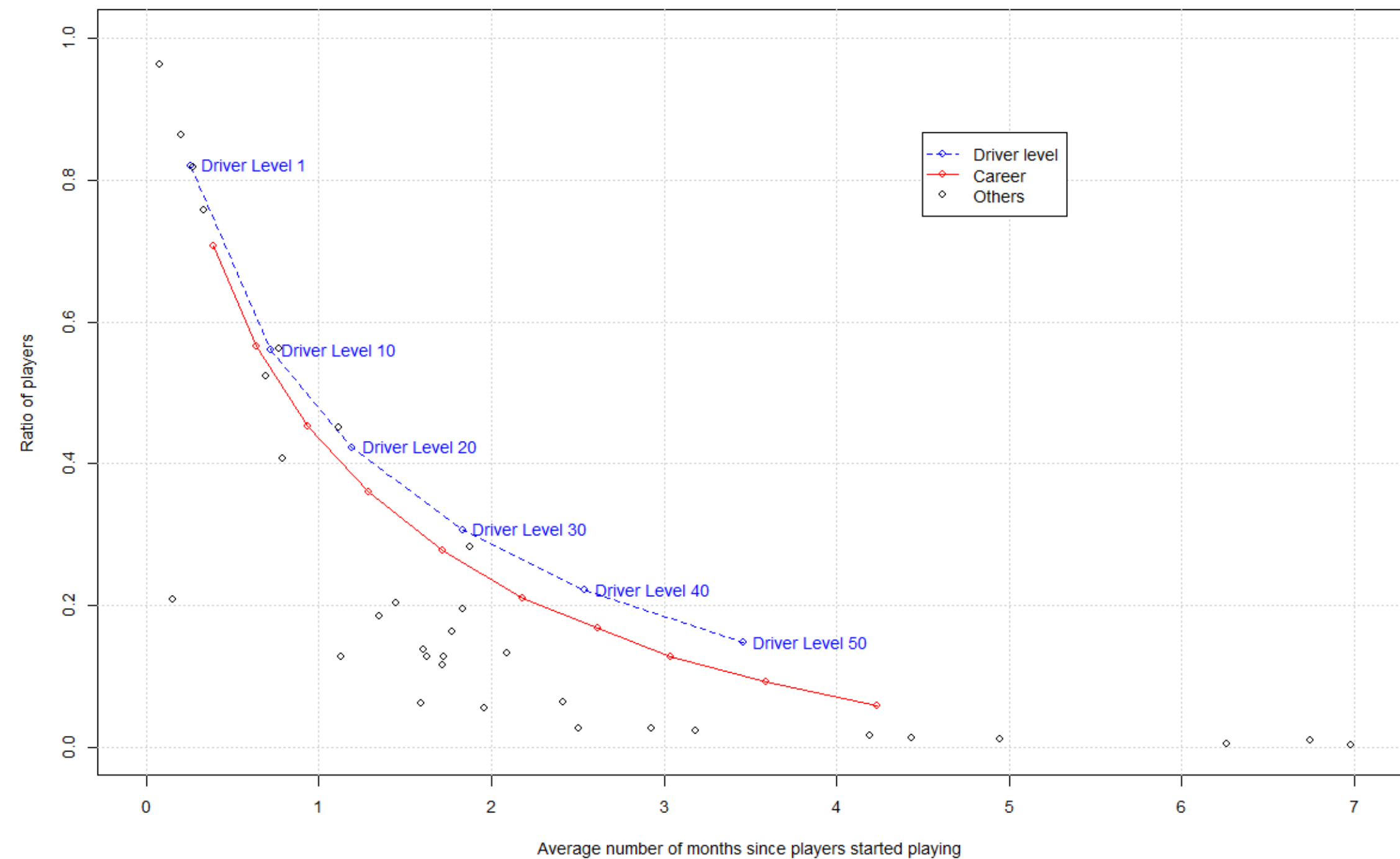
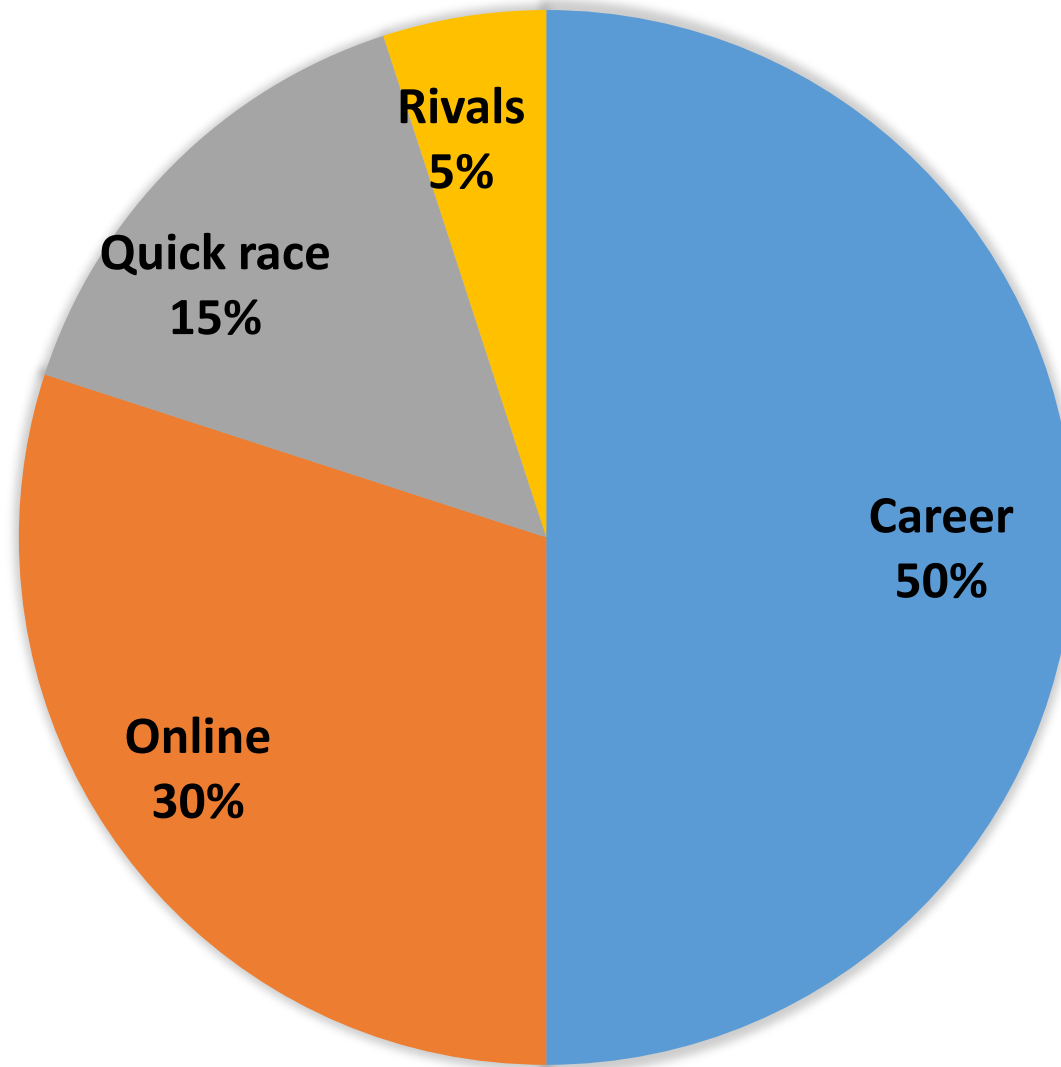# Intro

- 5% of player base, pulled randomly
- 200k players, 25M races

- Progression
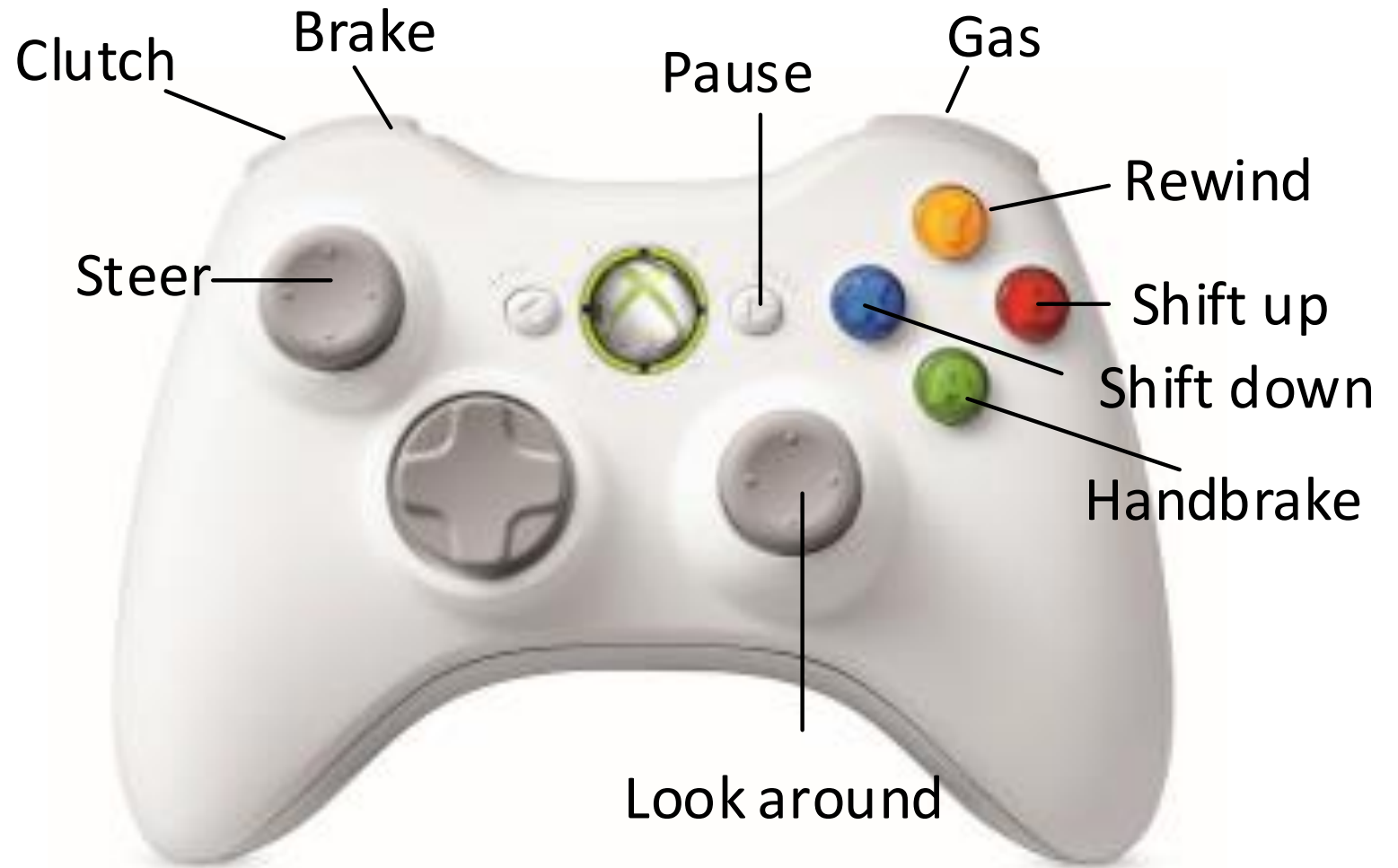- Assist usage
- Assist transitions

Progression

Assist usage

Clutch

Brake

Pause

Gas

Rewind

Steer

Shift up

Shift down

Handbrake

Look around

Assists and bundles

- Stability

- Traction

- Autobrake

- ABS

- Autoshift

- Clutch

- Full line

- Brake line

- Cosmetic damge

- Limited damage

Bundle	Career		Online	
	%players	%races	%players	%races
Easy	57.9	18.5	29.9	3.0
Stab,trac,clutch,cosm dmg	28.2	1.8	49.5	5.0
Stability, traction, clutch	21.0	2.1	12.5	0.5
Stab, trac, clutch, ltd dmg	13.7	0.8	4.0	1.1
Medium	10.5	3.2	0.8	0.0
All but autobrake	7.6	4.0	12.5	2.8
All but autob and fullline	4.2	2.7	10.0	2.6
Clutch and cosmetic dmg	1.2	0.5	31.8	20.4

Assist evolution over career races

assist progression over career races

Most players keep the clutch disabled

Brake line, ABS, and TCS follow the same trend

Autoshift, limited damage, and STM follow the same trend

Autobrake, full line, and cosmetic damage are the assists most commonly disabled

Assist transitions

race before

disabled

race after

failure

yoyo

success

time
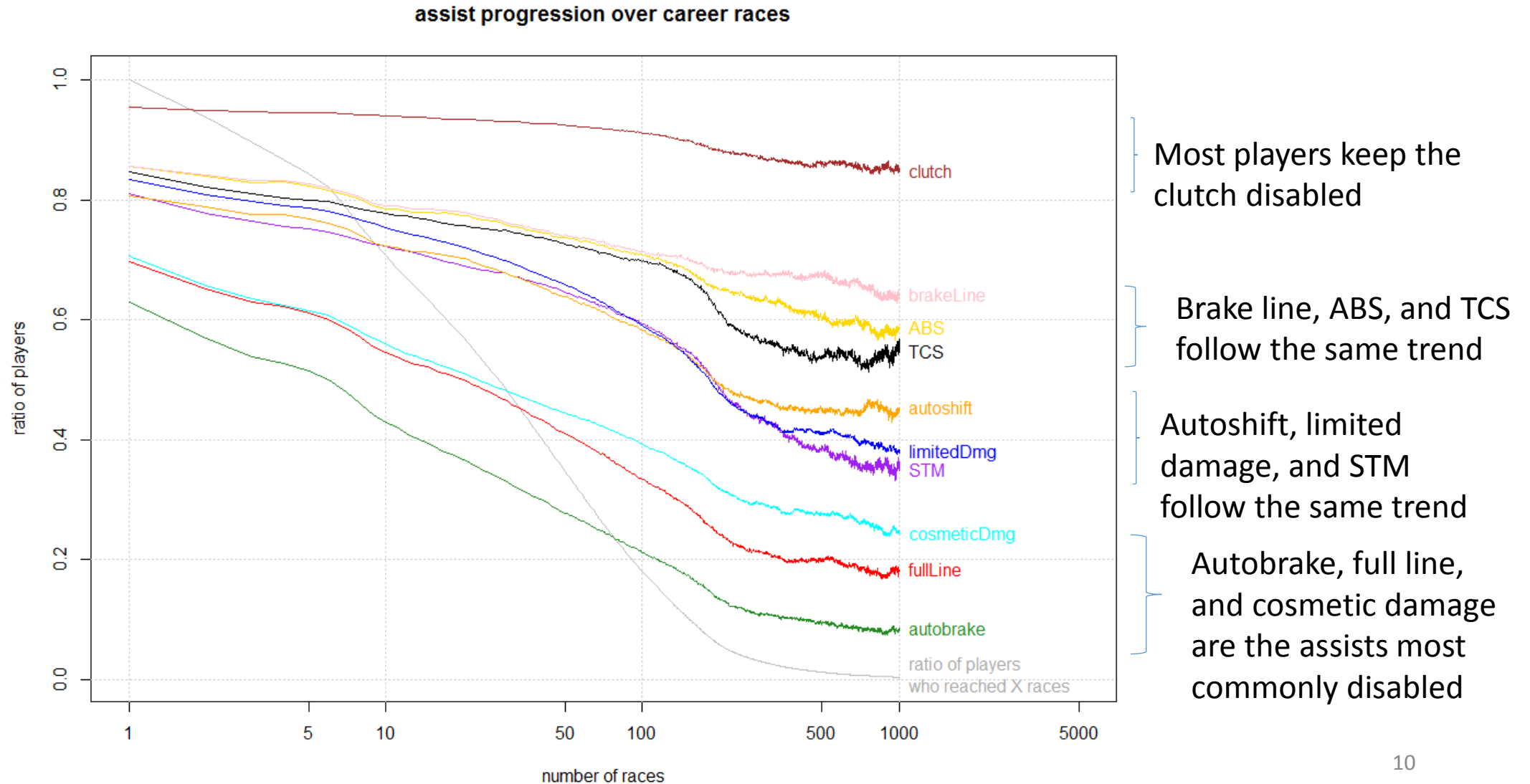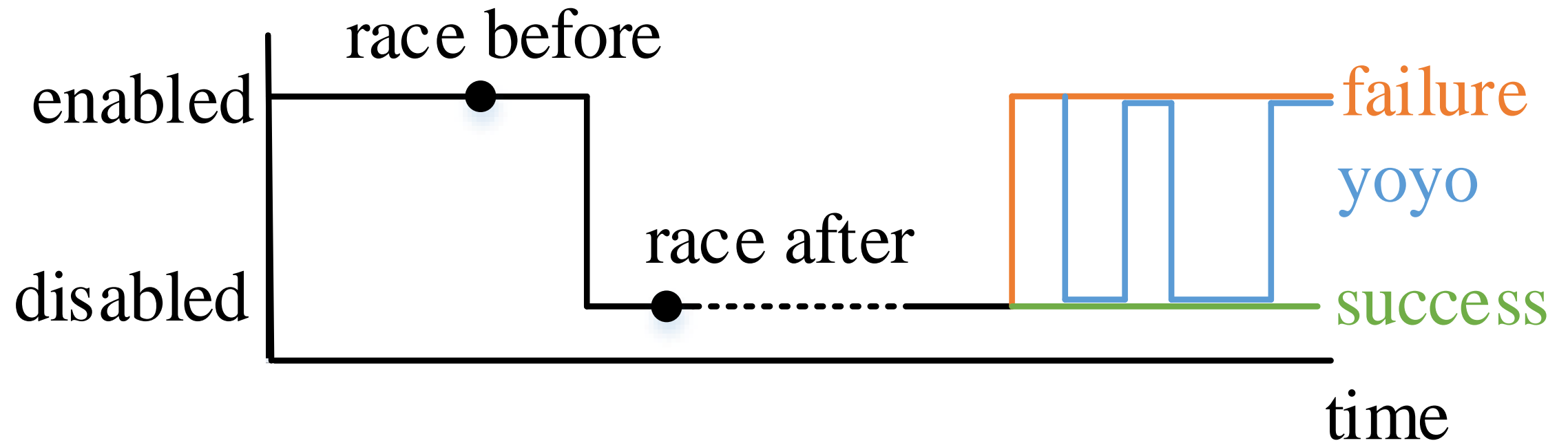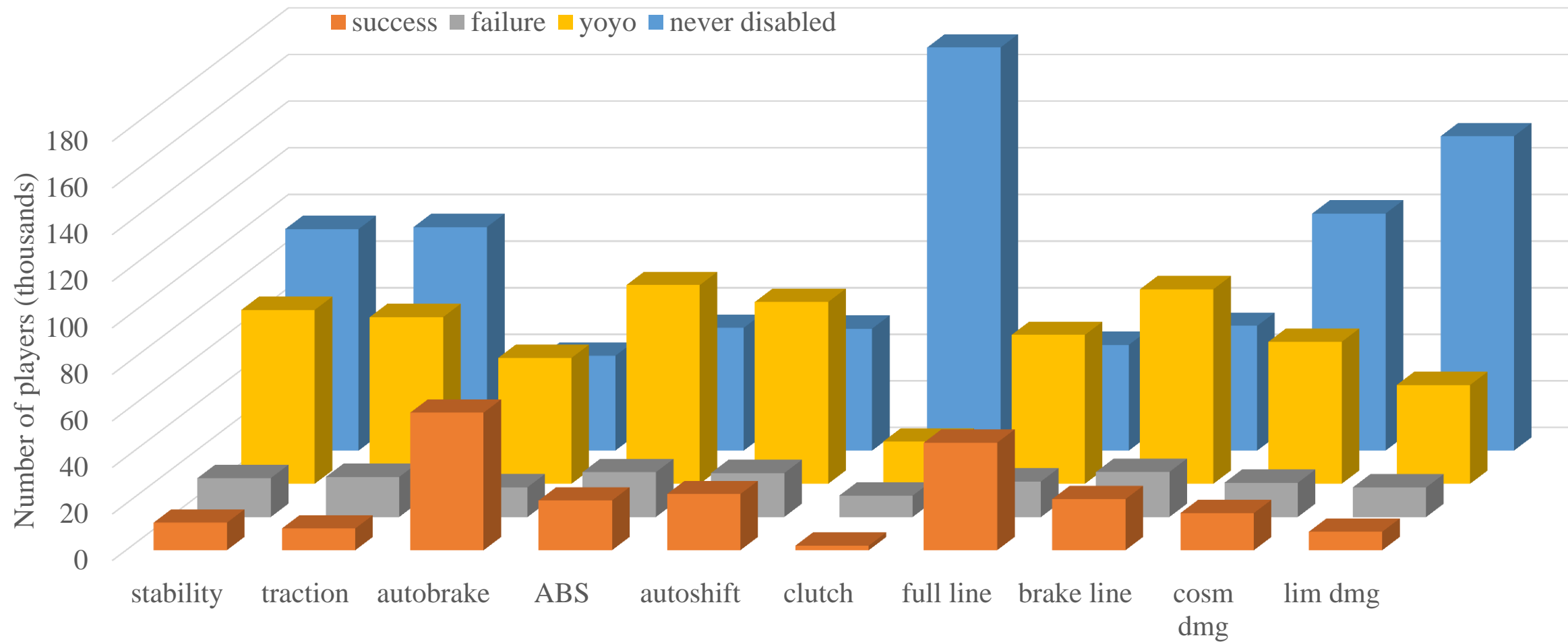
If I disable now, will I keep it disabled?

Assist	Num races	Races/day	Career Mode	RWD	Car PI	Position
Stability	–	–		+	–	–
Traction	–	–		+	–	
Autobrake	–	–	–	+	–	–
ABS	–	–	–	+	–	–
Autoshift	–	–	–	+	–	–
Clutch	–	–		+	–	
Full line	–	–	–	+	–	–
Brake line	–	–	–	+	–	–
Cosmetic Damage	–	–		+	–	–
Limited Damage	–	–		+	–	–

	N	% success	Model 1: Race before		Model 2: Before& after	
			Prec.	Recall	Prec.	Recall
Stability	23,915	46	.61	.73	.65	.64
Traction	21,066	40	.61	.58	.63	.53
Autobrake	73,244	82	.84	.97	.88	95
ABS	42,535	50	.66	.73	.81	.65
Autoshift	44,314	54	.70	.80	.83	.74
Clutch	11,653	22	.90	.00	.63	.29
Full line	62,955	74	.78	.95	.88	.89
Brake line	46,094	51	.68	.76	.83	.68
CosmDmg	31,212	51	.61	.81	.64	.80
LimDmg	20,872	38	.60	.50	.60	.62

Questions