



Social Systems in Virtual Worlds

Building a better looking raid loot system in World
of Warcraft using the IAD framework

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Outline

The environment

Looking For Raid (LFR) in *World of Warcraft*

The phenomenon

Perceived rampant greedy behavior vs. self-reported behavior

The framework

Game theory and Institutional Analysis and Design (IAD)

The study

Focus groups and a survey

The results

???

LFR Phenomenon

Ethnographic observations

November 29, 2011: Raid Finder released in *World of Warcraft*

- Collaboration between 25 unknown players from different servers
- Exploitation of pre-established loot rules
- Effect on player behavior



Loot System Basics

Players enter the raid tagged by role

- tank, DPS, healer

Loot also tagged for role and class

Players can roll "Need", "Greed", "Pass"

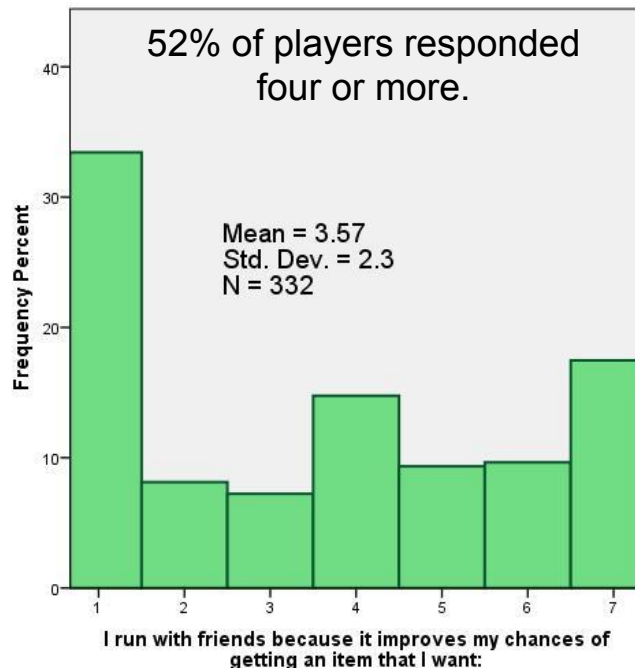
- Only players who match the loot tag can roll "Need"

How to exploit the system

Loot items can be traded among raid members

-Bring a friend in your same class or role.

-both of you roll on items that one can use, and trade with each other



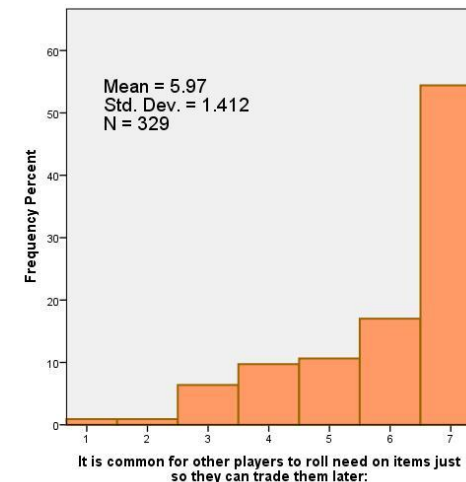
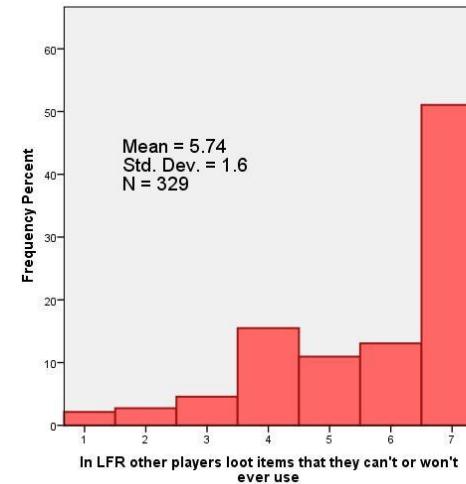
How to exploit the system

If you're alone:

-roll "Need" on everything you can

*hope that you win *something* whether you actually need it or not

*use that item to trade later for something you do need



Focus Groups

Two focus groups conducted with a total of 10 players and an ethnographer.

Insights from focus groups confirm ethnographic observations.

- Players are angry about the behavior of unknown others.
- There is always somebody being a jerk about loot.
- Player fight back by gaming the system, and do so because "everybody else does it".



Focus Groups

Players generally report "rampant greed" in LFR

SC: "I just expect everybody to need on everything and that's pretty much going to be the case whether it's need, whether it's offspec, whether they're just being jerks about it."

Does this cause players to change their behavior?

DG: "...to be honest, the only reason I [trade items with friends] is because I just get pissed off so much that other people are needing on stuff when they obviously have 397 [better gear]. Which again, it's probably the same way, they might be doing this too, but I can't know that for sure, so I do it. I do it to help my friend out, give him a chance to get gear."

...smells like Game Theory.



IAD Framework

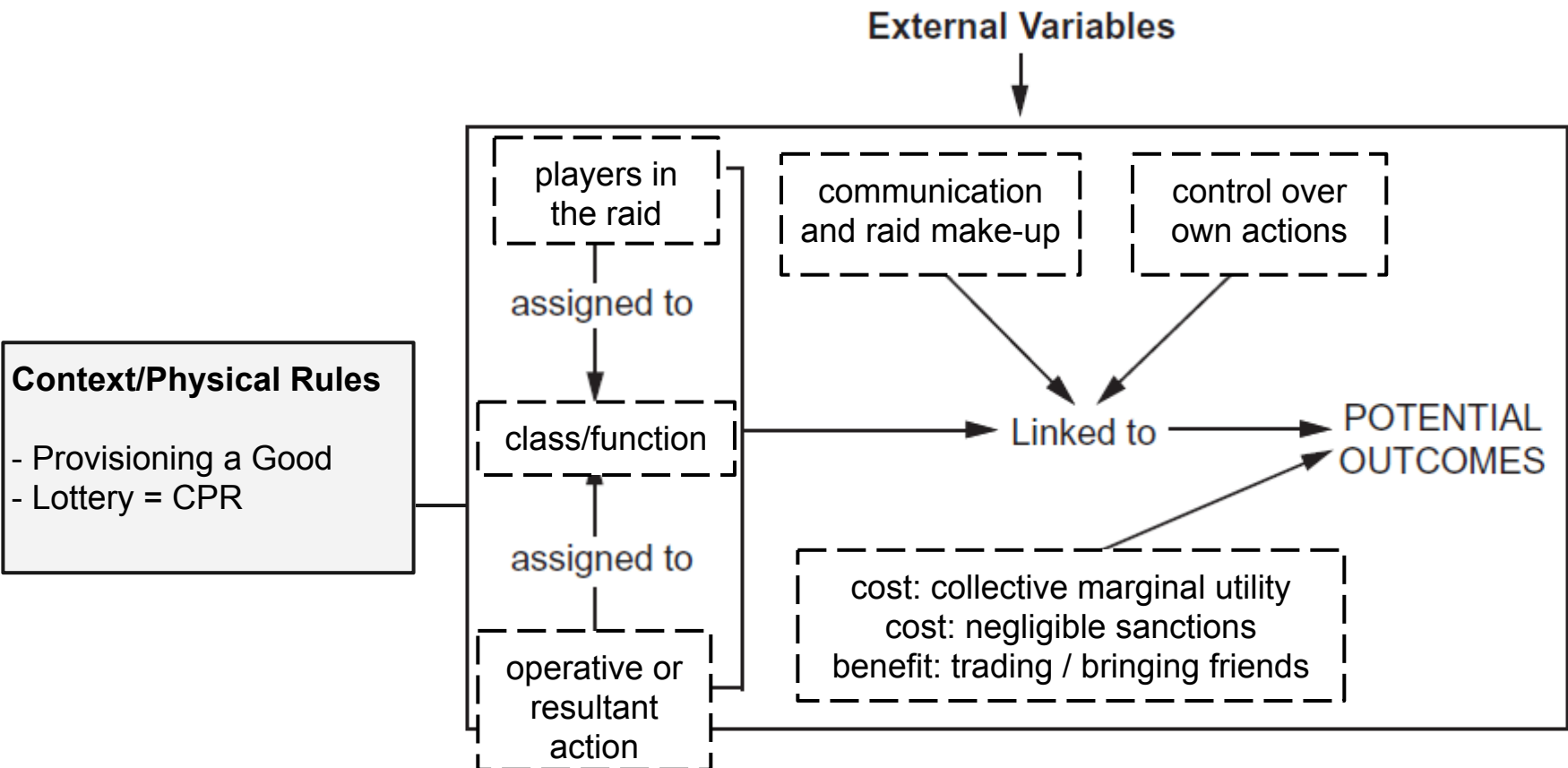


Figure 2. The Internal Structure of an Action Situation.

Source: Adapted from E. Ostrom (2005, p. 33).

The Survey

54 questions constructed based on observations and focus groups.

-expectations of others' behavior, your own behavior, happiness, demographic information

333 survey responses gathered from a convenience sample.

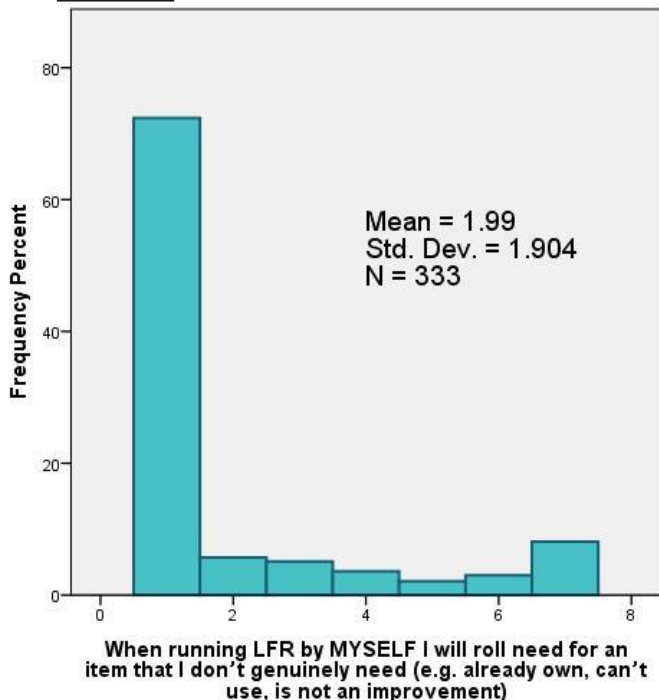
-Survey link posted in WoW-related forums (Blizzard forums, WoWhead, Ten Ton Hammer, Allakazham, TankSpot, WoW-ladies)



Preliminary Results

Discrepancy between "self" and "others" when rolling 'need' on items that won't ever be used:

self:



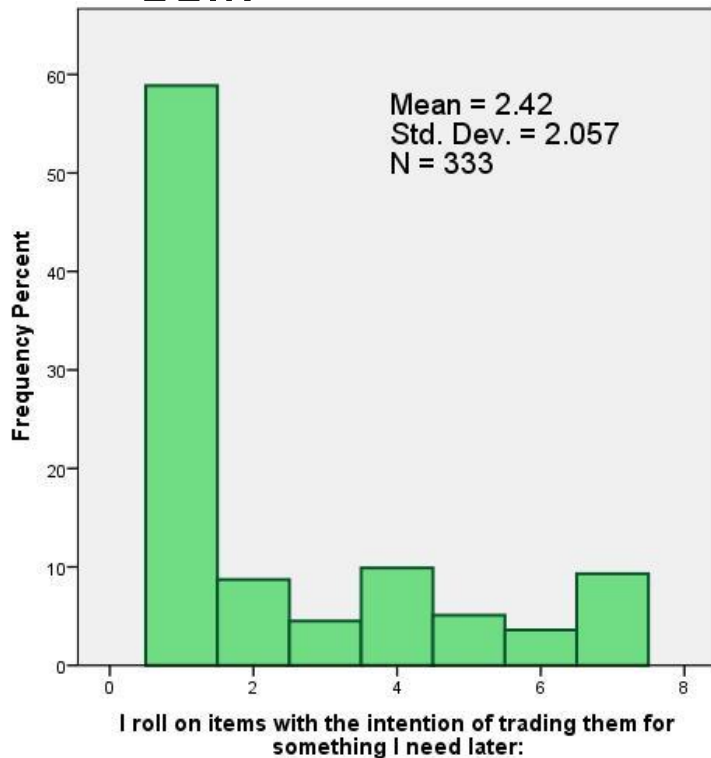
others:



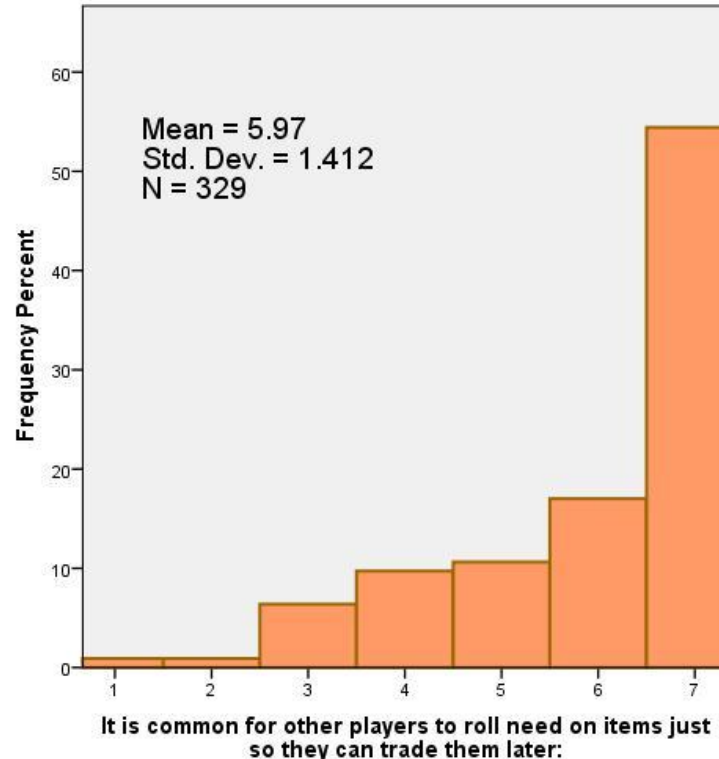
Preliminary Results

Similar discrepancy in reports of needing to trade.

self:



others:



More Preliminary Results

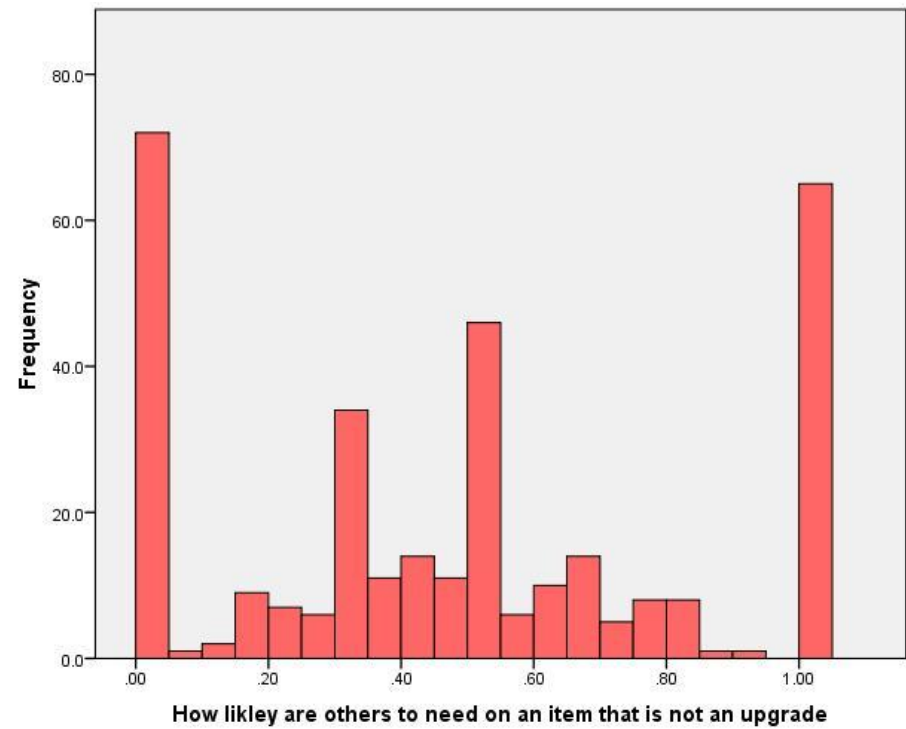
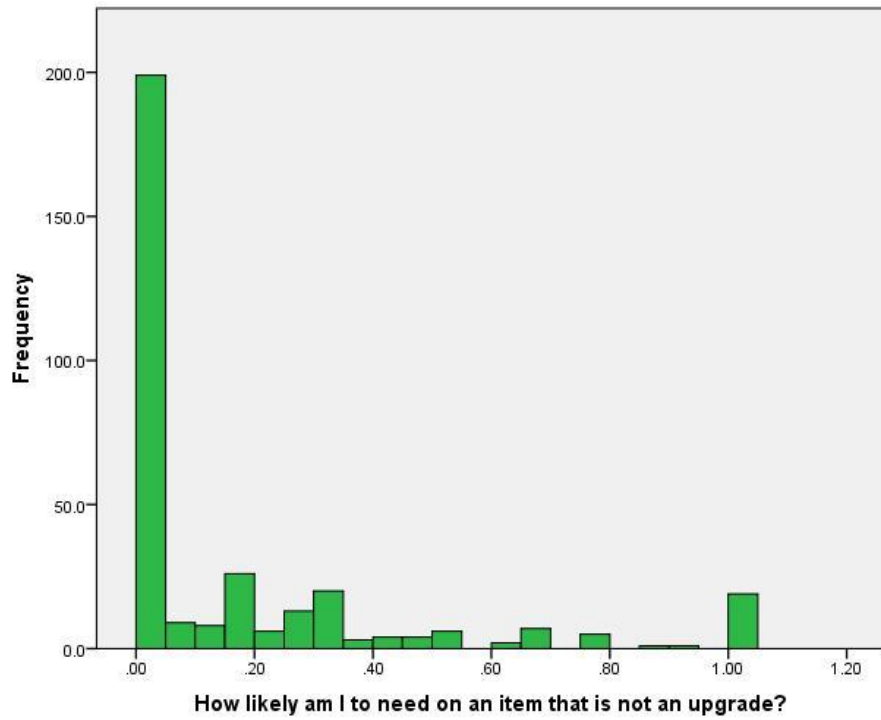
A simple model:

Do expectations of others change behavior?

Do players who expect greed
become more greedy?

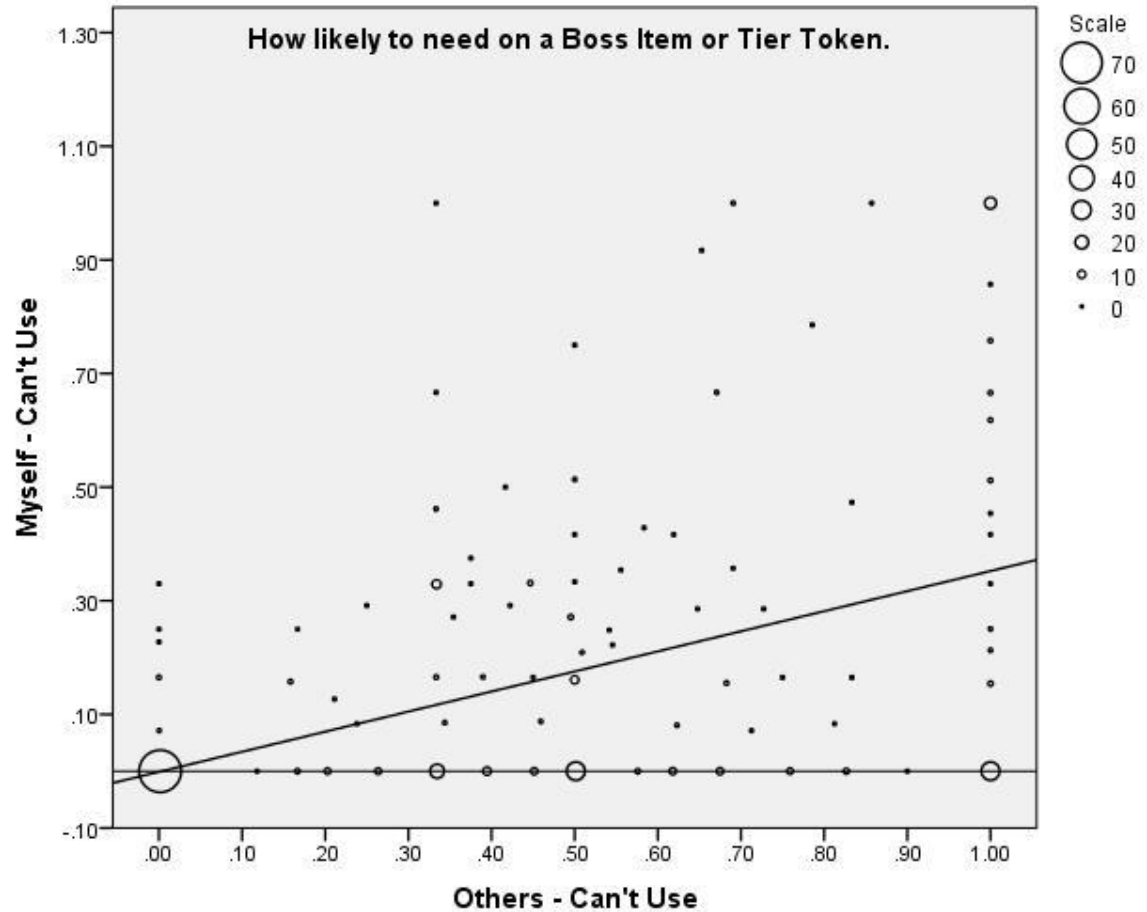


Myself vs. Others



Myself vs. Others

Adj. $R^2 = .20$



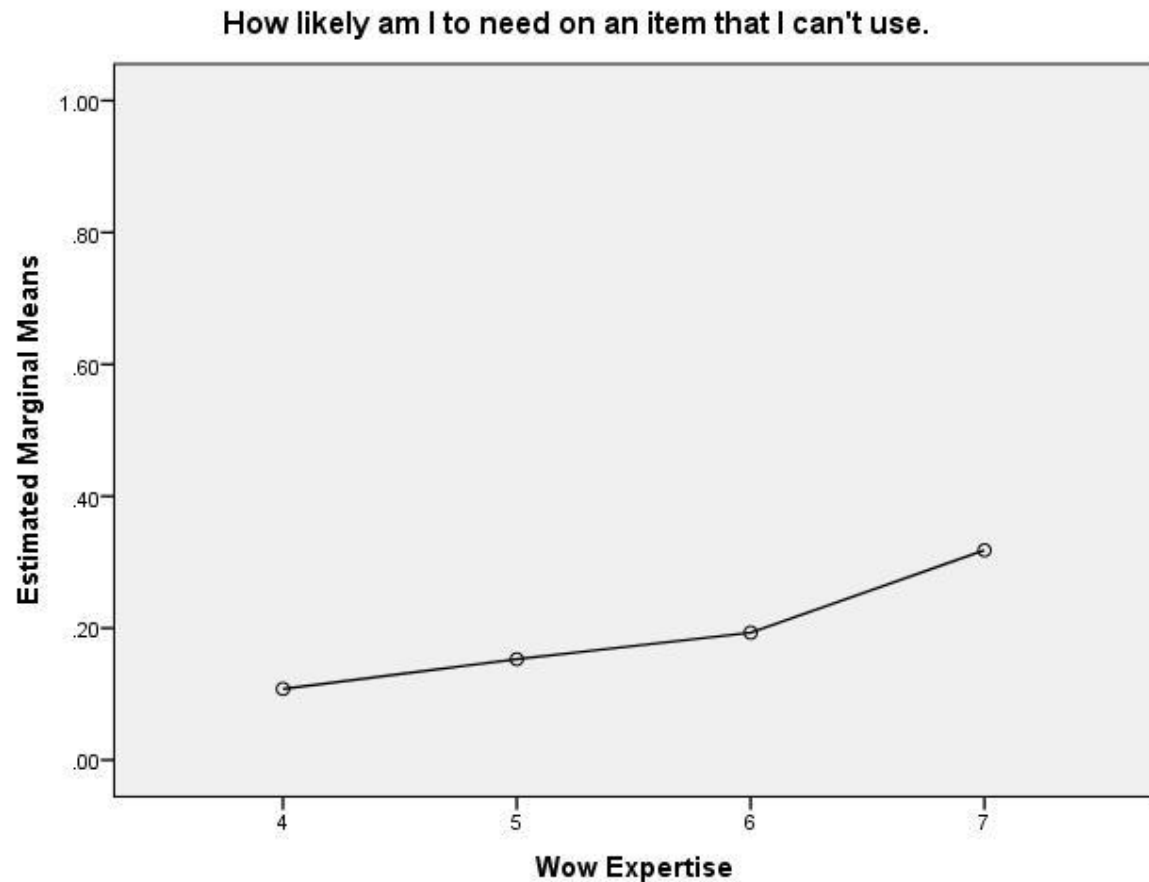
Expertise effect

Significant Main Effect:
Expertise

$F(3) = 3.133$
 $p = .026$

N Values

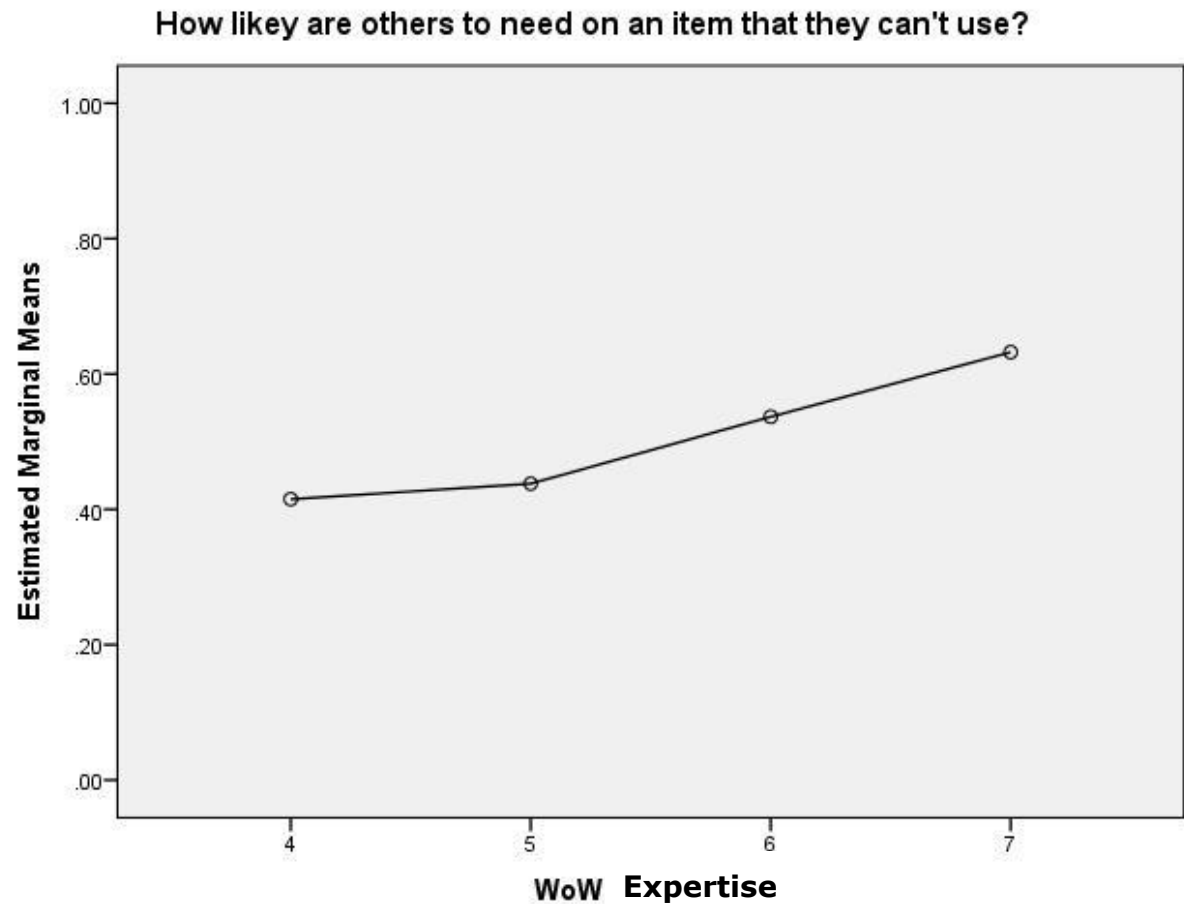
4 = 48
5 = 162
6 = 99
7 = 20



Expertise effect

Significant Main Effect:
Expertise

$F(3) = 3.55$
 $p = .015$



Future Directions

New WoW expansion = New LFR system

- No longer a mixed motive game.
- Removes opportunities for player interaction
- Natural experiment:
 - Are players happy?
 - Do they have more fun?
 - Has behavior changed?
 - Does the avoidance of "loot greed" justify the lack of social interaction?



Future Directions

Using Mixed Motive games in multiplayer games

Predictions from IAD:

- Have sanctions for greedy behavior
- Keep social interaction possible



References

Ostrom, Elinor. (2005). *Understanding Institutional Diversity*. Princeton: Princeton University Press.

Schell, J. (2008). *The Art of Game Design: A book of lenses* (1st ed.). Burlington, MA: Morgan Kaufmann.

Special thanks to:

<SeeD> (especially C, DG, J, RL, SB, SC, SF, & T)
Asakawa@WoWhead, Kaolian@Allakhazam
Jonathan Hills
Ashleigh Ayn Sult
Jen Hansen



Thank you!



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