

Supplemental Materials for “Consciousness, Phenomenal Consciousness, and Free Will”

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1. Definitions

To check that the definitions reported in the main text were typical of standard online dictionaries, we checked two additional dictionaries. Definitions for the adjective “conscious” were:

1. aware of one’s own existence, sensations, thoughts, surroundings, etc.
2. fully aware of or sensitive to something (often followed by of)
3. having the mental faculties fully active
4. known to oneself; felt
5. aware of what one is doing
6. aware of oneself; self-conscious
7. deliberate; intentional
8. acutely aware of or concerned about (Dictionary.com, accessed 12 August 2021)

1. having mental faculties not dulled by sleep, faintness, or stupor: AWAKE
2. perceiving, apprehending, or noticing with a degree of controlled thought or observation
3. personally felt
- 4a. likely to notice, consider, or appraise
- 4b. being concerned or interested
- 4c. marked by strong feelings or notions
5. done or acting with critical awareness
6. capable of or marked by thought, will, design, or perception
7. SELF-CONSCIOUS (Merriam-Webster.com, accessed 12 August 2021).

2. Study

2.1 Materials

Participants were asked, in this order, basic demographic questions, given one of two philosophical vignettes with 25 questions, an attention filter, a personality inventory, an extended set of demographic questions, and two reflection tests in randomized order. Basic demographic questions include Age, Gender, Country of Birth, Native Language, Religiosity, Education Level, Philosophy Level, Sciences Level, and Psychology Level. Religiosity asked, “If religiosity is defined as participating with an organized religion, then to what degree do you consider yourself religious?” Participants answered on a 5-point scale with text anchors (“Not At All,” “Almost Not,” “Somewhat,” “A Lot,” “Totally”). Education Level asked “What is the highest level of education you have finished?” with an 8-point scale with text anchors (“Before High School,” “Some High School,” “High School Graduate or Equivalent,” “Trade or Vocational Degree,” “Some University,” “Associate Degree,” “Bachelor’s Degree,” “Graduate or Professional Degree”). The questions for level of education in different areas used a binary question (“Yes,” “No”)—asking “Do you have any training in [philosophy / the sciences / psychology or the brain sciences]?”—with “Yes” answers unfolding to a question asking for highest level of training in that area on a 5-point scale with text anchors (“Some Undergraduate Classes,” “Undergraduate Major,” “Some Graduate Classes,” “MA,” “PhD”).

On a second page, participants were randomly assigned one of two vignettes (Android, Physical Duplicate):

Android: Imagine that in the future scientists are able to exactly scan a person's body and brain at the molecular level. Using the information from the body scan they can create an android body that is externally indistinguishable from the original person. And using the information from the brain scan they can create a perfect computer simulation of the working brain. They can then embed that computer in the android body to create a duplicate of the person.

Imagine that scientists scan your body and your brain and use that information to create an exact android duplicate of you. What, if anything, do you think this duplicate would be capable of?

Physical Duplicate: Imagine that in the future scientists are able to exactly scan a person's body (including their brain) at the molecular level. Using this information, they can then create an exact physical duplicate of the body (and brain) molecule by molecule. Physically, the duplicate will be exactly the same as the person's original body (including their brain). Since the scientists are only able to scan the person's physical structure, if there was any non-physical aspect to the person—such as a non-physical soul or mind—the scientists would not be able to duplicate that aspect of the person.

Imagine that scientists scan you and use that information to create an exact physical duplicate of your body (including your brain). What, if anything, do you think this duplicate would be capable of?

After reading the vignette, participants were then asked “On a scale of 1–7, one being disagree strongly and seven being agree strongly, how much do you agree with each of the following claims?” This was followed by versions of the 25 statements from Ozdemir's (2021) second dimension study, updated to ask about the duplicate. Questions were presented in randomized order. Pronouns corresponded with the participant's answer to the Gender question and are shown in Table 1 for women. Responses were given on a 1–7 scale fully anchored with both numeric values and text descriptions (1=“Disagree Strongly,” 2=“Disagree Moderately,” 3=“Disagree a Little,” 4=“Neither Agree nor Disagree,” 5=“Agree a Little,” 6=“Agree Moderately,” 7=“Agree Strongly”).

On a third page, participants were given the following text as an attention filter:

Recent research on decision making shows that choices are affected by context. Differences in how people feel, their previous knowledge and experience, and their environment can affect choices. To help us understand how people make decisions, we are interested in information about you. Specifically, we are interested in whether you actually take the time to read the directions; if not, some results may not tell us very much about people's decision making. To show that you have read the instructions, please ignore the question below about how you are feeling and instead check only the “none of the above” option as your answer.

Participants were then asked “please check all the words that describe how you are currently feeling,” followed by a list of 20 state descriptions and “none of the above.” On the fourth page, participants were given the 10-item Big-Five personality inventory from Gosling et al. (2003). Extended demographic questions on the fifth page included a question about Religious Orientation (“Which of the following best reflects your current religious orientation?” with options of “Theist,” “Atheist,” “Agnostic,” “Other”), Religious Affiliation (“What is your religious affiliation” followed by a list twelve religions and “Other”), and Political Attitude (“What is your general political attitude?” with options of “Very Liberal,” “Moderate Liberal,” “Lean Liberal,” “Neither Liberal nor

Conservative,” “Lean Conservative,” “Moderate Conservative,” and “Very Conservative”). Finally, on the sixth and seventh pages, participants were given both the three-item Cognitive Reflection Test (CRT) from Frederick (2005) and the four-item CRT-2 from Thomson and Oppenheimer (2016).¹ The order of the two tests was randomized. Across the questionnaire, participants were not able to return to a previous page after submitting.

2.2 Sample

Participants were recruited through advertising for a free personality test on Google Ads, with the results for the Big-Five personality inventory being displayed at the end of the questionnaire. Ads were displayed globally in English. One notable benefit of using a “push strategy” like this one (i.e., recruiting participants who were not directly looking to participate in research) is that participants are more likely to be “experimentally naïve” and less likely to be motivated to provide the responses that they think the experimenters are looking for (Haug 2018). Samples collected using the recruitment strategy employed here have been previously compared against samples collected with other methods in replication studies. And the present strategy has been consistently found to generate a diverse sample in terms of geography, socioeconomic status, religiosity, political orientation, age, and education. Studies using this strategy have been previously reported in publications including, e.g., Feltz and Cokely (2011), Sytsma (2012), Murray et al. (2013), Machery et al. (2015), Kim et al. (2016), Livengood and Rose (2016), Sytsma and Reuter (2017), Livengood et al. (2017), Reuter et al. (2019), and Reuter and Sytsma (2020).

The ad was run long enough to expand on the full sample collected by Ozdemir (2021) in his second dimension study (N=346) for each condition. Responses were collected from 886 participants who answered the philosophical questions and were at least 16 years of age as specified by the Human Ethics Committee approval at Victoria University of Wellington (N=482 Android, N=404 Physical Duplicate). Participants were 37.9% native English-speakers, 60.4% women (10 non-binary), aged from 16 to 75 (average 25.3 years), and hailing from countries ranging from Afghanistan to Zimbabwe (and over 100 different countries in total). 73.4% of participants reported having at least a high school degree and 30.0% at least an undergraduate degree. The majority reported having no training in philosophy (90.5%; 3.4% reported having an undergraduate major or higher), psychology or the brain sciences (87.2%; 4.1% undergraduate major or higher), or the sciences more generally (70.9%; 12.6% undergraduate major or higher). Participants were also varied in their religious engagement, with 25.1% answering “not at all” while 24.6% answered “a lot” or “totally” for Religiosity.

2.3 Basic Analysis

As noted in the main text, we ran a series of basic tests on each of the 25 attributions to the duplicates for the full sample to assess both differences between the two conditions (Welch’s independent-samples t-tests comparing between the conditions) and general agreement or disagreement with each item (Student’s t-tests comparing ratings for Android or Physical Duplicate against the midpoint of 4). All tests were two-tailed. The results are shown in Table 1, including both original p-values and adjusted p-values applying the Holm–Bonferroni correction for the 25 comparisons. As noted, the only significant differences were for **[2]** *Feel Pain*, **[18]** *Alive*, and **[23]** *Deserve Human Rights*. In general, participants tended to agree with each statement, whether for the Android or the Physical Duplicate, as indicated by mean ratings for all but one item being above and significantly different from the midpoint. The exception was ratings for **[12]** *Have Dreams during Sleep* for the Android.

¹ Two tests were used in recognition of increasing familiarity with the original CRT (e.g., Haigh 2016) as well as potential confounding with numeracy (e.g., Thomson and Oppenheimer 2016).

Item	Mean SD	Android Physical	Welch's t-tests [adjusted p-value]	Student's t-tests (mu=4)	
				Android [adjusted p-value]	Physical [adjusted p-value]
[1] The duplicate would have free will.	4.48 2.14	4.35 4.62	t(858.67)=1.90, p=.058 [.93]	t(481)=3.59, p<.001 [.0011], d=.16	t(403)=5.89, p<.001 [<.001], d=.29
[2] The duplicate would feel pain when she is injured.	4.53 2.28	4.25 4.88	t(866.4)=4.16, p<.001 [<.001], d=.28	t(481)=2.37, p=.018 [.037], d=.11	t(403)=7.98, p<.001 [<.001], d=.40
[3] The duplicate would see colors.	5.64 1.78	5.61 5.66	t(859.63)=0.43, p=.67 [1]	t(481)=19.76, p<.001 [<.001], d=.90	t(403)=18.83, p<.001 [<.001], d=.94
[4] The duplicate would experience sights and sounds.	5.49 1.84	5.50 5.47	t(854.76)=0.29, p=.77 [1]	t(481)=18.02, p<.001 [<.001], d=.82	t(403)=15.98, p<.001 [<.001], d=.79
[5] The duplicate would make choices.	4.97 2.00	4.93 5.02	t(859.87)=0.68, p=.49 [1]	t(481)=10.12, p<.001 [<.001], d=.46	t(403)=10.28, p<.001 [<.001], d=.51
[6] The duplicate would understand English.	5.65 1.77	5.81 5.46	t(823.75)=2.94, p=.0033 [.073]	t(481)=23.53, p<.001 [<.001], d=1.07	t(403)=15.76, p<.001 [<.001], d=.78
[7] The duplicate would give meaningful replies to questions in English.	5.28 1.81	5.39 5.14	t(835.88)=2.03, p=.043 [.73]	t(481)=17.39, p<.001 [<.001], d=.79	t(403)=12.27, p<.001 [<.001], d=.61
[8] The duplicate would display creativity.	4.88 1.93	4.90 4.86	t(846.06)=0.26, p=.79 [1]	t(481)=10.36, p<.001 [<.001], d=.47	t(403)=8.81, p<.001 [<.001], d=.44
[9] The duplicate would think.	5.12 2.03	5.05 5.21	t(863.15)=1.18, p=.24 [1]	t(481)=11.27, p<.001 [<.001], d=.51	t(403)=12.15, p<.001 [<.001], d=.60
[10] The duplicate would solve problems.	5.27 1.83	5.34 5.19	t(842.67)=1.21, p=.23 [1]	t(481)=16.41, p<.001 [<.001], d=.75	t(403)=12.78, p<.001 [<.001], d=.64
[11] The duplicate would be capable of morality.	4.63 2.07	4.58 4.69	t(867.11)=0.79, p=.43 [1]	t(481)=6.07, p<.001 [<.001], d=.28	t(403)=6.86, p<.001 [<.001], d=.34
[12] The duplicate would have dreams when she sleeps.	4.17 2.25	3.98 4.41	t(863.69)=2.88, p=.0041 [.086]	t(481)=0.24, p=.81 [.81]	t(403)=3.72, p<.001 [<.001], d=.18
[13] The duplicate would have emotions.	4.58 2.08	4.40 4.79	t(869.63)=2.58, p=.010 [.19]	t(481)=3.91, p<.001 [<.001], d=.18	t(403)=7.33, p<.001 [<.001], d=.36
[14] The duplicate would have moods.	4.62 2.15	4.56 4.71	t(862.07)=1.03, p=.30 [1]	t(481)=5.64, p<.001 [<.001], d=.26	t(403)=6.66, p<.001 [<.001], d=.33
[15] The duplicate would have self-consciousness.	4.58 2.08	4.44 4.75	t(859.83)=2.29, p=.022 [.40]	t(481)=4.60, p<.001 [<.001], d=.21	t(403)=7.36, p<.001 [<.001], d=.37
[16] The duplicate would have a personality.	4.92 2.04	4.86 4.99	t(869.85)=0.95, p=.34 [1]	t(481)=9.09, p<.001 [<.001], d=.41	t(403)=10.05, p<.001 [<.001], d=.50
[17] The duplicate would be intelligent.	5.25 1.79	5.36 5.13	t(845.18)=1.89, p=.060 [.93]	t(481)=16.97, p<.001 [<.001], d=.77	t(403)=12.44, p<.001 [<.001], d=.62
[18] The duplicate would be alive.	4.69 2.17	4.47 4.96	t(871.02)=3.38, p<.001 [.018], d=.23	t(481)=4.64, p<.001 [<.001], d=.21	t(403)=9.19, p<.001 [<.001], d=.46
[19] The duplicate would be conscious.	4.74 2.01	4.70 4.79	t(856.04)=0.69, p=.49 [1]	t(481)=7.66, p<.001 [<.001], d=.35	t(403)=7.91, p<.001 [<.001], d=.39
[20] The duplicate would be aware of herself.	4.80 2.00	4.76 4.83	t(863.16)=0.52, p=.60 [1]	t(481)=8.31, p<.001 [<.001], d=.38	t(403)=8.39, p<.001 [<.001], d=.42
[21] The duplicate would be aware of things around her.	5.23 1.83	5.26 5.19	t(840.76)=0.59, p=.56 [1]	t(481)=15.47, p<.001 [<.001], d=.70	t(403)=12.69, p<.001 [<.001], d=.63
[22] The duplicate would be responsible for her actions.	4.91 2.08	4.88 4.95	t(862.33)=0.52, p=.60 [1]	t(481)=9.21, p<.001 [<.001], d=.42	t(403)=9.31, p<.001 [<.001], d=.46
[23] The duplicate would deserve human rights.	4.74 2.21	4.46 5.07	t(868.59)=4.19, p=.001 [<.001], d=.28	t(481)=4.51, p<.001 [<.001], d=.21	t(403)=10.12, p<.001 [<.001], d=.50
[24] The duplicate would have goals and ambitions.	4.65 2.11	4.46 4.75	t(868.09)=1.38, p=.17 [1]	t(481)=5.68, p<.001 [<.001], d=.26	t(403)=7.33, p<.001 [<.001], d=.36
[25] The duplicate would have memories of past events.	4.60 2.18	4.78 4.39	t(839.47)=2.64, p=.0083 [.17]	t(481)=8.12, p<.001 [<.001], d=.37	t(403)=3.55, p<.001 [<.001], d=.18

Table 1: Study items, with overall mean and standard deviation and means by condition, Welch's t-tests for comparison between conditions and Student's t-tests for comparison to the midpoint. Adjusted p-values shown in brackets and Cohen's d shown for significant results.

2.4 Demographic Differences

Given the global sample used, as well as for exploratory purposes, we checked for systematic differences in responses based on the demographic questions tested, focusing especially on the comparison between our sample and that employed by Nahmias et al. (2020), where responses were collected from undergraduates at Georgia State University, and variables previously connected to judgments about free will or judgments about consciousness or prototypical phenomenal states. With regard to free will, potentially relevant variables include religiosity (Paulhus and Carey 2011, Murray et al. 2021), political conservatism (Everett et al. 2021), and the Big-Five personality trait of extraversion (Feltz and Cokely 2009, but see Nadelhoffer et al. 2009). With regard to consciousness and prototypical phenomenal states, Fischer and Sytsma (2021) found a negative correlation between religiosity and attributions of consciousness to physical duplicates. And, as noted in the main text, philosophy education correlates with judgments about prototypical phenomenal states (Sytsma and Machery 2010), and this *might* be predicted to extend to training in psychology and the brain sciences, the sciences, or even level of education more generally, although evidence hasn't been previously found for this that we are aware of (and Fischer and Sytsma found no correlations for education or training in psychology or the sciences for attributions of consciousness to biological duplicates). Finally, reflectivity has been raised as an issue for work on lay attributions of phenomenal consciousness (Talbot 2012, but see Sytsma and Machery 2012). Overall, relatively few significant differences or correlations were found, and what were found were generally small. This suggests focusing on the full sample for assessing patterns of judgments, as we did in the main text, although we'll return to this below.

For the basic demographic questions we checked for correlations between responses for each item and each condition for Age, Religiosity, Education Level, Philosophy Level, Sciences Level, and Psychology Level (using Pearson's r for the first and Spearman's ρ for the rest). For Gender, Country, and Native Language we used Welch's t -tests, comparing responses between women and men, North Americans and the rest of the world, and native English-speakers to non-native English-speakers, respectively. Results are reported in Tables 2 and 3. We applied the Holm-Bonferroni correction for each variable (25 comparisons), as shown in brackets. More conservatively, the correction could be applied to the full set of tests. Doing so, there are only four significant findings at the .05 level, three for Country for the Android condition (**[5]** *Make Choices*, **[6]** *Understand English*, **[16]** *Have a Personality*) and one for Religiosity for the Android condition (**[1]** *Have Free Will*). Given this finding for Religiosity and our focus on judgments about free will, we also examined responses for Religious Orientation and Religious Affiliation. First, we compared those who identified as theists ($N=238$) versus atheists or agnostics ($N=210$). While the expected differences were seen, they weren't significant for either the Android condition [$M=4.26$ versus 4.75 ; $t(229.17)=1.75$, $p=.081$, $d=.23$] or the Physical Duplicate condition [$M=4.56$ versus 4.95 ; $t(212.27)=1.37$, $p=.17$, $d=.19$]. Second, we compared those who indicated a religious affiliation of none, atheist, or agnostic ($N=125$) with those indicating another religious affiliation ($N=581$). A significant difference was found for the Android condition [$M=4.92$ versus 4.24 ; $t(120.7)=-2.55$, $p=.012$, $d=.31$], but not the Physical Duplicate condition [$M=4.92$ versus 4.62 ; $t(67.38)=0.89$, $p=.37$, $d=.14$].²

² Sample sizes did not warrant a comparison between all religious groups, but no significant differences were seen between major religions, with the largest effect being between Christians ($N=298$) and Muslims ($N=142$)—Android: $M=4.35$ vs 3.90 [$t(127.57)=1.42$, $p=.16$, $d=.20$]; Physical Duplicate: $M=4.79$ vs 4.28 [$t(140.9)=1.56$, $p=.12$, $d=.24$].

Item Num	Gender: Women (N=535), Men (N=341)		Country: North America (N=118), Rest (N=768)		Native Language: English (N=336), Rest (N=550)	
	Means	Welch's t-test [adjusted]	Means	Welch's t-test [adjusted]	Means	Welch's t-test [adjusted]
[1]	4.15, 4.64	$t(403.25)=2.47, p=.014$ [.33]	4.74, 4.27	$t(117.04)=1.84, p=.068$ [.75]	4.41, 4.31	$t(432.21)=0.53, p=.59$ [1]
	4.56, 4.71	$t(323.72)=0.69, p=.49$ [1]	5.42, 4.54	$t(48.923)=2.84, p=.0066$ [.16]	4.92, 4.48	$t(268.69)=1.96, p=.051$ [.87]
[2]	4.23, 4.26	$t(389.24)=0.14, p=.89$ [1]	4.70, 4.16	$t(117.51)=2.03, p=.045$ [.59]	4.40, 4.14	$t(432.28)=1.23, p=.22$ [1]
	4.88, 4.84	$t(333.95)=0.19, p=.85$ [1]	4.95, 4.87	$t(46.862)=0.22, p=.83$ [1]	5.11, 4.76	$t(280.14)=1.53, p=.13$ [1]
[3]	5.59, 5.63	$t(385.99)=0.26, p=.80$ [1]	5.96, 5.54	$t(122.61)=2.08, p=.039$ [.55]	5.58, 5.64	$t(438.35)=0.35, p=.72$ [1]
	5.80, 5.45	$t(289.09)=1.85, p=.066$ [1]	6.11, 5.62	$t(49.013)=1.89, p=.065$ [.98]	5.85, 5.57	$t(288.82)=1.52, p=.13$ [1]
[4]	5.42, 5.65	$t(409.01)=1.39, p=.17$ [1]	6.09, 4.29	$t(126.24)=3.50, p<.001$ [.014], $d=.39$	5.39, 5.48	$t(429.26)=0.36, p=.72$ [1]
	5.64, 5.20	$t(277.24)=2.19, p=.029$ [.70]	5.82, 5.43	$t(49.139)=1.43, p=.16$ [1]	5.59, 5.41	$t(264.62)=0.94, p=.35$ [1]
[5]	4.78, 5.16	$t(405.67)=2.04, p=.042$ [.91]	5.69, 4.78	$t(140.39)=4.51, p<.001$ [$<.001$], $d=.46$	5.03, 4.85	$t(419.98)=0.94, p=.35$ [1]
	5.04, 4.99	$t(317.67)=0.26, p=.80$ [1]	5.79, 4.94	$t(51.5)=3.15, p=.0027$ [.067]	5.43, 4.82	$t(287.5)=3.04, p=.0026$ [.057]
[6]	5.79, 5.85	$t(385.3)=0.42, p=.67$ [1]	6.32, 5.71	$t(156.54)=3.89, p<.001$ [.0034], $d=.37$	5.88, 4.76	$t(437.42)=0.82, p=.42$ [1]
	5.66, 5.14	$t(288.57)=2.65, p=.0085$ [.21]	5.61, 5.44	$t(47.035)=0.57, p=.57$ [1]	5.55, 5.41	$t(259.13)=0.74, p=.46$ [1]
[7]	5.35, 5.44	$t(400.23)=0.52, p=.61$ [1]	5.51, 5.37	$t(114.81)=0.70, p=.49$ [1]	5.40, 5.38	$t(412.23)=0.13, p=.90$ [1]
	5.25, 4.97	$t(292.01)=1.43, p=.15$ [1]	4.97, 5.16	$t(43.435)=0.53, p=.60$ [1]	5.17, 5.12	$t(237.02)=0.24, p=.81$ [1]
[8]	4.87, 4.98	$t(413.06)=0.67, p=.50$ [1]	5.29, 4.82	$t(143.05)=2.45, p=.016$ [.28]	4.90, 4.90	$t(439.83)=0.013, p=.99$ [1]
	4.93, 4.77	$t(317.78)=0.80, p=.43$ [1]	5.42, 4.81	$t(47.472)=2.04, p=.047$ [.85]	5.06, 4.77	$t(258.16)=1.40, p=.16$ [1]
[9]	4.84, 5.35	$t(417.99)=2.72, p=.0067$ [.17]	5.65, 4.93	$t(133.62)=3.36, p=.0010$ [.021], $d=.35$	5.10, 5.01	$t(432.2)=0.44, p=.66$ [1]
	5.27, 5.11	$t(336.2)=.77, p=.44$ [1]	5.82, 5.15	$t(51.108)=2.44, p=.018$ [.40]	5.47, 5.08	$t(275.36)=1.86, p=.064$ [1]
[10]	5.29, 5.41	$t(396.21)=0.75, p=.46$ [1]	5.50, 5.31	$t(114.9)=0.90, p=.37$ [1]	5.38, 5.31	$t(415.38)=0.41, p=.68$ [1]
	5.26, 5.12	$t(306.4)=.73, p=.47$ [1]	5.58, 5.15	$t(47.589)=1.51, p=.14$ [1]	5.30, 5.14	$t(273.2)=0.82, p=.41$ [1]
[11]	4.62, 4.50	$t(398.9)=0.62, p=.54$ [1]	4.81, 4.54	$t(113.23)=1.07, p=.29$ [1]	4.53, 4.62	$t(413.77)=0.43, p=.67$ [1]
	4.80, 4.52	$t(306.13)=1.32, p=.19$ [1]	4.95, 4.67	$t(46.652)=0.87, p=.39$ [1]	4.90, 4.59	$t(262.2)=1.45, p=.15$ [1]
[12]	3.97, 3.94	$t(387.86)=0.15, p=.88$ [1]	4.20, 3.93	$t(112.19)=.97, p=.33$ [1]	3.96, 3.99	$t(428.89)=0.12, p=.91$ [1]
	4.46, 4.30	$t(326.36)=.70, p=.48$ [1]	4.68, 4.38	$t(45.484)=.83, p=.41$ [1]	4.77, 4.23	$t(267.62)=2.35, p=.019$ [.39]
[13]	4.35, 4.44	$t(410.7)=0.43, p=.67$ [1]	4.76, 4.33	$t(116.15)=1.59, p=.11$ [1]	4.51, 4.33	$t(430.11)=0.87, p=.39$ [1]
	4.80, 4.77	$t(327.8)=.16, p=.87$ [1]	5.34, 4.73	$t(49.327)=1.95, p=.056$ [.90]	5.27, 4.56	$t(285.24)=3.22, p=.0014$ [.034], $d=.33$
[14]	4.43, 4.72	$t(400.82)=1.41, p=.16$ [1]	5.11, 4.45	$t(117.75)=2.64, p=.0093$ [.18]	4.79, 4.38	$t(449.35)=2.09, p=.037$ [1]
	4.84, 4.52	$t(320.54)=1.50, p=.14$ [1]	5.37, 4.64	$t(48.563)=2.33, p=.024$ [.49]	5.21, 4.46	$t(291.17)=3.53, p<.001$ [.012], $d=.36$
[15]	4.41, 4.44	$t(384.4)=0.13, p=.89$ [1]	4.89, 4.35	$t(116.43)=2.21, p=.029$ [.44]	4.50, 4.39	$t(422.62)=0.53, p=.60$ [1]
	4.78, 4.68	$t(315.89)=0.46, p=.65$ [1]	5.05, 4.72	$t(47.344)=1.03, p=.31$ [1]	4.98, 4.64	$t(276.14)=1.60, p=.22$ [1]
[16]	4.73, 5.07	$t(431.03)=1.78, p=.076$ [1]	5.70, 4.70	$t(139.54)=4.78, p<.001$ [$<.001$], $d=.49$	5.00, 4.76	$t(434.23)=1.28, p=.20$ [1]
	5.02, 4.95	$t(338.66)=0.31, p=.76$ [1]	5.26, 4.96	$t(48.383)=1.01, p=.32$ [1]	5.34, 4.82	$t(275.24)=2.53, p=.012$ [.25]
[17]	5.39, 5.32	$t(380.41)=0.42, p=.67$ [1]	5.52, 5.32	$t(115.23)=0.96, p=.34$ [1]	5.28, 5.41	$t(407)=0.81, p=.42$ [1]
	5.21, 5.03	$t(294.4)=0.92, p=.36$ [1]	5.39, 5.10	$t(48.904)=1.10, p=.28$ [1]	5.13, 5.13	$t(262.52)=0.00, p=1.00$ [1]
[18]	4.39, 4.58	$t(386.5)=0.92, p=.36$ [1]	4.66, 4.43	$t(109.59)=0.84, p=.40$ [1]	4.51, 4.43	$t(426.74)=0.40, p=.69$ [1]
	5.04, 4.81	$t(310.25)=1.05, p=.29$ [1]	5.21, 4.93	$t(47.288)=0.87, p=.39$ [1]	5.39, 4.47	$t(304.24)=3.15, p=.0018$ [.042], $d=.31$
[19]	4.64, 4.78	$t(388.17)=0.47, p=.72$ [1]	5.09, 4.62	$t(115.17)=1.93, p=.056$ [.67]	4.75, 4.67	$t(417.44)=0.40, p=.69$ [1]
	4.82, 4.72	$t(328.51)=0.50, p=.62$ [1]	5.18, 4.75	$t(48.061)=1.42, p=.16$ [1]	4.99, 4.70	$t(274.45)=1.40, p=.16$ [1]
[20]	4.73, 4.81	$t(402.49)=0.46, p=.65$ [1]	5.01, 4.71	$t(113.85)=1.22, p=.22$ [1]	4.84, 4.71	$t(434.08)=0.74, p=.46$ [1]
	4.91, 4.69	$t(311.14)=1.04, p=.30$ [1]	5.39, 4.78	$t(47.755)=2.06, p=.044$ [.84]	5.05, 4.73	$t(274.79)=1.59, p=.11$ [1]
[21]	5.14, 5.47	$t(392.83)=1.93, p=.053$ [1]	5.66, 5.18	$t(120.19)=2.35, p=.021$ [.35]	5.25, 5.27	$t(403.55)=0.17, p=.87$ [1]
	5.29, 5.01	$t(307.3)=1.41, p=.16$ [1]	5.79, 5.13	$t(51.291)=2.59, p=.012$ [.29]	5.30, 5.13	$t(277.2)=0.88, p=.38$ [1]
[22]	4.71, 5.13	$t(413.05)=2.17, p=.031$ [.71]	5.35, 4.79	$t(118.36)=2.32, p=.022$ [.36]	4.97, 4.81	$t(425.93)=0.81, p=.42$ [1]
	4.99, 4.88	$t(333.23)=0.49, p=.62$ [1]	5.63, 4.88	$t(47.118)=2.35, p=.023$ [.49]	5.25, 4.81	$t(265.11)=2.05, p=.042$ [.79]
[23]	4.42, 4.49	$t(405.24)=0.33, p=.74$ [1]	4.85, 4.38	$t(116.91)=1.79, p=.076$ [.76]	4.56, 4.38	$t(427.55)=0.88, p=.38$ [1]
	5.09, 5.01	$t(335.2)=0.37, p=.71$ [1]	5.50, 5.03	$t(47.642)=1.44, p=.16$ [1]	5.37, 4.93	$t(285.06)=2.03, p=.044$ [.79]
[24]	4.54, 4.56	$t(409.99)=0.11, p=.91$ [1]	5.11, 4.45	$t(120.49)=2.72, p=.0075$ [.15]	4.66, 4.48	$t(432.43)=0.92, p=.36$ [1]
	4.71, 4.83	$t(330.44)=0.55, p=.58$ [1]	5.29, 4.70	$t(49.564)=2.01, p=.050$ [.85]	4.99, 4.64	$t(257.08)=1.63, p=.11$ [1]
[25]	4.64, 4.97	$t(388.4)=1.63, p=.10$ [1]	5.01, 4.72	$t(119.33)=1.56, p=.12$ [1]	4.83, 4.74	$t(441.4)=0.46, p=.65$ [1]
	4.31, 4.55	$t(323.8)=1.08, p=.28$ [1]	4.45, 4.39	$t(44.527)=0.15, p=.88$ [1]	4.52, 4.33	$t(265.96)=0.77, p=.44$ [1]

Table 2: Comparisons by Gender, Country of Birth, and Native Language for each condition (Android in grey, Physical Duplicate in white), showing means, Welch's t-tests with adjusted p-values in brackets, and Cohen's d for significant results. Item numbers correspond with Table 1.

Item Num	Age [adjusted]	Religiosity [adjusted]	Education [adjusted]	Philosophy [adjusted]	Psychology [adjusted]	Sciences [adjusted]
[1]	$r=.027, p=.55$ [1]	$\rho=-.18, p<.001$ [.0024]	$\rho=-.085, p=.062$ [1]	$\rho=-.13, p=.0043$ [.11]	$\rho=-.048, p=.29$ [1]	$\rho=-.061, p=.18$ [1]
	$r=.019, p=.70$ [1]	$\rho=-.046, p=.36$ [1]	$\rho=.050, p=.32$ [1]	$\rho=.032, p=.52$ [1]	$\rho=.050, p=.32$ [1]	$\rho=-.030, p=.55$ [1]
[2]	$r=.097, p=.034$ [.82]	$\rho=-.12, p=.011$ [.26]	$\rho=-.041, p=.37$ [1]	$\rho=-.073, p=.11$ [1]	$\rho=-.019, p=.68$ [1]	$\rho=-.10, p=.025$ [.62]
	$r=-.004, p=.94$ [1]	$\rho=-.074, p=.14$ [1]	$\rho=.011, p=.83$ [1]	$\rho=.068, p=.17$ [1]	$\rho=.061, p=.22$ [1]	$\rho=.076, p=.13$ [1]
[3]	$r=-.018, p=.69$ [1]	$\rho=-.034, p=.45$ [1]	$\rho=.019, p=.67$ [1]	$\rho=.016, p=.73$ [1]	$\rho=.063, p=.16$ [1]	$\rho=.054, p=.24$ [1]
	$r=-.011, p=.83$ [1]	$\rho=-.049, p=.32$ [1]	$\rho=.013, p=.80$ [1]	$\rho=.062, p=.21$ [1]	$\rho=.042, p=.40$ [1]	$\rho=.034, p=.50$ [1]
[4]	$r=.003, p=.95$ [1]	$\rho=-.060, p=.19$ [1]	$\rho=-.027, p=.55$ [1]	$\rho=-.045, p=.32$ [1]	$\rho=.017, p=.71$ [1]	$\rho=.013, p=.78$ [1]
	$r=.049, p=.32$ [1]	$\rho=-.068, p=.17$ [1]	$\rho=.049, p=.33$ [1]	$\rho=.088, p=.078$ [1]	$\rho=.11, p=.026$ [.58]	$\rho=.12, p=.015$ [.36]
[5]	$r=.041, p=.37$ [1]	$\rho=-.10, p=.028$ [.60]	$\rho=-.021, p=.64$ [1]	$\rho=-.089, p=.052$ [1]	$\rho=-.010, p=.82$ [1]	$\rho=-.030, p=.51$ [1]
	$r=.092, p=.065$ [1]	$\rho=-.11, p=.028$ [.67]	$\rho=.048, p=.33$ [1]	$\rho=.050, p=.31$ [1]	$\rho=.075, p=.13$ [1]	$\rho=.002, p=.97$ [1]
[6]	$r=.007, p=.89$ [1]	$\rho=.030, p=.51$ [1]	$\rho=-.004, p=.93$ [1]	$\rho=-.045, p=.33$ [1]	$\rho=-.043, p=.34$ [1]	$\rho=-.024, p=.60$ [1]
	$r=-.003, p=.96$ [1]	$\rho=.057, p=.25$ [1]	$\rho=-.017, p=.74$ [1]	$\rho=.061, p=.22$ [1]	$\rho=-.018, p=.72$ [1]	$\rho=.058, p=.24$ [1]
[7]	$r=.074, p=.11$ [1]	$\rho=.010, p=.82$ [1]	$\rho=.052, p=.26$ [1]	$\rho=-.031, p=.50$ [1]	$\rho=-.037, p=.42$ [1]	$\rho=.032, p=.48$ [1]
	$r=.049, p=.33$ [1]	$\rho=-.023, p=.65$ [1]	$\rho=.049, p=.33$ [1]	$\rho=.10, p=.037$ [.85]	$\rho=.050, p=.31$ [1]	$\rho=.031, p=.53$ [1]
[8]	$r=.038, p=.40$ [1]	$\rho=.022, p=.62$ [1]	$\rho=.013, p=.77$ [1]	$\rho=-.041, p=.37$ [1]	$\rho=.003, p=.95$ [1]	$\rho=.027, p=.55$ [1]
	$r=.016, p=.75$ [1]	$\rho=-.014, p=.78$ [1]	$\rho=.044, p=.38$ [1]	$\rho=.039, p=.44$ [1]	$\rho=.029, p=.56$ [1]	$\rho=.036, p=.47$ [1]
[9]	$r=.057, p=.21$ [1]	$\rho=-.053, p=.25$ [1]	$\rho=-.049, p=.29$ [1]	$\rho=-.068, p=.13$ [1]	$\rho=-.051, p=.26$ [1]	$\rho=-.030, p=.51$ [1]
	$r=.025, p=.61$ [1]	$\rho=-.085, p=.088$ [1]	$\rho=.039, p=.44$ [1]	$\rho=.096, p=.053$ [1]	$\rho=.12, p=.019$ [.44]	$\rho=.010, p=.84$ [1]
[10]	$r=.12, p=.0087$ [.22]	$\rho=-.026, p=.56$ [1]	$\rho=.085, p=.064$ [1]	$\rho=-.054, p=.24$ [1]	$\rho=-.031, p=.36$ [1]	$\rho=.019, p=.68$ [1]
	$r=.012, p=.81$ [1]	$\rho=.038, p=.44$ [1]	$\rho=.039, p=.44$ [1]	$\rho=.067, p=.18$ [1]	$\rho=.031, p=.53$ [1]	$\rho=.074, p=.14$ [1]
[11]	$r=.034, p=.46$ [1]	$\rho=-.11, p=.017$ [.38]	$\rho=-.020, p=.65$ [1]	$\rho=-.025, p=.59$ [1]	$\rho=.028, p=.53$ [1]	$\rho=.008, p=.87$ [1]
	$r=.025, p=.61$ [1]	$\rho=.011, p=.83$ [1]	$\rho=.092, p=.064$ [1]	$\rho=.10, p=.043$ [.95]	$\rho=.083, p=.097$ [1]	$\rho=.076, p=.13$ [1]
[12]	$r=.054, p=.23$ [1]	$\rho=-.032, p=.49$ [1]	$\rho=-.086, p=.060$ [1]	$\rho=-.12, p=.011$ [.26]	$\rho=-.059, p=.20$ [1]	$\rho=-.082, p=.073$ [1]
	$r=-.012, p=.82$ [1]	$\rho=-.041, p=.41$ [1]	$\rho=-.015, p=.77$ [1]	$\rho=.016, p=.75$ [1]	$\rho=.054, p=.28$ [1]	$\rho=.031, p=.54$ [1]
[13]	$r=.026, p=.58$ [1]	$\rho=-.045, p=.33$ [1]	$\rho=-.10, p=.022$ [.54]	$\rho=-.11, p=.015$ [.34]	$\rho=-.026, p=.57$ [1]	$\rho=-.051, p=.26$ [1]
	$r=.058, p=.25$ [1]	$\rho=-.041, p=.41$ [1]	$\rho=.002, p=.96$ [1]	$\rho=.064, p=.20$ [1]	$\rho=.070, p=.16$ [1]	$\rho=.035, p=.49$ [1]
[14]	$r=.035, p=.44$ [1]	$\rho=-.065, p=.15$ [1]	$\rho=-.094, p=.039$ [.94]	$\rho=-.11, p=.015$ [.34]	$\rho=-.055, p=.23$ [1]	$\rho=-.093, p=.041$ [.97]
	$r=.021, p=.67$ [1]	$\rho=-.060, p=.23$ [1]	$\rho=.058, p=.24$ [1]	$\rho=.046, p=.36$ [1]	$\rho=.012, p=.82$ [1]	$\rho=.028, p=.58$ [1]
[15]	$r=-.014, p=.76$ [1]	$\rho=-.073, p=.11$ [1]	$\rho=-.053, p=.35$ [1]	$\rho=-.026, p=.57$ [1]	$\rho=-.042, p=.36$ [1]	$\rho=-.027, p=.56$ [1]
	$r=.086, p=.086$ [1]	$\rho=-.015, p=.76$ [1]	$\rho=.055, p=.27$ [1]	$\rho=.13, p=.0095$ [.24]	$\rho=.13, p=.010$ [.24]	$\rho=.088, p=.077$ [1]
[16]	$r=.025, p=.58$ [1]	$\rho=-.028, p=.54$ [1]	$\rho=-.070, p=.12$ [1]	$\rho=-.057, p=.21$ [1]	$\rho=-.016, p=.72$ [1]	$\rho=-.051, p=.27$ [1]
	$r=.072, p=.14$ [1]	$\rho=-.003, p=.95$ [1]	$\rho=.075, p=.13$ [1]	$\rho=.043, p=.39$ [1]	$\rho=.033, p=.50$ [1]	$\rho=-.002, p=.98$ [1]
[17]	$r=.027, p=.55$ [1]	$\rho=.015, p=.74$ [1]	$\rho=.069, p=.13$ [1]	$\rho=-.006, p=.89$ [1]	$\rho=.008, p=.86$ [1]	$\rho=.016, p=.73$ [1]
	$r=.024, p=.63$ [1]	$\rho=.060, p=.23$ [1]	$\rho=.053, p=.28$ [1]	$\rho=.085, p=.089$ [1]	$\rho=.083, p=.097$ [1]	$\rho=.074, p=.14$ [1]
[18]	$r=.054, p=.24$ [1]	$\rho=-.076, p=.097$ [1]	$\rho=.006, p=.90$ [1]	$\rho=-.060, p=.19$ [1]	$\rho=.013, p=.78$ [1]	$\rho=-.008, p=.86$ [1]
	$r=.058, p=.24$ [1]	$\rho=-.005, p=.92$ [1]	$\rho=.053, p=.28$ [1]	$\rho=.11, p=.030$ [.73]	$\rho=.11, p=.034$ [.72]	$\rho=.10, p=.040$ [.93]
[19]	$r=.019, p=.68$ [1]	$\rho=-.055, p=.23$ [1]	$\rho=.006, p=.90$ [1]	$\rho=-.057, p=.21$ [1]	$\rho=-.047, p=.31$ [1]	$\rho=-.018, p=.69$ [1]
	$r=.094, p=.059$ [1]	$\rho=-.064, p=.20$ [1]	$\rho=.092, p=.065$ [1]	$\rho=.098, p=.049$ [1]	$\rho=.13, p=.0098$ [.24]	$\rho=.051, p=.30$ [1]
[20]	$r=.047, p=.30$ [1]	$\rho=-.070, p=.12$ [1]	$\rho=.005, p=.91$ [1]	$\rho=-.025, p=.58$ [1]	$\rho=.027, p=.55$ [1]	$\rho=-.022, p=.63$ [1]
	$r=.001, p=.99$ [1]	$\rho=-.033, p=.51$ [1]	$\rho=.072, p=.15$ [1]	$\rho=.052, p=.28$ [1]	$\rho=.075, p=.13$ [1]	$\rho=.10, p=.036$ [.87]
[21]	$r=.053, p=.24$ [1]	$\rho=-.088, p=.054$ [1]	$\rho=-.008, p=.86$ [1]	$\rho=-.024, p=.60$ [1]	$\rho=.026, p=.58$ [1]	$\rho=-.001, p=.98$ [1]
	$r=.008, p=.87$ [1]	$\rho=-.027, p=.59$ [1]	$\rho=.001, p=.98$ [1]	$\rho=.056, p=.26$ [1]	$\rho=.028, p=.57$ [1]	$\rho=.088, p=.078$ [1]
[22]	$r=.010, p=.83$ [1]	$\rho=-.068, p=.14$ [1]	$\rho=-.028, p=.53$ [1]	$\rho=-.050, p=.27$ [1]	$\rho=-.050, p=.28$ [1]	$\rho=-.004, p=.92$ [1]
	$r=.001, p=.99$ [1]	$\rho=-.012, p=.020$ [1]	$\rho=-.008, p=.87$ [1]	$\rho=.041, p=.41$ [1]	$\rho=.001, p=.99$ [1]	$\rho=.039, p=.43$ [1]
[23]	$r=.001, p=.98$ [1]	$\rho=-.11, p=.017$ [.38]	$\rho=-.073, p=.11$ [1]	$\rho=-.073, p=.11$ [1]	$\rho=-.040, p=.37$ [1]	$\rho=-.029, p=.53$ [1]
	$r=-.007, p=.89$ [1]	$\rho=-.095, p=.058$ [.50]	$\rho=-.071, p=.15$ [1]	$\rho=.055, p=.27$ [1]	$\rho=.036, p=.48$ [1]	$\rho=.007, p=.89$ [1]
[24]	$r=.007, p=.87$ [1]	$\rho=-.049, p=.28$ [1]	$\rho=-.019, p=.68$ [1]	$\rho=-.071, p=.12$ [1]	$\rho=-.040, p=.38$ [1]	$\rho=.0019, p=.97$ [1]
	$r=.058, p=.24$ [1]	$\rho=-.024, p=.63$ [1]	$\rho=.022, p=.66$ [1]	$\rho=.051, p=.31$ [1]	$\rho=.028, p=.57$ [1]	$\rho=.046, p=.36$ [1]
[25]	$r=.082, p=.072$ [1]	$\rho=-.023, p=.62$ [1]	$\rho=-.038, p=.41$ [1]	$\rho=-.062, p=.18$ [1]	$\rho=-.042, p=.36$ [1]	$\rho=-.013, p=.77$ [1]
	$r=-.016, p=.74$ [1]	$\rho=-.021, p=.67$ [1]	$\rho=.003, p=.95$ [1]	$\rho=.063, p=.21$ [1]	$\rho=.032, p=.52$ [1]	$\rho=.054, p=.28$ [1]

Table 3: Correlations with Age, Religiosity, Education Level, Philosophy Level, Psychology Level, and Sciences Level (Android in grey, Physical Duplicate in white). Pearson's r used for Age, Spearman's rho for the rest, with adjusted p-values in brackets. Item numbers correspond with Table 1.

In addition, we conducted Welch's t-tests to compare responses between those who passed and those who failed the attention filter on the third page for each condition, and checked for correlations between responses for both the CRT and CRT-2 using Pearson's r , as well as for Political Attitude using Spearman's ρ . Results are shown in Table 4. Finally, we checked for correlations with the Big-Five personality traits using Pearson's r , as shown in Table 5. As before, the Holm–Bonferroni correction was used for each set of tests and all tests were two-tailed.

The difficulty of the attention filter is attested by only 41% of 836 participants who completed the task passing. This stringent attention check serves as a measure of how carefully participants were reading the materials. We see only minimal differences between those passing and those failing the test, however, with only [4] *Experience Sights & Sounds* for the Android condition showing a significant difference after correcting for multiple comparisons. Here we find that more attentive participants gave *higher* responses on average. This is in line with what Sytsma and Ozdemir (2019) found for judgments about the simple robot Jimmy from Sytsma and Machery (2010) for both “see red” and “experience red.” Further, we find something similar for reflectivity, as might be expected. Interestingly, unlike Sytsma and Machery (2012) we find a significant, if small, correlation between CRT and [3] *See Colors* for the Android and for both [3] *See Colors* and [4] *Experience Sights & Sounds* for the Physical Duplicate. Similarly, there is a significant, if small, correlation between CRT-2 and [4] *Experience Sights & Sounds* for the Android.³ These correlations run in the opposite direction to that expected by Talbot (2012), however, with more reflective individuals giving higher judgments. The difference between the current and previous findings might be due to the present study testing judgments about highly sophisticated robots where Sytsma and Machery tested judgments about a simple robot. Overall, the only variable tested that we found to have a general, notable effect across a range of items was the Big-Five personality trait of openness.

³ In his first study, using materials based on Sytsma and Machery (2010), Ozdemir (2021) found a significant, negative correlation ($r=-.29, p=.02$) between CRT and Jimmy seeing red, although this would disappear if correcting for multiple comparisons, but no significant correlation with CRT-2, and no correlation for either and Jimmy experiencing red. He did not find significant correlations for items [3] *See Colors* or [4] *Experience Sights & Sounds* in his dimension study, however, even without correcting for multiple comparisons. Thus, while there is some suggestive evidence that attention and reflectivity might correlate with higher judgments for robots seeing, the results are decidedly mixed and further study is called for.

Item Num	Attention: Pass (N=342), Fail (N=494)		CRT (N=577)	CRT-2 (N=593)	Politics (N=706)
	Means	Welch's t-test [adjusted]	[adjusted]	[adjusted]	[adjusted]
[1]	4.16, 4.44	$t(401.4)=1.40, p=.16$ [1]	$r=.074, p=.19$ [1]	$r=.093, p=.094$ [.75]	$\rho=-.055, p=.28$ [1]
	4.52, 4.80	$t(290.16)=1.25, p=.21$ [1]	$r=-.004, p=.95$ [1]	$r=-.022, p=.72$ [1]	$\rho=.026, p=.65$ [1]
[2]	4.32, 4.15	$t(413.41)=0.78, p=.43$ [1]	$r=.11, p=.041$ [.70]	$r=.14, p=.010$ [.19]	$\rho=-.065, p=.20$ [1]
	5.28, 4.75	$t(312.86)=2.33, p=.020$ [.51]	$r=.15, p=.015$ [.34]	$r=.024, p=.69$ [1]	$\rho=-.032, p=.57$ [1]
[3]	5.83, 5.38	$t(446.58)=2.72, p=.0067$ [.15]	$r=.18, p=.0015$ [.037]	$r=.15, p=.0074$ [.15]	$\rho=-.042, p=.41$ [1]
	5.84, 5.64	$t(297.03)=1.09, p=.28$ [1]	$r=.19, p=.0021$ [.049]	$r=.15, p=.014$ [.34]	$\rho=-.005, p=.93$ [1]
[4]	5.82, 5.26	$t(439.8)=3.32, p<.001$ [.024], $d=.31$	$r=.12, p=.034$ [.64]	$r=.21, p<.001$ [.0036]	$\rho=-.061, p=.23$ [1]
	5.77, 5.36	$t(297.7)=2.14, p=.033$ [.80]	$r=.20, p<.001$ [.025]	$r=.17, p=.0045$ [.11]	$\rho=.020, p=.72$ [1]
[5]	5.14, 4.71	$t(418.13)=2.26, p=.024$ [.46]	$r=.12, p=.032$ [.64]	$r=.17, p=.0015$ [.037]	$\rho=-.030, p=.55$ [1]
	5.17, 5.03	$t(288.91)=0.66, p=.51$ [1]	$r=.11, p=.085$ [1]	$r=.041, p=.50$ [1]	$\rho=.042, p=.46$ [1]
[6]	6.05, 5.61	$t(449.09)=2.80, p=.0053$ [.13]	$r=.14, p=.011$ [.25]	$r=.17, p=.0020$ [.046]	$\rho=-.021, p=.68$ [1]
	5.39, 5.59	$t(282.24)=1.00, p=.32$ [1]	$r=-.014, p=.82$ [1]	$r=.016, p=.79$ [1]	$\rho=.055, p=.33$ [1]
[7]	5.56, 5.26	$t(416.28)=1.85, p=.065$ [1]	$r=.13, p=.019$ [.41]	$r=.11, p=.049$ [.49]	$\rho=-.086, p=.091$ [1]
	5.02, 5.28	$t(284.84)=1.31, p=.19$ [1]	$r=.045, p=.47$ [1]	$r=-.018, p=.77$ [1]	$\rho=.050, p=.37$ [1]
[8]	4.97, 4.84	$t(423.93)=0.75, p=.45$ [1]	$r=.048, p=.39$ [1]	$r=.067, p=.22$ [1]	$\rho=-.048, p=.35$ [1]
	4.80, 4.93	$t(286.82)=0.63, p=.53$ [1]	$r=.058, p=.35$ [1]	$r=.021, p=.73$ [1]	$\rho=.026, p=.64$ [1]
[9]	5.08, 5.00	$t(407.41)=0.39, p=.70$ [1]	$r=.16, p=.0033$ [.079]	$r=.12, p=.024$ [.34]	$\rho=.022, p=.67$ [1]
	5.43, 5.17	$t(313.46)=1.28, p=.20$ [1]	$r=.092, p=.14$ [1]	$r=.097, p=.11$ [1]	$\rho=.035, p=.54$ [1]
[10]	5.57, 5.11	$t(429.29)=2.76, p=.0061$ [.14]	$r=.13, p=.023$ [.48]	$r=.12, p=.030$ [.39]	$\rho=-.047, p=.35$ [1]
	5.27, 5.18	$t(296.92)=0.46, p=.65$ [1]	$r=.052, p=.40$ [1]	$r=.031, p=.61$ [1]	$\rho=.086, p=.13$ [1]
[11]	4.68, 4.47	$t(418.32)=1.05, p=.30$ [1]	$r=.059, p=.29$ [1]	$r=.12, p=.030$ [.39]	$\rho=-.22, p<.001$ [<.001]
	4.71, 4.76	$t(296.67)=0.23, p=.82$ [1]	$r=-.015, p=.81$ [1]	$r=-.022, p=.71$ [1]	$\rho=-.041, p=.46$ [1]
[12]	3.82, 4.06	$t(422.49)=1.11, p=.27$ [1]	$r=-.013, p=.82$ [1]	$r=.070, p=.21$ [1]	$\rho=.051, p=.32$ [1]
	4.51, 4.42	$t(299.6)=0.40, p=.69$ [1]	$r=.052, p=.40$ [1]	$r=.026, p=.68$ [1]	$\rho=.034, p=.55$ [1]
[13]	4.44, 4.33	$t(413.01)=0.49, p=.62$ [1]	$r=.037, p=.52$ [1]	$r=.12, p=.038$ [.42]	$\rho=-.092, p=.069$ [1]
	4.78, 4.87	$t(287.82)=0.41, p=.68$ [1]	$r=-.027, p=.66$ [1]	$r=-.069, p=.26$ [1]	$\rho=.011, p=.85$ [1]
[14]	4.55, 4.54	$t(415.62)=0.060, p=.95$ [1]	$r=.073, p=.20$ [1]	$r=.17, p=.0022$ [.048]	$\rho=-.019, p=.70$ [1]
	4.82, 4.76	$t(299.76)=0.27, p=.79$ [1]	$r=.050, p=.42$ [1]	$r=.029, p=.63$ [1]	$\rho=-.043, p=.44$ [1]
[15]	4.67, 4.38	$t(416.47)=0.45, p=.65$ [1]	$r=.082, p=.15$ [1]	$r=.13, p=.019$ [.28]	$\rho=-.0079, p=.88$ [1]
	4.87, 4.75	$t(293.08)=0.52, p=.61$ [1]	$r=.060, p=.34$ [1]	$r=-.006, p=.92$ [1]	$\rho=.033, p=.56$ [1]
[16]	4.97, 4.75	$t(427.63)=1.15, p=.25$ [1]	$r=.093, p=.097$ [1]	$r=.083, p=.14$ [.95]	$\rho=.012, p=.82$ [1]
	5.11, 4.98	$t(305.7)=0.65, p=.51$ [1]	$r=.024, p=.70$ [1]	$r=.002, p=.97$ [1]	$\rho=-.024, p=.67$ [1]
[17]	5.56, 5.20	$t(423.04)=2.23, p=.026$ [.48]	$r=.092, p=.10$ [1]	$r=.14, p=.011$ [.20]	$\rho=-.055, p=.28$ [1]
	5.12, 5.20	$t(300.67)=0.40, p=.69$ [1]	$r=.13, p=.038$ [1]	$r=.033, p=.59$ [1]	$\rho=-.032, p=.57$ [1]
[18]	4.18, 4.67	$t(415.79)=2.32, p=.021$ [.42]	$r=.037, p=.51$ [1]	$r=.066, p=.23$ [1]	$\rho=-.072, p=.16$ [1]
	5.21, 4.89	$t(316.57)=1.48, p=.14$ [1]	$r=.11, p=.078$ [1]	$r=.079, p=.20$ [1]	$\rho=-.034, p=.55$ [1]
[19]	4.70, 4.71	$t(406.26)=0.053, p=.96$ [1]	$r=.091, p=.11$ [1]	$r=.13, p=.017$ [.27]	$\rho=-.040, p=.43$ [1]
	5.02, 4.78	$t(300.43)=1.14, p=.26$ [1]	$r=.009, p=.88$ [1]	$r=.075, p=.22$ [1]	$\rho=.054, p=.33$ [1]
[20]	4.84, 4.68	$t(416.2)=0.84, p=.40$ [1]	$r=.080, p=.16$ [1]	$r=.055, p=.32$ [1]	$\rho=-.030, p=.56$ [1]
	4.94, 4.83	$t(316.59)=0.51, p=.61$ [1]	$r=.051, p=.41$ [1]	$r=.070, p=.25$ [1]	$\rho=-.009, p=.87$ [1]
[21]	5.51, 5.07	$t(419.5)=2.57, p=.010$ [.22]	$r=.10, p=.078$ [1]	$r=.15, p=.0057$ [.12]	$\rho=-.036, p=.48$ [1]
	5.40, 5.15	$t(300.69)=1.25, p=.21$ [1]	$r=.15, p=.018$ [1]	$r=.13, p=.036$ [.83]	$\rho=.035, p=.53$ [1]
[22]	4.86, 4.87	$t(417.06)=0.054, p=.96$ [1]	$r=.12, p=.033$ [.64]	$r=.14, p=.012$ [.21]	$\rho=-.020, p=.69$ [1]
	5.01, 4.98	$t(303.42)=0.13, p=.90$ [1]	$r=.060, p=.33$ [1]	$r=.028, p=.65$ [1]	$\rho=-.031, p=.58$ [1]
[23]	4.86, 4.46	$t(425.62)=0.20, p=.84$ [1]	$r=.052, p=.36$ [1]	$r=.032, p=.56$ [1]	$\rho=-.065, p=.20$ [1]
	5.16, 5.08	$t(292.58)=0.34, p=.73$ [1]	$r=.023, p=.71$ [1]	$r=.086, p=.16$ [1]	$\rho=.040, p=.48$ [1]
[24]	4.42, 4.37	$t(429.04)=1.90, p=.058$ [.98]	$r=.087, p=.12$ [1]	$r=.097, p=.080$ [.72]	$\rho=-.048, p=.34$ [1]
	4.71, 4.88	$t(302.65)=0.75, p=.46$ [1]	$r=.042, p=.50$ [1]	$r=-.0095, p=.88$ [1]	$\rho=.020, p=.72$ [1]
[25]	4.76, 4.87	$t(407.43)=1.03, p=.30$ [1]	$r=.073, p=.19$ [1]	$r=.008, p=.88$ [1]	$\rho=-.042, p=.40$ [1]
	4.30, 4.44	$t(300.65)=0.60, p=.55$ [1]	$r=.036, p=.57$ [1]	$r=.022, p=.72$ [1]	$\rho=-.053, p=.34$ [1]

Table 5: Comparison between those passing and failing the attention check (Welch's t-tests with Cohen's d for significant results), and correlations with CRT, CRT-2, and Political Attitude. Android in grey, Physical Duplicate in white. Pearson's r used for CRT and CRT-2, Spearman's rho for the rest. Adjusted p-values shown in brackets. Item numbers correspond with Table 1.

Item Num	Openness [adjusted]	Conscientiousness [adjusted]	Extraversion [adjusted]	Agreeableness [adjusted]	Neuroticism [adjusted]
[1]	<i>r</i> =.052, <i>p</i> =.29 [1] <i>r</i> =.16, <i>p</i> =.0021 [.015]	<i>r</i> =.031, <i>p</i> =.53 [1] <i>r</i> =-.038, <i>p</i> =.48 [1]	<i>r</i> =.029, <i>p</i> =.55 [1] <i>r</i> =.12, <i>p</i> =.024 [.61]	<i>r</i> =.055, <i>p</i> =.26 [1] <i>r</i> =-.054, <i>p</i> =.31 [1]	<i>r</i> =-.031, <i>p</i> =.52 [1] <i>r</i> =.019, <i>p</i> =.71 [1]
[2]	<i>r</i> =.046, <i>p</i> =.34 [1] <i>r</i> =.082, <i>p</i> =.12 [.25]	<i>r</i> =.10, <i>p</i> =.031 [.69] <i>r</i> =.028, <i>p</i> =.60 [1]	<i>r</i> =.052, <i>p</i> =.29 [1] <i>r</i> =.018, <i>p</i> =.73 [1]	<i>r</i> =.085, <i>p</i> =.080 [1] <i>r</i> =-.12, <i>p</i> =.027 [.67]	<i>r</i> =-.12, <i>p</i> =.017 [.37] <i>r</i> =-.18, <i>p</i> <.001 [.012]
[3]	<i>r</i> =.083, <i>p</i> =.086 [1] <i>r</i> =.21, <i>p</i> <.001 [.0012]	<i>r</i> =-.027, <i>p</i> =.57 [1] <i>r</i> =.023, <i>p</i> =.66 [1]	<i>r</i> =.078, <i>p</i> =.11 [1] <i>r</i> =.052, <i>p</i> =.33 [1]	<i>r</i> =.020, <i>p</i> =.68 [1] <i>r</i> =.0045, <i>p</i> =.93 [1]	<i>r</i> =-.12, <i>p</i> =.015 [.34] <i>r</i> =-.034, <i>p</i> =.52 [1]
[4]	<i>r</i> =.16, <i>p</i> =.0011 [.025] <i>r</i> =.22, <i>p</i> <.001 [<.001]	<i>r</i> =.010, <i>p</i> =.84 [1] <i>r</i> =.086, <i>p</i> =.10 [1]	<i>r</i> =.097, <i>p</i> =.046 [1] <i>r</i> =.022, <i>p</i> =.68 [1]	<i>r</i> =.060, <i>p</i> =.21 [1] <i>r</i> =.034, <i>p</i> =.53 [1]	<i>r</i> =-.069, <i>p</i> =.15 [1] <i>r</i> =-.043, <i>p</i> =.42 [1]
[5]	<i>r</i> =.13, <i>p</i> =.0072 [.14] <i>r</i> =.19, <i>p</i> <.001 [.0049]	<i>r</i> =.10, <i>p</i> =.032 [.69] <i>r</i> =.005, <i>p</i> =.93 [1]	<i>r</i> =.020, <i>p</i> =.69 [1] <i>r</i> =.046, <i>p</i> =.38 [1]	<i>r</i> =.040, <i>p</i> =.42 [1] <i>r</i> =-.061, <i>p</i> =.25 [1]	<i>r</i> =-.010, <i>p</i> =.84 [1] <i>r</i> =-.007, <i>p</i> =.90 [1]
[6]	<i>r</i> =.084, <i>p</i> =.081 [1] <i>r</i> =.18, <i>p</i> <.001 [.0071]	<i>r</i> =.016, <i>p</i> =.74 [1] <i>r</i> =.066, <i>p</i> =.22 [1]	<i>r</i> =.066, <i>p</i> =.17 [1] <i>r</i> =.063, <i>p</i> =.24 [1]	<i>r</i> =.019, <i>p</i> =.69 [1] <i>r</i> =.038, <i>p</i> =.48 [1]	<i>r</i> =-.064, <i>p</i> =.19 [1] <i>r</i> =-.037, <i>p</i> =.49 [1]
[7]	<i>r</i> =.12, <i>p</i> =.013 [.24] <i>r</i> =.17, <i>p</i> =.0012 [.0094]	<i>r</i> =.15, <i>p</i> =.0028 [.070] <i>r</i> =.036, <i>p</i> =.50 [1]	<i>r</i> =.044, <i>p</i> =.37 [1] <i>r</i> =.045, <i>p</i> =.39 [1]	<i>r</i> =.13, <i>p</i> =.0077 [.17] <i>r</i> =-.035, <i>p</i> =.51 [1]	<i>r</i> =.056, <i>p</i> =.25 [1] <i>r</i> =.022, <i>p</i> =.68 [1]
[8]	<i>r</i> =.18, <i>p</i> <.001 [.0040] <i>r</i> =.20, <i>p</i> <.001 [.0018]	<i>r</i> =.098, <i>p</i> =.043 [.80] <i>r</i> =.004, <i>p</i> =.94 [1]	<i>r</i> =.092, <i>p</i> =.058 [1] <i>r</i> =.049, <i>p</i> =.35 [1]	<i>r</i> =.13, <i>p</i> =.0061 [.14] <i>r</i> =-.032, <i>p</i> =.55 [1]	<i>r</i> =-.021, <i>p</i> =.66 [1] <i>r</i> =.021, <i>p</i> =.69 [1]
[9]	<i>r</i> =.063, <i>p</i> =.19 [1] <i>r</i> =.18, <i>p</i> <.001 [.0061]	<i>r</i> =.054, <i>p</i> =.27 [1] <i>r</i> =.049, <i>p</i> =.35 [1]	<i>r</i> =.039, <i>p</i> =.43 [1] <i>r</i> =.021, <i>p</i> =.70 [1]	<i>r</i> =.046, <i>p</i> =.34 [1] <i>r</i> =-.083, <i>p</i> =.12 [1]	<i>r</i> =-.019, <i>p</i> =.70 [1] <i>r</i> =-.061, <i>p</i> =.25 [1]
[10]	<i>r</i> =.23, <i>p</i> <.001 [<.001] <i>r</i> =.24, <i>p</i> <.001 [<.001]	<i>r</i> =.10, <i>p</i> =.032 [.69] <i>r</i> =-.016, <i>p</i> =.76 [1]	<i>r</i> =.11, <i>p</i> =.018 [.43] <i>r</i> =.091, <i>p</i> =.088 [1]	<i>r</i> =.066, <i>p</i> =.17 [1] <i>r</i> =.009, <i>p</i> =.86 [1]	<i>r</i> =.011, <i>p</i> =.82 [1] <i>r</i> =-.027, <i>p</i> =.61 [1]
[11]	<i>r</i> =.0086, <i>p</i> =.86 [1] <i>r</i> =.20, <i>p</i> <.001 [.0018]	<i>r</i> =.060, <i>p</i> =.22 [1] <i>r</i> =.017, <i>p</i> =.76 [1]	<i>r</i> =-.046, <i>p</i> =.34 [1] <i>r</i> =.10, <i>p</i> =.049 [1]	<i>r</i> =.17, <i>p</i> <.001 [.016] <i>r</i> =.044, <i>p</i> =.40 [1]	<i>r</i> =-.022, <i>p</i> =.65 [1] <i>r</i> =.001, <i>p</i> =.99 [1]
[12]	<i>r</i> =.017, <i>p</i> =.72 [1] <i>r</i> =.18, <i>p</i> <.001 [.0071]	<i>r</i> =.052, <i>p</i> =.29 [1] <i>r</i> =-.055, <i>p</i> =.30 [1]	<i>r</i> =-.017, <i>p</i> =.73 [1] <i>r</i> =.053, <i>p</i> =.32 [1]	<i>r</i> =.12, <i>p</i> =.013 [.26] <i>r</i> =-.038, <i>p</i> =.47 [1]	<i>r</i> =-.11, <i>p</i> =.024 [.50] <i>r</i> =-.049, <i>p</i> =.35 [1]
[13]	<i>r</i> =.032, <i>p</i> =.52 [1] <i>r</i> =.11, <i>p</i> =.033 [.16]	<i>r</i> =.060, <i>p</i> =.22 [1] <i>r</i> =-.009, <i>p</i> =.86 [1]	<i>r</i> =.037, <i>p</i> =.44 [1] <i>r</i> =.041, <i>p</i> =.44 [1]	<i>r</i> =.15, <i>p</i> =.0018 [.044] <i>r</i> =-.065, <i>p</i> =.22 [1]	<i>r</i> =-.12, <i>p</i> =.011 [.26] <i>r</i> =-.036, <i>p</i> =.49 [1]
[14]	<i>r</i> =-.010, <i>p</i> =.84 [1] <i>r</i> =.11, <i>p</i> =.047 [.16]	<i>r</i> =.001, <i>p</i> =.98 [1] <i>r</i> =-.018, <i>p</i> =.74 [1]	<i>r</i> =-.025, <i>p</i> =.60 [1] <i>r</i> =.022, <i>p</i> =.68 [1]	<i>r</i> =.10, <i>p</i> =.046 [.93] <i>r</i> =-.023, <i>p</i> =.67 [1]	<i>r</i> =-.17, <i>p</i> <.001 [.011] <i>r</i> =-.053, <i>p</i> =.32 [1]
[15]	<i>r</i> =.051, <i>p</i> =.30 [1] <i>r</i> =.23, <i>p</i> <.001 [<.001]	<i>r</i> =.072, <i>p</i> =.14 [1] <i>r</i> =.057, <i>p</i> =.28 [1]	<i>r</i> =.028, <i>p</i> =.57 [1] <i>r</i> =.085, <i>p</i> =.11 [1]	<i>r</i> =.046, <i>p</i> =.34 [1] <i>r</i> =-.034, <i>p</i> =.53 [1]	<i>r</i> =-.086, <i>p</i> =.078 [1] <i>r</i> =-.035, <i>p</i> =.51 [1]
[16]	<i>r</i> =.093, <i>p</i> =.057 [.97] <i>r</i> =.18, <i>p</i> <.001 [.0061]	<i>r</i> =.065, <i>p</i> =.18 [1] <i>r</i> =.045, <i>p</i> =.39 [1]	<i>r</i> =.045, <i>p</i> =.36 [1] <i>r</i> =.10, <i>p</i> =.057 [1]	<i>r</i> =.070, <i>p</i> =.15 [1] <i>r</i> =-.015, <i>p</i> =.78 [1]	<i>r</i> =-.030, <i>p</i> =.54 [1] <i>r</i> =-.032, <i>p</i> =.55 [1]
[17]	<i>r</i> =.16, <i>p</i> <.001 [.017] <i>r</i> =.22, <i>p</i> <.001 [<.001]	<i>r</i> =.12, <i>p</i> =.011 [.26] <i>r</i> =.067, <i>p</i> =.20 [1]	<i>r</i> =.087, <i>p</i> =.075 [1] <i>r</i> =.12, <i>p</i> =.027 [.64]	<i>r</i> =.021, <i>p</i> =.66 [1] <i>r</i> =.034, <i>p</i> =.52 [1]	<i>r</i> =.029, <i>p</i> =.55 [1] <i>r</i> =.016, <i>p</i> =.76 [1]
[18]	<i>r</i> =.000, <i>p</i> =.99 [1] <i>r</i> =.16, <i>p</i> =.0028 [.017]	<i>r</i> =.048, <i>p</i> =.32 [1] <i>r</i> =.022, <i>p</i> =.67 [1]	<i>r</i> =.045, <i>p</i> =.35 [1] <i>r</i> =.096, <i>p</i> =.071 [1]	<i>r</i> =.038, <i>p</i> =.44 [1] <i>r</i> =-.048, <i>p</i> =.37 [1]	<i>r</i> =-.018, <i>p</i> =.70 [1] <i>r</i> =-.056, <i>p</i> =.29 [1]
[19]	<i>r</i> =.073, <i>p</i> =.13 [1] <i>r</i> =.18, <i>p</i> <.001 [.0061]	<i>r</i> =.062, <i>p</i> =.20 [1] <i>r</i> =.091, <i>p</i> =.086 [1]	<i>r</i> =.064, <i>p</i> =.19 [1] <i>r</i> =.065, <i>p</i> =.22 [1]	<i>r</i> =.025, <i>p</i> =.61 [1] <i>r</i> =-.061, <i>p</i> =.25 [1]	<i>r</i> =-.039, <i>p</i> =.43 [1] <i>r</i> =-.015, <i>p</i> =.78 [1]
[20]	<i>r</i> =.13, <i>p</i> =.0089 [.17] <i>r</i> =.21, <i>p</i> <.001 [<.001]	<i>r</i> =.11, <i>p</i> =.029 [.68] <i>r</i> =.019, <i>p</i> =.72 [1]	<i>r</i> =.079, <i>p</i> =.10 [1] <i>r</i> =.11, <i>p</i> =.037 [.86]	<i>r</i> =.069, <i>p</i> =.16 [1] <i>r</i> =-.020, <i>p</i> =.71 [1]	<i>r</i> =-.028, <i>p</i> =.57 [1] <i>r</i> =-.025, <i>p</i> =.64 [1]
[21]	<i>r</i> =.14, <i>p</i> =.0040 [.084] <i>r</i> =.25, <i>p</i> <.001 [<.001]	<i>r</i> =.10, <i>p</i> =.042 [.80] <i>r</i> =.035, <i>p</i> =.51 [1]	<i>r</i> =.15, <i>p</i> =.0028 [.069] <i>r</i> =.10, <i>p</i> =.060 [1]	<i>r</i> =.054, <i>p</i> =.27 [1] <i>r</i> =0.012, <i>p</i> =.83 [1]	<i>r</i> =.017, <i>p</i> =.72 [1] <i>r</i> =-.044, <i>p</i> =.41 [1]
[22]	<i>r</i> =.071, <i>p</i> =.15 [1] <i>r</i> =.11, <i>p</i> =.039 [.16]	<i>r</i> =.075, <i>p</i> =.12 [1] <i>r</i> =.002, <i>p</i> =.97 [1]	<i>r</i> =.016, <i>p</i> =.74 [1] <i>r</i> =.001, <i>p</i> =1 [1]	<i>r</i> =-.0026, <i>p</i> =.96 [1] <i>r</i> =-.015, <i>p</i> =.78 [1]	<i>r</i> =-.030, <i>p</i> =.54 [1] <i>r</i> =-.077, <i>p</i> =.15 [1]
[23]	<i>r</i> =.006, <i>p</i> =.91 [1] <i>r</i> =.20, <i>p</i> <.001 [.0018]	<i>r</i> =.042, <i>p</i> =.39 [1] <i>r</i> =.078, <i>p</i> =.14 [1]	<i>r</i> =-.037, <i>p</i> =.45 [1] <i>r</i> =.071, <i>p</i> =.18 [1]	<i>r</i> =.038, <i>p</i> =.43 [1] <i>r</i> =-.051, <i>p</i> =.34 [1]	<i>r</i> =-.077, <i>p</i> =.11 [1] <i>r</i> =-.003, <i>p</i> =.96 [1]
[24]	<i>r</i> =.084, <i>p</i> =.085 [1] <i>r</i> =.23, <i>p</i> <.001 [<.001]	<i>r</i> =.032, <i>p</i> =.51 [1] <i>r</i> =-.033, <i>p</i> =.54 [1]	<i>r</i> =.053, <i>p</i> =.28 [1] <i>r</i> =.092, <i>p</i> =.084 [1]	<i>r</i> =.082, <i>p</i> =.092 [1] <i>r</i> =-.025, <i>p</i> =.64 [1]	<i>r</i> =-.074, <i>p</i> =.13 [1] <i>r</i> =.020, <i>p</i> =.71 [1]
[25]	<i>r</i> =.068, <i>p</i> =.16 [1] <i>r</i> =.070, <i>p</i> =.19 [.25]	<i>r</i> =-.009, <i>p</i> =.85 [1] <i>r</i> =.002, <i>p</i> =.97 [1]	<i>r</i> =.085, <i>p</i> =.080 [1] <i>r</i> =.004, <i>p</i> =.93 [1]	<i>r</i> =.078, <i>p</i> =.11 [1] <i>r</i> =-.034, <i>p</i> =.53 [1]	<i>r</i> =-.031, <i>p</i> =.53 [1] <i>r</i> =-.062, <i>p</i> =.25 [1]

Table 5: Correlations with the Big-Five personality traits of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism using Pearson’s *r* with Android in grey and Physical Duplicate in white). Restricted to the N=780 participants completing the personality inventory. Adjusted *p*-values shown in brackets. Item numbers correspond with Table 1.

2.4 Cluster Analyses

To assess the feasibility of cluster analysis on our data, we first checked the clustering tendency of our data. The Hopkins statistic (0.59) was above the standard threshold (0.5), indicating that it contains meaningful clusters. As indicated in the main text, we employed two distance measures (Euclidean, Spearman). The distance matrices are shown in Figure 1, with darker colors indicating that the items were closer together.

For each distance measure we looked at the five clustering methods common to both the `agnes` function from the `cluster` package (Maechler et al. 2021) and the `pvcust` (Suzuki et al. 2019) package in R: ward (ward.D2 in `pvcust`), average (Unweighted Pair Group Method with Arithmetic Mean), single, complete, and weighted (mcquitty or Weighted Pair Group Method with Arithmetic Mean).⁴ For each combination we used the `agnes` function to assess the agglomerative coefficient, which describes the strength of the clustering structure, and the Cophenetic correlation coefficient, which indicates how well the clustering captures the distance matrix. Weighting these two criteria equally, we used the top two clustering methods for each distance measure (ward and complete for Euclidean, ward and average for Spearman).⁵ For each distance measure, Ward’s clustering method gave the best combination of clustering structure and faithfulness to the distance matrix of the five clustering methods. The resulting dendrogram for Ward’s method with Euclidean distance is shown in the main text, and the remaining three are shown in Figures 2–4.

The four clusterings paint a similar picture, although there are differences between them as we would expect. First, all four clusterings produce generally consistent higher-level clusters that are in line with the dimensions reported by Ozdemir (2021). Setting aside [25] *Have Memories*—which forms its own mid-level cluster in the dendrogram for complete with Euclidean and its own top-level cluster for average with Spearman—the only divergence in the items falling under the higher-level clusters from that shown in the main text was [21] *Aware of Surroundings* for Ward’s method with Spearman distance. Second, as with the dendrogram discussed in the main text, the remaining three also show the expected low-level clusters for [3] *See Colors* and [4] *Experience Sights & Sounds* and for [13] *Have Emotions* and [14] *Have Moods*. Third, in each case we find that the prototypical examples of phenomenal states we focused on—[2] *Feel Pain* and [3] *See Colors* / [4] *Experience Sights & Sounds*—fell across different higher-level clusters. Finally, focusing on [1] *Have Free Will*, in each case we again find that it falls in a mid-level cluster with [20] *Aware of Self*, [15] *Have Self-consciousness*, and [19] *Conscious*. In addition, three of the four mid-level clusters included [23] *Deserve Human Rights*, although other items varied more notably between the clusterings. It is worth noting here, that for Ward’s method with Spearman distance, the mid-level cluster of [19] *Conscious*, [15] *Have Self-consciousness*, [20] *Aware of Self*, [1] *Have Free Will*, and [23] *Deserve Human Rights*, clustered most closely with [18] *Alive*, [13] *Have Emotions*, and [14] *Have Moods*, offering the strongest indication of the four of a closer connection between judgments about free will and emotions. Even here, however, the connection to being alive remains consistent with the alternative hypothesis put forward in the main text.

⁴ Note that two different algorithms are found in the literature for Ward clustering. Both “ward” for `agnes` and “ward.D2” in `pvcust`—calling on the `hclust` function from the `STAT` package (Bolar 2019)—implement Ward’s (1963) clustering criterion.

⁵ The Cophenetic correlation coefficients for these four clusterings were 0.56, 0.66, 0.70, and 0.81, respectively, while the agglomerative coefficients were 0.56, 0.36, 0.64, 0.32.

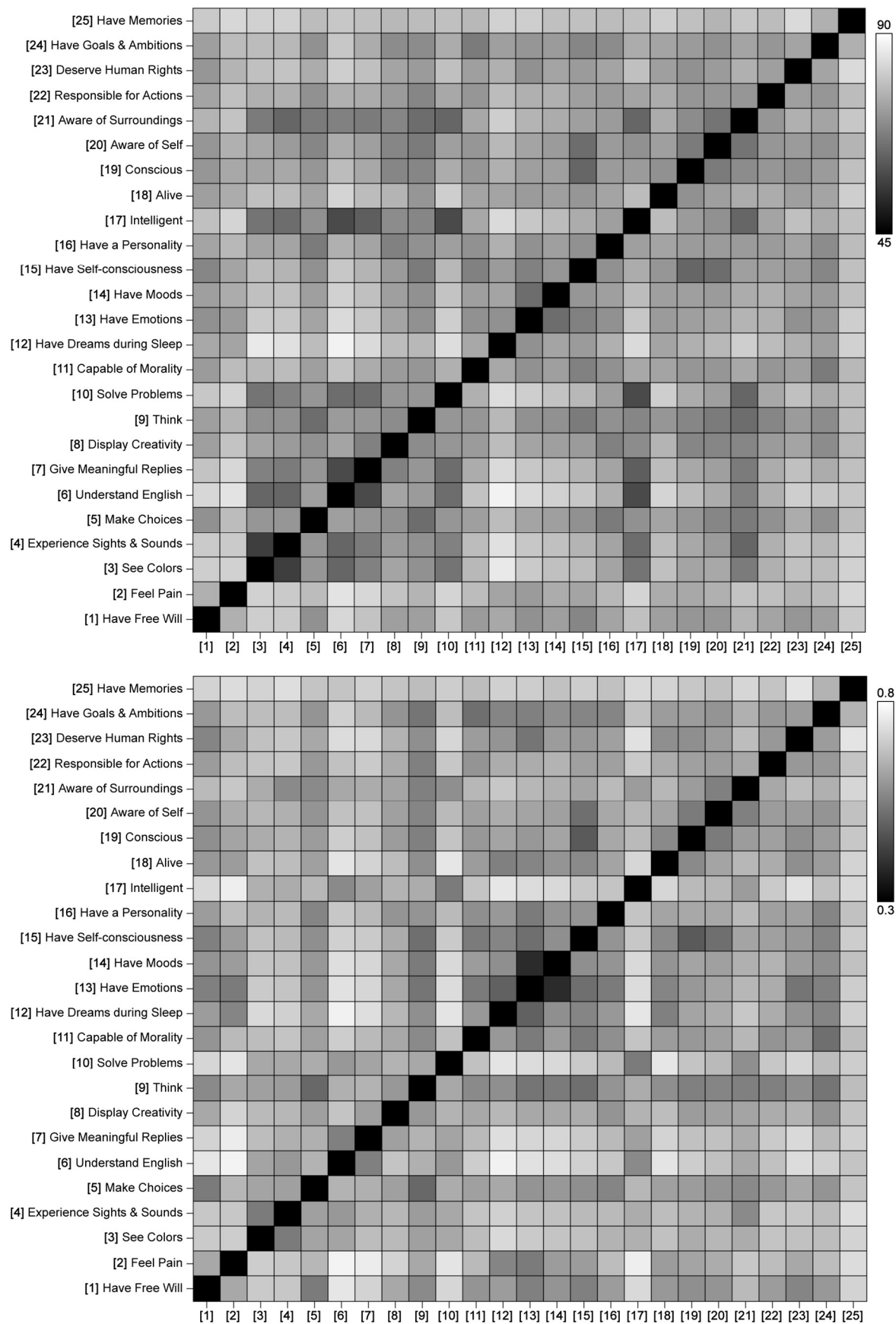


Figure 1: Distance matrixes, Euclidean top and Spearman bottom.

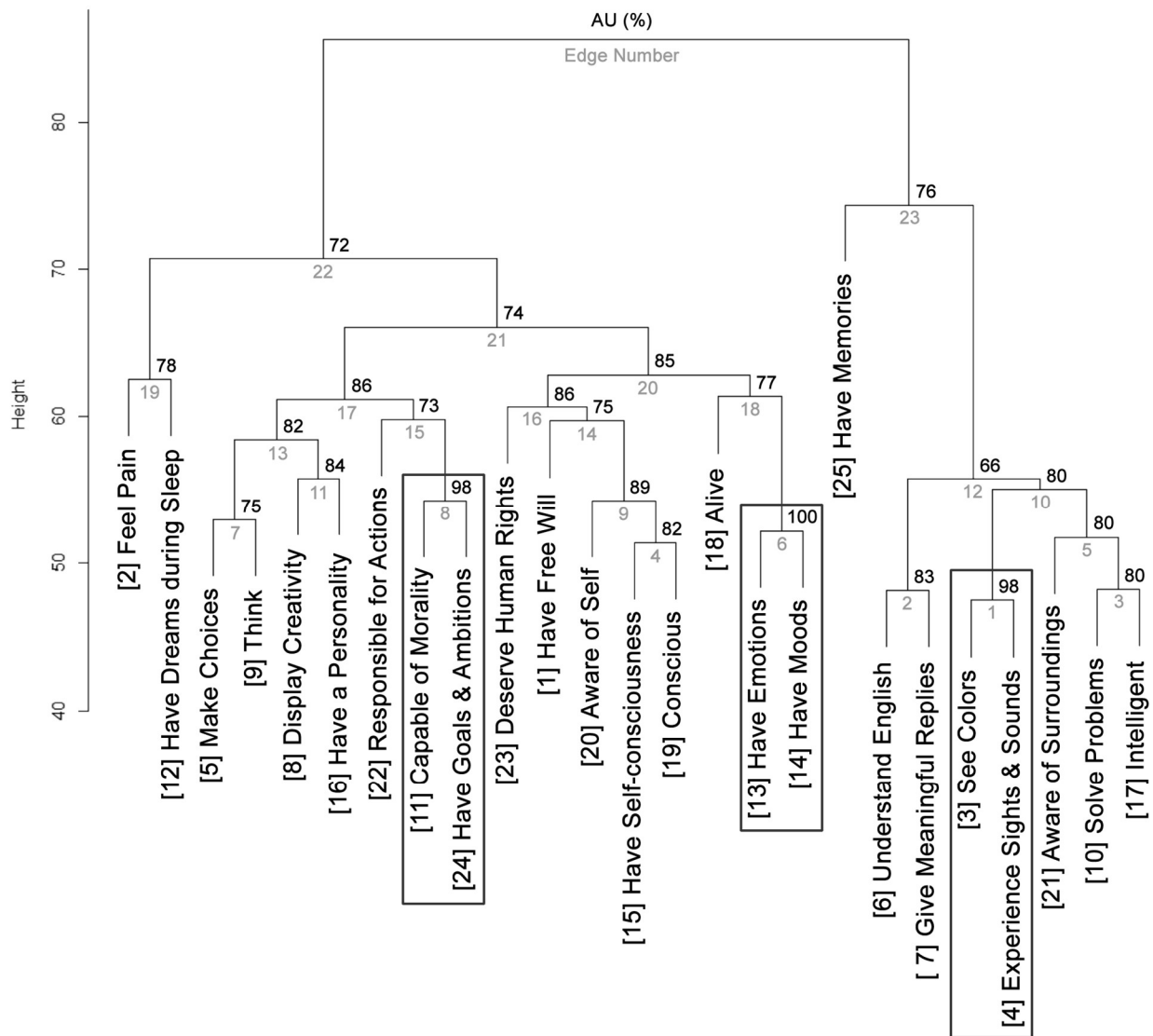


Figure 2: Dendrogram for the hierarchical cluster analysis using the complete clustering method with Euclidean distance measure for participants passing the attention filter. Edge numbers are displayed below (grey) and AU values are displayed above (black). Highest-level clusters occurring in 95% or more of the resamples are highlighted. Item numbers correspond with those given in Table 1.

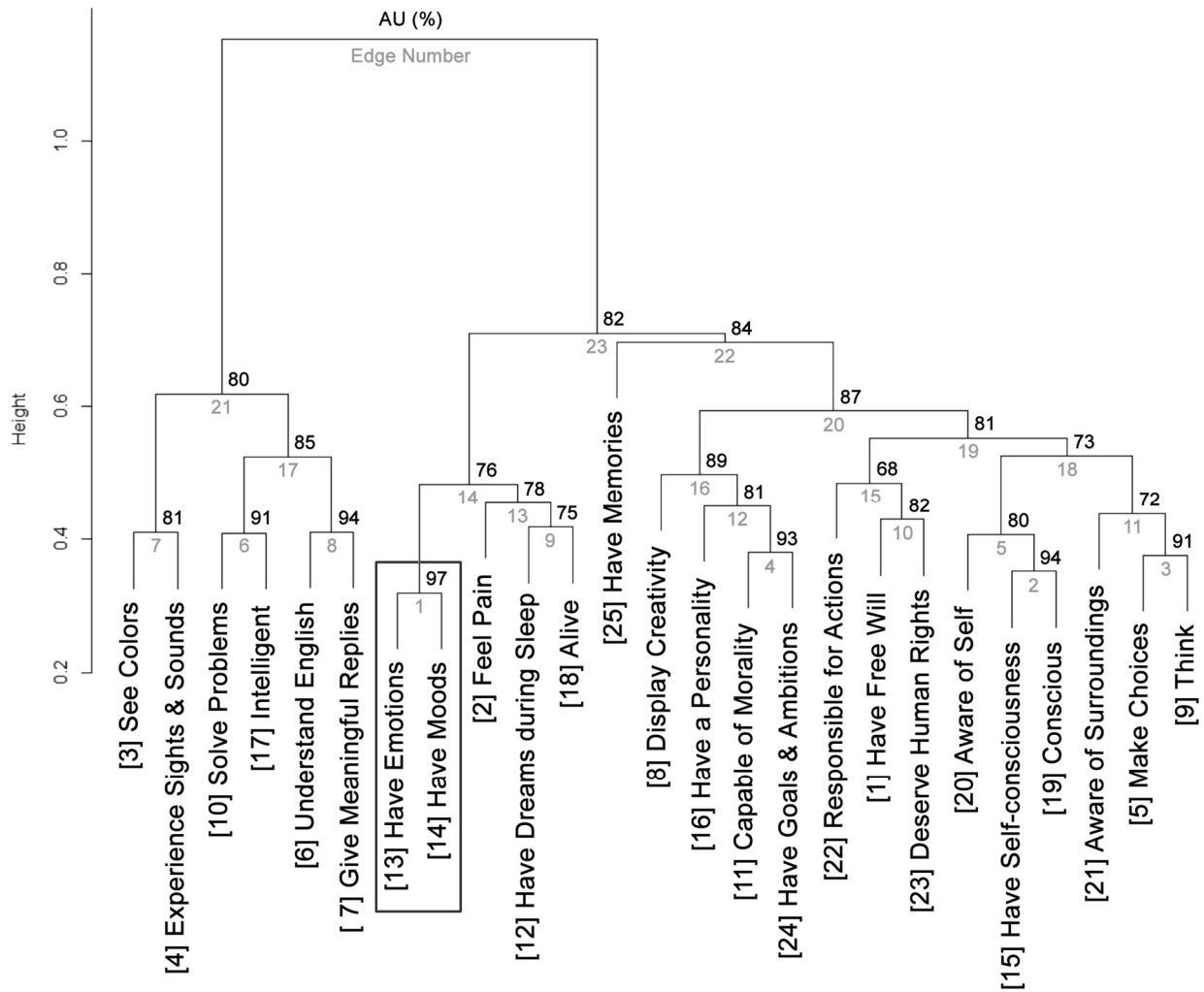


Figure 3: Dendrogram for the hierarchical cluster analysis using Ward’s method with the Spearman distance measure for participants passing the attention filter. Edge numbers are displayed below (grey) and AU values are displayed above (black). Highest-level clusters occurring in 95% or more of the resamples are highlighted. Item numbers correspond with those given in Table 1.

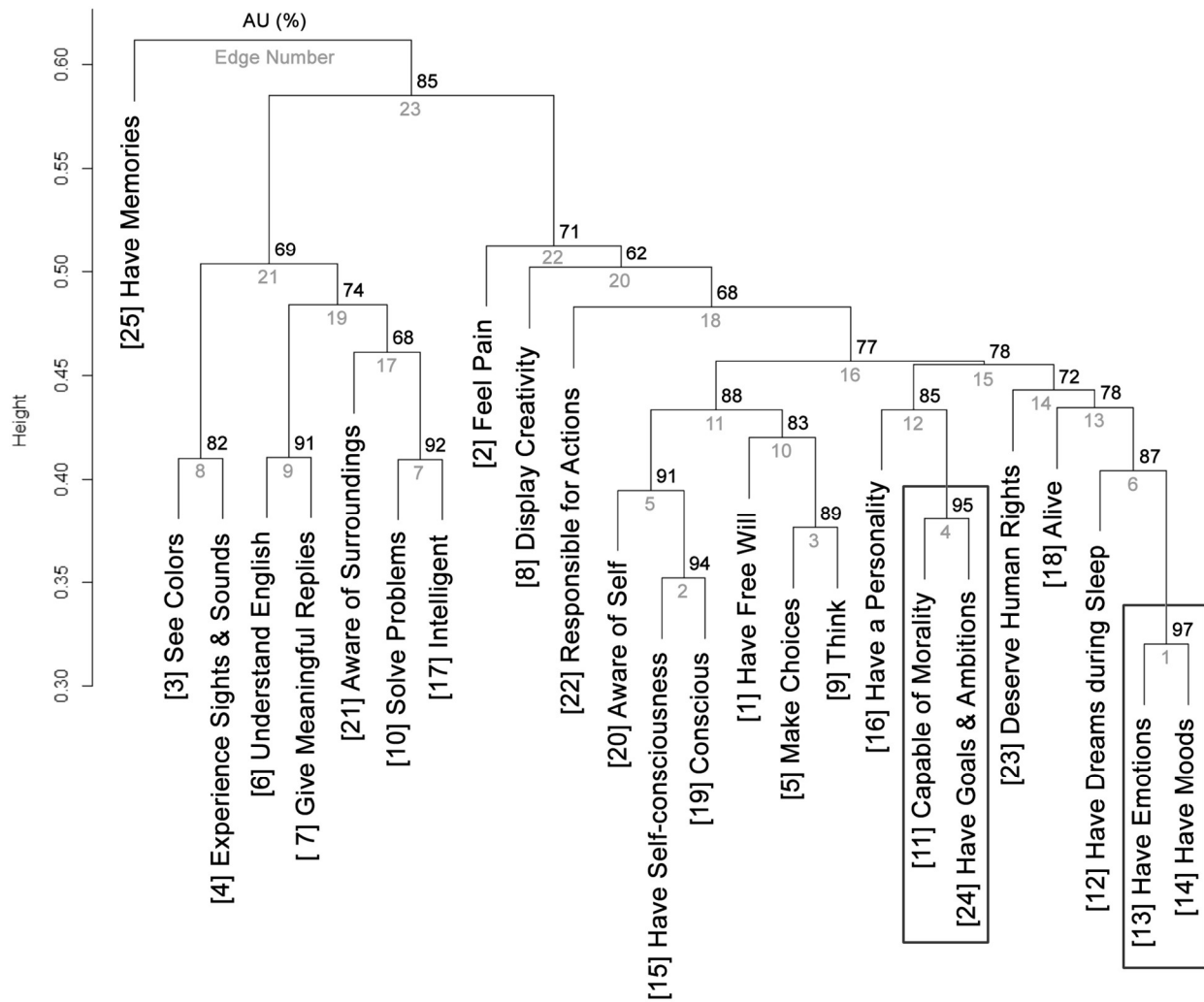


Figure 4: Dendrogram for the hierarchical cluster analysis using the average clustering method with the Spearman distance measure for participants passing the attention filter. Edge numbers are displayed below (grey) and AU values are displayed above (black). Highest-level clusters occurring in 95% or more of the resamples are highlighted. Item numbers correspond with those in Table 1.

While the differences or correlations seen in judgments about the duplicates and the various factors tested in 2.3 were generally minimal, we did observe some differences, including for factors of potential importance for testing Nahmias et al.’s (2020) hypothesis that the capacity for phenomenally conscious emotions is crucial for free will judgments. And small differences across individual items could generate larger differences in assessing patterns of responses. As such, we ran two additional hierarchical cluster analyses, following the same procedure as in the main text, but now [A] restricting to participants who passed the attention filter (N=342) and [B] applying a common set of restrictions for work in experimental philosophy on conceptual judgments—native English-speaking participants from North America with minimal training in philosophy (excluding those with a philosophy major or more advanced training; N=102). As in the main analysis, we used Ward’s method with the Euclidian distance measure as our default here. The resulting dendrograms are shown in Figures 5 and 6.

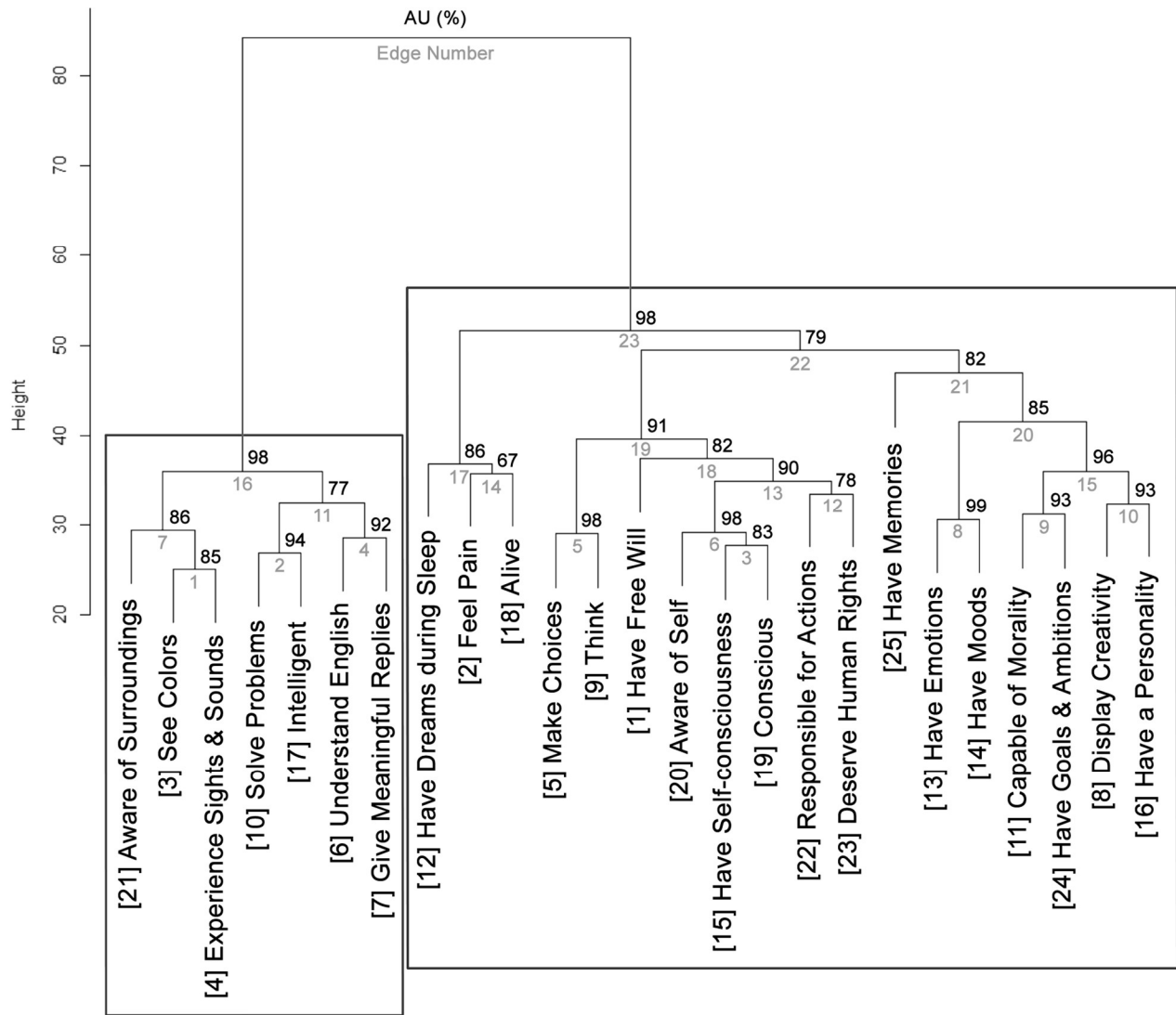


Figure 5: Dendrogram for the hierarchical cluster analysis using Ward’s method with the Euclidian distance measure for participants passing the attention filter (restrictions [A]). Edge numbers are displayed below (grey) and AU values are displayed above (black). Highest-level clusters occurring in 95% or more of the resamples are highlighted. Item numbers correspond with those given in Table 1.

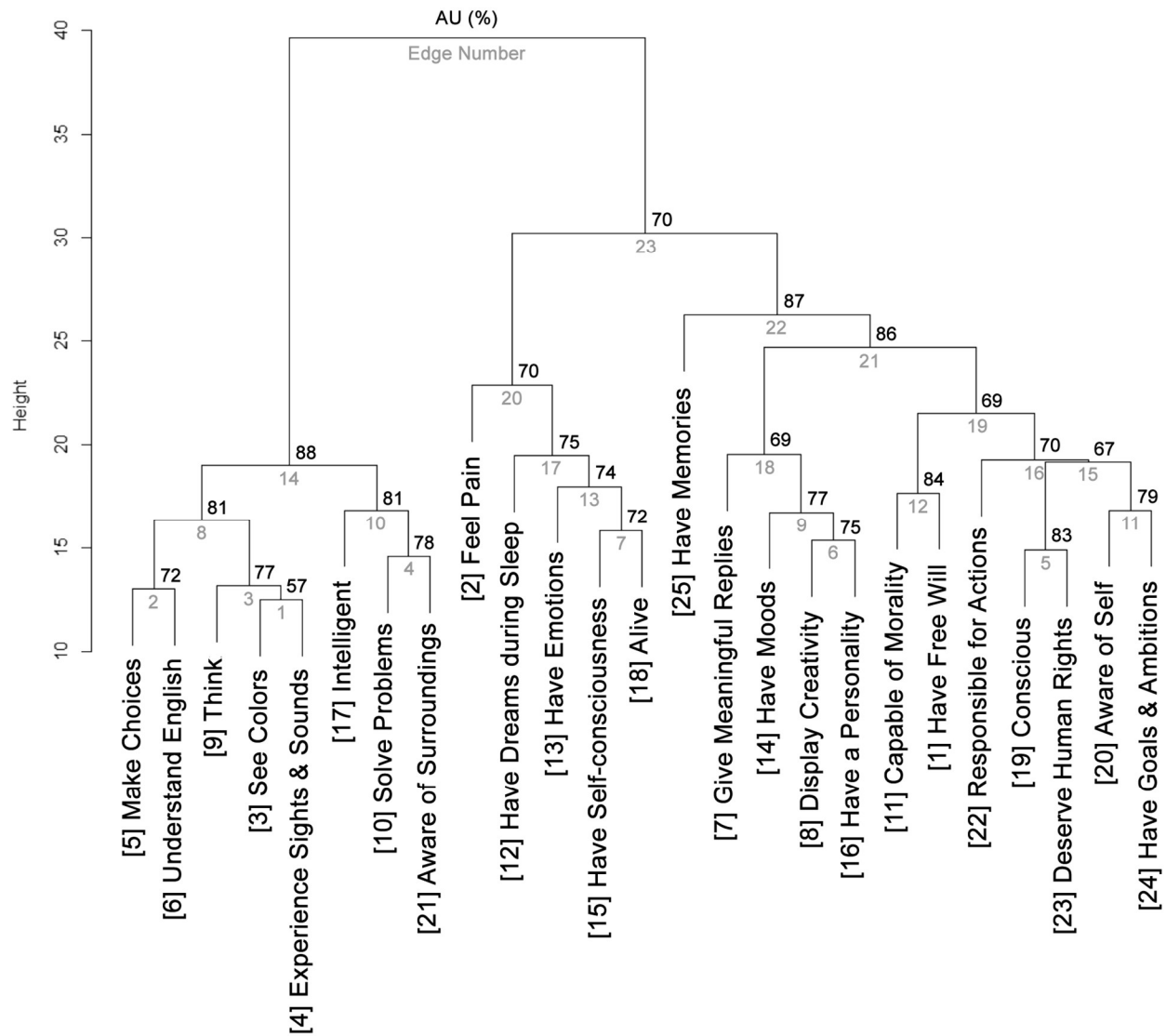


Figure 6: Dendrogram for the hierarchical cluster analysis using Ward’s method with the Euclidian distance measure for native English-speaking participants from North America with at most minimal training in philosophy (restrictions **[B]**). Edge numbers are displayed below (grey) and AU values are displayed above (black). Highest-level clusters occurring in 95% or more of the resamples are highlighted. Item numbers correspond with those given in Table 1.

While unsurprisingly there are some differences in the details of the clusters between the primary analysis in the main text and the two shown above, they again paint a similar picture, including supporting the contention that prototypical phenomenal states are not treated similarly and that having free will and having emotions are not treated especially similarly. Looking at restrictions **[A]** in more detail, we again find that **[3]** *See Colors* and **[4]** *Experience Sights and Sounds* form a low-level cluster and that **[13]** *Have Emotions* and **[14]** *Have Moods* form a low-level cluster. Further, we again find that the prototypical examples of supposed phenomenal states fall across different top-level clusters (**[3]** *See Colors* and **[4]** *Experience Sights & Sounds* in one, **[2]** *Feel Pain* in the other). Finally, we find that **[1]** *Have Free Will* did not cluster especially closely with **[13]** *Have Emotions*, with the two falling in different mid-level clusters, with **[1]** *Have Free Will* again clustering together with **[20]** *Aware of Self*, **[15]** *Have Self-consciousness*, **[19]**

Conscious, and [23] *Deserve Human Rights*, although it no longer clustered closely with [18] *Alive*, but clustered more closely with [22] *Responsible for Actions*. Similarly, focusing on [B], [3] *See Colors* and [4] *Experience Sights & Sounds* form a low-level cluster (although, interestingly, [13] *Have Emotions* and [14] *Have Moods* do not), while falling in a different top-level cluster from [2] *Feel Pain*. Again, [1] *Have Free Will* did not cluster especially closely with [13] *Have Emotions*, falling in different mid-level clusters. And [1] *Have Free Will* again clustered together with [20] *Aware of Self*, [19] *Conscious*, [23] *Deserve Human Rights*, and [22] *Responsible for Actions*, in addition to [11] *Capable of Morality* and [24] *Have Goals and Ambitions*.

References

Bolar, Kartikeya (2019). “Package ‘STAT’.” <https://cran.r-project.org/web/packages/STAT/STAT.pdf>

Everett, Jim, Cory Clark, Peter Meindl, Jamie Luguri, Brian Earp, Jesse Graham, Peter Ditto, and Azim Shariff (2021). “Political differences in free will belief are associated with differences in moralization.” *Journal of Personality and Social Psychology*, 120(2): 461–483.

Feltz, Adam and Edward Cokely (2009). “Do judgments about freedom and responsibility depend on who you are? Personality differences in intuitions about compatibilism and incompatibilism.” *Consciousness and Cognition*, 18(1): 342–350.

Feltz, Adam and Edward Cokely (2011). “Individual differences in theory-of-mind judgments: Order effects and side effects.” *Philosophical Psychology*, 24(3): 343–355.

Fischer, Eugen and Justin Sytsma (2021). “Zombie Intuitions.” *Cognition*, 215: 104807.

Frederick, Shane (2005). “Cognitive Reflection and Decision Making.” *Journal of Economic Perspectives*, 19 (4): 25–42.

Gosling, Samuel, Peter Rentfrow, and William Swann (2003). “A very brief measure of the Big-Five personality domains.” *Journal of Research in Personality*, 37 (6): 504–528.

Haigh, Matthew (2016). “Has the standard cognitive reflection test become a victim of its own success?” *Advances in Cognitive Psychology*, 12(3): 145–149.

Haug, Matthew (2018). “Fast, cheap, and unethical? The interplay of morality and methodology in crowdsourced survey research.” *Review of Philosophy and Psychology*, 9(2): 363–379.

Kim, Hyo-eun, Nina Poth, Kevin Reuter, and Justin Sytsma (2016). “Where is your pain? A cross-cultural comparison of the concept of pain in Americans and South Koreans.” *Studia Philosophica Estonica*, 9(1): 136–169.

Livengood, Jonathan and David Rose (2016). “Experimental philosophy and causal attribution.” In J. Sytsma and W. Buckwalter (eds.), *A Companion to Experimental Philosophy*, Wiley Blackwell, 434–449.

- Livengood, Jonathan, Justin Sytsma, and David Rose (2017). “Following the FAD: Folk Attributions and Theories of Actual Causation.” *Review of Philosophy and Psychology*, 8(2): 274–294.
- Machery, Edouard, Justin Sytsma, and Max Deutsch (2015). “Speaker’s reference and cross-cultural semantics.” In A. Bianchi (ed.), *On Reference*, Oxford University Press, 62–76.
- Maechler, Martin, Peter Rousseeuw, Anja Stuyf, Mia Hubert, Kurt Hornik, Matthias Studer, and Pierre Roudier (2021). “Package ‘cluster’.” <https://cran.r-project.org/web/packages/cluster/cluster.pdf>
- Murray, Dylan, Justin Sytsma, and Jonathan Livengood (2013). “God knows (but does God believe?)” *Philosophical Studies*, 166: 83–107.
- Murray, Samuel, Elise Murray, and Thomas Nadelhoffer (2021). “Piercing the smoke screen: Dualism, Free Will, and Christianity.” *Journal of Cognition and Culture*, 21: 94–111.
- Nadelhoffer, Thomas, Trevor Kvaran, and Eddy Nahmias (2009). “Temperament and intuition: A commentary on Feltz and Cokely.” *Consciousness and Cognition*, 18(1): 351–355.
- Ozdemir, Eyuphan (2021). *Empirical Evidence Against Phenomenal Theses*. PhD Dissertation, Victoria University of Wellington.
- Paulhus, Delroy and Jasmine Carey (2011). “The FAD-Plus: Measuring lay beliefs regarding free will and related constructs.” *Journal of Personality Assessment*, 93(1): 96–104.
- Reuter, Kevin, Michael Siemhold, and Justin Sytsma (2019). “Putting Pain in its Proper Place.” *Analysis*, 79(1): 72–82.
- Reuter, Kevin and Justin Sytsma (2020). “Unfelt Pain.” *Synthese*, 197: 1777–1801.
- Sytsma, Justin (2012). “Revisiting the Valence Account.” *Philosophical Topics*, 40(2): 179–198.
- Sytsma, Justin and Edouard Machery (2010). “Two conceptions of subjective experience.” *Philosophical Studies*, 151(2): 299–327.
- Sytsma, Justin and Edouard Machery (2012). “On the Relevance of Folk Intuitions: A Reply to Talbot.” *Consciousness and Cognition*, 21: 654–660.
- Sytsma, Justin and Eyuphan Ozdemir (2019). “No Problem: Evidence that the Concept of Phenomenal Consciousness is not Widespread.” *Journal of Consciousness Studies*, 26(9-10): 241–256.
- Sytsma, Justin and Kevin Reuter (2017). “Experimental Philosophy of Pain.” *Journal of Indian Council of Philosophical Research*, 34(3): 611–628.
- Suzuki, Ryota, Yoshikazu Terada, and Hidetoshi Shimodaira (2019). “Package ‘pvclust’.” <https://cran.r-project.org/web/packages/pvclust/pvclust.pdf>
- Talbot, Brian (2012). “The irrelevance of folk intuitions to the ‘hard problem’ of consciousness.” *Consciousness and Cognition*, 21(2): 644–650.

Thomson, Keela and Daniel Oppenheimer (2016). “Investigating an alternate form of the cognitive reflection test.” *Judgment and Decision Making*, 11(1): 99–113.

Ward, Joe (1963). “Hierarchical Grouping to Optimize an Objective Function.” *Journal of the American Statistical Association*, 58: 236–244.