Surprise study pilot 14

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Study description

This study has the same version of PE's as pilots 10 and 11, also having video and audio only. In this pilot we 1) replaced the judge pictures with cartoon images to see whether it becomes more believable as many people believed those images were AI generated, 2) we allow participants to also choose their own avatar, again to make it more believable that the others are also real, 3) we have created a new narrative around public speaking and what is the goal of this task and added criteria they will be judged open to make them more nervous but also make it more believable if they get a rating that they cannot guess what they were judged upon at each trial (they are told the judges will receive a new criterion per trial), 4) lastly, we changed two feedback questions to inquire about believability, one of them being a scale asking "How stressful was this as a social situation?"

The Gorilla experiment is the following: https://app.gorilla.sc/admin/project/120255 The task is the following: https://app.gorilla.sc/admin/task/741126/editor?version=13

I will write this here as well for us to have, if we forget again:

Positive PE: we selected numbers from a normal distribution ranging from 12-20, added this number to the mean of the histogram.

Negative PE: we selected numbers from a normal distribution ranging from 12-20, subtracted this number to the mean of the histogram.

Big positive PE: Per judge, we added 10 to the biggest positive feedback we had generated before.

Neutral PE: we added -1, 0, 1 to the mean of the histograms

In this sample, only 17 people out of 41 had high social anxiety.

```
##
  # A tibble: 41 x 2
##
      Random_ID
                   Trial.Number
##
      <chr>
                           <int>
    1 SUPPRF01407
##
                              48
##
    2 SUPPRF02465
                              48
##
    3 SUPPRF05137
                              48
                              26
##
    4 SUPPRF05583
##
    5 SUPPRF05702
                              48
    6 SUPPRF06407
                              48
##
##
    7 SUPPRF08160
                              39
                              48
##
    8 SUPPRF08392
    9 SUPPRF08503
                              48
## 10 SUPPRF11118
                              48
## # i 31 more rows
```

Relationship between Anxiety and SubjPE

[1] "average correlation between anxiety and SubjPE: -0.0570621407466249"

		JPPRF0140	JPPRF0246	JPPRF051:	JPPRF0558	JPPRF0570	JPPRF0640	JPPRF0816	
	100 75 50 25 0	= -0.45	100 75 50 25 0	100 75 50 25 0	¹⁰⁰ / ₇₅ = -0.07 ⁵⁰ / ₂₅	¹⁰⁰ ₇₅ ₇₅ ₇₅ ₇₅ ₇₅ ₇₅ ₇₅	100 75 = 0.19 50 25	100 75 50 25 0	
		-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	
		JPPRF0839	JPPRF0850	JPPRF1111	JPPRF111€	UPPRF1311	JPPRF1471	UPPRF1483	
	100 75 50 25	= 0.01	100 75 50 25 0	¹⁰⁰ / ₇₅ : -0.03 ⁵⁰ / ₂₅	¹⁰⁰ / ₇₅ : -0.14 ⁵⁰ / ₂₅	100 75 = 0.01 50 25	100 75 50 25	¹⁰⁰ / ₇₅ : -0.28 ⁵⁰ / ₂₅	
	-	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	
		JPPRF1818	UPPRF2702	JPPRF2728	JPPRF2858	UPPRF3327	JPPRF343(UPPRF372	Social_Anxiety
	100 75 50 25 0	= 0.21	¹⁰⁰ ₇₅ ₇₅ ₈ ₈ ₉₀ ₁₀₀	100 75 50 25 0	100 75 50 25 0	100 75 50 25	100 75 50 25 0	100 75 50 25 0	high
Anxiety			0	-	-	-			low
	-	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	IOW
Ę	400	JPPRF4267	UPPRF4314	JPPRF4668	JPPRF5139	UPPRF5499	JPPRF5499	UPPRF5529	
	100 75 50 25	= -0.26	100 000	¹⁰⁰ / ₇₅ : -0.13	¹⁰⁰ / ₇₅ = -0.13	¹⁰⁰ ₇₅ = -0.39	$^{100}_{75}$ R = 0	¹⁰⁰ ₇₅ = -0.03	- 1 1
	25 0	: -0.20	100 75 50 25 0	¹⁰⁰ / ₇₅ : -0.13 ⁵⁰ / ₂₅	100 75 50 25 0	100 75 = -0.39	100 R = 0 50 25 0	100 75 50 25 0	alpha
	0	-80-3020 70	75 = 0.08 50 25 0 -80-3020 70	75 = -0.13 50 25 ————————————————————————————————————	75 - 75 50 25 0 -80-3020 70	75	75 50 25 0 -80-3020 70	-80-3020 70	■ 0.3
	-			-80-3020 70	-80-3020 70	-	-80-3020 70 JPPRF740€	-80-3020 70	-
	-	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70	-80-3020 70 JPPRF740€	-80-3020 70	-
	100 75 50 25 0	-80-3020 70 JPPRF590£	-80-3020 70 UPPRF642 :	-80-3020 70	-80-3020 70	-80-3020 70 UPPRF7224	-80-3020 70 UPPRF7406	-80-3020 70 UPPRF806 9	-
	100 75 50 25 0	-80-3020 70 UPPRF5905 = -0.15	-80-3020 70 UPPRF642: 100 75 50 25	-80-3020 70 JPPRF6691 100 75 = 0.03 50 25	-80-3020 70 UPPRF6882 100 75 8 = 0.1 50 25	-80-3020 70 UPPRF7224 100 75 50 25 0	-80-3020 70 JPPRF740€ 100 75 50 25 0	-80-3020 70 UPPRF806: 100 75 50 25	-
	100 75 50 25 0	-80-3020 70 UPPRF5908 : -0.15 -80-3020 70	-80-3020 70 UPPRF642: 100 75 =-0.51 50 -80-3020 70	-80-3020 70 JPPRF669: 100 = 0.03 550 = 0.03 -80-3020 70	-80-3020 70 UPPRF688; 100 75 8 = 0.1 25 -80-3020 70	-80-3020 70 UPPRF7224 100 75 50 25 0 -80-3020 70	-80-3020 70 JPPRF7406 100 75 = 0.08 50 -80-3020 70	-80-3020 70 UPPRF806: 100 75 50 25	-

Relationship between Mood and SubjPE

[1] "average correlation between mood and SubjPE: 0.169860303615549"

	100 75 50 25 0	JPPRF0140 = 0.65	100 75 50 25 0	UPPRF0246 = 0.41	400	PPRF051: = 0.18	100 75 50 25	JPPRF0558 = 0.11	100 75 50 25 0	UPPRF0570 = 0.05	100 75 50 25 0	JPPRF0640 = 0.18	100 75 50 25 0	UPPRF0816		
		-80-3020 70		-80-3020 70		0-3020 70		-80-3020 70		80-3020 70		-80-3020 70		-80-3020 70		
	100 75	JPPRF0839 = 0.13	100	UPPRF0850 = -0.02	400	PPRF1111 -0.04	100 75 50 25	JPPRF1116 = 0.14	100 75 50 25	UPPRF1311 = 0.14	100 75 50 25	JPPRF1471 R = 0.5	100 75 50 25 0	UPPRF1483 = 0.58		
	100 75 50 25 0	-80-3020 70	-	-80-3020 70		0-3020 70	-	-80-3020 70	-	80-3020 70	•	-80-3020 70		-80-3020 70		
		JPPRF1818		JPPRF2702	JI	PPRF2728		JPPRF2858		UPPRF3327		JPPRF343(UPPRF372	Soc	ial_Anxiety
p	100 75 50 25 0	-0.32	100 75 50 25	=-0. 08	100 75 50 25	= 0.14	100 75 50 25	=0.1	100 75 50 25	= -0.1 3	100 75 50 25	=_0.07	100 75 50 25	= 0.16	•	high
		-80-3020 70	•	-80-3020 70	O	0-3020 70	-	-80-3020 70	-	80-3020 70	-	-80-3020 70	-	-80-3020 70	•	low
Mood		JPPRF4267		JPPRF4314		PPRF4668		JPPRF5139		UPPRF5499		JPPRF5499		UPPRF5529		
_		31 1 101 7201		JI I IXI 43 I-		1 1 111 4001		31 1 101 3 130				31 1 101 3430				
	100 75 50	= 0.56		= 0.41		2 = 0.7	100 75 50	= -0.04		= 0.81	100 75 50	: -0.11	100 75 50	= 0.26	alph	na
	100 75 50 25 0		100 75 50 25 0	•	100 R 75 S 50 25		100 75 50 25 0		100 75 50 25 0		100 75 50 25 0		100 75 50 25 0		alph •	na 0.3
		= 0.56	100 75 50 25 0	= 0.41	100 R 75 R 25 0 -80	2 = 0.7	-	= -0.04	100 75 50 25 0	= 0.81		= -0.11		= 0.26	alph •	
		= 0.56 -80-3020 70	100 75 50 25 0	= 0.41 -80-3020 70	100 R 75 R 25 0 -80	2 = 0.7 0-3020 70	-	= -0.04 -80-3020 70	100 75 50 25 0	80-3020 70		= -0.11 -80-3020 70		-80-3020 70	alph •	
	100 75 50 25 0	= 0.56 -80-3020 70 UPPRF5905	100 75 50 25 0 100 75 50 25 0	= 0.41 -80-3020 70 UPPRF642 :	100 75 50 25 0 -80 JI 100 75 50 25 0	0-3020 70 PPRF6697	100 75 50 25 0	= -0.04 -80-3020 70 UPPRF688 2	100 75 550 25 0 100 75 550 25 0	= 0.81 80-3020 70 UPPRF7224	100 75 50 25 0	= -0.11 -80-3020 70 UPPRF7406	100 75 50 25 0	= 0.26 -80-3020 70 UPPRF8069	alph •	
	100 75 50 25 0	= 0.56 -80-3020 70 UPPRF5908 = 0.37	100 75 50 25 0 100 75 50 25 0	= 0.41 -80-3020 70 UPPRF642: R = 0.5	100 R 500 -80 100 75 100 75 500 -80	0-3020 70 PPRF669: = 0.05	100 75 50 25 0	= -0.04 -80-3020 70 UPPRF6882 = 0.53	100 75 50 25 0 - 100 75 50 25 0 -	= 0.81 80-3020 70 UPPRF7224 = -0.37	100 75 50 25 0	= -0.11 -80-3020 70 UPPRF7406 = -0.02	100 75 50 25 0	= 0.26 -80-3020 70 UPPRF8069 = 0.22	alph •	
	100 75 50 25 0	= 0.56 -80-3020 70 UPPRF590t = 0.37 -80-3020 70	100 75 50 25 0 100 75 50 25 0	= 0.41 -80-3020 70 UPPRF642: R = 0.5 -80-3020 70	100 R 75 R 25 0 -80	0-3020 70 PPRF669: 0-3020 70	100 75 50 25 0	= -0.04 -80-3020 70 UPPRF6882 = 0.53 -80-3020 70 UPPRF9048	100 755 25 0 - 100 755 25 0	= 0.81 80-3020 70 UPPRF7224 = -0.37 80-3020 70	100 75 50 25 0	= -0.11 -80-3020 70 UPPRF7406 = -0.02 -80-3020 70 UPPRF9058	100 75 50 25 0	= 0.26 -80-3020 70 UPPRF8069 = 0.22	alph •	

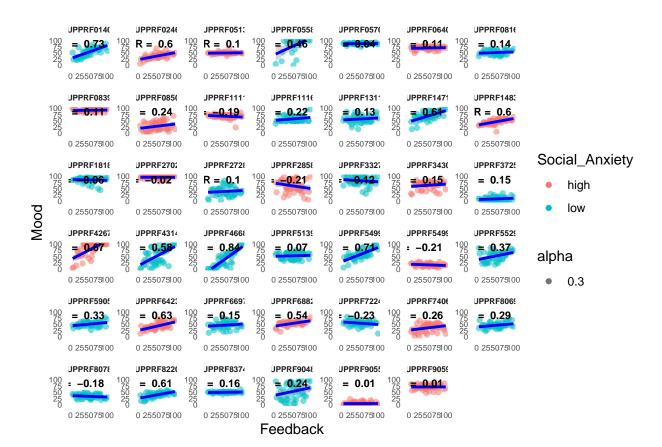
SubjPE: feedback - prediction

Relationship between Mood and feedback

The relationship between mood and feedback seems to be stronger than mood and subjective PE (0.24 vs 0.17), so it seems people may care more about the feedback as receiving reward or punishment, rather than social PE? The relationship between subjective PE with both anxiety and mood has been the weakest across all pilots. We need to make sure it is only because of changing the pictures of virtual players, maybe by changing the narrative they would assume that the other players are also learning how to do public speaking (less intimidating than someone who is an expert?).

To be sure, I wonder if we want to repeat the pilot and just replace the images?

[1] "average correlation between mood and feedback: 0.237770542807818"



Relationship between Mood and prediction

[1] "average correlation between mood and prediction: 0.119584769789578"

	100 75 50 25 0	UPPRF014(= 0.32	UPPRF0246 = 0.23	JPPRF051: = _0.11	UPPRF0558 - 0.21	UPPRF057(R = 0 100 75 50 25 0 255075100	JPPRF064(= _0.14 100 75 50 25 0 0 255075100	UPPRF0816 = 0.32 0 255075100	
	100 75 50 25 0	UPPRF0835 = ■0.07 100 75 25 25 0 255075100	UPPRF085(= 0.33	JPPRF111' ■0.22	UPPRF1116 -0.16 -0.255075100	UPPRF1311 - 0.04	JPPRF147 1 ₹ -0.1 100 75 50 225 0 0 255075100	UPPRF148: = 0.07 0 255075100	
Mood	100 75 50 25 0	UPPRF1818 = 0.74 100 75 50 25 0 0 255075100	UPPRF2702 = 0.34 100 75 50 25 0 0 255075100	JPPRF2728 -0.13	JPPRF2858 = −0.14 100 75 50 25 0 0 255075100	UPPRF3321 - 0.03	UPPRF343(R = 0.1 100 75 50 25 0 0 255075100	UPPRF372! = -0.07 0 255075100	Social_Anxietyhighlow
M	100 75 50 25 0	UPPRF4267 = 0.36 175 50 25 0 255075100	UPPRF4314 = 0.24	JPPRF4668 = 0.34	UPPRF513: = 0.12	UPPRF549! - 0.16	UPPRF5499: ■ -0.23	UPPRF5529 = 0.15 0 255075100	alpha • 0.3
	100 75 50 25 0	UPPRF590£ R = 0	UPPRF642: -0.05 100 75 50 0 255075100	JPPRF669; = 0.11 100 75 500 25 0 255075100	UPPRF6882 = 0.04 175 500 255075100	UPPRF7224 = 0.43	UPPRF7406 = 0.43	UPPRF8069 = 0.11 0 255075100	
	100 75 50 25 0	UPPRF807€ = 0.05 100 75 50 0 255075100	UPPRF822(= 0.37 100 75 50 25 50 25 50 75 00 00 00 00 00 0	JPPRF8374 = 0.17 100 75 50 0 255075100	UPPRF9048 -0.07 100 75 50 25 0 255075100 rediction	UPPRF905: = 0.33	UPPRF9059 = -0.1 0 255075100		

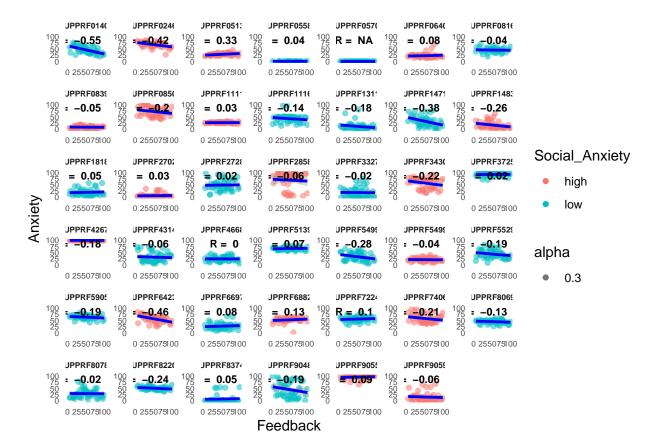
Relationship between Anxiety and prediction

[1] "average correlation between anxiety and prediction: -0.0520117558366197"

	100 75 50 25 0	UPPRF014(= 70.31	0 255075100	0 255075100	UPPRF0558 R = 0.1 100 75 50 25 0 255075100	UPPRF057(R = NA	JPPRF064 (= −0.19 100 75 50 25 0 255075100	0 255075100	
	100 75 50 25 0	UPPRF0839 = -0.09 75 50 25 0 255075100	UPPRF0850 -0.34	JPPRF1111 = 0.07 100 75 50 25 0 255075100	■ 0.01 100 ■ 0.01 175 50 25 0 255075100	UPPRF1311 = -0.24	UPPRF1471 = 0.05 100 75 500 25 0 0 0 0 0 0 0 0 0	UPPRF148: = 0.01 0 255075100	
Mood	100 75 50 25 0	UPPRF1818 = -0.46 75 50 25 60 255075100	UPPRF270: = -0.37	JPPRF2728 = 0.34	UPPRF2858 = 0.01	UPPRF3327 = -0.02	UPPRF343(=0.17	UPPRF372! = 0.13 0 255075100	Social_Anxiety high low
Mo	100 75 50 25 0	UPPRF4267 R = 0 100 75 50 25 0 255075100	UPPRF4314 0 = -0.13 100 75 50 0 255075100	JPPRF4668 R = 0.1 100 50 50 50 0 255075100	UPPRF5138 = 0.23	UPPRF5499 R = 0	UPPRF549\$ = −0.1 100 75 50 25 0 0 255075100	UPPRF5529 - 0.24 0 255075100	alpha 0.3
	100 75 50 25 0	UPPRF590\$ = -0.06 75 50 22 0 255075100	UPPRF642: 	JPPRF6697 = 0.06 100 75 50 25 0 0 255075100	UPPRF6882 = 0.11	UPPRF7224 = 0.67	UPPRF7406 =	UPPRF8069 = -0.18 0 255075100	
	100 75 50 25 0	UPPRF8078 - 0.38	UPPRF822(= -0.22 100 5 50 50 0 255075100	0 255075100	UPPRF9048 = 0.01 100 75 50 25 0 255075100 Prediction	UPPRF905!0.4 100 75 50 25 0 255075100	UPPRF9059 R = 0 0 255075100		

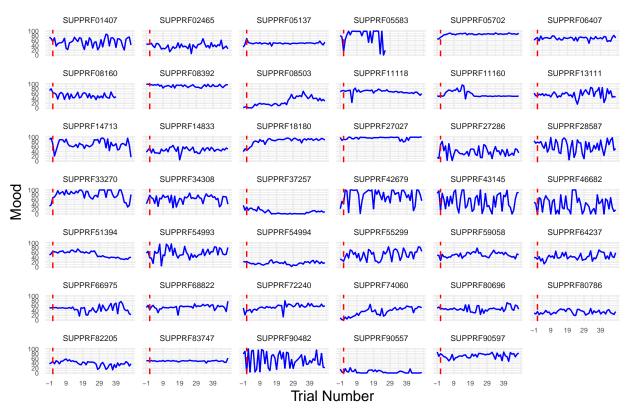
Relationship between Anxiety and feedback

[1] "average correlation between anxiety and feedback: -0.0912289783912545"



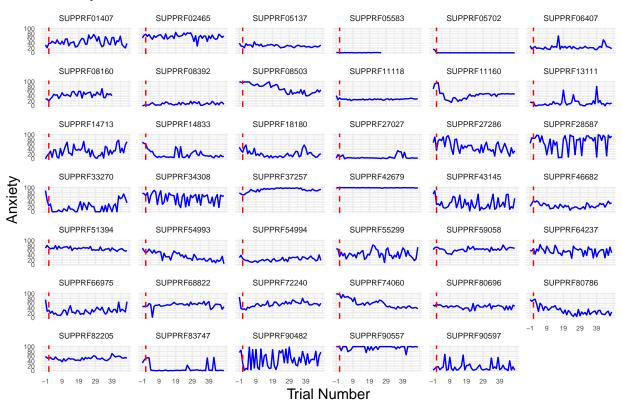
Mood over time

Mood across time



Anxiety over time

Anxiety across time



Participants' feedback

In the feedback we received from people, some people mentioned they did not like being watched and some mentioned since they did not see the other person, they did not care and did not think they were real and did not influence how they felt. We did have a few people who mentioned "the observer" or "they" when trying to descrive the virtual players. But overall, seeing how weaker the relationship is, I don't think having the cartoon images helps.

But since in this new pilot we have had several changes at once, shall we repeat the pilot with the new narrative but with the old pictures we had?