

Bóthe, B. et al: **Identification and comprehensive characterization of moral disapproval and dysregulation-based pornography-use profiles across 42 countries**

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Online Supplemental Materials

Preliminary Measurement Models

Analyses and Model Evaluation

Prior to our main analyses, preliminary measurement models were estimated to verify the psychometric properties of the multi-item measures used in this study and obtain factor scores for the main analyses. In comparison to manifest scale scores (such as averages or sums of items forming a scale), factor scores preserve the nature of the underlying measurement model while also providing a partial level of control for measurement error (and unreliability) present at the item level (Morin, 2023; Skrondal & Laake, 2001).

Unless stated otherwise, the majority of the multi-item measures were represented with a first-order confirmatory factor analytic (CFA) model in which items were specified to load on their corresponding factors. Problematic pornography use was represented with a higher-order CFA model in which the six first-order factors (i.e., salience, mood modification, conflict, tolerance, relapse, withdrawal) were used to define higher-order problematic pornography use latent factor (Bóthe et al., 2018). The attractive person-related desire factor of the sexual desire measure was only defined by two items, thus creating a locally under-identified factor even though the model remains globally identified. To address this issue, similar to previous work (Tóth-Király et al., 2021), essentially tau-equivalent constraints (ETECs; Little et al., 1999) were used to achieve the local identification of this factor by putting equality constraints on the factor loadings, thus assuming that the two items were equivalent indicators of the underlying factor. Finally, following previous applications (Gillet et al., 2019; Tóth-Király et al., 2018), the measure of basic psychological need satisfaction was represented with a first-order exploratory structural equation model (ESEM; Morin, 2023). Compared to CFA, ESEM models allow the free estimation of all cross-loadings, resulting in more accurate factor definitions and correlations (Asparouhov et al.,

2015; Morin et al., 2019) as well as associations with external criterion variables (Mai et al., 2018).

Given the number of measurement models, it was not possible to estimate them in a single model. As a result, two sets of models were created based on theoretical considerations. The first set included pornography-use-related (e.g., pornography use motivations) and sexuality-related characteristics (e.g., sexual distress), while the second set included measures of psychological characteristics (e.g., impulsivity).

Analyses were conducted with Mplus 8.8 (Muthén & Muthén, 2022) and the weighted least squares mean- and variance-adjusted estimator (WLSMV) which has been found to be superior to maximum-likelihood estimation for ordered-categorical items, particularly when the response categories follow asymmetric thresholds (see Finney & DiStefano, 2013 for a review). The measurement models were evaluated using commonly used goodness-of-fit indices (Hu & Bentler, 1999; Marsh et al., 2005): the comparative fit index (CFI), the Tucker-Lewis Index (TLI), and the root mean square error of approximation (RMSEA). CFI and TLI values are typically considered to be adequate or excellent when they are above .90 and .95, respectively. RMSEA values are considered to be adequate or excellent below .08 and .06, respectively. As the chi-square test (χ^2) is known to be oversensitive to model misspecifications and sample size (Marsh et al., 2005), it is simply reported for the sake of transparency, but not used in model evaluation. When evaluating the factors, we assessed their factor definition (i.e., the average factor loading per factor) and calculated model-based omega composite reliability indices (McDonald, 1970).

Results

Goodness-of-fit indices associated with the preliminary measurement models are reported in Table S2 and showed that both sets of models displayed an adequate level of fit ($CFI \geq .937$, $TLI \geq .932$, $RMSEA \leq .052$). Parameter estimates are reported in Table S3 (first

set of models), Table S4 (CFAs from the second set of models), and Table S5 (ESEM from the second set of models). Across all models, factor definitions ranged from .496 (anankasticism) to .927 (relapse) with the average factor definition across all factors being $M_{\lambda} = .769$. Their reliability ranged from .568 (anankasticism) to .967 (sexual satisfaction) with the average composite reliability being $M_{\omega} = .859$. Altogether, these results supported the adequacy of our factors. As a result, factor scores (with $M = 0$ and $SD = 1$) were saved from these measurement models for the main analyses. Descriptive statistics for each pornography use-related, sexuality-related, and psychological variable are presented in Table S6. Correlations between these variables can be seen in Table S7. Fit statistics for the latent profile analyses are included in Table S8.

Table S1. *Hypothesized Differences between Pornography-Use Profiles.*

Variables	Hypothesized differences between the different pornography-use profiles based on the findings of previous profile-analytic studies
Sociodemographic characteristics	
Gender (being a man as a reference group)	P1 < P2, P3, P4, P5
Sexual orientation	Mixed findings
Age	P1 > P2, P4, P5, no hypothesis about P3
Relationship status	Mixed findings
Religious affiliation	No previous profile-analytic findings – exploratory analysis
Country of residence	No previous profile-analytic findings – exploratory analysis
Pornography use-related characteristics	
Age at first pornography use	P1 > P2, P3, P4, P5
Duration of pornography use per session	P1, P3 < P2, P4, P5
Pornography use motivations	No previous profile-analytic findings – exploratory analysis
Past-year pornography-use frequency	P1, P3 < P2, P4, P5
Problematic pornography use	P1, P2, P3 < P4, P5
Moral disapproval of pornography	P1, P2, P4 < P3, P5
Past treatment-seeking for pornography use	No previous profile-analytic findings – exploratory analysis
Current treatment-seeking for pornography use	No previous profile-analytic findings – exploratory analysis
Sexuality-related characteristics	
Past-year masturbation frequency	No previous profile-analytic findings – exploratory analysis
Past-year sexual frequency (total)	No previous profile-analytic findings – exploratory analysis
Past-year sexual frequency (romantic partner)	No previous profile-analytic findings – exploratory analysis
Sexual satisfaction	P1 > P2 > P3, P4, P5
Sexual desire	No previous profile-analytic findings – exploratory analysis
Sexual function	Mixed findings
Sexual distress	No previous profile-analytic findings – exploratory analysis
Psychological and psychiatric characteristics	
Religiosity	No previous profile-analytic findings – exploratory analysis
Impulsivity	P1 < P2 < P4, no hypotheses about P3 and P5
Compulsivity	P1 < P2 < P4, no hypotheses about P3 and P5
Basic psychological needs	P1 < P2 < P4, no hypotheses about P3 and P5
Depressive symptoms	P1 < P2 < P4, no hypotheses about P3 and P5
Anxiety symptoms	No previous profile-analytic findings – exploratory analysis
Adult attention deficit hyperactivity disorder	P1 < P2 < P4, no hypotheses about P3 and P5
Alcohol use disorder	No previous profile-analytic findings – exploratory analysis
Substance use	No previous profile-analytic findings – exploratory analysis

Note. P1 = low-frequency, non-problematic use profile; P2 = high-frequency, non-problematic

use profile; P3 = low-frequency, pornography problems due to moral incongruence profile; P4

= high-frequency, problematic pornography use profile; and P5 = high-frequency, problematic

pornography use with moral incongruence profile.

Table S2. *Goodness-of-Fit Statistics for the Estimated Models*

	χ^2	df	CFI	TLI	RMSEA [90% CI]
Pornography- and sexuality-related characteristics model	388,997.857*	2,100	.937	.932	.052 [.052, .053]
Psychological characteristics model	282,372.621*	3,905	.947	.942	.033 [.033, .033]

Note. * $p < .01$; χ^2 : Robust chi-square test of exact fit; df: Degrees of freedom; CFI:

Comparative fit index; TLI: Tucker-Lewis index; RMSEA: Root mean square error of approximation; 90% CI: 90% confidence interval of the RMSEA.

Table S3. *Standardized Parameter Estimates from the First Measurement Model*

	PUMS: SPL		PUMS: SCU		PUMS: FAN		PUMS: BAV		PUMS: LSS		PUMS: EDS		PUMS: SRE		PUMS: SEX		GMSEX		SDS	
	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ
Item 1	.665	.558	.778	.395	.821	.326	.833	.306	.920	.153	.865	.252	.879	.228	.833	.306	.942	.112	.836	.301
Item 2	.711	.494	.861	.259	.847	.282	.900	.189	.954	.090	.904	.183	.898	.193	.873	.238	.929	.137	.844	.287
Item 3	.929	.136	.927	.141	.945	.106	.962	.075	.825	.320	.941	.115	.878	.229	.883	.219	.944	.109	.830	.312
Item 4																	.908	.176		
Item 5																	.893	.203		
FD	.768		.855		.871		.898		.900		.903		.885		.863		.923		.837	
ω	.817		.892		.905		.927		.928		.930		.916		.898		.967		.875	
	PPCS: SAL		PPCS: MMO		PPCS: CON		PPCS: TOL		PPCS: REL		PPCS: WIT		SDI-2: PRD		SDI-2: SOD		SDI-2: ARD		ASEX	
	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ
Item 1	.836	.301	.893	.202	.772	.405	.917	.159	.921	.151	.876	.233	.776	.399	.797	.365	.901	.188	.899	.192
Item 2	.810	.345	.891	.206	.868	.246	.939	.118	.909	.175	.910	.173	.789	.378	.905	.181	.901	.188	.806	.351
Item 3	.825	.320	.836	.302	.898	.193	.747	.442	.952	.093	.900	.190	.752	.434	.774	.401			.547	.700
Item 4													.608	.630	.863	.255			.511	.739
Item 5													.825	.319					.426	.819
Item 6													.651	.576						
Item 7													.787	.381						
FD	.824		.873		.846		.868		.927		.895		.741		.835		.835		.638	
ω	.863		.906		.884		.904		.949		.924		.896		.903		.903		.784	

Note. λ : factor loading; δ : item uniqueness; FD: factor definition; ω ; model-based omega composite reliability index; PUMS: Pornography Use

Motivations Scale; SPL: sexual pleasure; SCU: sexual curiosity; FAN: fantasy; BAV: boredom avoidance; LSS: lack of sexual satisfaction;

EDS: emotional distraction/suppression; SRE: stress reduction; SEX: self-exploration; GMSEX: Global Measure of Sexual Satisfaction; SDS:

Sexual Distress Scale; PPCS: Problematic Pornography consumption Scale; SAL: salience; MMO: mood modification; CON: conflict; TOL:

tolerance; REL: relapse; WIT: withdrawal; SDI-2: Sexual Desire Inventory-2; PRD: partner-related desire; SOD: solitary desire; ARD: attractive

person-related desire; ASEX: Arizona Sexual Experience Scale. All factor loadings are standardized factor loadings and statistically significant

at $p < .001$.

Table S4. *Standardized Parameter Estimates from the Second Measurement Model from Confirmatory Factor Analyses*

	UPPS-P: LPR		UPPS-P: PUR		UPPS-P: SEN		UPPS-P: NUR		UPPS-P: LPE		COMP: PER		COMP: ANA	
	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ
Item 1	.704	.504	.728	.470	.742	.449	.800	.361	.656	.570	.698	.513	.509	.741
Item 2	.846	.284	.617	.620	.770	.407	.628	.606	.871	.242	.633	.599	.554	.694
Item 3	.853	.273	.897	.196	.682	.534	.860	.261	.826	.317	.532	.717	.345	.881
Item 4	.700	.510	.507	.742	.745	.444	.697	.515	.859	.262	.496	.754	.575	.670
FD	.776		.687		.735		.746		.803		.590		.496	
ω	.860		.788		.825		.836		.881		.683		.568	
	REL		BSI: ANX		BSI: DEP		ADHD		AUD: ACO		AUD: APR		SUB	
	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ	λ	δ
Item 1	.944	.110	.830	.311	.665	.557	.672	.548	.854	.271	.846	.284	.599	.641
Item 2	.961	.076	.885	.216	.781	.390	.762	.419	.680	.538	.832	.307	.903	.184
Item 3	.838	.298	.856	.267	.827	.316	.715	.489	.836	.301	.672	.548	.625	.609
Item 4			.815	.336	.817	.332	.584	.659			.828	.315	.722	.479
Item 5			.851	.276	.849	.279	.539	.709			.816	.334	.716	.487
Item 6			.772	.404	.943	.111	.373	.861			.582	.661	.499	.751
Item 7											.665	.558	.415	.828
Item 8													.680	.538
Item 9													.455	.793
Item 10													.214	.954
FD	.914		.835		.814		.608		.790		.749		.583	
ω	.940		.933		.923		.783		.835		.901		.844	

Note. λ : factor loading; δ : item uniqueness; FD: factor definition; ω ; model-based omega composite reliability index; UPPS-P: Short UPPS-P

Impulsive Behavior Scale; LPR: lack of premeditation; PUR: positive urgency; SEN: sensation seeking; NUR: negative urgency; LPE: lack of perseverance; COMP: Compulsive Personality Assessment Scale; PER: perfectionism; ANA: anankasticism; REL: religiosity; BSI: Brief Symptom Inventory; ANX: anxiety symptoms; DEP: depressive symptoms; ADHD: Adult ADHD Self-Report Scale; AUD: Alcohol Use Disorders Identification Test; ACO: alcohol consumption; APR: alcohol problems; SUB: Alcohol, Smoking, and Substance Involvement Screening Test. All factor loadings are standardized factor loadings and statistically significant at $p < .001$.

Table S5. *Standardized Parameter Estimates from the Second Measurement Model from Exploratory Structural Equation Models*

	BPN: ASA (λ)	BPN: RSA (λ)	BPN: CSA (λ)	BPN: AFR (λ)	BPN: RFR (λ)	BPN: CFR (λ)	δ
Item 1	.368**	.145**	.179**	-.289**	.068**	.096**	.543
Item 2	.881**	-.125**	.025**	.070**	-.105**	.004	.305
Item 3	.837**	-.072**	.057**	.047**	-.114**	.083**	.351
Item 4	.475**	.184**	.081**	-.160**	.206**	-.099**	.487
Item 5	.079**	.516**	-.042**	.017**	-.253**	-.045**	.456
Item 6	-.044**	.849**	.083**	.025**	-.032**	-.002	.253
Item 7	-.040**	.871**	.069**	.011**	-.038**	-.023**	.191
Item 8	.106**	.538**	.119**	-.061**	-.221**	.173**	.429
Item 9	.052**	.045**	.697**	-.016**	-.069**	-.119**	.259
Item 10	.132**	.106**	.582**	.014**	-.013*	-.185**	.290
Item 11	.224**	.163**	.479**	-.024**	.138**	-.221**	.311
Item 12	.175**	.083**	.592**	.041**	.049**	-.182**	.304
Item 13	.092**	.033**	-.097**	.750**	.053**	-.196**	.569
Item 14	-.157**	-.027**	.081**	.593**	.041**	.072**	.464
Item 15	-.006	.079**	.099**	.659**	.043**	.183**	.455
Item 16	-.093**	-.031**	.094**	.600**	-.015*	.153**	.482
Item 17	-.018**	-.080**	-.033**	.120**	.552**	.092**	.446
Item 18	-.060**	-.208**	.138**	.036**	.575**	.133**	.368
Item 19	-.053**	-.071**	.029**	.020**	.634**	.190**	.331
Item 20	-.069**	-.261**	-.004	.095**	.453**	-.002	.472
Item 21	.077**	.143**	-.464**	.116**	.263**	.346**	.282
Item 22	-.060**	.017**	-.084**	.076**	.112**	.607**	.354
Item 23	.006	.078**	-.326**	.116**	.116**	.475**	.320
Item 24	-.028**	-.091**	.038**	.079**	.068**	.733**	.281
FD	.640	.694	.588	.651	.554	.540	
ω	.796	.853	.826	.775	.752	.791	

Note. * $p < .05$; ** $p < .01$; λ : factor loading; δ : item uniqueness; FD: factor definition; ω :

model-based omega composite reliability index; BPN: Basic Psychological Needs

Satisfaction and Frustration Scale; ASA: autonomy satisfaction; RSA: relatedness

satisfaction; CSA: competence satisfaction; AFR: autonomy frustration; RFR: relatedness

frustration; CFR: competence frustration. All factor loadings are standardized factor loadings.

** $p < .001$.

Table S6. *Descriptive Statistics of Study Variables.*

Variables	Min.	Max.	<i>M</i>	<i>SD</i>
Pornography use frequency ^a	1	10	5.18	2.50
Moral disapproval of pornography use ^b	1	7	2.49	1.68
Problematic pornography use	18	126	32.03	17.50
Age of first pornography use	3	83	14.24	4.69
Duration of pornography use per session (in minutes)	1	1200	23.19	24.27
Sexual pleasure PUM	3	21	13.53	4.42
Sexual curiosity PUM	3	21	7.62	4.19
Fantasy PUM	3	21	8.09	4.72
Boredom avoidance PUM	3	21	6.96	4.33
Lack of sexual satisfaction PUM	3	21	8.18	4.96
Emotional suppression/ distraction PUM	3	21	5.91	4.02
Stress reduction PUM	3	21	7.32	4.54
Self-exploration PUM	3	21	8.96	4.52
Past-year masturbation frequency ^a	0	10	5.91	2.28
Past-year sexual frequency (total) ^a	0	10	4.11	2.70
Past-year sexual frequency (romantic partner) ^a	0	10	5.34	2.11
Sexual satisfaction	5	35	27.69	7.71
Partner-related desire	0	56	35.11	10.91
Solidarity desire	0	31	17.11	7.37
Attractive person-related desire	0	16	7.33	4.30
Sexual function problems	5	30	13.70	3.94
Sexual distress	0	12	3.42	2.71
Religiosity	3	21	7.75	4.99
Impulsivity: Lack of premeditation	4	16	7.23	2.20
Impulsivity: Position urgency	4	16	9.56	2.56
Impulsivity: Sensation-seeking	4	16	9.82	2.67
Impulsivity: Negative urgency	4	16	9.05	2.81
Impulsivity: Lack of perseverance	4	16	7.84	2.51
Compulsivity: Perfectionism	0	16	6.46	3.06
Compulsivity: Anankasticism	0	16	6.92	2.89
BPN: Autonomy satisfaction	4	20	14.55	3.14
BPN: Relatedness satisfaction	4	20	16.07	3.17
BPN: Competence satisfaction	4	20	15.08	3.51
BPN: Autonomy frustration	4	20	11.54	3.55
BPN: Relatedness frustration	4	20	8.27	3.58
BPN: Competence frustration	4	20	10.23	4.31
Depressive symptoms	0	24	6.98	6.08
Anxiety symptoms	0	24	6.68	5.65
Adult ADHD symptoms	0	24	10.17	4.46
Alcohol consumption	0	12	3.08	2.36
Alcohol problems	0	28	1.80	3.13
Substance use	0	37	3.33	3.41

Note. *M*: mean; *SD*: standard deviation; Min.: minimum; Max.: maximum; PUM:

pornography use motivation; BPN: basic psychological needs. ^a0: never, 1: once in the past

year, 2: 2-6 times in the past year, 3: 7-11 times in the past year, 4: monthly, 5: 2-3 times a

month, 6: weekly, 7: 2-3 times a week, 8: 4-5 times a week, 9: 6-7 times a week, 10: more

than 7 times a week. ^b1: strongly disagree, 2: disagree, 3: somewhat disagree, 4: neither agree

nor disagree, 5: somewhat agree, 6: agree, 7: strongly agree.

Table S7. Correlations between Study Variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1. Pornography use frequency	-																																								
2. Moral disapproval	-.13**	-																																							
3. Problematic pornography use	.60**	.04**	-																																						
4. Age of first pornography use	-.22**	.02**	-.16**	-																																					
5. Duration of pornography use per session (in minutes)	.17**	.00	.27**	-.04**	-																																				
6. Sexual pleasure PUM	.54**	-.08**	.66**	-.15**	.16**	-																																			
7. Sexual curiosity PUM	.25**	-.05**	.43**	-.05**	.16**	.26**	-																																		
8. Fantasy PUM	.49**	-.04**	.76**	-.11**	.23**	.63**	.53**	-																																	
9. Boredom avoidance PUM	.46**	.00	.73**	-.15**	.20**	.41**	.37**	.61**	-																																
10. Lack of sexual satisfaction PUM	.44**	.00	.65**	-.06**	.17**	.65**	.26**	.70**	.51**	-																															
11. Emotional suppression/ distraction PUM	.49**	.02**	.88**	-.13**	.22**	.53**	.44**	.71**	.84**	.64**	-																														
12. Stress reduction PUM	.54**	-.02**	.89**	-.14**	.22**	.64**	.44**	.71**	.79**	.61**	.96**	-																													
13. Self-exploration PUM	.30**	-.09**	.50**	-.08**	.17**	.46**	.82**	.64**	.40**	.35**	.49**	.53**	-																												
14. Past-year masturbation frequency	.65**	-.10**	.40**	-.20**	.07**	.44**	.12**	.32**	.27**	.30**	.30**	.36**	.21**	-																											
15. Past-year sexual frequency (total)	-.04**	-.03**	-.11**	-.10**	-.05**	-.11**	.07**	-.14**	-.06**	-.32**	-.11**	-.07**	-.01	-.02**	-																										
16. Past-year sexual frequency (romantic partner)	-.05**	-.02**	-.12**	-.10**	-.06**	-.13**	.08**	-.15**	-.06**	-.36**	-.12**	-.08**	.00	-.02**	.86**	-																									
17. Sexual satisfaction	-.09**	-.01	.17**	-.06**	-.05**	-.14**	.04**	-.23**	-.09**	-.56**	-.18**	-.13**	-.02**	-.06**	.36**	.42**	-																								
18. Partner-related desire	.28**	-.04**	.20**	-.11**	.06**	.20**	.28**	.14**	.15**	.08**	.15**	.23**	.16**	.29**	.31**	.31**	.30**	-																							
19. Solidarity desire	.53**	-.09**	.50**	-.14**	.13**	.55**	.18**	.44**	.29**	.37**	.36**	.45**	.32**	.67**	-.05**	-.07**	.11**	.39**	-																						
20. Attractive person-related desire	.36**	-.05**	.47**	-.08**	.14**	.37**	.23**	.46**	.33**	.42**	.39**	.42**	.25**	.28**	-.01	-.04**	.19**	.45**	.45**	-																					
21. Sexual function	-.35**	.05**	-.26**	.12**	-.08**	-.25**	-.24**	-.19**	-.19**	-.09**	-.18**	-.28**	-.14**	-.34**	-.23**	-.23**	-.27**	.81**	.44**	.41**	-																				
22. Sexual distress	.12**	.09**	.34**	-.08**	.06**	.26**	.09**	.31**	.19**	.53**	.34**	.23**	.19**	.11**	-.23**	-.25**	-.45**	-.04**	.16**	.20**	.15**	-																			
23. Religiosity	-.05**	.26**	.09**	-.09**	.04**	-.05**	.10**	.04**	.05**	.04**	.08**	.06**	.02**	.12**	-.05**	-.03**	-.02**	.03**	-.08**	.03**	-.03**	.03**	-																		
24. Impulsivity: Lack of premeditation	-.01	.02**	.06**	-.06**	-.01	.01*	.00	.03**	.07**	.05**	.07**	.04**	.03**	.02**	.00	.00	-.07**	-.04**	.02**	.02**	.06**	.12**	-.04**	-																	
25. Impulsivity: Position urgency	.02**	.07**	.18**	-.09**	.01	.10**	.14**	.13**	.16**	.09**	.18**	.16**	.17**	.05**	.03**	.04**	-.01	.12**	.10**	.13**	-.08**	.19**	.01*	.61**	-																
26. Impulsivity: Sensation-seeking	.10**	-.02**	.15**	-.10**	.02**	.09**	.19**	.12**	.14**	.04**	.14**	.15**	.18**	.12**	.11**	.09**	.07**	.24**	.13**	.19**	-.23**	.03**	-.01**	.20**	.54**	-															
27. Impulsivity: Negative urgency	-.03**	.10**	.14**	-.06**	-.01	.07**	.09**	.10**	.12**	.10**	.15**	.11**	.13**	.00	-.01	.01	-.06**	.03**	.05**	.06**	.03**	.24**	.03**	.56**	.86**	.27**	-														
28. Impulsivity: Lack of perseverance	.02**	.04**	.08**	-.11**	.02**	.04**	-.02**	.05**	.09**	.07**	.08**	.04**	.03**	.05**	-.05**	-.04**	-.09**	.12**	.02**	-.04**	.14**	.17**	-.10**	.69**	.35**	-.02**	.36**	-													
29. Compulsivity: Perfectionism	.01	.14**	.16**	-.05**	.03**	.06**	.11**	.12**	.10**	.11**	.15**	.13**	.12**	-.01*	-.05**	-.04**	-.04**	.00	.02**	.05**	.02**	.19**	.15**	-.31**	.13**	-.04**	.21**	.14**	-												
30. Compulsivity: Anankasticism	.01	.13**	.17**	-.09**	.02**	.09**	.11**	.13**	.12**	.12**	.17**	.13**	.15**	.00	-.05**	-.03**	-.06**	-.02**	.04**	.03**	.06**	.26**	.04**	.01*	.39**	.03**	.52**	.13**	.83**	-											
31. BPN: Autonomy satisfaction	.00	-.06**	-.09**	.08**	-.02**	-.05**	.03**	-.08**	-.08**	-.17**	-.11**	-.05**	-.03**	-.02**	.10**	.10**	.21**	.17**	.01	-.03**	-.20**	-.29**	.08**	-.42**	-.24**	.14**	-.37**	-.56**	-.09**	-.29**	-										
32. BPN: Relatedness satisfaction	-.09**	-.06**	-.19**	.03**	-.05**	-.08**	-.04**	.18**	-.16**	-.27**	-.21**	.15**	-.06**	-.04**	.15**	.15**	.28**	.12**	-.03**	-.10**	-.12**	-.27**	.00	-.23**	-.13**	.04**	-.23**	-.29**	-.19**	-.28**	.59**	-									
33. BPN: Competence satisfaction	.05**	-.07**	-.02**	.07**	-.01*	.00	.04**	.00	-.02**	-.03**	-.04**	.01**	-.02**	.01	.07**	.05**	.08**	.17**	.04**	.11**	-.21**	-.20**	.09**	-.40**	-.21**	.21**	-.33**	-.62**	-.08**	-.26**	.67**	.33**	-								
34. BPN: Autonomy frustration	.03**	.11**	.20**	.10**	.03**	.12**	.09**	.18**	.15**	.21**	.21**	.16**	.14**	.03**	-.09**	-.08**	.15**	-.05**	.05**	.06**	.10**	.33**	.03**	.13**	.31**	-.01	.42**	.29**	.48**	.58**	-.62**	-.41**	-.41**	-							
35. BPN: Relatedness frustration	.04**	.13**	.21**	-.07**	.04**	.08**	.12**	.18**	.18**	.22**	.23**	.17**	.15**	.03**	-.11**	-.11**	.19**	-.06**	.05**	.08**	.09**	.32**	.08**	.20**	.34**	.11**	.45**	.25**	.42**	.56**	-.43**	-.69**	-.35**	.57**	-						
36. BPN: Competence frustration	-.02**	.11**	.12**	.13**	.02**	.06**	.05**	.08**	.10**	.09**	.14**	.07**	.13**	.03**	-.06**	-.04**	-.08**	-.08**	.02**	-.05**	.15**																				

Note. PUM: pornography use motivation; BPN: basic psychological needs. Correlations were either calculated from factor scores with a mean of 0 and a standard deviation of 1, or were standardized prior to the analyses.

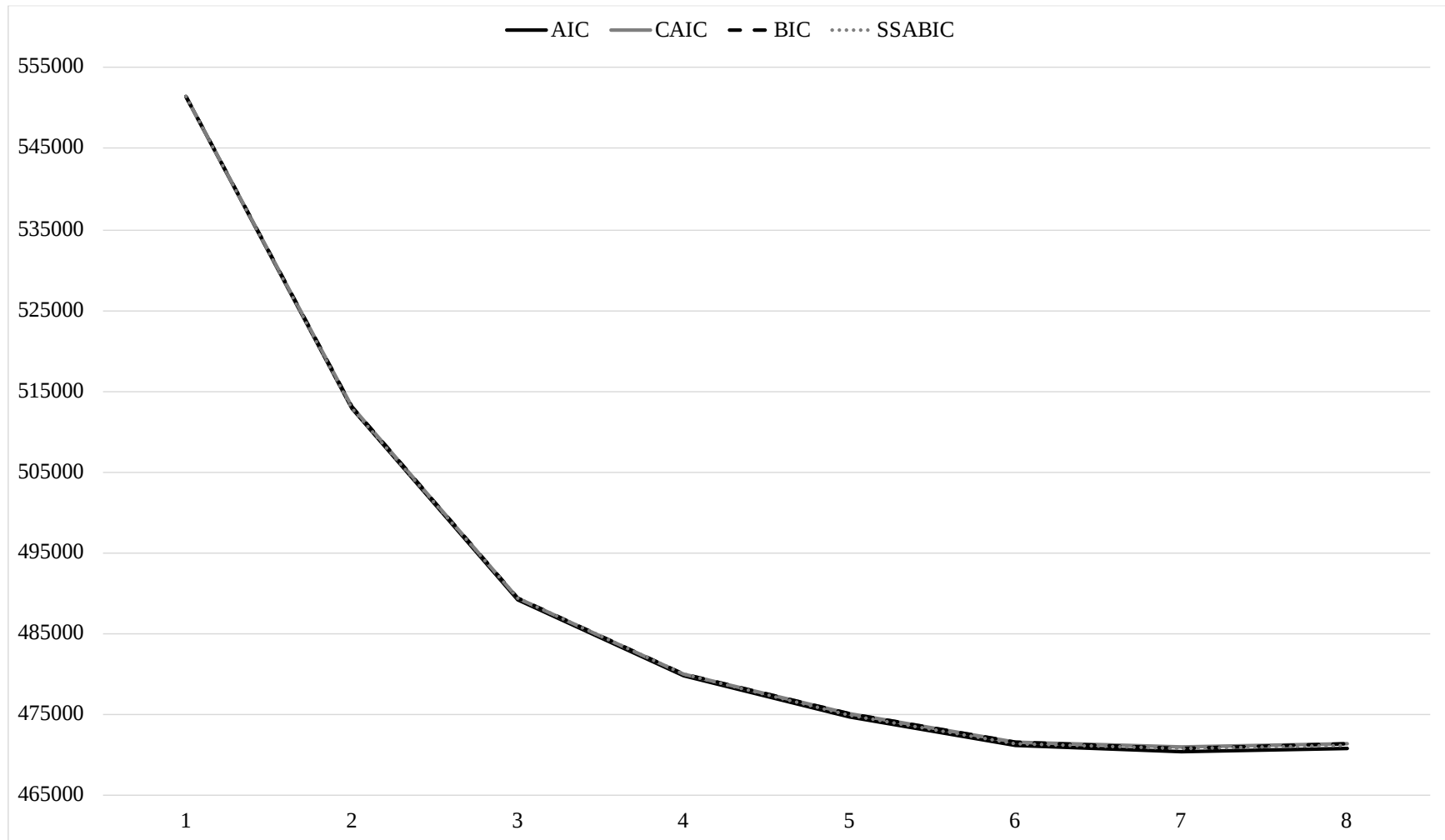
p* < .05; *p* < .01.

Table S8. *Fit Statistics for Latent Profile Analyses.*

Model	LL	fp	Scaling	AIC	CAIC	BIC	SSABIC	Entropy	aLMR	BLRT
1 Profile	-275686.324	6	0.913	551384.649	551445.323	551439.323	551420.255	NA	NA	NA
2 Profiles	-256435.609	13	0.856	512897.218	513028.678	513015.678	512974.364	.724	< .001	< .001
3 Profiles	-244629.834	20	0.957	489299.669	489501.916	489481.916	489418.356	.773	< .001	< .001
4 Profiles	-239867.047	27	0.979	479788.095	480061.129	480034.129	479948.322	.730	< .001	< .001
5 Profiles	-237347.218	34	1.146	474762.437	475106.257	475072.257	474964.204	.699	< .001	< .001
6 Profiles	-235523.534	41	1.048	471129.068	471543.675	471502.675	471372.376	.718	< .001	< .001
7 Profiles	-235184.380	48	1.099	470464.760	470950.153	470902.153	470749.608	.739	< .001	< .001
8 Profiles	-235374.909	55	0.889	470859.818	471415.998	471360.998	471186.206	.788	1.000	1.000

Note. LL: loglikelihood; fp: number of free parameters; AIC: Akaike Information Criterion; CAIC: constant AIC; BIC: Bayesian Information Criterion; SSABIC: Sample-Size Adjusted BIC; aLMR: p-value associated with the adjusted Lo-Mendell-Rubin likelihood ratio test; BLRT: Bootstrap Likelihood Ratio Test; NA: Not Applicable.

Figure S1. *Visual Presentation (i.e., “Elbow Plot”) for the Information Criteria for the Latent Profile Analysis.*



Note. Numbers on the x-axis represent the numbers of profiles. AIC: Akaike Information Criterion; CAIC: constant AIC; BIC: Bayesian Information Criterion; SSABIC: Sample-Size Adjusted BIC.

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