# Online supplementary material

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# **SCENARIO STUDY**

# **Test Survey Link**

You can view and try the online implementation of the Scenario Study, created in Qualtrics.

Scenario Study

To restart the experiment, refresh the page.

# **Pre-registration Link**

Find the pre-registration for the **Scenario Study** here:

http://aspredicted.org/blind.php?x=yu2d8i

# **Instructions (screenshots)**

Below are a series of screenshots of the experiment showing the exact instructions participants were given.

Competence/Warmth Prime

### **Short Recall Task**

Please think of a person you <b>likable</b> . Type the initials of thi below.		
Person's first and last initials		
In the box below, describe 2-makes them seem <b>generous</b> ,		-
What is the gender of this pe	rson?	
What is the golden of the pe		
Male	Female	Other
<<		<b>&gt;&gt;</b>

Scenario section

On the next page you will be asked to read a scenario.

Please <u>carefully imagine yourself</u> in the scenario and <u>take on the values of the person</u> in the scenario, even if they don't match your own real-life values.



#### INSTRUCTIONS

REMINDER: Please <u>carefully imagine yourself</u> in the scenario and <u>take on the values</u> <u>of the person</u> in the scenario, even if they don't match your own real-life values.

On the next page you will be asked to answer questions based on this scenario.

Read carefully: Later, you will have to answer a few <u>comprehension check</u> <u>questions</u> about it.

Competence-favoring scenario (PosOrigComp)

This version of the scenario is from the "PosOrigComp" condition. That is, it is the competence-favoring condition, where the participant is in the role of the Originator, and the outcome is positive.

### You and John:

Imagine that you work at a large publishing company called Paper Press, Inc. At Paper Press, you and a co-worker, John, have the same supervisor. Both of you work remotely for the publishing company. You don't really know or interact with John, so you feel pretty indifferent towards him. Though, sometimes he can be a bit rude.

# The Company Culture and Values:

Every month, you must attend a seminar that reminds you of the company values:

Dominance: Have a will to win, and focus on success.

Accountability: If it is to be, it's up to me. Quality: Great just isn't good enough. Speed: Fast is better than slow. Hard Work: Desire to be the best.

Competition: Know your competitive advantage and leverage it.

Paper Press really cares that employees fit with the culture and values it puts forth, so much so, that promotion decisions are heavily influenced by whether you exhibit these values in your work and social interactions at the company. You feel lucky to work at a job like this because those are the exact values you care most about.

Recently, you have become aware of a new position opening up that would be a step up for you in the company, and you know that John is also considering applying.

## The Task:

John has an important report due for the publishing company the following day and he asks you to give him some feedback. You reluctantly agree. You spend a lot of time editing the report and suggest some radical changes to the report, which John accepts.

### The Outcome:

During your weekly joint-conference call, your supervisor at the publishing company reads the report in the presence of both of you, but has no idea that you were involved. The supervisor effusively praises John's report, especially the parts that you are primarily responsible for. Based on the quality of this report, your supervisor decides to recommend John for the new position.

Warmth-favoring scenario (NegRecWarm)

This version of the scenario is from the "NegRecWarm" condition. That is, it is the warmth-favoring condition, where the participant is in the role of the Receiver, and the outcome is negative.

#### You and John:

Imagine that you work at a large publishing company called Paper Press, Inc. At Paper Press, you and a co-worker, John, have the same supervisor. Both of you work remotely for the publishing company. You interact with John often and consider him a very close friend. You care a great deal about him.

# The Company Culture and Values:

Every month, you must attend a seminar that reminds you of the company values:

Teamwork: We are one team, and together we make the difference. Good Citizenship: Treat others with respect, and follow The Golden Rule.

Family: Treat fellow co-workers like friends and family. Humility: Be humble, and don't take yourself too seriously.

Generosity: Put others first.

Harmony: Create a culture of warmth and belonging, where everyone is welcome.

Paper Press really cares that employees fit with the culture and values it puts forth, so much so, that promotion decisions are heavily influenced by whether you exhibit these values in your work and social interactions at the company. You feel lucky to work at a job like this because those are the exact values you care most about.

Recently, you have become aware of a new position opening up that would be a step up for you in the company, and you know that John is also considering applying.

### The Task:

You have an important report due for the publishing company the following day and you ask John to give you some feedback. He spends a lot of time editing the report and suggests some radical changes to the report, which you accept.

#### The Outcome:

During your weekly joint-conference call, your supervisor at the publishing company reads the report in the presence of both of you, but has no idea that John was involved. The supervisor harshly criticizes your report, especially the parts that John is primarily responsible for. Based on the quality of this report, your supervisor decides you should not be recommended for the new position.

# The Questions

Please answer the following questions <u>as if you were the person in the scenario</u>. Again, please <u>take on the values of that person</u>.

Again, please <u>take on the values of that person</u> .
(The scenario is at the bottom of the page, in case you need to refer back to it.)
Right after hearing the supervisor's evaluation of the report, which of the following would you be MORE likely to do?
Immediately take credit for the report in front of the supervisor.
Wait to let John say something first.
During the conference call, when would you be MORE motivated to take the credit for the report?
After John already gave you the credit in front of the supervisor.
If John didn't say anything about your involvement in the report.
During the conference call, which of the following two events would you prefer to happen?
YOU take the credit for the report in front of the supervisor.
JOHN gives you the credit for the report in front of the supervisor.
During the conference call, which of the following two events would you prefer to happen?
YOU take the credit for the report in front of the supervisor.
Neither person says anything about your involvement.
During the conference call, if John said that you "glanced at the report and gave a little feedback" (which is much less than you actually did), which of the following would you be MORE likely to do?
Say nothing.
Placeral Abrahassa, and a seem a seem as a different base as seem to the another than the standard and a seem of

## The Attention Check

For this question, which is an attention check, please select 5 for all three people listed below.

	1	2	3	4	5
John	0	0	0	0	0
Supervisor	0	0	0	0	0
You	0	0	0	0	0

>>

# The Comprehension Check

Please answer the following comprehension check questions.				
Which of the following occurred in the scenario?				
John helped you.	You helped John.			
Which of the following were included in the s	et of company values:			
Dominance & Competition	Teamwork & Harmony			
The supervisor				
PRAISED the report.	CRITICIZED the report.			
Which of the following best describe your feelings toward John, as mentioned at the beginning of the scenario?				
You like John and consider him a close friend.	You feel indifferent towards John, and even think he is somewhat rude.			

## Individual Difference Measure

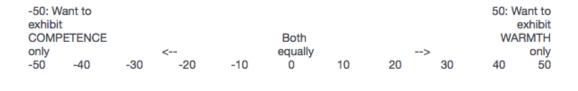
# ANSWER THE FOLLOWING QUESTION FOR <u>YOU, YOURSELF</u>, NOT THE PERSON IN THE SCENARIO:

# Personally, to what extent do YOU prefer to exhibit the following sets of traits in your everyday life?

Indicate your preference on the slider below, where

-50 = You care ONLY about exhibiting COMPETENCE (skill, ability, intelligence, hardworking)

50 = You care ONLY about exhibiting WARMTH (generosity, friendliness, kindness, likability)



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# LIVE CHAT STUDY

# **Pre-registration Link**

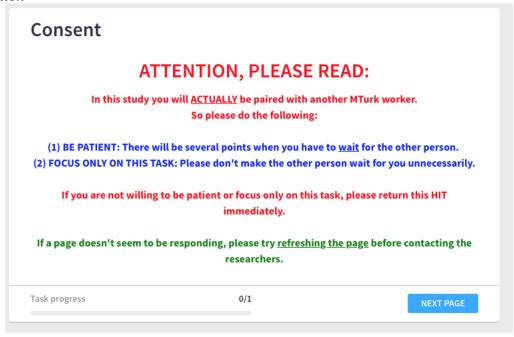
Find the pre-registration for the **Live Chat Study** here:

http://aspredicted.org/blind.php?x=9bx4jr

# **Instructions (screenshots)**

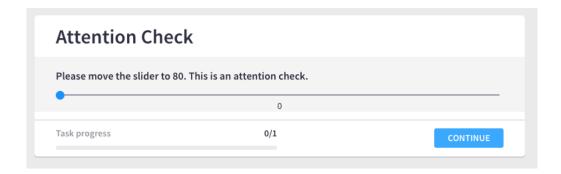
Below are a series of screenshots of the experiment showing the exact instructions participants were given.

#### Introduction

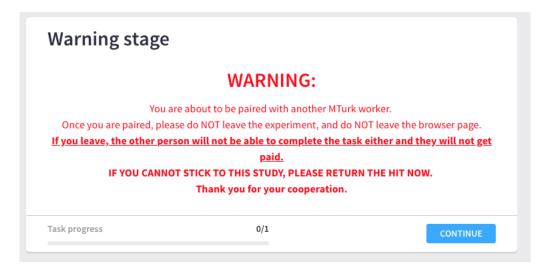


Introduction		
Thank you for taking part in	this study.	
In this study, we want to exa	mine how peer competition can help i	mprove performance.
will each work on a task sep determined by the higher o	npetitive peer, another participant wi arately, but you will split the earnings of the two scores on the task. These earr receive your portion as a bonus to you	equally. Task earnings will be nings will be split equally between
,	you no longer than 15-20 minutes to o edr@andrew.cmu.edu) if you have any	•
On the next page, you will b	e assigned to your <b>competitive peer</b> . O	Click "Continue" to begin.
Task progress	0/1	CONTINUE

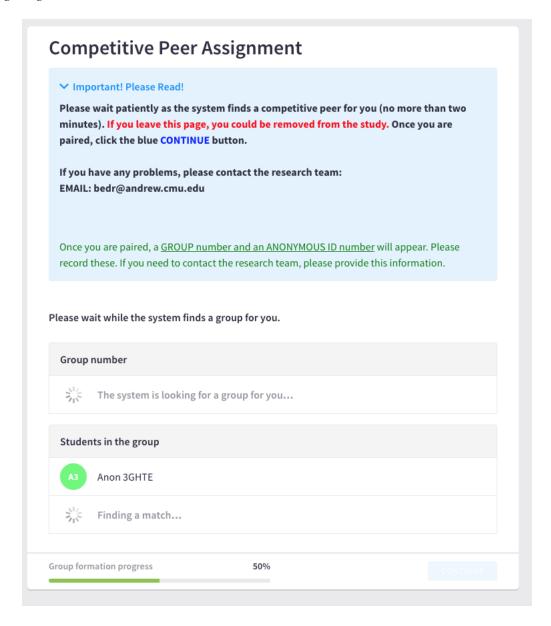
### Attention Check

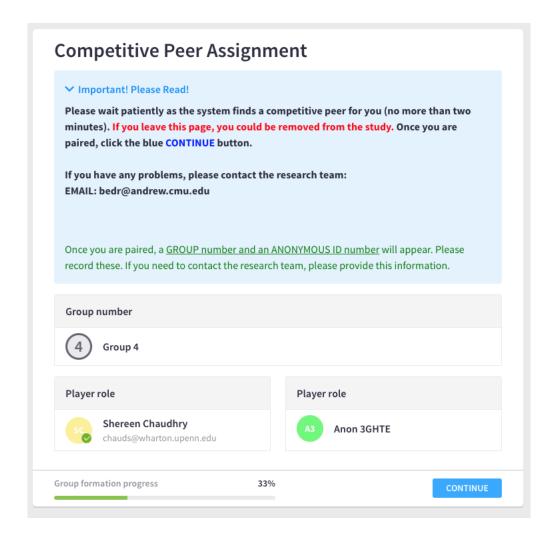


## Warning Stage

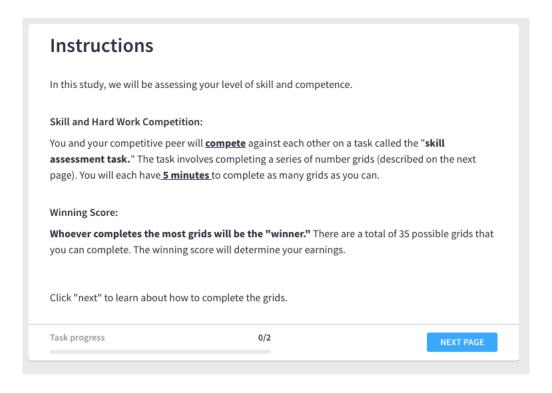


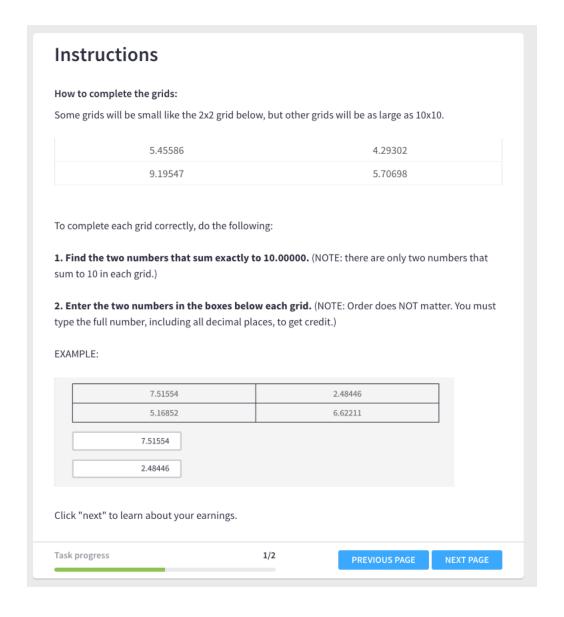
## Pairing Stage





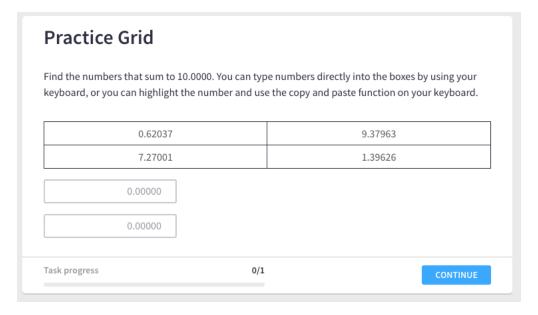
#### Task Instructions

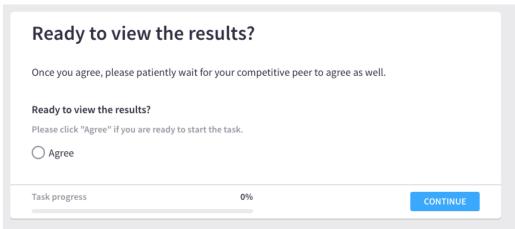


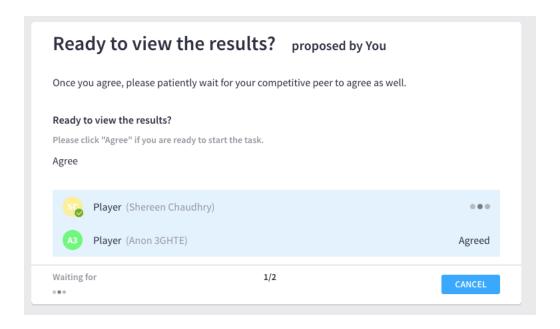


,	ings. Each correct grid is worth 1 point. Each point of
,	0.03 cents to your peer. (Essentially, you will both earn
, ,	core.) See chart below for examples. There are a total
of 35 grids, so the most the winning score can	be is 35 points, which would be worth \$1.05 to you.
If the Winning Score is:	Then Your Earnings will be:
1 point	\$0.03
4 points	\$0.12
answer the questions below and then click "su GRID.	\$0.60  FICE GRID. This grid will not affect your score. Please ubmit" when you are ready to begin the PRACTICE  ENSION CHECK:
On the next page, you will be given a PRACT answer the questions below and then click "su GRID.	TICE GRID. This grid will not affect your score. Please ubmit" when you are ready to begin the PRACTICE
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On the next page, you will be given a PRACT answer the questions below and then click "su GRID.  COMPREHI  You must answer these que	TICE GRID. This grid will not affect your score. Please abmit" when you are ready to begin the PRACTICE  ENSION CHECK:  estions correctly in order to proceed.
On the next page, you will be given a PRACT answer the questions below and then click "su GRID.  COMPREHI  You must answer these que  Will you cooperate or compete with your pee	TICE GRID. This grid will not affect your score. Please abmit" when you are ready to begin the PRACTICE  ENSION CHECK:  estions correctly in order to proceed.
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On the next page, you will be given a PRACT answer the questions below and then click "su GRID.  COMPREHI  You must answer these que  Will you cooperate or compete with your pee  Cooperate  Compete	TICE GRID. This grid will not affect your score. Please abmit" when you are ready to begin the PRACTICE  ENSION CHECK:  estions correctly in order to proceed.

Practice task (practice grid)

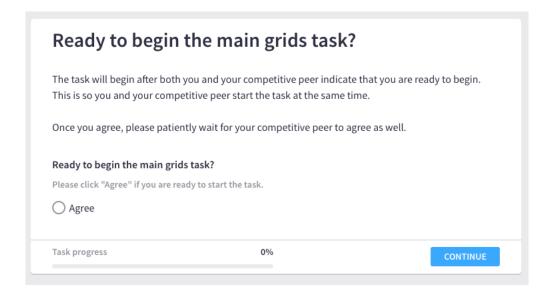


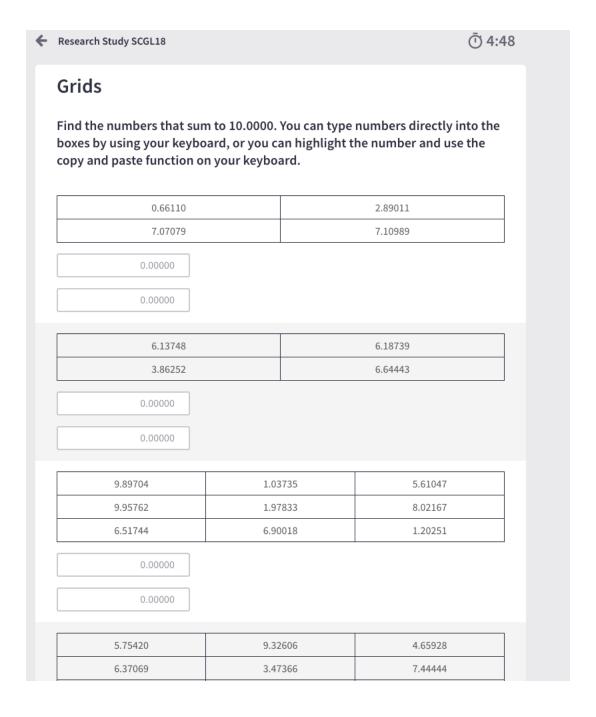




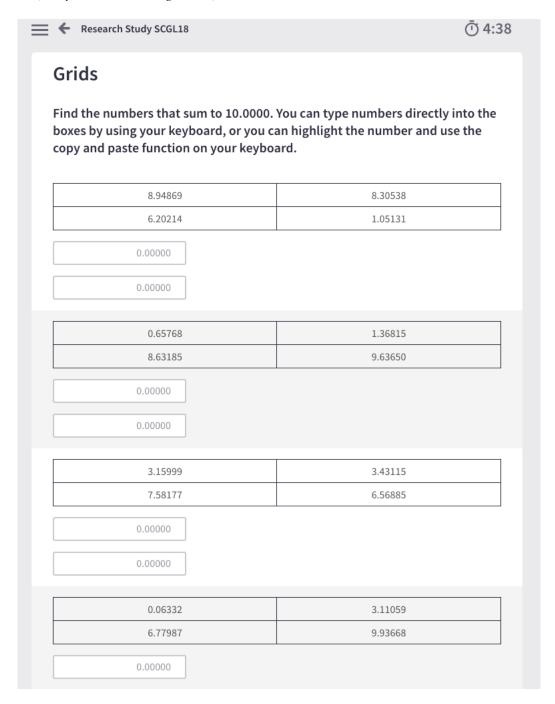


Main Task (Difficult Version – Receiver)

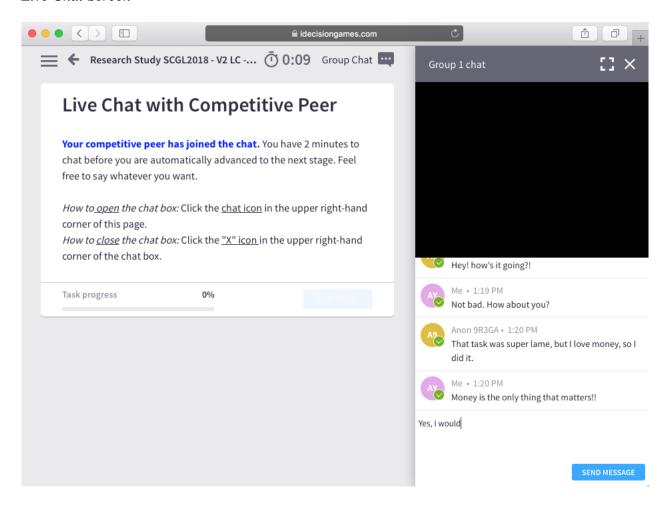




Main Task (Easy Version – Originator)



#### Live Chat Screen



# **Coding Instructions**

Introduction to Experiment

The experiment was first described to coders and then a general description of their task was given to them.

SUMMARY OF	Two participants—Player A and Player B—each worked separately on a
<b>EXPERIMENT:</b>	similar task. In the task, participants had to look at grids of numbers and
	find the two numbers that summed to 10. See example picture to the
	right. The person with the higher score was the "winner," while the other
	person was the "loser." The score of the winner was used to determine
	the earnings for both people. That is, even though the loser got a lower
	score, the loser benefitted from the winner's higher score. This chat
	occurred after both people finished the task, they learned each other's
	score, and they learned who the winner was.
<b>INSTRUCTIONS:</b>	Each conversation is associated with one group number. To identify
	when a conversation starts or ends, look at the number in the group
	column. (Alternatively, look for the NA or highlighted green cell in the
	"time since last message" column.) For each message or line of
	conversation, you need to fill out the three columns, as defined below.
	The first column "message_codes" is the most involved column. You must
	indicate all possible categories that the message could fall under. Each
	category is defined with examples below. Following that, indicate if a
	message is the first time the task is brought up in the conversation. Then
TA (DODE A NE	identify whether the message is generally positive or negative.
IMPORTANT	Messages within conversations are often NOT self-contained, but instead
NOTE ABOUT	are part of a series of messages. For instance, something as simple as a
<b>CODING:</b>	"Yeah, me neither" response cannot be categorized without reference to
	what it is responding to. To categorize this message, consider the context
	of what it is responding to .
	of mai a to responding to .

## Specific Coding Instructions

Below is the exact chart given to coders with descriptions of each of the codes they could use to classify messages. They could use an unlimited number of codes for a given message.

Column name	Codes	Definition	Notes
message_codes	Any and as many of the codes below can be used to classify a given message. Separate codes within the same cell using a semicolon like this: "joke;		
1	br_resp; bot" greeting	a type of greeting	Examples: "Hi" "how's it going" "what's up" "nice to meet you"
2	goodperf_other	acknowledges other person's good performance	Anything that indicates the other person performed well on the task. May include phrases like "thank you" or "good job." But it can also include more complex versions of this that you believe still convey the general message that the other person performed well. NOTE: Just because they say "thank you" does not mean it should be categorized as "goodperf_other" in this sheet. "goodperf_other" in this sheet has to be one person telling the other person that they performed well.
3	badperf_self	acknowledges own bad performance	Anything that indicates the speaker performed poorly on the task. May include phrases like "sorry" or "I'm bad at this task." But it can also include more complex versions of this that you believe still convey the general message that the speaker performed poorly. NOTE: Just because they say "sorry" does not mean it should be categorized as

			"badperf_self" in this sheet. "badperf_self "in this sheet has to be one person saying they performed poorly on the task.
4	goodperf_self	acknowledges own good performance	Anything that indicates the speaker performed well on the task. May include phrases like "I won" or "I'm good at math." But it can also include more complex versions of this that you believe still convey the general message that the speaker performed well.
5	goodperf_both	acknowledges GROUP's good performance (i.e., both of them)	Examples: "we did a great job" "we won"
6	badperf_other	acknowledges other person's bad performance	Anything that indicates the other person performed poorly on the task. May include phrases like "You did bad" or "You are not good at math." But it can also include more complex versions of this that you believe still convey the general message that the other person performed poorly.
7	selfdep	involves self-deprecation: relays bad information about themselves or avoids/discredits good information about themselves	Examples: they criticize/insult themselves ("I'm bad at math"); they dismiss positive information ("it was just luck" or "oh, I just guessed")
8	nontask	discussion that is NOT related to the task they just completed	Examples: Talking about the weather, or where they live, what they do, what they are eating, etc.
9	task	discussion that IS related to the task they just completed	ANY discussion that is related to the task. For instance, if they talk about the task the whole time, this code may be present for every message within that chat.
10	stratquest	question about the strategy used by the other person during the task	Example: "How did you get 10 grids?"

11	stratinfo	information about one's own strategy used during	Example: "I just looked at the last digit." or "I guessed on most of them"
12	gp_other_resp (gor)	written in response to a goodperf_other, when it is clear that the message-writer has read the	Usually, this is the first message written by the other person after the goodperf_other message, but not always — the recipient of the goodperf_other might have written a message that got sent write after the goodperf_other but before they
13	bp_self_resp (bsr)	goodperf_other message written in response to a badperf_self message	had a chance to read the goodperf_other.  (see gp_other_resp)
14	gp_self_resp (gsr)	written in response to a goodperf_self message	(see gp_other_resp)
15	bp_other_resp (bor)	written in response to a badperf_other message	(see gp_other_resp)
16	comic	anything said to be playful, said for comic relief, meant to be a joke, said ironically, or said in a sarcastic/joking tone; something that is excessively exaggerated for comic effect; something dramatic said in a dry tone	This is very context sensitive and is not always easy to detect. If you think something COULD be meant in a joking/sarcastic/ironic tone, then use this code. You don't have to be certain. Examples: "I like math but not THAT much"; "Looks like we have an Einstein on our hands!" "take that! hah!" "So much wooooooork" "Ah, such is life"
17	laugh	indicates laughing or belief that something said by other person or one's self was funny	Examples: "lol" "hahah" "that was funny"
18	complain	expressing some dissatisfaction with the task or the experiment	Examples: "this made me tired" "I wish we got paid more for this" "that was hard"
19	emoji_pos	characters used to indicate the shape of a face with a POSITIVE expression	Examples: :-), :-P

	I	T	
20	emoji_neg	characters used to indicate	Examples: :- :-(
		the shape of a face with a	
		NEGATIVE (or	
		NEUTRAL/ABMIGUOUS)	
		expression	
21	error_exp	discussion indicates that	This could be with respect to scores being incorrect or
		there was an error in the	something in the chat function going wrong. Examples: "my
		experiment	timer is not working"
22	error_chat	error in chat such that, for	If a message is doubled, ONLY code ONE of the messages
		example, a message is	for content; you can put "error_chat" in both, but we don't
		doubled or re-typed because	want more tallys of information than there actually is.
		it was not typed correctly	Examples: "t", new message: "ty"; OR one message: "I'm
		the first time. Or if	good you" second message: "?"
		punctuation is typed in a	
		separate message.	
23	bot	discusses possibility that	Examples: "prove you're not a bot"
		other person is or could	
		have been a bot	
24	bye	goodbye	Examples: "Bye", "Have a nice day" "good luck"
first mention	1 = yes, 0 = no	first time in the	Only one "yes" in this column per chat. This refers to any
of the task		conversation that any	message that in any way references the task that they just did.
		reference to the task is	Examples: "that was hard." "nice job" "how did you do that?"
		made (not the experiment in	"i didn't understand what i was supposed to do during the
		general, but specifically the	task". This does NOT include things that speak generally
		task they just completed)	about the experiment but not about the task they just did like
			"this experiment is taking forever" or "Is there another task
			after this chat?"
message	1-7 scale; 1 =	indicates the tone of the	Though some messages might include both something
valence	very negative, 2	message	positive and something negative, just indicate the OVERALL
	= negative, 3 =		tone of the message, as it is perceived by the person
	slightly		expressing it (i.e., the speaker). If it's a message that is
	negative, 4 =		intended by the speaker in one way but comes off to the
	neutral, 5 =		listener in another way, use the perspective of the speaker.

## RESPONSIBILITY EXCHANGE THEORY

slightly		
positive, 6 =		
positive, 7 =		
very positive		

## Example Coded Chats Given to RAs

# **Example Coded Chat 1, given to RA as example:**

			first mention of	maggaga	
role	message	message_codes	the task	message valence	Winner
		nontask;			
Player A	Yo!	greeting; comic	0	6	Player A
Player B	Hi	nontask; greeting	0	5	Player A
		task;			
		goodperf_self;			
Player A	I just beat you!	comic	1	7	Player A
		task; gsr;			
Player B	Yes, nice work.	goodperf_other	0	6	Player A
		task; gor;			
		emoji_pos;			
Player A	Welcome. :) You did pretty good too.	goodperf_other	0	6	Player A
Player B	Thanks.	task; gor	0	5	Player A

## **Example Coded Chat 2, given to RA as example:**

role	message	message_codes	first mention of the task	message valence	Winner
Player A	Well, hello.	nontask; greeting	0	5	Player B
Player A	Nice job	task; goodperf_other	1	6	Player B
Player B	Hi.	nontask; greeting task; gor; badperf_other;	0	5	Player B
Player B	Thanks. You could have done better. ;-P lol	emoji_pos; comic; laugh	0	6	Player B

Player A	Wow. Okay	task; bor;	0	2	Player B
Player B	Sorry, I was just joking.	task	0	5	Player B
		task; selfdep;			
Player A	I'm not good at math, so it was difficult for me.	complain	0	3	Player B
Player B	It's okay.	task	0	5	Player B
Player B	How's the weather where you are?	nontask	0	5	Player B
		nontask;			
Player A	Not	error_chat	0	NA	Player B
Player A	Not bad	nontask	0	4	Player B
Player B	Are you a bot?	nontask; bot	0	4	Player B
Player B	Time to go! C ya	nontask; bye	0	6	Player B

# **Example Coded Chat 3, given to RA as example:**

role	maggaga	message_codes	first mention of the task	message valence	Winner
	message	- J	the task	vaichce	
Player A	what'd you think of that?	task	1	4	Player A
		task; complain;			
		selfdep;			
Player B	It was hard. I'm not good at those puzzles	badperf_self	0	2	Player A
	No worries! I'm glad we both get the same				
Player A	amount.	task; bsr	0	6	Player A
		task; stratquest;			
Player B	How did you get so many?	goodperf_other	0	4	Player A
		task; stratinfo;			
Player A	Just looked at last two numbers	gor	0	4	Player A
Player B	Oh.	task	0	4	Player A
Player A	Yep.	task	0	4	Player A