



EXPERIENCE MACHINE EXPERIMENTS

**TESTING THE IMPORTANCE OF RELATIONSHIPS AND
INDIVIDUAL DIFFERENCES**

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The background is a solid teal color with a subtle gradient. In the four corners, there are decorative white line-art patterns resembling circuit traces or neural network connections. These patterns consist of straight lines of varying lengths and thicknesses, ending in small circles. The patterns are more dense in the top-left and bottom-left corners and more sparse in the top-right and bottom-right corners.

WHAT GETS ME UP IN THE MORNING

RATIONALE/PLAN

- De Brigard (2010) + Weijers (2014): status quo
- Basil Smith (2011): relationships/social capital
 - *Test relationships vs reality*
- Shaun Nichols (conversation, 2017): testing for individual differences
- Peter Unger (conversations, 2015-6): age, health/wellbeing, tech familiarity
 - *Test for individual differences: demographics, personality, wellbeing, tech familiarity*

A QUICK HISTORY OF...

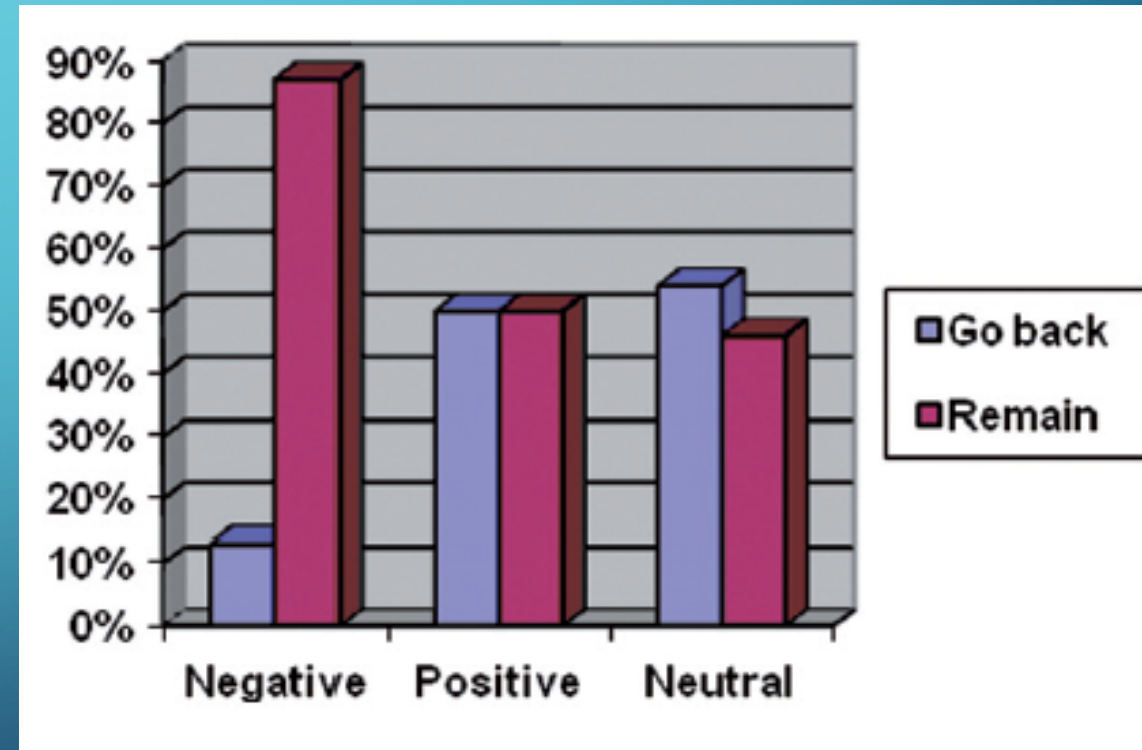
THE EXPERIENCE MACHINE VS HEDONISM

- Hedonism / internalist experiential accounts of prudential value
- Nozick (1974; 1989): experiences vs reality, we do and should choose reality
- Lots: Nozick is right, hedonism fails.
- Several: scenario is misleading
 - See (Weijers & Schouten, 2013)
- De Brigard (2010) + Weijers (2014): status quo
- Basil Smith (2011): specific losses (relationships)
 - Didn't survey just students



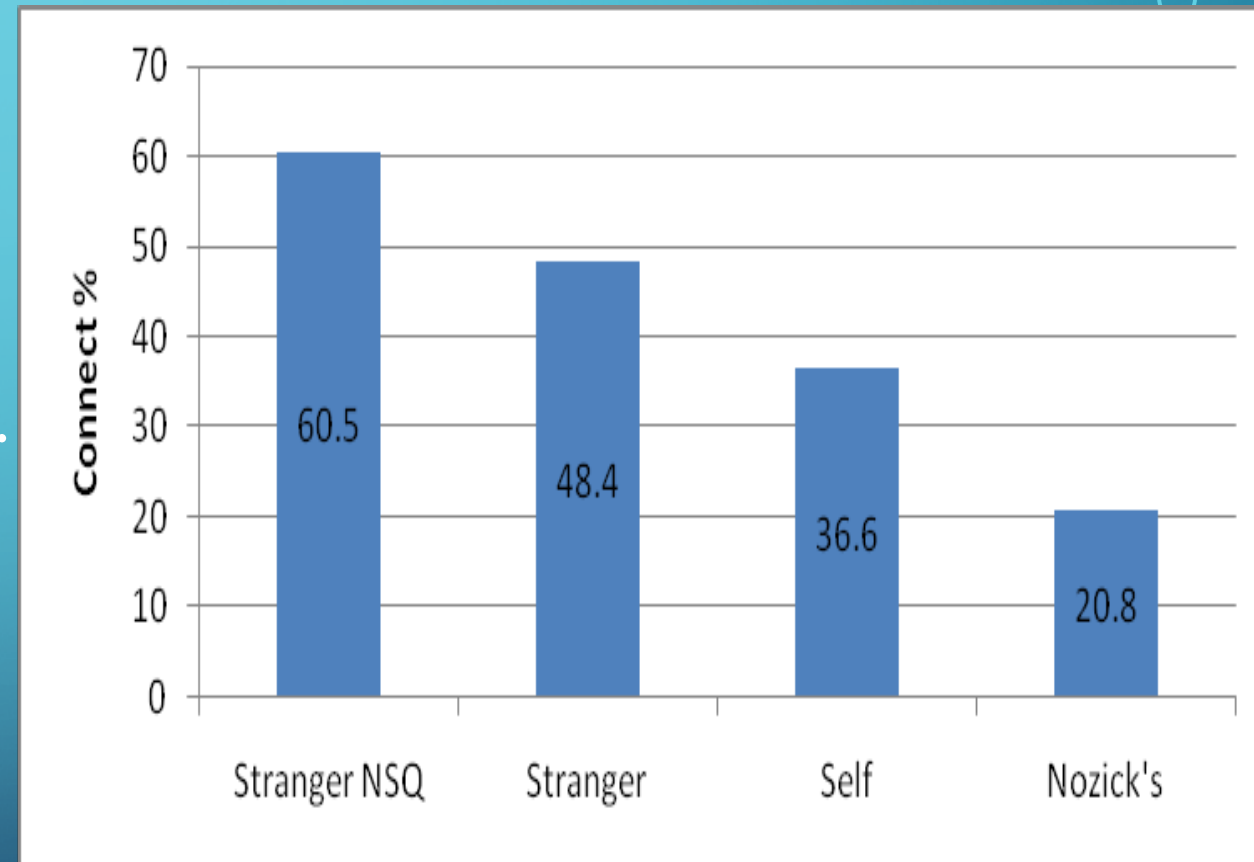
DE BRIGARD (2010): REVERSED SCENARIOS

- Do you want to unplug?
- 24 students per condition
- Negative: max security prison
- Positive: multimillionaire artist in Monaco
- Neutral: back to reality (no description)



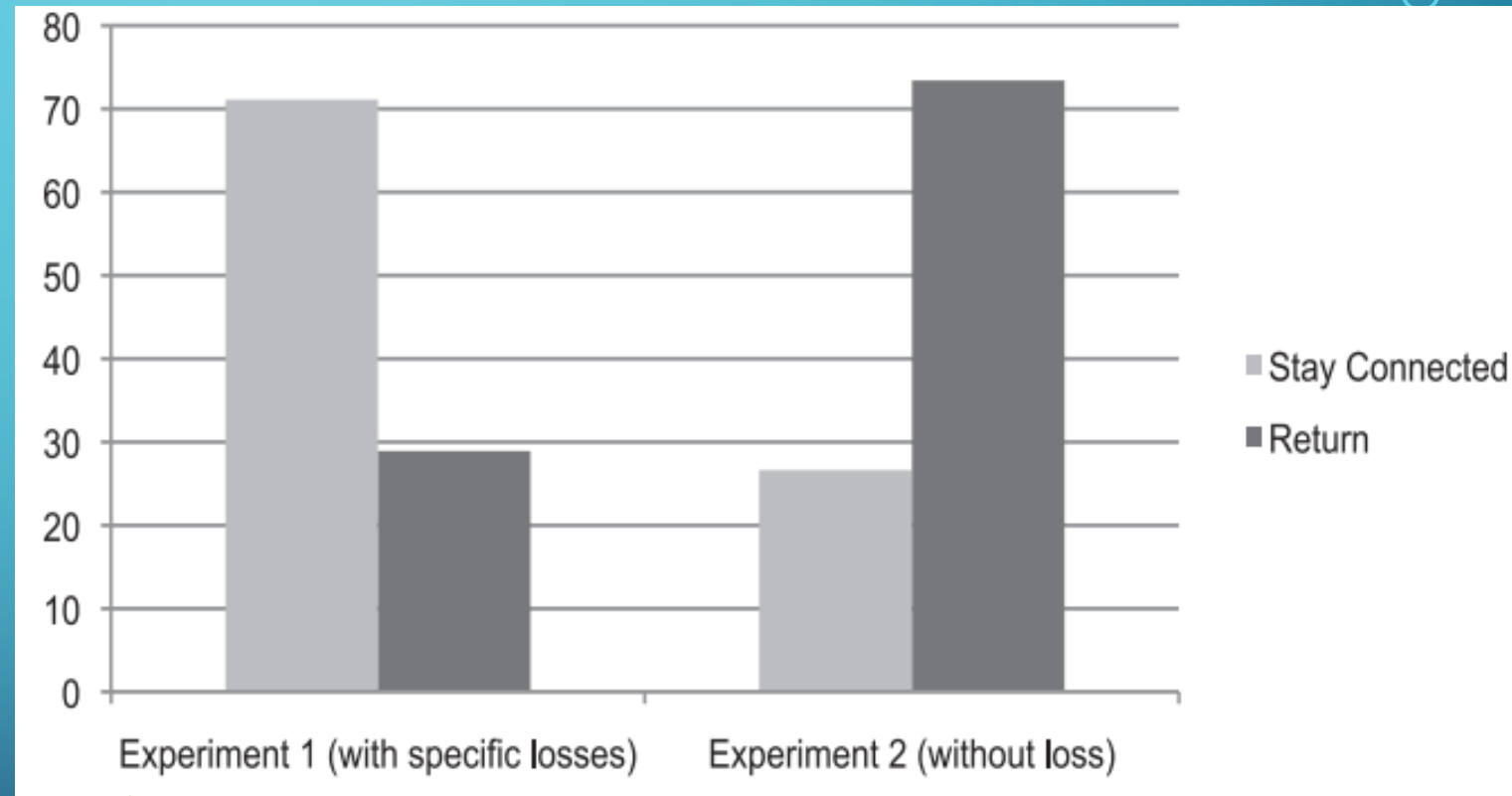
WEIJERS (2011/2014): TRYING TO REDUCE STATUS QUO BIAS

- Neutralising the status quo = 12% difference (Stranger NSQ vs. Stranger, p-value = 0.025)
- Making the choice on behalf of a stranger = 12% difference (Stranger vs. Self, p-value = 0.035)
- Reducing irrelevant factors = 16% difference (Self vs. Nozick's, p-value = 0.004)
- Stranger NSQ vs. Nozick's = 40% difference (p-value = 0.000)



BASIL SMITH (2011): EQUAL EXPERIENCE REVERSED SCENARIOS

- Specific losses:
 - Back to reality, start a new (need to forge new relationships)
- Without loss:
 - Back to reality, people etc are recreated for you, so it's the *exactly* the same

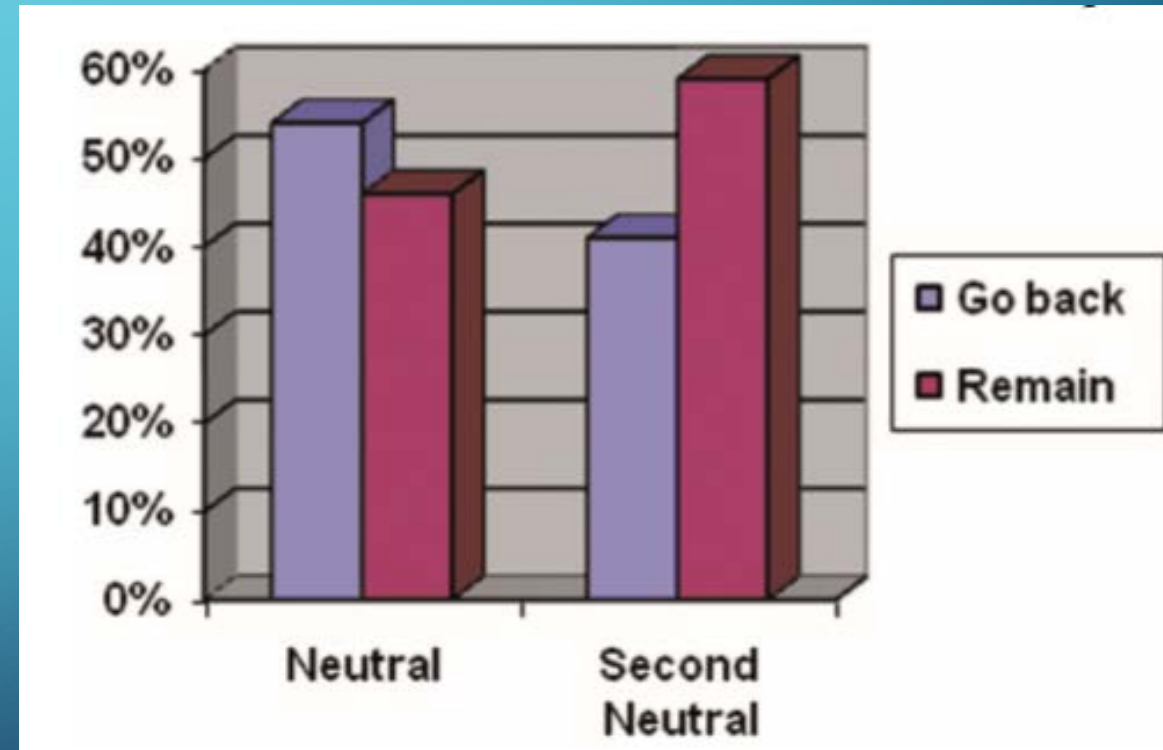


Freebie problem!

COULD CONTINUATION OF RELATIONSHIPS EXPLAIN DE BRIGARD'S RESULTS?

Going back to reality would mean...

- Negative: worse experiences, losing existing relationships
- Positive: better experiences, losing existing relationships
- Neutral: similar experiences, ?losing existing relationships?
- 2nd Neutral: + “your life outside is not at all like the life you have experienced so far.”



WHERE WE AT?

- Status quo bias seems important (?25%?)
- But perhaps most or all of that is about maintaining relationships?
- This is important because Nozick's original is unclear/silent about whether the experience of relationships can be maintained in the experience machine
- Let's investigate the impact of maintaining relationships on exp mach scenarios

EXP MACH V1: PERSONAL MACHINE (1)

It's 2062 and you are riding a hovertube to town. You have been offered a permanent spot in an Experience Machine. You are now trying to decide if you should accept.

You have had a go in an Experience Machine before and know that they provide an unpredictable roller-coaster ride of remarkable experiences. When in the machine, it still felt like you made autonomous decisions and occasionally faced tough situations, such as striving for your goals and feeling grief, although you didn't *really* do these things.

EXP MACH V1: PERSONAL MACHINE (2)

Your experiences were vastly more enjoyable and varied in the machine, and you didn't experience any of the health or disability issues that plague normal life.

You also recall that, while you were in the Experience Machine, you had no idea that you had gotten into a machine or that your experiences were generated by a machine.

EXP MACH V1: PERSONAL MACHINE (3)

Experience machines are personal – each Experience Machine services only one person. This means that you don't interact with any real people in an Experience Machine. Of course, you experience interesting, enlightening, and exciting interactions with enhanced versions of all your favorite people and amazing new people.

If you accept the spot, then you will stay in an Experience Machine permanently. If you reject the spot, then you will never be offered a spot again. Your life will be the same length in an Experience Machine as it would otherwise have been.

EXP MACH V1: PERSONAL MACHINE (4)

- Ignoring how your family, friends, any other dependents, and society in general might be affected, and assuming that Experience Machines always work perfectly, what is the best thing for you to do *for yourself* in this situation?
- You should accept the spot in an Experience Machine 42%
- You should *not* accept the spot in an Experience Machine 58%

This is basically a clean version of Nozick's original, so having nearly 50% want to connect to the machine is pretty impressive (and pretty bad for people who like to use the experience machine against happiness/hedonism)

EXP MACH V2: PERSONAL MACHINE, F&FS ALL IN (EVEN BFF??? OMG!!) (1)

Added to previous version:

- As it happens, all of your family, friends, and any other dependents you might have, all decided to accept spots in Experience Machines. You will no longer have contact with them in reality or in an Experience Machine. However, if you connect to an Experience Machine, you will experience having contact with enhanced versions of these people.

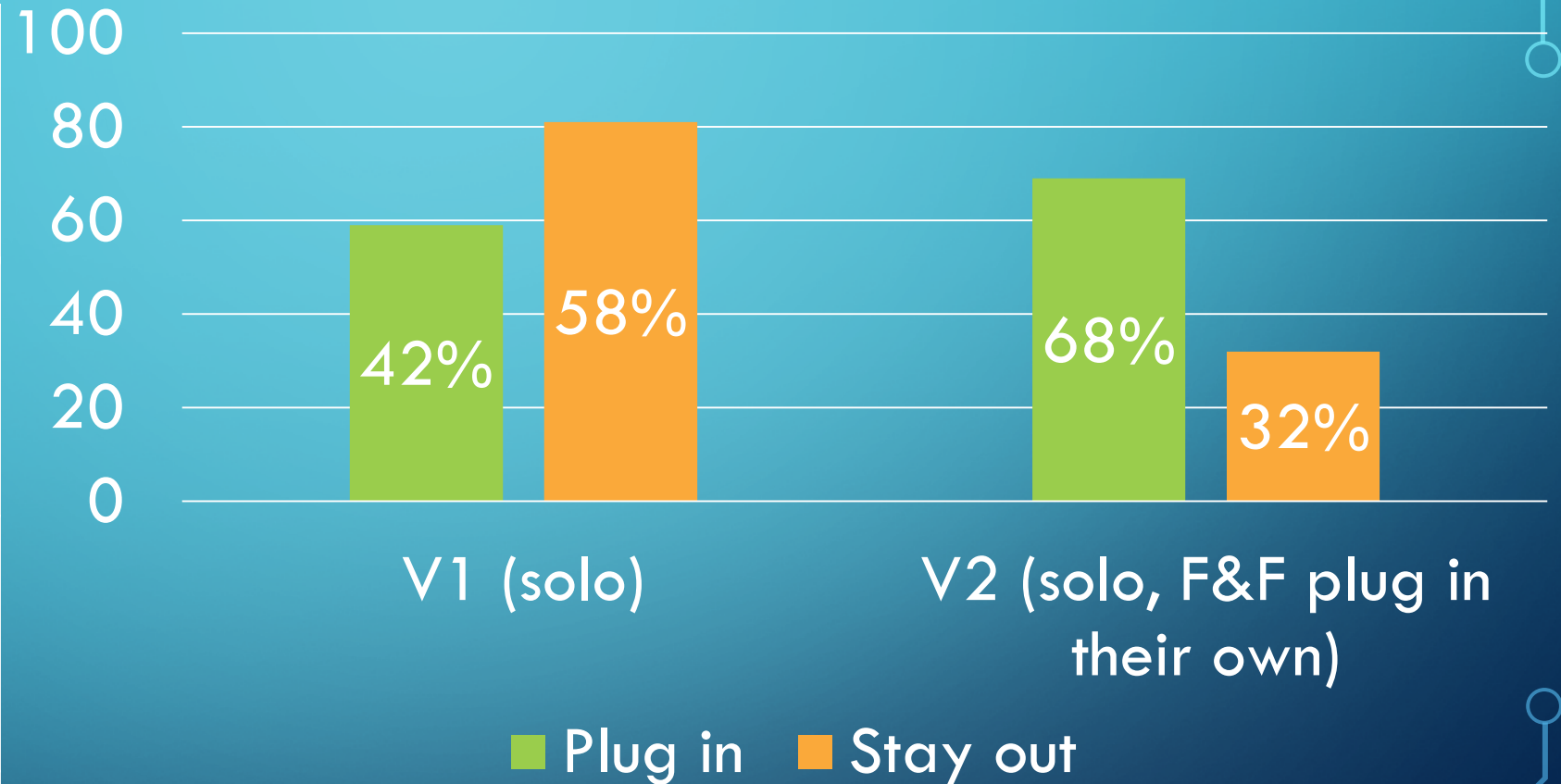
EXP MACH V2: PERSONAL MACHINE, F&FS ALL IN (EVEN BFF??? OMG!!) (2)

- Ignoring how your family, friends, any other dependents, and society in general might be affected, and assuming that Experience Machines always work perfectly, what is the best thing for you to do *for yourself* in this situation?
- You should accept the spot in an Experience Machine 68%
- You should *not* accept the spot in an Experience Machine 32%

This is like V1, but it puts all of your friends and family into their own experience machines. This starts to get at the perceived value of reality without continuing existing relationships. The results show that reality isn't all that good without family

COMPARING V1 & V2: LOSING EXISTING RELATIONSHIPS MAKES REALITY ~HALF AS VALUABLE

	In	Out
V1	42%	58%
V2	68%	32%
Diff	26%	



- Fisher's exact test: The two-tailed **P-value** is less than **0.0001**:
<https://www.graphpad.com/quickcalcs/contingency2/>

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ASSESSING THE “SIZE/IMPORTANCE/IMPACT” OF BIASES OR VALUABLE THINGS ACCURATELY REQUIRES CONTROLLING FOR

INDIVIDUAL DIFFERENCES

LIKE NOT HAVING GOOD FRIENDS TO START WITH

INDIVIDUAL DIFFERENCES: WHAT KIND OF FREAK WOULD PLUG IN?

- Big 5 personality
- Wellbeing qns: life sat., happiness, flourishing, depression
- Health, disability status in various domains
- Essentialism
- Need for Closure: prefer order, prefer predictability, decisiveness, discomfort with ambiguity, closed-mindedness
- Special Demographics – relationships, dependants
- Special Demographics – technology/games/VR use/familiarity/interest
- Basic Demographics
- Extended demographics – politics, religion

I haven't corrected for the high number of input variables yet (fishing)

BINARY LOGISTIC REGRESSION ON PLUGGING IN TO AN EXPERIENCE MACHINE

Predicting “stay out” of experience machine

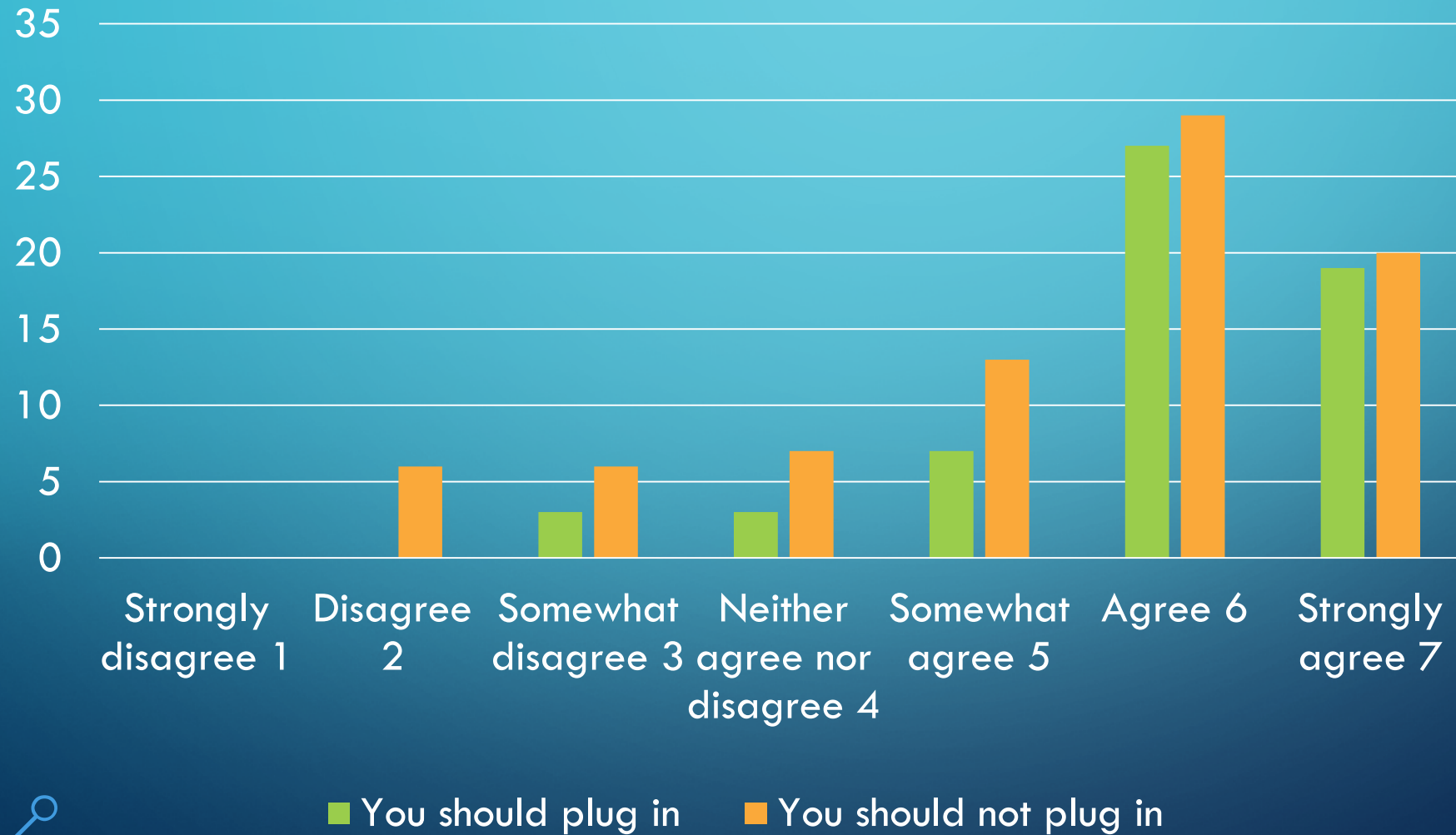
	B	S.E.	Wald	df	Sig.	Exp(B)
Interest in VR	-.458	.164	7.760	1	.005	.633
Close mindedness	-.484	.213	5.185	1	.023	.616
Please indicate how much of the time during the past week... - ...you felt depressed	-.551	.231	5.696	1	.017	.576
Constant	4.952	1.274	15.119	1	.000	141.451

Assumptions met

I did check for linearity of significant predictors

a. Variable(s) entered on step 1: Interest in VR, Close mindedness, Please indicate how much of the time during the past week... - ...you felt depressed.

INTEREST IN VR (ROUNDED)

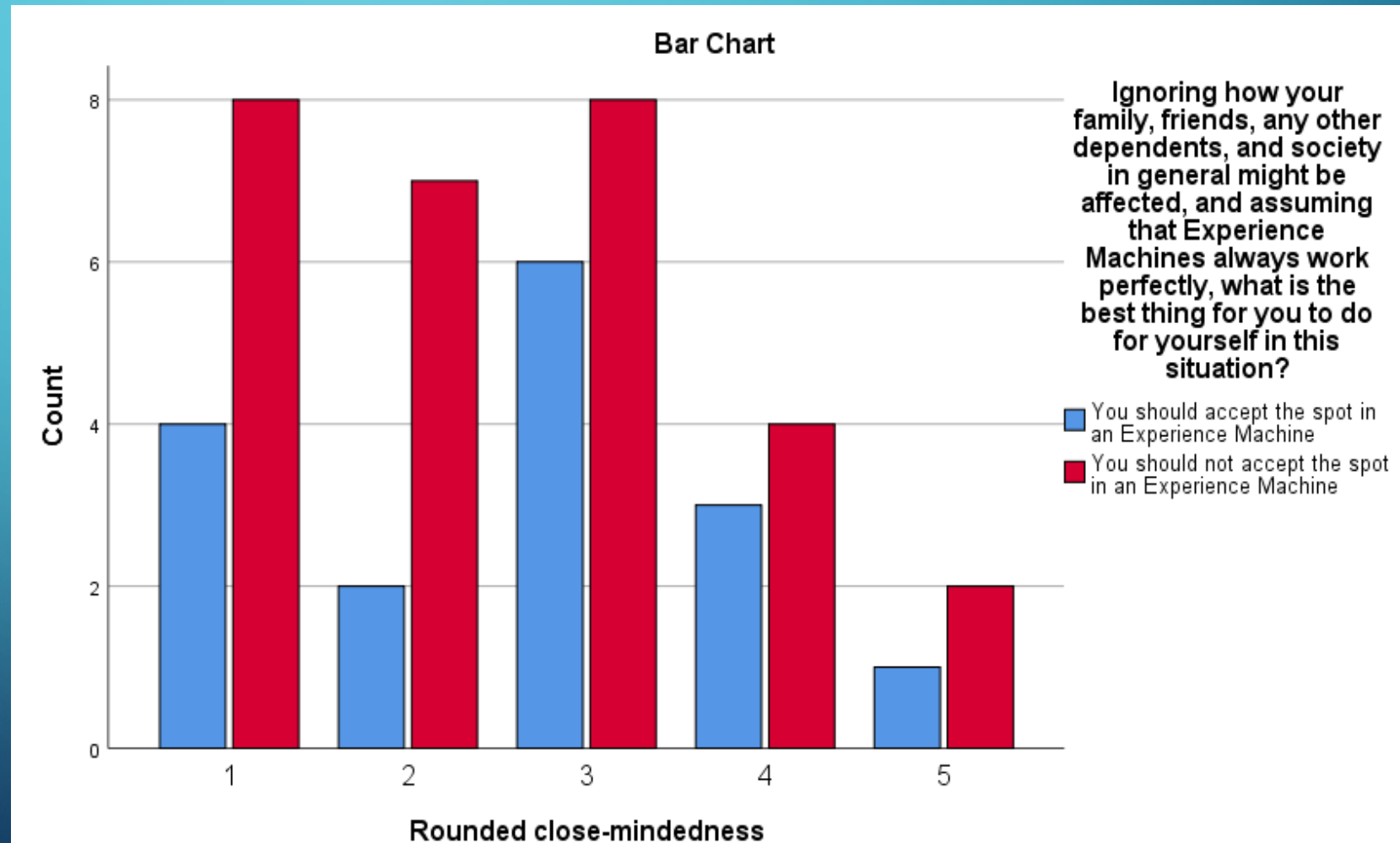


Items

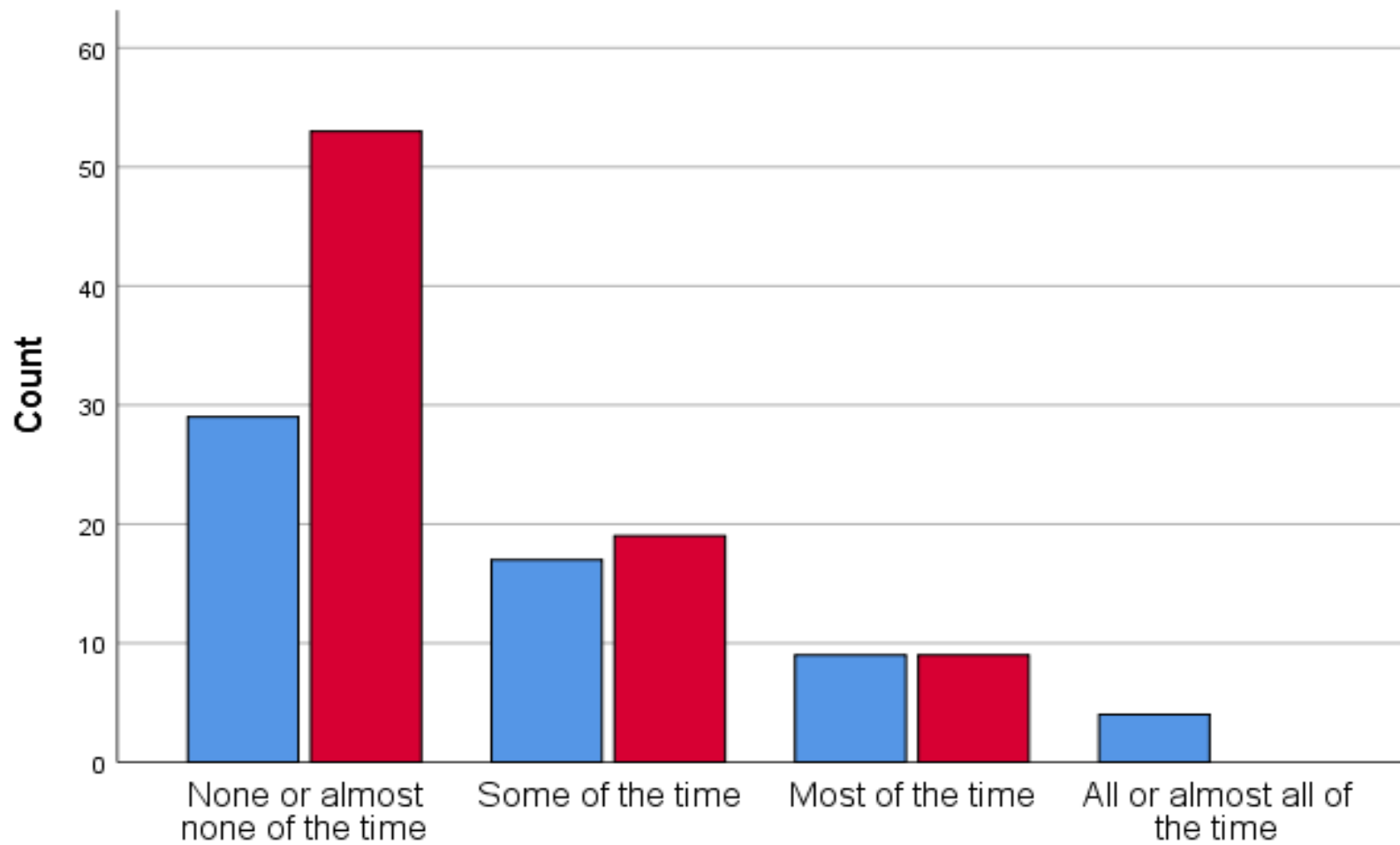
- I am very interested in learning about and using virtual reality technology
- I have no interest in learning about or using virtual reality technologies (R)

“CLOSE-MINDEDNESS”... OR HEADSTRONG PREFERENCE FOR SIMPLICITY AND SUREITY?

- I dislike questions which could be answered in many different ways
- I feel irritated when one person disagrees with what everyone else in a group believes
- I do not usually consult many different opinions before forming my own view



DEPRESSION (“MAIN ITEM” FROM CESD DEPRESSION SCALE)



Ignoring how your family, friends, any other dependents, and society in general might be affected, and assuming that Experience Machines always work perfectly, what is the best thing for you to do for yourself in this situation?

- You should accept the spot in an Experience Machine
- You should not accept the spot in an Experience Machine

Please indicate how much of the time during the past week... - ...you felt depressed

FLOURISHING WAS INTERESTING (1)

Items

- I lead a purposeful and meaningful life
- My social relationships are supportive and rewarding
- I am engaged and interested in my daily activities
- I actively contribute to the happiness and well-being of others
- I am competent and capable in the activities that are important to me
- I am a good person and lead a good life
- I am an optimist about my future
- People respect me

Predicting “stay out” of experience machine

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Flourishing	.311	.155	4.024	1	.045	1.365
	Constant	-1.376	.860	2.559	1	.110	.252

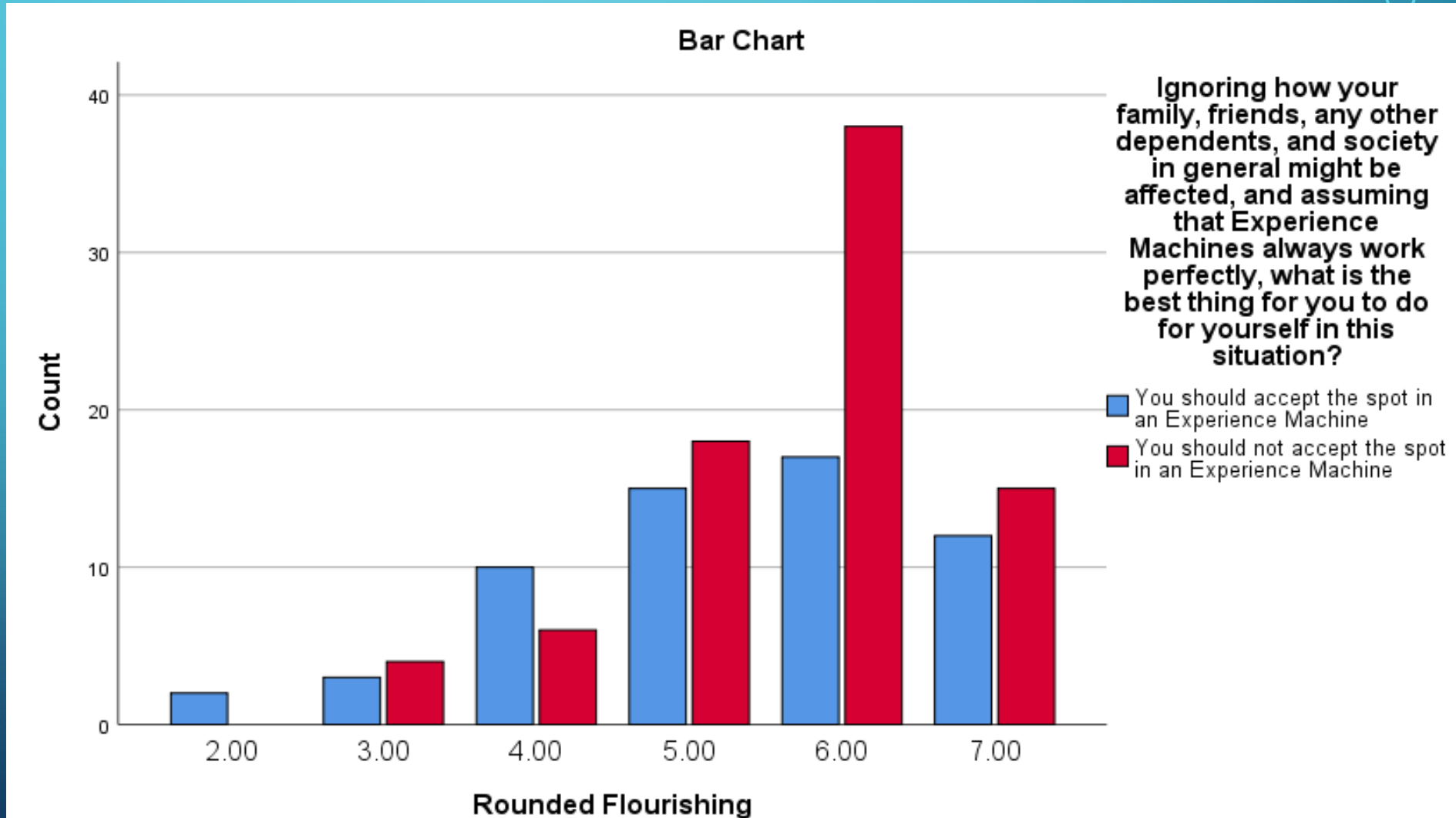
a. Variable(s) entered on step 1: Flourishing.

Indicate your agreement or disagreement with the following statements about you: -

	B	S.E.	Wald	df	Sig.	Exp(B)
I lead a purposeful and meaningful life	.438	.229	3.676	1	.055	1.550
My social relationships are supportive and rewarding	-.435	.207	4.396	1	.036	.647
I am engaged and interested in my daily activities	-.008	.221	.001	1	.971	.992
I actively contribute to the happiness and well-being of others	.188	.206	.830	1	.362	1.207
I am competent and capable in the activities that are important to me	-.547	.315	3.022	1	.082	.579
I am a good person and lead a good life	.427	.356	1.439	1	.230	1.532
I am an optimist about my future	.161	.152	1.120	1	.290	1.174
People respect me	.006	.236	.001	1	.978	1.006
Constant	-.752	1.284	.343	1	.558	.471

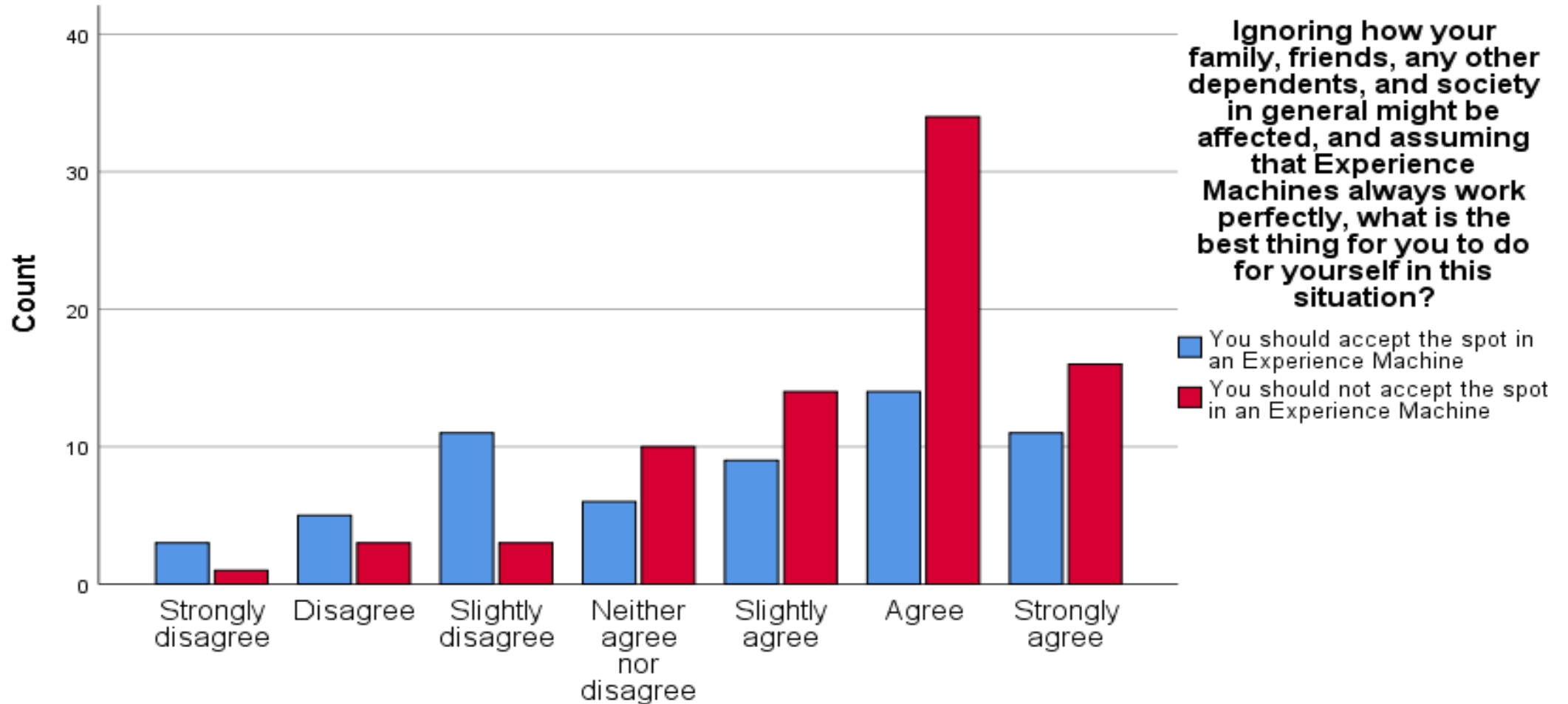
FLOURISHING WAS INTERESTING (2)

- Extremely happy, flourishing (etc.) people are weird



I LEAD A PURPOSEFUL AND MEANINGFUL LIFE

Bar Chart



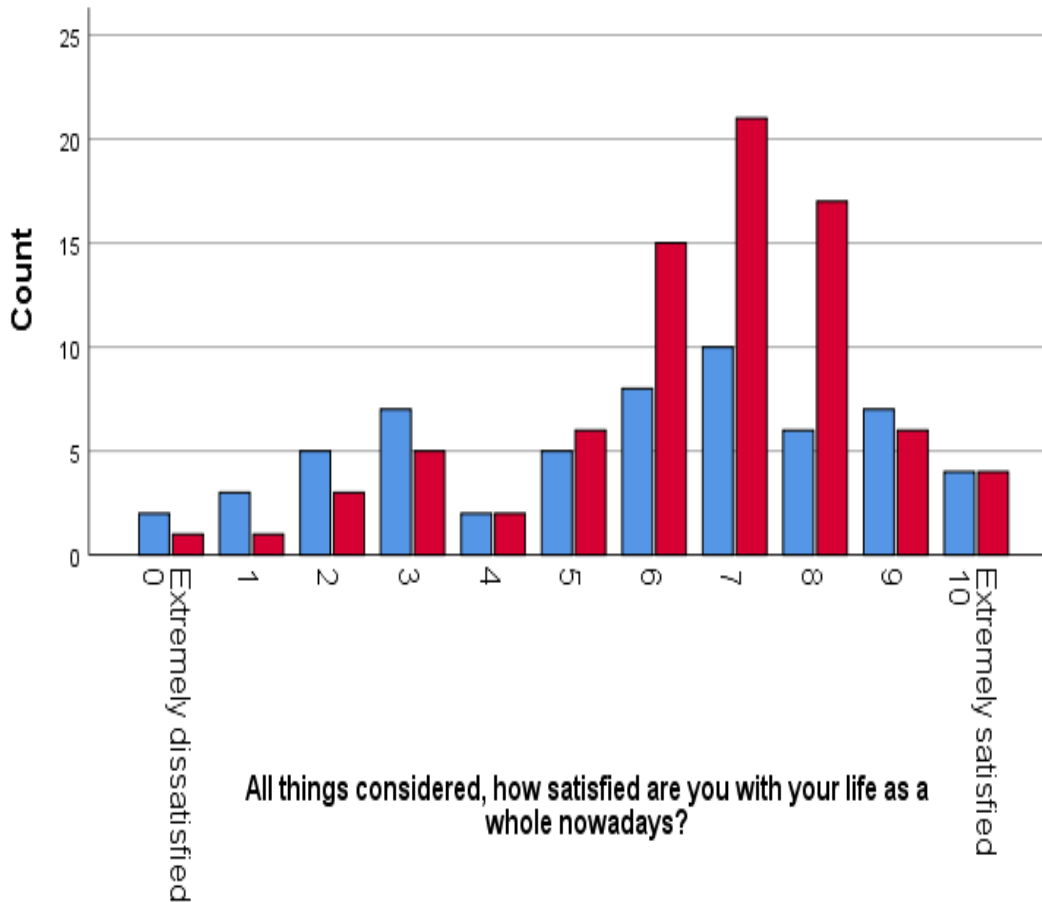
Ignoring how your family, friends, any other dependents, and society in general might be affected, and assuming that Experience Machines always work perfectly, what is the best thing for you to do for yourself in this situation?

- You should accept the spot in an Experience Machine
- You should not accept the spot in an Experience Machine

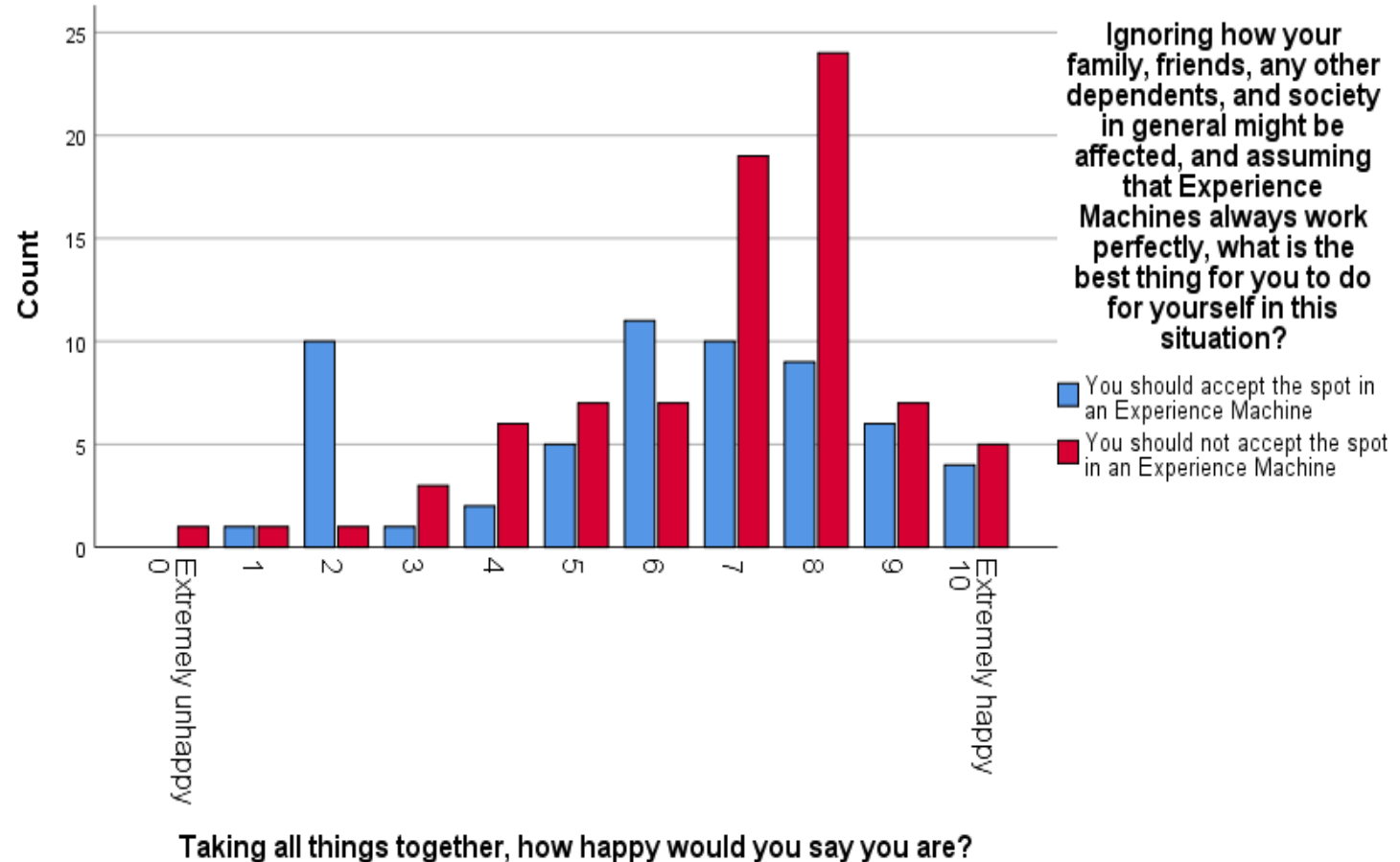
Indicate your agreement or disagreement with the following ...

MORE EXTREMELY HAPPY PEOPLE BEING WEIRD

Bar Chart



Bar Chart





WHAT ABOUT THE INDIVIDUAL DIFFERENCES IN SURVEY 2?

- Yikes....
- 

Predicting “Stay out” of personal exp mach (when F&Fs are all in exp machs)

	B	S.E.	Wald	df	Sig.	Exp(B)
All things considered, how satisfied are you with your life as a whole nowadays?	.243	.240	1.023	1	.312	1.275
Taking all things together, how happy would you say you are?	-.149	.263	.320	1	.571	.862
Indicate your agreement or disagreement with the following statements about you: - I lead a purposeful and meaningful life	.231	.226	1.048	1	.306	1.260
Indicate your agreement or disagreement with the following statements about you: - My social relationships are supportive and rewarding	-.483	.222	4.730	1	.030	.617
Please indicate how much of the time during the past week... - ...you felt depressed	-.273	.412	.437	1	.508	.761
Interest_in_VR	-.144	.172	.700	1	.403	.866
Constant	1.027	1.861	.305	1	.581	2.793

WHEN PRIMED TO THINK ABOUT LOSING EXISTING RELATIONSHIPS, NOTHING ELSE SEEMS TO MATTER ANY MORE

Predicting “Stay out” of personal exp mach (when F&Fs are all in exp machs)

	B	S.E.	Wald	df	Sig.	Exp(B)
Indicate your agreement or disagreement with the following statements about you: - I lead a purposeful and meaningful life	.352	.185	3.629	1	.057	1.422
Indicate your agreement or disagreement with the following statements about you: - My social relationships are supportive and rewarding	-.369	.186	3.917	1	.048	.691
Constant	-.682	.666	1.049	1	.306	.506

REFERENCES

- De Brigard, F. (2010). If You Like it, Does it Matter if it's Real?, *Philosophical Psychology*, 23(1): 43–57.
- Smith, B. (2011). Can We Test the Experience Machine?, *Ethical Perspectives*, 18 (1): 29–51.
- Weijers, D. (2014). Nozick's Experience Machine is Dead, Long Live the Experience Machine!, *Philosophical Psychology*, 27(4): 513–535.