Fallout: Shelter

Fallout: Shelter

- Postapocalyptic mobile game
- You control a shelter full of dwellers
- One thing dwellers can do is scout
- Scouts retrieve bottlecaps and items
- Scouts face deadly challenges

SPECIAL

Seven stats determine success

- Strength
- Perception
- Endurance
- Charisma
- Intelligence
- Agility
- Luck

Retrieval: Intro

- We wanted to know what determined how fast a scout found items and bottlecaps
- We performed a linear analysis and looked at the p-values
- The goal is to figure out if some dwellers are better scouts than others

Retrieval: Items

Table: Number of items per hour

	Estimate Std.	Error	t value	Pr($>$|t|)	
(Intercept)	1.290960	0.771921	1.672	0.0959	.
level	-0.021353	0.017178	-1.243	0.2152	
dmg	-0.060882	0.057463	-1.059	0.2906	
s	-0.003986	0.055532	-0.072	0.9428	
p	-0.079242	0.095350	-0.831	0.4069	
e	0.031539	0.070731	0.446	0.6561	
c	-0.057148	0.091382	-0.625	0.5324	
i	0.324587	0.335993	0.966	0.3351	
a	0.214665	0.133610	1.607	0.1096	
l	0.042945	0.073570	0.584	0.5600	

Retrieval: Bottlecaps

Table: Average number of caps per hour

	Estimate	t value	Pr($>$|t|)	
(Intercept)	83.81787937	11.63356	$<$2e-162	***
s	-0.21649106	-0.43309	0.665802	
p	0.61211724	0.91113	0.364235	
e	-0.88781188	-1.67151	0.097489	.
c	-0.18453188	-0.31035	0.756888	
i	0.19836365	0.35132	0.726024	
a	-0.04815488	-0.08799	0.930043	
l	13.48815469	26.55579	$<$2e-16	***
start.level	-0.68088744	-4.25171	0.00004495	***
start.damage	-1.56703535	-1.97083	0.051278	.
level.increase	-3.44085855	-1.97599	0.050683	.
death.damage	0.30906873	0.88693	0.377067	

Retrieval: Conclusions

- Difficult to determine what affects items found. Two p-values stand out, but are still bad.
    - Intercept has p-value 0.96
    - Agility has p-value 1.1
- Caps found clearly determined by Luck (infinitesimal p-value). There's also a base value (intercept). There is also a clear negative correlation with level, hard to tell why this is.

Survival: Intro

-

Survival: Relevance

Survival: Models

Survival: Performance

Survival: Conclusions

Questions