

Impact of Wellness & Practice on Game Speed

LeGit

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Wrangling the Data

Data: Tournament game performance for the 17 players who played more than 1 tournament game

Response:

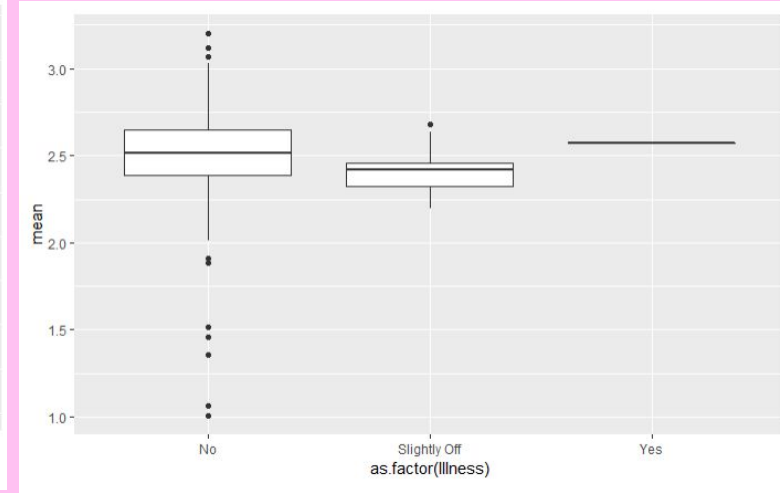
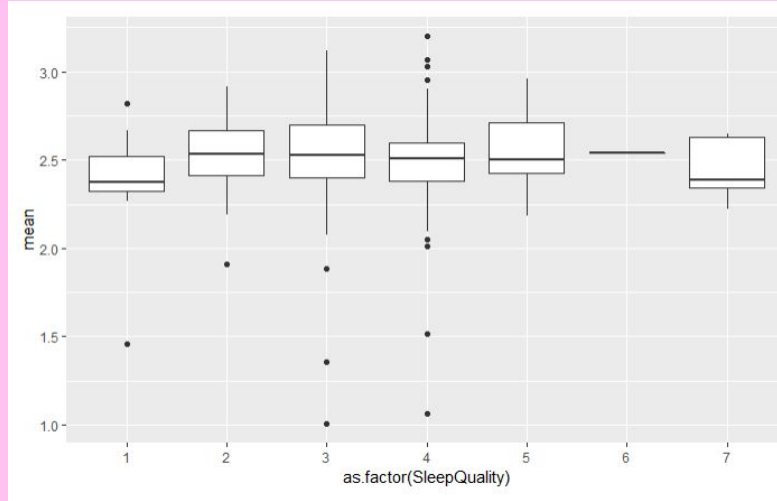
- Mean game speed

Explanatory:

- Wellness
- Practice
 - Self-reported effort rate (RPE)
 - Duration of practice in minutes

Wellness Not Related To Mean First Tournament Game Speed

- Training Readiness
- Fatigue
- Soreness
- Desire
- Irritability
- Sleep Hours
- Sleep Quality
- Pain
- Illness
- Menstruation
- Nutrition
- Nutrition Adjustment
- USG Measurements



Nutrition: Needs Further Investigation

ANOVA comparisons showed that the better the nutrition, the less effect physical discomfort has on self-evaluated fatigue.

Response: Fatigue

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
SleepHours	1	22.065	22.065	68.2421	1.401e-15 ***
SleepQuality	1	94.110	94.110	291.0560	< 2.2e-16 ***
Nutrition	1	4.316	4.316	13.3467	0.0002872 ***
Illness	2	1.142	0.571	1.7654	0.1722209
Menstruation	1	2.359	2.359	7.2967	0.0071508 **
NutritionAdjustment	2	2.877	1.439	4.4491	0.0121722 *
Desire	1	25.756	25.756	79.6548	< 2.2e-16 ***
Soreness	1	45.953	45.953	142.1179	< 2.2e-16 ***
Irritability	1	1.684	1.684	5.2068	0.0229329 *
USG	1	0.214	0.214	0.6608	0.4166650
SleepQuality:Nutrition	1	0.001	0.001	0.0029	0.9574055
Nutrition:Illness	2	0.348	0.174	0.5389	0.5837629
Nutrition:Menstruation	1	0.001	0.001	0.0031	0.9557906
Nutrition:NutritionAdjustment	2	0.222	0.111	0.3431	0.7097384
Nutrition:Desire	1	3.055	3.055	9.4485	0.0022327 **
Nutrition:Soreness	1	2.151	2.151	6.6510	0.0102050 *
Nutrition:Irritability	1	0.363	0.363	1.1228	0.2898444
Nutrition:USG	1	0.048	0.048	0.1492	0.6994310
Residuals	483	156.174	0.323		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Analysis of Variance Table

Response: Fatigue

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
SleepHours	1	18.871	18.871	55.8514	5.992e-13 ***
SleepQuality	1	68.974	68.974	204.1420	< 2.2e-16 ***
Illness	2	0.161	0.081	0.2384	0.7880
Menstruation	1	0.588	0.588	1.7393	0.1881
NutritionAdjustment	2	0.018	0.009	0.0273	0.9730
Desire	1	12.130	12.130	35.9013	5.038e-09 ***
Soreness	1	39.447	39.447	116.7506	< 2.2e-16 ***
Irritability	1	0.731	0.731	2.1621	0.1423
USG	1	0.468	0.468	1.3841	0.2402
Pain	1	0.195	0.195	0.5763	0.4483
Residuals	360	121.635	0.338		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

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> anova(pf4)
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Analysis of Variance Table

Response: Fatigue

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
SleepHours	1	7.466	7.4659	26.2659	1.152e-06 ***
SleepQuality	1	22.544	22.5437	79.3108	6.844e-15 ***
Illness	2	2.252	1.1258	3.9608	0.021590 *
Menstruation	1	2.376	2.3756	8.3576	0.004560 **
NutritionAdjustment	2	2.945	1.4724	5.1799	0.006954 **
Desire	1	18.430	18.4303	64.8395	6.695e-13 ***
Soreness	1	5.145	5.1455	18.1022	4.173e-05 ***
Irritability	1	1.005	1.0052	3.5363	0.062464 .
USG	1	0.028	0.0275	0.0968	0.756283
Pain	1	0.061	0.0614	0.2159	0.642994
Residuals	120	34.109	0.2842		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

BUT the interaction term is not significant

Practices Can Be More Chill

No linear relationship between:

- Rate of perceived effort in practices before game and mean game speed
- Minutes of total practice before game and mean game speed

