

SUPPLEMENTAL MATERIALS FOR:
UNSUPERVISED SURVEY BOT DETECTION: IN SEARCH OF HIGH CLASSIFICATION ACCURACY

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Tables S1 and S2 provide additional details on datasets and measurement instruments included in Study 2 of the manuscript. When no citation is apparent given the codebook/documentation or links from such resources, the url for the instrument on openpsychometrics.org is provided.

The remaining Tables (S3-S6) provide full results for three classification metrics (accuracy, sensitivity, specificity) for all simulation studies (Study 1a, 1b, 1c, and Study 2).

Table S1: Information regarding datasets included in
Study 2 of the manuscript

Dataset	No. items	No. Categories	<i>N</i>	Prop. Missing
Analog to Multiple Broadband Inventories (Yarkoni, 2010)	181	7	2017	0.00
Artistic Preferences Scale (https://openpsychometrics.org/tests/APS/development/)	30	5	18575	0.00
Big Five Factor Markers (Goldberg, 1992)	50	5	1015341	0.01
Big Five Personality Test (Goldberg, 1992)	50	5	19719	0.00
Cattell's 16 Personality Factors Test (IPIP) (Conn & Rieke, 1994)	163	5	49159	0.01
Consideration of Future Consequences Scale (Strathman, Gleicher, Boninger, & Edwards, 1994)	12	5	15034	0.00
Depression Anxiety Stress Scales (Lovibond & Lovibond, 1995)	42	4	39775	0.00
Development of the Firstborn Personality Scale (https://openpsychometrics.org/tests/birthorder/development/)	26	5	41841	0.01

Development of the Multidimensional Introversion-Extraversion Scales (https://openpsychometrics.org/tests/MIES/development/)	91	5	7188	0.00
Development of the Open Sex Role Inventory (https://openpsychometrics.org/tests/OSRI/development/)	44	5	318573	0.00
Duckworth's Grit scale (Duckworth, Peterson, Matthews, & Kelly, 2007)	12	5	4270	0.00
Experiences in Close Relationships Scale (Brennan, Clark, & Shaver, 1998)	36	5	51491	0.01
Feminist Perspectives Scale (Henley, Meng, O'Brien, McCarthy, & Sockloskie, 1998)	60	5	13477	0.02
Fisher Temperament Inventory (Brown, Acevedo, & Fisher, 2013)	56	4	4967	0.00
Generic Conspiracist Beliefs Scale (Brotherton, French, & Pickering, 2013)	15	5	2495	0.00
Holland Code (RIASEC) Test (Armstrong, Allison, & Rounds, 2008)	48	5	145828	0.00
Humor Styles Questionnaire (Kuiper, 2016)	32	5	1071	0.00

(Hypersensitive Narcissism Scale) and The Dirty Dozen (Jonason & Webster, 2010)	12	5	53981	0.01
IPIP Assertiveness (http://ipip.ori.org/newCPIKey.htm#Assertiveness)	40	5	1005	0.01
Social confidence (http://ipip.ori.org/newJPI-RKey.htm#Social-Confidence)				
Adventurousness (http://ipip.ori.org/newNEOKey.htm#Adventurousness)				
and Dominance (http://ipip.ori.org/newCPIKey.htm#Dominance)				
IPIP HEXACO equivalent scales (Ashton, Lee, & Goldberg, 2007)	240	7	22786	0.00
Kentucky Inventory of Mindfulness Skills (Baer, T., & Allen, 2004)	39	5	601	0.01
Machivallianism Test (version of MACH-IV) (Christie & Geis, 1970)	20	5	73489	0.00
Multidimensional Sexual Self-Concept Questionnaire (Snell, 1995)	100	5	17685	0.02
Narcissistic Personality Inventory (Raskin & Terry, 1988)	40	2	11243	0.00

Nature Relatedness Scale (Nisbet & Zelenski, 2013)	6	5	1522	0.00
Nerdy Personality Attributes Scale http://openpsychometrics.org/tests/NPAS/development/	26	5	14955	0.00
Nonverbal Immediacy Scale (Richmond, McCroskey, & Johnson, 2003)	26	5	151864	0.00
Open Hemispheric Brain Dominance Scale https://openpsychometrics.org/tests/OHBDS/development/	20	5	29544	0.00
Protestant Work Ethic Scale (Mirels & Garrett, 1971)	19	5	1350	0.00
Right-wing Authoritarianism Scale (Altemeyer, 2007)	22	9	9881	0.00
Rosenberg Self-Esteem Scale (Rosenberg, 1965)	10	4	47974	0.00
Sexual Compulsivity Scale (Kalichman & Rompa, 1995)	10	4	3376	0.01
Short Dark Triad (Jones & Paulhus, 2014)	27	5	18192	0.00
Taylor Manifest Anxiety Scale (Taylor, 1953)	50	2	5410	0.01
Woodworth Psychoneurotic Inventory (Papurt, 1930)	116	2	6019	0.01

Table S2: Datasets excluded from Study 2

Dataset	Reason for exclusion
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Wagner Preference Inventory	Appeared to contain nominal data, not ordered categorical data.
Experimental IQ test	Items of interest coded as correct/incorrect, not Likert.
Exposure based face memory test	Main test of interest concerns whether participants recall seeing a face; not Likert-type data.
Full scale IQ test	Items of interest coded as correct/incorrect, not Likert.
Multifactor general knowledge test	Items of interest coded as correct/incorrect, not Likert.
Sentence completion survey appended to the Holland Code and Big Five personality tests	Open-ended responses are of primary interest, not Likert-type responses.
Survey asking respondents to generate random numbers attached to the Big Five personality test	Random number generation is main result of interest, not Likert-type responses.
User generated corpus of personality test	Main outcome involves participants' generated personality test items, not Likert-type responses.
Vocabulary IQ test	Items of interest coded as correct/incorrect, not Likert.
Development of the Artistic Preferences Scale	Codebook indicates that questions are from different test forms and mixed up. Procedure to align questions may not be worth the work given that a separate dataset has the final Artistic Preferences scale.

Empathizing-Systemizing Test

Columns from the two separate scales appear to be duplicates of each other.

Table S3: Results from Study 1a

n	Contam. Rate	Bot Dist.	Slope	b spread	b shift	Accuracy	Specificity	Sensitivity
100	0.05	unif	small	small	0.00	0.13	0.09	0.95
300	0.05	unif	small	small	0.00	0.12	0.07	0.95
900	0.05	unif	small	small	0.00	0.12	0.08	0.95
100	0.50	unif	small	small	0.00	0.51	0.08	0.95
300	0.50	unif	small	small	0.00	0.51	0.07	0.95
900	0.50	unif	small	small	0.00	0.51	0.08	0.95
100	0.95	unif	small	small	0.00	0.90	0.05	0.95
300	0.95	unif	small	small	0.00	0.90	0.05	0.95
900	0.95	unif	small	small	0.00	0.91	0.06	0.95
100	0.05	binom	small	small	0.00	0.13	0.09	0.95
300	0.05	binom	small	small	0.00	0.12	0.07	0.95
900	0.05	binom	small	small	0.00	0.12	0.08	0.95
100	0.50	binom	small	small	0.00	0.52	0.08	0.95
300	0.50	binom	small	small	0.00	0.51	0.08	0.95
900	0.50	binom	small	small	0.00	0.52	0.09	0.95
100	0.95	binom	small	small	0.00	0.90	0.05	0.95
300	0.95	binom	small	small	0.00	0.90	0.06	0.95
900	0.95	binom	small	small	0.00	0.91	0.06	0.95
100	0.05	unif	big	small	0.00	0.18	0.14	0.95
300	0.05	unif	big	small	0.00	0.18	0.14	0.95
900	0.05	unif	big	small	0.00	0.20	0.17	0.95
100	0.50	unif	big	small	0.00	0.53	0.10	0.95
300	0.50	unif	big	small	0.00	0.53	0.11	0.95
900	0.50	unif	big	small	0.00	0.55	0.15	0.95

100	0.95	unif	big	small	0.00	0.90	0.05	0.95
300	0.95	unif	big	small	0.00	0.90	0.05	0.95
900	0.95	unif	big	small	0.00	0.91	0.06	0.95
100	0.05	binom	big	small	0.00	0.19	0.15	0.95
300	0.05	binom	big	small	0.00	0.19	0.15	0.95
900	0.05	binom	big	small	0.00	0.22	0.18	0.95
100	0.50	binom	big	small	0.00	0.54	0.13	0.95
300	0.50	binom	big	small	0.00	0.55	0.15	0.95
900	0.50	binom	big	small	0.00	0.57	0.19	0.95
100	0.95	binom	big	small	0.00	0.90	0.05	0.95
300	0.95	binom	big	small	0.00	0.91	0.06	0.95
900	0.95	binom	big	small	0.00	0.91	0.06	0.95
100	0.05	unif	small	medium	0.00	0.40	0.37	0.95
300	0.05	unif	small	medium	0.00	0.46	0.44	0.95
900	0.05	unif	small	medium	0.00	0.54	0.52	0.95
100	0.50	unif	small	medium	0.00	0.66	0.38	0.95
300	0.50	unif	small	medium	0.00	0.71	0.47	0.95
900	0.50	unif	small	medium	0.00	0.75	0.54	0.95
100	0.95	unif	small	medium	0.00	0.91	0.08	0.95
300	0.95	unif	small	medium	0.00	0.91	0.11	0.95
900	0.95	unif	small	medium	0.00	0.91	0.17	0.95
100	0.05	binom	small	medium	0.00	0.42	0.39	0.96
300	0.05	binom	small	medium	0.00	0.48	0.45	0.95
900	0.05	binom	small	medium	0.00	0.55	0.53	0.95
100	0.50	binom	small	medium	0.00	0.70	0.45	0.95
300	0.50	binom	small	medium	0.00	0.74	0.52	0.95
900	0.50	binom	small	medium	0.00	0.76	0.57	0.95

100	0.95	binom	small	medium	0.00	0.91	0.11	0.95
300	0.95	binom	small	medium	0.00	0.91	0.18	0.95
900	0.95	binom	small	medium	0.00	0.92	0.29	0.95
100	0.05	unif	big	medium	0.00	0.84	0.83	0.95
300	0.05	unif	big	medium	0.00	0.88	0.88	0.95
900	0.05	unif	big	medium	0.00	0.91	0.90	0.95
100	0.50	unif	big	medium	0.00	0.87	0.79	0.95
300	0.50	unif	big	medium	0.00	0.91	0.87	0.95
900	0.50	unif	big	medium	0.00	0.92	0.89	0.95
100	0.95	unif	big	medium	0.00	0.91	0.16	0.95
300	0.95	unif	big	medium	0.00	0.92	0.30	0.95
900	0.95	unif	big	medium	0.00	0.93	0.51	0.95
100	0.05	binom	big	medium	0.00	0.85	0.84	0.95
300	0.05	binom	big	medium	0.00	0.89	0.89	0.95
900	0.05	binom	big	medium	0.00	0.91	0.91	0.95
100	0.50	binom	big	medium	0.00	0.90	0.84	0.95
300	0.50	binom	big	medium	0.00	0.92	0.89	0.95
900	0.50	binom	big	medium	0.00	0.93	0.91	0.95
100	0.95	binom	big	medium	0.00	0.92	0.26	0.95
300	0.95	binom	big	medium	0.00	0.93	0.52	0.95
900	0.95	binom	big	medium	0.00	0.94	0.73	0.95
100	0.05	unif	small	big	0.00	0.81	0.81	0.95
300	0.05	unif	small	big	0.00	0.87	0.86	0.95
900	0.05	unif	small	big	0.00	0.89	0.89	0.95
100	0.50	unif	small	big	0.00	0.88	0.81	0.95
300	0.50	unif	small	big	0.00	0.91	0.88	0.95
900	0.50	unif	small	big	0.00	0.93	0.90	0.95

100	0.95	unif	small	big	0.00	0.91	0.20	0.95
300	0.95	unif	small	big	0.00	0.92	0.39	0.95
900	0.95	unif	small	big	0.00	0.94	0.65	0.95
100	0.05	binom	small	big	0.00	0.82	0.82	0.95
300	0.05	binom	small	big	0.00	0.87	0.87	0.95
900	0.05	binom	small	big	0.00	0.89	0.89	0.95
100	0.50	binom	small	big	0.00	0.90	0.84	0.95
300	0.50	binom	small	big	0.00	0.92	0.89	0.95
900	0.50	binom	small	big	0.00	0.93	0.91	0.95
100	0.95	binom	small	big	0.00	0.92	0.34	0.95
300	0.95	binom	small	big	0.00	0.93	0.62	0.95
900	0.95	binom	small	big	0.00	0.94	0.80	0.95
100	0.05	unif	big	big	0.00	0.98	0.98	0.95
300	0.05	unif	big	big	0.00	0.98	0.99	0.95
900	0.05	unif	big	big	0.00	0.99	0.99	0.95
100	0.50	unif	big	big	0.00	0.97	0.98	0.95
300	0.50	unif	big	big	0.00	0.97	0.99	0.95
900	0.50	unif	big	big	0.00	0.97	0.99	0.95
100	0.95	unif	big	big	0.00	0.93	0.52	0.95
300	0.95	unif	big	big	0.00	0.94	0.82	0.95
900	0.95	unif	big	big	0.00	0.95	0.94	0.95
100	0.05	binom	big	big	0.00	0.98	0.98	0.95
300	0.05	binom	big	big	0.00	0.99	0.99	0.95
900	0.05	binom	big	big	0.00	0.99	0.99	0.95
100	0.50	binom	big	big	0.00	0.97	0.98	0.95
300	0.50	binom	big	big	0.00	0.97	0.99	0.95
900	0.50	binom	big	big	0.00	0.97	0.99	0.95

100	0.95	binom	big	big	0.00	0.94	0.73	0.95
300	0.95	binom	big	big	0.00	0.95	0.93	0.95
900	0.95	binom	big	big	0.00	0.95	0.97	0.95
100	0.05	unif	small	small	-1.00	0.14	0.10	0.95
300	0.05	unif	small	small	-1.00	0.12	0.08	0.96
900	0.05	unif	small	small	-1.00	0.12	0.07	0.95
100	0.50	unif	small	small	-1.00	0.52	0.09	0.95
300	0.50	unif	small	small	-1.00	0.52	0.09	0.95
900	0.50	unif	small	small	-1.00	0.52	0.09	0.95
100	0.95	unif	small	small	-1.00	0.91	0.06	0.95
300	0.95	unif	small	small	-1.00	0.91	0.07	0.95
900	0.95	unif	small	small	-1.00	0.91	0.08	0.95
100	0.05	binom	small	small	-1.00	0.14	0.10	0.96
300	0.05	binom	small	small	-1.00	0.13	0.08	0.95
900	0.05	binom	small	small	-1.00	0.12	0.08	0.95
100	0.50	binom	small	small	-1.00	0.52	0.10	0.95
300	0.50	binom	small	small	-1.00	0.52	0.10	0.95
900	0.50	binom	small	small	-1.00	0.52	0.10	0.95
100	0.95	binom	small	small	-1.00	0.91	0.06	0.95
300	0.95	binom	small	small	-1.00	0.91	0.08	0.95
900	0.95	binom	small	small	-1.00	0.91	0.09	0.95
100	0.05	unif	big	small	-1.00	0.17	0.13	0.95
300	0.05	unif	big	small	-1.00	0.16	0.12	0.95
900	0.05	unif	big	small	-1.00	0.18	0.14	0.95
100	0.50	unif	big	small	-1.00	0.53	0.11	0.95
300	0.50	unif	big	small	-1.00	0.53	0.11	0.95
900	0.50	unif	big	small	-1.00	0.54	0.13	0.95

100	0.95	unif	big	small	-1.00	0.91	0.06	0.95
300	0.95	unif	big	small	-1.00	0.90	0.07	0.95
900	0.95	unif	big	small	-1.00	0.91	0.09	0.95
100	0.05	binom	big	small	-1.00	0.18	0.14	0.95
300	0.05	binom	big	small	-1.00	0.17	0.13	0.95
900	0.05	binom	big	small	-1.00	0.19	0.14	0.95
100	0.50	binom	big	small	-1.00	0.54	0.13	0.95
300	0.50	binom	big	small	-1.00	0.54	0.14	0.95
900	0.50	binom	big	small	-1.00	0.56	0.17	0.95
100	0.95	binom	big	small	-1.00	0.91	0.07	0.95
300	0.95	binom	big	small	-1.00	0.91	0.08	0.95
900	0.95	binom	big	small	-1.00	0.91	0.11	0.95
100	0.05	unif	small	medium	-1.00	0.43	0.41	0.94
300	0.05	unif	small	medium	-1.00	0.45	0.43	0.95
900	0.05	unif	small	medium	-1.00	0.49	0.47	0.95
100	0.50	unif	small	medium	-1.00	0.66	0.36	0.95
300	0.50	unif	small	medium	-1.00	0.70	0.45	0.95
900	0.50	unif	small	medium	-1.00	0.74	0.52	0.95
100	0.95	unif	small	medium	-1.00	0.91	0.10	0.95
300	0.95	unif	small	medium	-1.00	0.91	0.18	0.95
900	0.95	unif	small	medium	-1.00	0.92	0.26	0.95
100	0.05	binom	small	medium	-1.00	0.45	0.42	0.95
300	0.05	binom	small	medium	-1.00	0.46	0.44	0.95
900	0.05	binom	small	medium	-1.00	0.50	0.48	0.95
100	0.50	binom	small	medium	-1.00	0.69	0.42	0.95
300	0.50	binom	small	medium	-1.00	0.73	0.50	0.95
900	0.50	binom	small	medium	-1.00	0.75	0.55	0.95

100	0.95	binom	small	medium	-1.00	0.91	0.15	0.95
300	0.95	binom	small	medium	-1.00	0.92	0.26	0.95
900	0.95	binom	small	medium	-1.00	0.92	0.36	0.95
100	0.05	unif	big	medium	-1.00	0.77	0.76	0.95
300	0.05	unif	big	medium	-1.00	0.81	0.80	0.95
900	0.05	unif	big	medium	-1.00	0.83	0.83	0.95
100	0.50	unif	big	medium	-1.00	0.83	0.70	0.95
300	0.50	unif	big	medium	-1.00	0.86	0.78	0.95
900	0.50	unif	big	medium	-1.00	0.88	0.81	0.95
100	0.95	unif	big	medium	-1.00	0.91	0.17	0.95
300	0.95	unif	big	medium	-1.00	0.92	0.35	0.95
900	0.95	unif	big	medium	-1.00	0.93	0.52	0.95
100	0.05	binom	big	medium	-1.00	0.78	0.77	0.95
300	0.05	binom	big	medium	-1.00	0.82	0.81	0.95
900	0.05	binom	big	medium	-1.00	0.84	0.83	0.95
100	0.50	binom	big	medium	-1.00	0.85	0.75	0.95
300	0.50	binom	big	medium	-1.00	0.87	0.80	0.95
900	0.50	binom	big	medium	-1.00	0.88	0.82	0.95
100	0.95	binom	big	medium	-1.00	0.92	0.31	0.95
300	0.95	binom	big	medium	-1.00	0.93	0.52	0.95
900	0.95	binom	big	medium	-1.00	0.94	0.66	0.95
100	0.05	unif	small	big	-1.00	0.82	0.82	0.95
300	0.05	unif	small	big	-1.00	0.85	0.85	0.95
900	0.05	unif	small	big	-1.00	0.87	0.87	0.95
100	0.50	unif	small	big	-1.00	0.86	0.76	0.95
300	0.50	unif	small	big	-1.00	0.89	0.83	0.95
900	0.50	unif	small	big	-1.00	0.91	0.86	0.95

100	0.95	unif	small	big	-1.00	0.91	0.23	0.95
300	0.95	unif	small	big	-1.00	0.92	0.46	0.95
900	0.95	unif	small	big	-1.00	0.93	0.64	0.95
100	0.05	binom	small	big	-1.00	0.83	0.83	0.95
300	0.05	binom	small	big	-1.00	0.86	0.86	0.95
900	0.05	binom	small	big	-1.00	0.88	0.88	0.95
100	0.50	binom	small	big	-1.00	0.88	0.80	0.95
300	0.50	binom	small	big	-1.00	0.90	0.85	0.95
900	0.50	binom	small	big	-1.00	0.91	0.87	0.95
100	0.95	binom	small	big	-1.00	0.92	0.37	0.95
300	0.95	binom	small	big	-1.00	0.93	0.63	0.95
900	0.95	binom	small	big	-1.00	0.94	0.76	0.95
100	0.05	unif	big	big	-1.00	0.96	0.96	0.95
300	0.05	unif	big	big	-1.00	0.96	0.96	0.95
900	0.05	unif	big	big	-1.00	0.97	0.97	0.95
100	0.50	unif	big	big	-1.00	0.94	0.94	0.95
300	0.50	unif	big	big	-1.00	0.95	0.95	0.95
900	0.50	unif	big	big	-1.00	0.95	0.95	0.95
100	0.95	unif	big	big	-1.00	0.93	0.50	0.95
300	0.95	unif	big	big	-1.00	0.94	0.79	0.95
900	0.95	unif	big	big	-1.00	0.95	0.90	0.95
100	0.05	binom	big	big	-1.00	0.96	0.96	0.95
300	0.05	binom	big	big	-1.00	0.97	0.97	0.95
900	0.05	binom	big	big	-1.00	0.97	0.97	0.95
100	0.50	binom	big	big	-1.00	0.95	0.95	0.95
300	0.50	binom	big	big	-1.00	0.95	0.95	0.95
900	0.50	binom	big	big	-1.00	0.95	0.96	0.95

100	0.95	binom	big	big	-1.00	0.94	0.72	0.95
300	0.95	binom	big	big	-1.00	0.95	0.89	0.95
900	0.95	binom	big	big	-1.00	0.95	0.94	0.95

Table S4: Results from Study 1b

n	Contam. Rate	Bot Dist.	Factor Correl.	Accuracy	Specificity	Sensitivity
100	0.05	unif	0.00	0.95	0.95	0.96
300	0.05	unif	0.00	0.97	0.97	0.95
900	0.05	unif	0.00	0.97	0.98	0.95
100	0.50	unif	0.00	0.95	0.94	0.95
300	0.50	unif	0.00	0.96	0.97	0.95
900	0.50	unif	0.00	0.96	0.98	0.95
100	0.95	unif	0.00	0.92	0.28	0.95
300	0.95	unif	0.00	0.93	0.53	0.95
900	0.95	unif	0.00	0.94	0.79	0.95
100	0.05	binom	0.00	0.96	0.96	0.94
300	0.05	binom	0.00	0.97	0.97	0.95
900	0.05	binom	0.00	0.97	0.98	0.95
100	0.50	binom	0.00	0.95	0.96	0.95
300	0.50	binom	0.00	0.96	0.97	0.95
900	0.50	binom	0.00	0.96	0.98	0.95
100	0.95	binom	0.00	0.92	0.43	0.95
300	0.95	binom	0.00	0.94	0.76	0.95
900	0.95	binom	0.00	0.95	0.91	0.95
100	0.05	unif	0.30	0.94	0.94	0.95
300	0.05	unif	0.30	0.96	0.96	0.95
900	0.05	unif	0.30	0.96	0.96	0.95
100	0.50	unif	0.30	0.93	0.92	0.95
300	0.50	unif	0.30	0.95	0.95	0.95
900	0.50	unif	0.30	0.96	0.96	0.95

100	0.95	unif	0.30	0.92	0.27	0.95
300	0.95	unif	0.30	0.93	0.50	0.95
900	0.95	unif	0.30	0.94	0.74	0.95
100	0.05	binom	0.30	0.94	0.94	0.95
300	0.05	binom	0.30	0.96	0.96	0.95
900	0.05	binom	0.30	0.96	0.96	0.95
100	0.50	binom	0.30	0.94	0.93	0.95
300	0.50	binom	0.30	0.95	0.96	0.95
900	0.50	binom	0.30	0.96	0.97	0.95
100	0.95	binom	0.30	0.92	0.42	0.95
300	0.95	binom	0.30	0.94	0.72	0.95
900	0.95	binom	0.30	0.95	0.87	0.95
100	0.05	unif	0.60	0.92	0.92	0.95
300	0.05	unif	0.60	0.94	0.94	0.95
900	0.05	unif	0.60	0.95	0.95	0.95
100	0.50	unif	0.60	0.92	0.89	0.95
300	0.50	unif	0.60	0.94	0.93	0.95
900	0.50	unif	0.60	0.95	0.94	0.95
100	0.95	unif	0.60	0.92	0.26	0.95
300	0.95	unif	0.60	0.93	0.49	0.95
900	0.95	unif	0.60	0.94	0.72	0.95
100	0.05	binom	0.60	0.92	0.92	0.94
300	0.05	binom	0.60	0.94	0.94	0.95
900	0.05	binom	0.60	0.95	0.95	0.95
100	0.50	binom	0.60	0.93	0.91	0.95
300	0.50	binom	0.60	0.94	0.94	0.95
900	0.50	binom	0.60	0.95	0.95	0.95

100	0.95	binom	0.60	0.92	0.42	0.95
300	0.95	binom	0.60	0.94	0.70	0.95
900	0.95	binom	0.60	0.95	0.84	0.95
100	0.05	unif	0.90	0.89	0.89	0.95
300	0.05	unif	0.90	0.92	0.92	0.95
900	0.05	unif	0.90	0.93	0.93	0.95
100	0.50	unif	0.90	0.91	0.87	0.95
300	0.50	unif	0.90	0.93	0.91	0.95
900	0.50	unif	0.90	0.94	0.92	0.95
100	0.95	unif	0.90	0.92	0.28	0.95
300	0.95	unif	0.90	0.93	0.52	0.95
900	0.95	unif	0.90	0.94	0.73	0.95
100	0.05	binom	0.90	0.90	0.90	0.94
300	0.05	binom	0.90	0.92	0.92	0.95
900	0.05	binom	0.90	0.93	0.93	0.95
100	0.50	binom	0.90	0.92	0.89	0.95
300	0.50	binom	0.90	0.93	0.92	0.95
900	0.50	binom	0.90	0.94	0.93	0.95
100	0.95	binom	0.90	0.92	0.45	0.95
300	0.95	binom	0.90	0.94	0.72	0.95
900	0.95	binom	0.90	0.95	0.84	0.95

Table S5: Results from Study 1c

n	Contam. Rate	Bot Dist.	# Items	# Factors	Accuracy	Specificity	Sensitivity
100	0.05	unif	6.00	1	0.48	0.45	0.96
300	0.05	unif	6.00	1	0.50	0.48	0.96
900	0.05	unif	6.00	1	0.51	0.49	0.96
100	0.50	unif	6.00	1	0.68	0.40	0.96
300	0.50	unif	6.00	1	0.70	0.45	0.96
900	0.50	unif	6.00	1	0.71	0.47	0.96
100	0.95	unif	6.00	1	0.91	0.06	0.96
300	0.95	unif	6.00	1	0.91	0.11	0.96
900	0.95	unif	6.00	1	0.92	0.16	0.96
100	0.05	binom	6.00	1	0.49	0.46	0.96
300	0.05	binom	6.00	1	0.50	0.48	0.96
900	0.05	binom	6.00	1	0.51	0.49	0.96
100	0.50	binom	6.00	1	0.70	0.44	0.96
300	0.50	binom	6.00	1	0.71	0.47	0.96
900	0.50	binom	6.00	1	0.72	0.48	0.96
100	0.95	binom	6.00	1	0.92	0.09	0.96
300	0.95	binom	6.00	1	0.92	0.16	0.96
900	0.95	binom	6.00	1	0.93	0.27	0.96
100	0.05	unif	12.00	1	0.72	0.70	0.95
300	0.05	unif	12.00	1	0.75	0.74	0.95
900	0.05	unif	12.00	1	0.77	0.76	0.95
100	0.50	unif	12.00	1	0.80	0.66	0.95
300	0.50	unif	12.00	1	0.84	0.72	0.95
900	0.50	unif	12.00	1	0.85	0.74	0.95

100	0.95	unif	12.00	1	0.91	0.16	0.95
300	0.95	unif	12.00	1	0.92	0.26	0.95
900	0.95	unif	12.00	1	0.93	0.45	0.95
100	0.05	binom	12.00	1	0.73	0.71	0.95
300	0.05	binom	12.00	1	0.76	0.75	0.96
900	0.05	binom	12.00	1	0.77	0.76	0.95
100	0.50	binom	12.00	1	0.83	0.70	0.95
300	0.50	binom	12.00	1	0.85	0.74	0.95
900	0.50	binom	12.00	1	0.85	0.75	0.95
100	0.95	binom	12.00	1	0.91	0.23	0.95
300	0.95	binom	12.00	1	0.93	0.43	0.95
900	0.95	binom	12.00	1	0.93	0.61	0.95
100	0.05	unif	18.00	1	0.79	0.79	0.96
300	0.05	unif	18.00	1	0.83	0.82	0.95
900	0.05	unif	18.00	1	0.85	0.84	0.95
100	0.50	unif	18.00	1	0.85	0.75	0.95
300	0.50	unif	18.00	1	0.88	0.80	0.95
900	0.50	unif	18.00	1	0.89	0.83	0.95
100	0.95	unif	18.00	1	0.91	0.20	0.95
300	0.95	unif	18.00	1	0.92	0.41	0.95
900	0.95	unif	18.00	1	0.93	0.61	0.95
100	0.05	binom	18.00	1	0.80	0.79	0.95
300	0.05	binom	18.00	1	0.83	0.83	0.95
900	0.05	binom	18.00	1	0.85	0.84	0.95
100	0.50	binom	18.00	1	0.87	0.78	0.95
300	0.50	binom	18.00	1	0.89	0.82	0.95
900	0.50	binom	18.00	1	0.89	0.83	0.95

100	0.95	binom	18.00	1	0.92	0.35	0.95
300	0.95	binom	18.00	1	0.93	0.59	0.95
900	0.95	binom	18.00	1	0.94	0.73	0.95
100	0.05	unif	6.00	2	0.48	0.45	0.95
300	0.05	unif	6.00	2	0.49	0.47	0.95
900	0.05	unif	6.00	2	0.50	0.47	0.96
100	0.50	unif	6.00	2	0.69	0.43	0.96
300	0.50	unif	6.00	2	0.71	0.46	0.96
900	0.50	unif	6.00	2	0.71	0.47	0.96
100	0.95	unif	6.00	2	0.91	0.07	0.96
300	0.95	unif	6.00	2	0.92	0.14	0.96
900	0.95	unif	6.00	2	0.92	0.22	0.96
100	0.05	binom	6.00	2	0.48	0.45	0.97
300	0.05	binom	6.00	2	0.49	0.47	0.96
900	0.05	binom	6.00	2	0.50	0.47	0.96
100	0.50	binom	6.00	2	0.71	0.45	0.96
300	0.50	binom	6.00	2	0.71	0.47	0.96
900	0.50	binom	6.00	2	0.72	0.48	0.96
100	0.95	binom	6.00	2	0.92	0.13	0.96
300	0.95	binom	6.00	2	0.92	0.22	0.96
900	0.95	binom	6.00	2	0.93	0.32	0.96
100	0.05	unif	12.00	2	0.79	0.78	0.95
300	0.05	unif	12.00	2	0.82	0.81	0.95
900	0.05	unif	12.00	2	0.83	0.82	0.95
100	0.50	unif	12.00	2	0.84	0.73	0.95
300	0.50	unif	12.00	2	0.88	0.80	0.95
900	0.50	unif	12.00	2	0.89	0.83	0.95

100	0.95	unif	12.00	2	0.91	0.13	0.95
300	0.95	unif	12.00	2	0.91	0.23	0.95
900	0.95	unif	12.00	2	0.92	0.39	0.95
100	0.05	binom	12.00	2	0.80	0.79	0.95
300	0.05	binom	12.00	2	0.82	0.82	0.95
900	0.05	binom	12.00	2	0.83	0.83	0.95
100	0.50	binom	12.00	2	0.86	0.77	0.95
300	0.50	binom	12.00	2	0.89	0.83	0.95
900	0.50	binom	12.00	2	0.90	0.84	0.95
100	0.95	binom	12.00	2	0.91	0.22	0.95
300	0.95	binom	12.00	2	0.92	0.40	0.95
900	0.95	binom	12.00	2	0.93	0.59	0.95
100	0.05	unif	18.00	2	0.87	0.87	0.95
300	0.05	unif	18.00	2	0.90	0.90	0.95
900	0.05	unif	18.00	2	0.91	0.91	0.95
100	0.50	unif	18.00	2	0.89	0.83	0.95
300	0.50	unif	18.00	2	0.92	0.89	0.95
900	0.50	unif	18.00	2	0.93	0.91	0.95
100	0.95	unif	18.00	2	0.91	0.21	0.95
300	0.95	unif	18.00	2	0.92	0.39	0.95
900	0.95	unif	18.00	2	0.93	0.61	0.95
100	0.05	binom	18.00	2	0.88	0.88	0.95
300	0.05	binom	18.00	2	0.90	0.90	0.95
900	0.05	binom	18.00	2	0.91	0.91	0.95
100	0.50	binom	18.00	2	0.91	0.86	0.95
300	0.50	binom	18.00	2	0.93	0.90	0.95
900	0.50	binom	18.00	2	0.93	0.91	0.95

100	0.95	binom	18.00	2	0.92	0.33	0.95
300	0.95	binom	18.00	2	0.93	0.59	0.95
900	0.95	binom	18.00	2	0.94	0.76	0.95
100	0.05	unif	6.00	3	0.37	0.34	0.96
300	0.05	unif	6.00	3	0.38	0.35	0.96
900	0.05	unif	6.00	3	0.39	0.36	0.96
100	0.50	unif	6.00	3	0.64	0.32	0.96
300	0.50	unif	6.00	3	0.66	0.37	0.96
900	0.50	unif	6.00	3	0.67	0.38	0.96
100	0.95	unif	6.00	3	0.91	0.06	0.96
300	0.95	unif	6.00	3	0.91	0.09	0.96
900	0.95	unif	6.00	3	0.91	0.13	0.96
100	0.05	binom	6.00	3	0.38	0.34	0.96
300	0.05	binom	6.00	3	0.39	0.36	0.96
900	0.05	binom	6.00	3	0.39	0.36	0.96
100	0.50	binom	6.00	3	0.66	0.37	0.96
300	0.50	binom	6.00	3	0.68	0.39	0.96
900	0.50	binom	6.00	3	0.68	0.40	0.96
100	0.95	binom	6.00	3	0.92	0.09	0.96
300	0.95	binom	6.00	3	0.92	0.14	0.96
900	0.95	binom	6.00	3	0.92	0.21	0.96
100	0.05	unif	12.00	3	0.76	0.75	0.94
300	0.05	unif	12.00	3	0.79	0.78	0.95
900	0.05	unif	12.00	3	0.80	0.79	0.95
100	0.50	unif	12.00	3	0.81	0.67	0.95
300	0.50	unif	12.00	3	0.86	0.76	0.95
900	0.50	unif	12.00	3	0.87	0.80	0.95

100	0.95	unif	12.00	3	0.91	0.13	0.95
300	0.95	unif	12.00	3	0.91	0.21	0.95
900	0.95	unif	12.00	3	0.92	0.37	0.95
100	0.05	binom	12.00	3	0.77	0.76	0.95
300	0.05	binom	12.00	3	0.79	0.78	0.95
900	0.05	binom	12.00	3	0.80	0.80	0.95
100	0.50	binom	12.00	3	0.84	0.73	0.95
300	0.50	binom	12.00	3	0.87	0.79	0.95
900	0.50	binom	12.00	3	0.88	0.82	0.95
100	0.95	binom	12.00	3	0.91	0.20	0.95
300	0.95	binom	12.00	3	0.92	0.36	0.95
900	0.95	binom	12.00	3	0.93	0.53	0.95
100	0.05	unif	18.00	3	0.90	0.90	0.96
300	0.05	unif	18.00	3	0.93	0.92	0.95
900	0.05	unif	18.00	3	0.93	0.93	0.95
100	0.50	unif	18.00	3	0.90	0.85	0.95
300	0.50	unif	18.00	3	0.93	0.91	0.95
900	0.50	unif	18.00	3	0.94	0.93	0.95
100	0.95	unif	18.00	3	0.91	0.19	0.95
300	0.95	unif	18.00	3	0.92	0.34	0.95
900	0.95	unif	18.00	3	0.93	0.55	0.95
100	0.05	binom	18.00	3	0.91	0.90	0.95
300	0.05	binom	18.00	3	0.93	0.93	0.95
900	0.05	binom	18.00	3	0.93	0.93	0.95
100	0.50	binom	18.00	3	0.92	0.89	0.95
300	0.50	binom	18.00	3	0.94	0.93	0.95
900	0.50	binom	18.00	3	0.95	0.94	0.95

100	0.95	binom	18.00	3	0.92	0.29	0.95
300	0.95	binom	18.00	3	0.93	0.54	0.95
900	0.95	binom	18.00	3	0.94	0.74	0.95

Table S6: Results from Study 2

instrument	nitem	ncat	contam	botdist	acc	spec	sens
Analog to Multiple Broadband Inventories (181)	181	7	0.05	unif	0.99	1.00	0.95
Artistic Preferences Scale (30)	30	5	0.05	unif	0.79	0.78	0.95
Big Five Factor Markers (50)	50	5	0.05	unif	0.95	0.95	0.95
Big Five Personality Test (50)	50	5	0.05	unif	0.97	0.97	0.95
Cattell's 16 Personality Factors Test (IPIP)- Answer (163)	163	5	0.05	unif	0.97	0.97	0.95
Consideration of Future Consequences Scale (12)	12	5	0.05	unif	0.62	0.60	0.95
Depression Anxiety Stress Scales (42)	42	4	0.05	unif	0.70	0.69	0.95
Development of the Firstborn Personality Scale (26)	26	5	0.05	unif	0.81	0.80	0.95
Development of the Multidimensional Introversion- Extraversion Scales (91)	91	5	0.05	unif	0.99	0.99	0.95
development of the Open Sex Role Inventory (44)	44	5	0.05	unif	0.89	0.88	0.95
Duckworth's Grit scale (12)	12	5	0.05	unif	0.57	0.55	0.95
Experiences in Close Relationships Scale (36)	36	5	0.05	unif	0.92	0.92	0.95
Feminist Perspectives Scale (Diversity of Feminist Atti- tudes) (60)	60	5	0.05	unif	0.97	0.97	0.95
Fisher Temperament Inventory (56)	56	4	0.05	unif	0.93	0.93	0.95

Generic Conspiracist Beliefs Scale (15)	15	5	0.05	unif	0.65	0.63	0.95
Holland Code (RIASEC) Test (48)	48	5	0.05	unif	0.91	0.90	0.95
Humor Styles Questionnaire (32)	32	5	0.05	unif	0.94	0.94	0.95
Hypersensitive Narcissism Scale and The Dirty Dozen (12)	12	5	0.05	unif	0.46	0.44	0.95
IPIP Assertiveness, Social confidence, Adventurousness, and Dominance scales (40)	40	5	0.05	unif	0.97	0.97	0.95
IPIP HEXACO equivalent scales (240)	240	7	0.05	unif	0.99	0.99	0.95
Kentucky Inventory of Mindfulness Skills (39)	39	5	0.05	unif	0.92	0.91	0.95
Machivallianism Test (version of MACH-IV) (20)	20	5	0.05	unif	0.78	0.77	0.95
Multidimensional Sexual Self-Concept Questionnaire (100)	100	5	0.05	unif	0.98	0.98	0.95
Narcissistic Personality Inventory (version from Raskin and Terry) (40)	40	2	0.05	unif	0.74	0.73	0.95
Nature Relatedness Scale (6)	6	5	0.05	unif	0.11	0.07	0.96
Nerdy Personality Attributes Scale (26)	26	5	0.05	unif	0.72	0.71	0.95
Nonverbal Immediacy Scale (26)	26	5	0.05	unif	0.97	0.97	0.94
Open Hemispheric Brain Dominance Scale (20)	20	5	0.05	unif	0.56	0.54	0.95
Protestant Work Ethic Scale (19)	19	5	0.05	unif	0.77	0.76	0.95
Right-wing Authoritarianism Scale (22)	22	9	0.05	unif	0.92	0.92	0.95
Rosenberg Self-Esteem Scale (10)	10	4	0.05	unif	0.65	0.63	0.95

Sexual Compulsivity Scale (Kalichman and Rompa) (10)	10	4	0.05	unif	0.29	0.25	0.95
Short Dark Triad - Answers (27)	27	5	0.05	unif	0.86	0.86	0.95
Taylor Manifest Anxiety Scale (50)	50	2	0.05	unif	0.75	0.74	0.95
Woodworth Psychoneurotic Inventory (116)	116	2	0.05	unif	0.98	0.98	0.95
Analog to Multiple Broadband Inventories (181)	181	7	0.25	unif	0.99	1.00	0.95
Artistic Preferences Scale (30)	30	5	0.25	unif	0.78	0.72	0.95
Big Five Factor Markers (50)	50	5	0.25	unif	0.94	0.94	0.95
Big Five Personality Test (50)	50	5	0.25	unif	0.95	0.95	0.95
Cattell's 16 Personality Factors Test (IPIP)- Answer (163)	163	5	0.25	unif	0.96	0.97	0.95
Consideration of Future Consequences Scale (12)	12	5	0.25	unif	0.67	0.58	0.95
Depression Anxiety Stress Scales (42)	42	4	0.25	unif	0.67	0.58	0.95
Development of the Firstborn Personality Scale (26)	26	5	0.25	unif	0.77	0.71	0.95
Development of the Multidimensional Introversion- Extraversion Scales (91)	91	5	0.25	unif	0.97	0.98	0.95
development of the Open Sex Role Inventory (44)	44	5	0.25	unif	0.84	0.80	0.95
Duckworth's Grit scale (12)	12	5	0.25	unif	0.63	0.52	0.95
Experiences in Close Relationships Scale (36)	36	5	0.25	unif	0.90	0.88	0.95
Feminist Perspectives Scale (Diversity of Feminist Atti- tudes) (60)	60	5	0.25	unif	0.97	0.97	0.95

Fisher Temperament Inventory (56)	56	4	0.25	unif	0.87	0.84	0.95
Generic Conspiracist Beliefs Scale (15)	15	5	0.25	unif	0.67	0.58	0.95
Holland Code (RIASEC) Test (48)	48	5	0.25	unif	0.88	0.86	0.95
Humor Styles Questionnaire (32)	32	5	0.25	unif	0.93	0.92	0.95
Hypersensitive Narcissism Scale and The Dirty Dozen (12)	12	5	0.25	unif	0.51	0.36	0.95
IPIP Assertiveness, Social confidence, Adventurousness, and Dominance scales (40)	40	5	0.25	unif	0.95	0.95	0.95
IPIP HEXACO equivalent scales (240)	240	7	0.25	unif	0.98	0.99	0.95
Kentucky Inventory of Mindfulness Skills (39)	39	5	0.25	unif	0.89	0.87	0.95
Machivallianism Test (version of MACH-IV) (20)	20	5	0.25	unif	0.79	0.74	0.95
Multidimensional Sexual Self-Concept Questionnaire (100)	100	5	0.25	unif	0.96	0.97	0.95
Narcissistic Personality Inventory (version from Raskin and Terry) (40)	40	2	0.25	unif	0.71	0.63	0.95
Nature Relatedness Scale (6)	6	5	0.25	unif	0.28	0.05	0.95
Nerdy Personality Attributes Scale (26)	26	5	0.25	unif	0.70	0.61	0.95
Nonverbal Immediacy Scale (26)	26	5	0.25	unif	0.95	0.96	0.95
Open Hemispheric Brain Dominance Scale (20)	20	5	0.25	unif	0.59	0.47	0.95
Protestant Work Ethic Scale (19)	19	5	0.25	unif	0.75	0.68	0.95
Right-wing Authoritarianism Scale (22)	22	9	0.25	unif	0.94	0.93	0.95

Rosenberg Self-Esteem Scale (10)	10	4	0.25	unif	0.69	0.60	0.95
Sexual Compulsivity Scale (Kalichman and Rompa) (10)	10	4	0.25	unif	0.36	0.16	0.95
Short Dark Triad - Answers (27)	27	5	0.25	unif	0.84	0.81	0.95
Taylor Manifest Anxiety Scale (50)	50	2	0.25	unif	0.73	0.65	0.95
Woodworth Psychoneurotic Inventory (116)	116	2	0.25	unif	0.96	0.96	0.95
Analog to Multiple Broadband Inventories (181)	181	7	0.5	unif	0.97	1.00	0.95
Artistic Preferences Scale (30)	30	5	0.5	unif	0.80	0.64	0.95
Big Five Factor Markers (50)	50	5	0.5	unif	0.93	0.91	0.95
Big Five Personality Test (50)	50	5	0.5	unif	0.94	0.92	0.95
Cattell's 16 Personality Factors Test (IPIP)- Answer (163)	163	5	0.5	unif	0.96	0.96	0.95
Consideration of Future Consequences Scale (12)	12	5	0.5	unif	0.75	0.55	0.95
Depression Anxiety Stress Scales (42)	42	4	0.5	unif	0.71	0.47	0.95
Development of the Firstborn Personality Scale (26)	26	5	0.5	unif	0.77	0.58	0.95
Development of the Multidimensional Introversion- Extraversion Scales (91)	91	5	0.5	unif	0.95	0.95	0.95
development of the Open Sex Role Inventory (44)	44	5	0.5	unif	0.83	0.70	0.95
Duckworth's Grit scale (12)	12	5	0.5	unif	0.72	0.48	0.95
Experiences in Close Relationships Scale (36)	36	5	0.5	unif	0.90	0.84	0.95

Feminist Perspectives Scale (Diversity of Feminist Attitudes) (60)	60	5	0.5	unif	0.96	0.97	0.95
Fisher Temperament Inventory (56)	56	4	0.5	unif	0.84	0.74	0.95
Generic Conspiracist Beliefs Scale (15)	15	5	0.5	unif	0.72	0.50	0.95
Holland Code (RIASEC) Test (48)	48	5	0.5	unif	0.88	0.80	0.95
Humor Styles Questionnaire (32)	32	5	0.5	unif	0.92	0.88	0.95
Hypersensitive Narcissism Scale and The Dirty Dozen (12)	12	5	0.5	unif	0.62	0.28	0.95
IPIP Assertiveness, Social confidence, Adventurousness, and Dominance scales (40)	40	5	0.5	unif	0.93	0.92	0.95
IPIP HEXACO equivalent scales (240)	240	7	0.5	unif	0.97	0.99	0.95
Kentucky Inventory of Mindfulness Skills (39)	39	5	0.5	unif	0.88	0.81	0.95
Machivallianism Test (version of MACH-IV) (20)	20	5	0.5	unif	0.83	0.70	0.95
Multidimensional Sexual Self-Concept Questionnaire (100)	100	5	0.5	unif	0.95	0.96	0.95
Narcissistic Personality Inventory (version from Raskin and Terry) (40)	40	2	0.5	unif	0.78	0.61	0.95
Nature Relatedness Scale (6)	6	5	0.5	unif	0.50	0.05	0.95
Nerdy Personality Attributes Scale (26)	26	5	0.5	unif	0.71	0.46	0.95
Nonverbal Immediacy Scale (26)	26	5	0.5	unif	0.94	0.92	0.95
Open Hemispheric Brain Dominance Scale (20)	20	5	0.5	unif	0.66	0.37	0.95

Protestant Work Ethic Scale (19)	19	5	0.5	unif	0.77	0.59	0.95
Right-wing Authoritarianism Scale (22)	22	9	0.5	unif	0.94	0.93	0.95
Rosenberg Self-Esteem Scale (10)	10	4	0.5	unif	0.75	0.54	0.95
Sexual Compulsivity Scale (Kalichman and Rompa) (10)	10	4	0.5	unif	0.54	0.13	0.95
Short Dark Triad - Answers (27)	27	5	0.5	unif	0.84	0.72	0.95
Taylor Manifest Anxiety Scale (50)	50	2	0.5	unif	0.79	0.62	0.95
Woodworth Psychoneurotic Inventory (116)	116	2	0.5	unif	0.94	0.92	0.95
Analog to Multiple Broadband Inventories (181)	181	7	0.75	unif	0.96	0.99	0.95
Artistic Preferences Scale (30)	30	5	0.75	unif	0.85	0.54	0.95
Big Five Factor Markers (50)	50	5	0.75	unif	0.92	0.84	0.95
Big Five Personality Test (50)	50	5	0.75	unif	0.93	0.85	0.95
Cattell's 16 Personality Factors Test (IPIP)- Answer (163)	163	5	0.75	unif	0.95	0.95	0.95
Consideration of Future Consequences Scale (12)	12	5	0.75	unif	0.83	0.48	0.95
Depression Anxiety Stress Scales (42)	42	4	0.75	unif	0.81	0.38	0.95
Development of the Firstborn Personality Scale (26)	26	5	0.75	unif	0.82	0.45	0.95
Development of the Multidimensional Introversion- Extraversion Scales (91)	91	5	0.75	unif	0.94	0.89	0.95
development of the Open Sex Role Inventory (44)	44	5	0.75	unif	0.86	0.59	0.95
Duckworth's Grit scale (12)	12	5	0.75	unif	0.81	0.37	0.95

Experiences in Close Relationships Scale (36)	36	5	0.75	unif	0.90	0.73	0.95
Feminist Perspectives Scale (Diversity of Feminist Attitudes) (60)	60	5	0.75	unif	0.95	0.96	0.95
Fisher Temperament Inventory (56)	56	4	0.75	unif	0.87	0.63	0.95
Generic Conspiracist Beliefs Scale (15)	15	5	0.75	unif	0.81	0.38	0.95
Holland Code (RIASEC) Test (48)	48	5	0.75	unif	0.88	0.68	0.95
Humor Styles Questionnaire (32)	32	5	0.75	unif	0.91	0.80	0.95
Hypersensitive Narcissism Scale and The Dirty Dozen (12)	12	5	0.75	unif	0.77	0.22	0.95
IPIP Assertiveness, Social confidence, Adventurousness, and Dominance scales (40)	40	5	0.75	unif	0.92	0.85	0.95
IPIP HEXACO equivalent scales (240)	240	7	0.75	unif	0.96	0.99	0.95
Kentucky Inventory of Mindfulness Skills (39)	39	5	0.75	unif	0.88	0.67	0.95
Machivallianism Test (version of MACH-IV) (20)	20	5	0.75	unif	0.87	0.64	0.95
Multidimensional Sexual Self-Concept Questionnaire (100)	100	5	0.75	unif	0.95	0.94	0.95
Narcissistic Personality Inventory (version from Raskin and Terry) (40)	40	2	0.75	unif	0.87	0.63	0.95
Nature Relatedness Scale (6)	6	5	0.75	unif	0.72	0.03	0.96
Nerdy Personality Attributes Scale (26)	26	5	0.75	unif	0.78	0.28	0.95
Nonverbal Immediacy Scale (26)	26	5	0.75	unif	0.92	0.84	0.95

Open Hemispheric Brain Dominance Scale (20)	20	5	0.75	unif	0.78	0.26	0.95
Protestant Work Ethic Scale (19)	19	5	0.75	unif	0.82	0.45	0.95
Right-wing Authoritarianism Scale (22)	22	9	0.75	unif	0.94	0.91	0.95
Rosenberg Self-Esteem Scale (10)	10	4	0.75	unif	0.81	0.37	0.95
Sexual Compulsivity Scale (Kalichman and Rompa) (10)	10	4	0.75	unif	0.75	0.15	0.95
Short Dark Triad - Answers (27)	27	5	0.75	unif	0.86	0.58	0.95
Taylor Manifest Anxiety Scale (50)	50	2	0.75	unif	0.87	0.64	0.95
Woodworth Psychoneurotic Inventory (116)	116	2	0.75	unif	0.93	0.86	0.95
Analog to Multiple Broadband Inventories (181)	181	7	0.95	unif	0.94	0.82	0.95
Artistic Preferences Scale (30)	30	5	0.95	unif	0.91	0.21	0.95
Big Five Factor Markers (50)	50	5	0.95	unif	0.93	0.53	0.95
Big Five Personality Test (50)	50	5	0.95	unif	0.93	0.55	0.95
Cattell's 16 Personality Factors Test (IPIP)- Answer (163)	163	5	0.95	unif	0.94	0.73	0.95
Consideration of Future Consequences Scale (12)	12	5	0.95	unif	0.91	0.17	0.95
Depression Anxiety Stress Scales (42)	42	4	0.95	unif	0.91	0.19	0.95
Development of the Firstborn Personality Scale (26)	26	5	0.95	unif	0.91	0.18	0.95
Development of the Multidimensional Introversion- Extraversion Scales (91)	91	5	0.95	unif	0.93	0.56	0.95
development of the Open Sex Role Inventory (44)	44	5	0.95	unif	0.92	0.24	0.95

Duckworth's Grit scale (12)	12	5	0.95	unif	0.91	0.12	0.95
Experiences in Close Relationships Scale (36)	36	5	0.95	unif	0.92	0.30	0.95
Feminist Perspectives Scale (Diversity of Feminist Attitudes) (60)	60	5	0.95	unif	0.95	0.88	0.95
Fisher Temperament Inventory (56)	56	4	0.95	unif	0.92	0.29	0.95
Generic Conspiracist Beliefs Scale (15)	15	5	0.95	unif	0.91	0.19	0.95
Holland Code (RIASEC) Test (48)	48	5	0.95	unif	0.92	0.37	0.95
Humor Styles Questionnaire (32)	32	5	0.95	unif	0.93	0.52	0.95
Hypersensitive Narcissism Scale and The Dirty Dozen (12)	12	5	0.95	unif	0.91	0.09	0.95
IPIP Assertiveness, Social confidence, Adventurousness, and Dominance scales (40)	40	5	0.95	unif	0.93	0.62	0.95
IPIP HEXACO equivalent scales (240)	240	7	0.95	unif	0.94	0.80	0.95
Kentucky Inventory of Mindfulness Skills (39)	39	5	0.95	unif	0.92	0.33	0.95
Machivallianism Test (version of MACH-IV) (20)	20	5	0.95	unif	0.92	0.31	0.95
Multidimensional Sexual Self-Concept Questionnaire (100)	100	5	0.95	unif	0.94	0.71	0.95
Narcissistic Personality Inventory (version from Raskin and Terry) (40)	40	2	0.95	unif	0.92	0.43	0.95
Nature Relatedness Scale (6)	6	5	0.95	unif	0.91	0.02	0.95
Nerdy Personality Attributes Scale (26)	26	5	0.95	unif	0.91	0.09	0.95

Nonverbal Immediacy Scale (26)	26	5	0.95	unif	0.93	0.49	0.95
Open Hemispheric Brain Dominance Scale (20)	20	5	0.95	unif	0.91	0.09	0.95
Protestant Work Ethic Scale (19)	19	5	0.95	unif	0.91	0.14	0.95
Right-wing Authoritarianism Scale (22)	22	9	0.95	unif	0.95	0.86	0.95
Rosenberg Self-Esteem Scale (10)	10	4	0.95	unif	0.91	0.10	0.95
Sexual Compulsivity Scale (Kalichman and Rompa) (10)	10	4	0.95	unif	0.91	0.08	0.95
Short Dark Triad - Answers (27)	27	5	0.95	unif	0.91	0.20	0.95
Taylor Manifest Anxiety Scale (50)	50	2	0.95	unif	0.92	0.44	0.95
Woodworth Psychoneurotic Inventory (116)	116	2	0.95	unif	0.94	0.71	0.95
Analog to Multiple Broadband Inventories (181)	181	7	0.05	binom	1.00	1.00	0.95
Artistic Preferences Scale (30)	30	5	0.05	binom	0.80	0.79	0.95
Big Five Factor Markers (50)	50	5	0.05	binom	0.96	0.96	0.95
Big Five Personality Test (50)	50	5	0.05	binom	0.97	0.97	0.95
Cattell's 16 Personality Factors Test (IPIP)- Answer (163)	163	5	0.05	binom	0.97	0.97	0.95
Consideration of Future Consequences Scale (12)	12	5	0.05	binom	0.62	0.61	0.95
Depression Anxiety Stress Scales (42)	42	4	0.05	binom	0.74	0.72	0.95
Development of the Firstborn Personality Scale (26)	26	5	0.05	binom	0.83	0.82	0.95
Development of the Multidimensional Introversion- Extraversion Scales (91)	91	5	0.05	binom	0.99	0.99	0.95

development of the Open Sex Role Inventory (44)	44	5	0.05	binom	0.89	0.89	0.95
Duckworth's Grit scale (12)	12	5	0.05	binom	0.58	0.56	0.95
Experiences in Close Relationships Scale (36)	36	5	0.05	binom	0.93	0.93	0.95
Feminist Perspectives Scale (Diversity of Feminist Attitudes) (60)	60	5	0.05	binom	0.98	0.98	0.95
Fisher Temperament Inventory (56)	56	4	0.05	binom	0.94	0.94	0.95
Generic Conspiracist Beliefs Scale (15)	15	5	0.05	binom	0.66	0.64	0.95
Holland Code (RIASEC) Test (48)	48	5	0.05	binom	0.92	0.92	0.95
Humor Styles Questionnaire (32)	32	5	0.05	binom	0.94	0.94	0.96
Hypersensitive Narcissism Scale and The Dirty Dozen (12)	12	5	0.05	binom	0.48	0.46	0.95
IPIP Assertiveness, Social confidence, Adventurousness, and Dominance scales (40)	40	5	0.05	binom	0.97	0.97	0.95
IPIP HEXACO equivalent scales (240)	240	7	0.05	binom	0.99	0.99	0.95
Kentucky Inventory of Mindfulness Skills (39)	39	5	0.05	binom	0.93	0.93	0.95
Machivallianism Test (version of MACH-IV) (20)	20	5	0.05	binom	0.79	0.78	0.95
Multidimensional Sexual Self-Concept Questionnaire (100)	100	5	0.05	binom	0.98	0.98	0.95
Narcissistic Personality Inventory (version from Raskin and Terry) (40)	40	2	0.05	binom	0.79	0.79	0.95
Nature Relatedness Scale (6)	6	5	0.05	binom	0.11	0.07	0.96

Nerdy Personality Attributes Scale (26)	26	5	0.05	binom	0.74	0.73	0.95
Nonverbal Immediacy Scale (26)	26	5	0.05	binom	0.98	0.98	0.95
Open Hemispheric Brain Dominance Scale (20)	20	5	0.05	binom	0.57	0.55	0.95
Protestant Work Ethic Scale (19)	19	5	0.05	binom	0.78	0.78	0.95
Right-wing Authoritarianism Scale (22)	22	9	0.05	binom	0.92	0.92	0.95
Rosenberg Self-Esteem Scale (10)	10	4	0.05	binom	0.67	0.65	0.95
Sexual Compulsivity Scale (Kalichman and Rompa) (10)	10	4	0.05	binom	0.31	0.28	0.95
Short Dark Triad - Answers (27)	27	5	0.05	binom	0.88	0.87	0.95
Taylor Manifest Anxiety Scale (50)	50	2	0.05	binom	0.78	0.77	0.95
Woodworth Psychoneurotic Inventory (116)	116	2	0.05	binom	0.98	0.98	0.95
Analog to Multiple Broadband Inventories (181)	181	7	0.25	binom	0.99	1.00	0.95
Artistic Preferences Scale (30)	30	5	0.25	binom	0.82	0.77	0.95
Big Five Factor Markers (50)	50	5	0.25	binom	0.95	0.95	0.95
Big Five Personality Test (50)	50	5	0.25	binom	0.96	0.97	0.95
Cattell's 16 Personality Factors Test (IPIP)- Answer (163)	163	5	0.25	binom	0.97	0.97	0.95
Consideration of Future Consequences Scale (12)	12	5	0.25	binom	0.69	0.60	0.95
Depression Anxiety Stress Scales (42)	42	4	0.25	binom	0.74	0.67	0.95
Development of the Firstborn Personality Scale (26)	26	5	0.25	binom	0.82	0.78	0.95

Development of the Multidimensional Introversion- Extraversion Scales (91)	91	5	0.25	binom	0.98	0.99	0.95
development of the Open Sex Role Inventory (44)	44	5	0.25	binom	0.88	0.86	0.95
Duckworth's Grit scale (12)	12	5	0.25	binom	0.65	0.54	0.95
Experiences in Close Relationships Scale (36)	36	5	0.25	binom	0.93	0.92	0.95
Feminist Perspectives Scale (Diversity of Feminist Atti- tudes) (60)	60	5	0.25	binom	0.97	0.98	0.95
Fisher Temperament Inventory (56)	56	4	0.25	binom	0.92	0.90	0.95
Generic Conspiracist Beliefs Scale (15)	15	5	0.25	binom	0.71	0.63	0.95
Holland Code (RIASEC) Test (48)	48	5	0.25	binom	0.91	0.90	0.95
Humor Styles Questionnaire (32)	32	5	0.25	binom	0.94	0.94	0.95
Hypersensitive Narcissism Scale and The Dirty Dozen (12)	12	5	0.25	binom	0.56	0.43	0.95
IPIP Assertiveness, Social confidence, Adventurousness, and Dominance scales (40)	40	5	0.25	binom	0.96	0.97	0.95
IPIP HEXACO equivalent scales (240)	240	7	0.25	binom	0.98	0.99	0.95
Kentucky Inventory of Mindfulness Skills (39)	39	5	0.25	binom	0.93	0.92	0.95
Machivallianism Test (version of MACH-IV) (20)	20	5	0.25	binom	0.81	0.77	0.95
Multidimensional Sexual Self-Concept Questionnaire (100)	100	5	0.25	binom	0.97	0.98	0.95

Narcissistic Personality Inventory (version from Raskin and Terry) (40)	40	2	0.25	binom	0.76	0.69	0.95
Nature Relatedness Scale (6)	6	5	0.25	binom	0.29	0.06	0.96
Nerdy Personality Attributes Scale (26)	26	5	0.25	binom	0.76	0.70	0.95
Nonverbal Immediacy Scale (26)	26	5	0.25	binom	0.97	0.98	0.95
Open Hemispheric Brain Dominance Scale (20)	20	5	0.25	binom	0.63	0.52	0.95
Protestant Work Ethic Scale (19)	19	5	0.25	binom	0.79	0.74	0.95
Right-wing Authoritarianism Scale (22)	22	9	0.25	binom	0.93	0.93	0.95
Rosenberg Self-Esteem Scale (10)	10	4	0.25	binom	0.71	0.63	0.95
Sexual Compulsivity Scale (Kalichman and Rompa) (10)	10	4	0.25	binom	0.41	0.23	0.95
Short Dark Triad - Answers (27)	27	5	0.25	binom	0.88	0.86	0.95
Taylor Manifest Anxiety Scale (50)	50	2	0.25	binom	0.75	0.68	0.95
Woodworth Psychoneurotic Inventory (116)	116	2	0.25	binom	0.96	0.97	0.95
Analog to Multiple Broadband Inventories (181)	181	7	0.5	binom	0.97	1.00	0.95
Artistic Preferences Scale (30)	30	5	0.5	binom	0.84	0.73	0.95
Big Five Factor Markers (50)	50	5	0.5	binom	0.95	0.94	0.95
Big Five Personality Test (50)	50	5	0.5	binom	0.95	0.95	0.95
Cattell's 16 Personality Factors Test (IPIP)- Answer (163)	163	5	0.5	binom	0.96	0.97	0.95
Consideration of Future Consequences Scale (12)	12	5	0.5	binom	0.77	0.58	0.95

Depression Anxiety Stress Scales (42)	42	4	0.5	binom	0.77	0.58	0.95
Development of the Firstborn Personality Scale (26)	26	5	0.5	binom	0.83	0.71	0.95
Development of the Multidimensional Introversion- Extraversion Scales (91)	91	5	0.5	binom	0.96	0.97	0.95
development of the Open Sex Role Inventory (44)	44	5	0.5	binom	0.87	0.79	0.95
Duckworth's Grit scale (12)	12	5	0.5	binom	0.74	0.52	0.95
Experiences in Close Relationships Scale (36)	36	5	0.5	binom	0.92	0.90	0.95
Feminist Perspectives Scale (Diversity of Feminist Atti- tudes) (60)	60	5	0.5	binom	0.96	0.98	0.95
Fisher Temperament Inventory (56)	56	4	0.5	binom	0.90	0.84	0.95
Generic Conspiracist Beliefs Scale (15)	15	5	0.5	binom	0.77	0.59	0.95
Holland Code (RIASEC) Test (48)	48	5	0.5	binom	0.91	0.88	0.95
Humor Styles Questionnaire (32)	32	5	0.5	binom	0.94	0.92	0.95
Hypersensitive Narcissism Scale and The Dirty Dozen (12)	12	5	0.5	binom	0.66	0.38	0.95
IPIP Assertiveness, Social confidence, Adventurousness, and Dominance scales (40)	40	5	0.5	binom	0.95	0.95	0.95
IPIP HEXACO equivalent scales (240)	240	7	0.5	binom	0.97	0.99	0.95
Kentucky Inventory of Mindfulness Skills (39)	39	5	0.5	binom	0.92	0.89	0.95
Machivallianism Test (version of MACH-IV) (20)	20	5	0.5	binom	0.85	0.74	0.95

Multidimensional Sexual Self-Concept Questionnaire (100)	100	5	0.5	binom	0.96	0.97	0.95
Narcissistic Personality Inventory (version from Raskin and Terry) (40)	40	2	0.5	binom	0.80	0.65	0.95
Nature Relatedness Scale (6)	6	5	0.5	binom	0.51	0.06	0.96
Nerdy Personality Attributes Scale (26)	26	5	0.5	binom	0.79	0.63	0.95
Nonverbal Immediacy Scale (26)	26	5	0.5	binom	0.96	0.96	0.95
Open Hemispheric Brain Dominance Scale (20)	20	5	0.5	binom	0.71	0.47	0.95
Protestant Work Ethic Scale (19)	19	5	0.5	binom	0.82	0.68	0.95
Right-wing Authoritarianism Scale (22)	22	9	0.5	binom	0.94	0.93	0.95
Rosenberg Self-Esteem Scale (10)	10	4	0.5	binom	0.77	0.60	0.95
Sexual Compulsivity Scale (Kalichman and Rompa) (10)	10	4	0.5	binom	0.56	0.18	0.95
Short Dark Triad - Answers (27)	27	5	0.5	binom	0.88	0.81	0.95
Taylor Manifest Anxiety Scale (50)	50	2	0.5	binom	0.79	0.63	0.95
Woodworth Psychoneurotic Inventory (116)	116	2	0.5	binom	0.95	0.94	0.95
Analog to Multiple Broadband Inventories (181)	181	7	0.75	binom	0.96	0.99	0.95
Artistic Preferences Scale (30)	30	5	0.75	binom	0.88	0.65	0.95
Big Five Factor Markers (50)	50	5	0.75	binom	0.94	0.90	0.95
Big Five Personality Test (50)	50	5	0.75	binom	0.94	0.92	0.95
Cattell's 16 Personality Factors Test (IPIP)- Answer (163)	163	5	0.75	binom	0.95	0.96	0.95

Consideration of Future Consequences Scale (12)	12	5	0.75	binom	0.85	0.55	0.95
Depression Anxiety Stress Scales (42)	42	4	0.75	binom	0.83	0.48	0.95
Development of the Firstborn Personality Scale (26)	26	5	0.75	binom	0.86	0.59	0.95
Development of the Multidimensional Introversion- Extraversion Scales (91)	91	5	0.75	binom	0.95	0.94	0.95
development of the Open Sex Role Inventory (44)	44	5	0.75	binom	0.89	0.69	0.95
Duckworth's Grit scale (12)	12	5	0.75	binom	0.83	0.48	0.95
Experiences in Close Relationships Scale (36)	36	5	0.75	binom	0.92	0.84	0.95
Feminist Perspectives Scale (Diversity of Feminist Atti- tudes) (60)	60	5	0.75	binom	0.96	0.97	0.95
Fisher Temperament Inventory (56)	56	4	0.75	binom	0.90	0.75	0.95
Generic Conspiracist Beliefs Scale (15)	15	5	0.75	binom	0.84	0.51	0.95
Holland Code (RIASEC) Test (48)	48	5	0.75	binom	0.91	0.80	0.95
Humor Styles Questionnaire (32)	32	5	0.75	binom	0.93	0.88	0.95
Hypersensitive Narcissism Scale and The Dirty Dozen (12)	12	5	0.75	binom	0.79	0.30	0.95
IPIP Assertiveness, Social confidence, Adventurousness, and Dominance scales (40)	40	5	0.75	binom	0.94	0.91	0.95
IPIP HEXACO equivalent scales (240)	240	7	0.75	binom	0.96	0.99	0.95
Kentucky Inventory of Mindfulness Skills (39)	39	5	0.75	binom	0.91	0.80	0.95

Machivallianism Test (version of MACH-IV) (20)	20	5	0.75	binom	0.89	0.71	0.95
Multidimensional Sexual Self-Concept Questionnaire (100)	100	5	0.75	binom	0.95	0.96	0.95
Narcissistic Personality Inventory (version from Raskin and Terry) (40)	40	2	0.75	binom	0.87	0.64	0.95
Nature Relatedness Scale (6)	6	5	0.75	binom	0.73	0.04	0.96
Nerdy Personality Attributes Scale (26)	26	5	0.75	binom	0.83	0.47	0.95
Nonverbal Immediacy Scale (26)	26	5	0.75	binom	0.94	0.92	0.95
Open Hemispheric Brain Dominance Scale (20)	20	5	0.75	binom	0.81	0.37	0.95
Protestant Work Ethic Scale (19)	19	5	0.75	binom	0.86	0.57	0.95
Right-wing Authoritarianism Scale (22)	22	9	0.75	binom	0.94	0.92	0.95
Rosenberg Self-Esteem Scale (10)	10	4	0.75	binom	0.85	0.53	0.95
Sexual Compulsivity Scale (Kalichman and Rompa) (10)	10	4	0.75	binom	0.75	0.16	0.95
Short Dark Triad - Answers (27)	27	5	0.75	binom	0.89	0.72	0.95
Taylor Manifest Anxiety Scale (50)	50	2	0.75	binom	0.88	0.65	0.95
Woodworth Psychoneurotic Inventory (116)	116	2	0.75	binom	0.94	0.91	0.95
Analog to Multiple Broadband Inventories (181)	181	7	0.95	binom	0.95	0.92	0.95
Artistic Preferences Scale (30)	30	5	0.95	binom	0.92	0.40	0.95
Big Five Factor Markers (50)	50	5	0.95	binom	0.94	0.73	0.95
Big Five Personality Test (50)	50	5	0.95	binom	0.94	0.73	0.95

Cattell's 16 Personality Factors Test (IPIP)- Answer (163)	163	5	0.95	binom	0.94	0.84	0.95
Consideration of Future Consequences Scale (12)	12	5	0.95	binom	0.92	0.36	0.95
Depression Anxiety Stress Scales (42)	42	4	0.95	binom	0.92	0.29	0.95
Development of the Firstborn Personality Scale (26)	26	5	0.95	binom	0.92	0.34	0.95
Development of the Multidimensional Introversion- Extraversion Scales (91)	91	5	0.95	binom	0.94	0.71	0.95
development of the Open Sex Role Inventory (44)	44	5	0.95	binom	0.92	0.41	0.95
Duckworth's Grit scale (12)	12	5	0.95	binom	0.91	0.22	0.95
Experiences in Close Relationships Scale (36)	36	5	0.95	binom	0.93	0.53	0.95
Feminist Perspectives Scale (Diversity of Feminist Atti- tudes) (60)	60	5	0.95	binom	0.95	0.93	0.95
Fisher Temperament Inventory (56)	56	4	0.95	binom	0.93	0.47	0.95
Generic Conspiracist Beliefs Scale (15)	15	5	0.95	binom	0.92	0.34	0.95
Holland Code (RIASEC) Test (48)	48	5	0.95	binom	0.93	0.52	0.95
Humor Styles Questionnaire (32)	32	5	0.95	binom	0.94	0.73	0.95
Hypersensitive Narcissism Scale and The Dirty Dozen (12)	12	5	0.95	binom	0.91	0.17	0.95
IPIP Assertiveness, Social confidence, Adventurousness, and Dominance scales (40)	40	5	0.95	binom	0.94	0.77	0.95
IPIP HEXACO equivalent scales (240)	240	7	0.95	binom	0.95	0.91	0.95

Kentucky Inventory of Mindfulness Skills (39)	39	5	0.95	binom	0.93	0.53	0.95
Machivallianism Test (version of MACH-IV) (20)	20	5	0.95	binom	0.93	0.51	0.95
Multidimensional Sexual Self-Concept Questionnaire (100)	100	5	0.95	binom	0.94	0.83	0.95
Narcissistic Personality Inventory (version from Raskin and Terry) (40)	40	2	0.95	binom	0.93	0.58	0.95
Nature Relatedness Scale (6)	6	5	0.95	binom	0.91	0.03	0.96
Nerdy Personality Attributes Scale (26)	26	5	0.95	binom	0.91	0.16	0.95
Nonverbal Immediacy Scale (26)	26	5	0.95	binom	0.94	0.72	0.95
Open Hemispheric Brain Dominance Scale (20)	20	5	0.95	binom	0.91	0.14	0.95
Protestant Work Ethic Scale (19)	19	5	0.95	binom	0.92	0.29	0.95
Right-wing Authoritarianism Scale (22)	22	9	0.95	binom	0.95	0.88	0.95
Rosenberg Self-Esteem Scale (10)	10	4	0.95	binom	0.91	0.20	0.95
Sexual Compulsivity Scale (Kalichman and Rompa) (10)	10	4	0.95	binom	0.91	0.13	0.95
Short Dark Triad - Answers (27)	27	5	0.95	binom	0.92	0.40	0.95
Taylor Manifest Anxiety Scale (50)	50	2	0.95	binom	0.93	0.57	0.95
Woodworth Psychoneurotic Inventory (116)	116	2	0.95	binom	0.94	0.76	0.95

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