

Supplementary materials

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Table S1. Search strategy

Search number	Search Details	Results
Pubmed		
1	((((((((((internet addiction[Title]) OR (internet overuse[Title/Abstract])) OR (problematic internet use[Title/Abstract])) OR (internet addiction disorder[Title/Abstract])) OR (pathological internet use[Title/Abstract])) OR (excessive internet use[Title/Abstract])) OR (compulsive internet use[Title/Abstract])) OR (internet dependency[Title/Abstract])) OR (internet gaming addiction[Title/Abstract])) OR (internet gaming disorders[Title/Abstract])) OR (computer addiction[Title/Abstract])) OR (internet use disorder[Title/Abstract])) OR (media addiction [Title/Abstract])) OR (electronic device addiction [Title/Abstract])) OR (mobile addiction [Title/Abstract])) OR (phone addiction [Title/Abstract])) OR (smartphone addiction[Title/Abstract])	3,832
2	((((((((((Youth [Title/Abstract]) OR (youth [Title/Abstract])) OR (youths [Title/Abstract])) OR (adolescent [Title/Abstract])) OR (adolescents [Title/Abstract])) OR (teenager [Title/Abstract])) OR (teenagers [Title/Abstract])) OR (child [Title/Abstract])) OR (children [Title/Abstract])) OR (student [Title/Abstract])) OR (students [Title/Abstract])	2,125,114

3	(((substance use [Title/Abstract]) OR (sexual health)) OR (mental health)) OR (weight and physical exercise)) OR (violence)) OR (physical health status and conditions)	910,902
4	((((((((((((internet addiction[Title]) OR (internet overuse[Title/Abstract])) OR (problematic internet use[Title/Abstract])) OR (internet addiction disorder[Title/Abstract])) OR (pathological internet use[Title/Abstract])) OR (excessive internet use[Title/Abstract])) OR (compulsive internet use[Title/Abstract])) OR (internet dependency[Title/Abstract])) OR (internet gaming addiction[Title/Abstract])) OR (internet gaming disorders[Title/Abstract])) OR (computer addiction[Title/Abstract])) OR (internet use disorder[Title/Abstract])) OR (smartphone addiction[Title/Abstract])) AND (((((((Youth[Title/Abstract]) OR (youth[Title/Abstract]) OR (youths[Title/Abstract]) OR (adolescent[Title/Abstract]) OR (adolescents[Title/Abstract]) OR (teenager[Title/Abstract]) OR (teenagers[Title/Abstract]) OR (child[Title/Abstract]) OR (children[Title/Abstract]) OR (student[Title/Abstract]) OR (students[Title/Abstract])) AND (((substance use[Title/Abstract]) OR (sexual health)) OR (mental health)) OR (weight and physical exercise)) OR (violence)) OR (physical health status and conditions))	1795
Web of Science		
1	((((((((((TS=(internet addiction)) OR TS=(internet overuse)) OR TS=(problematic internet use)) OR TS=(internet addiction disorder)) OR TS=(pathological internet use)) OR TS=(excessive internet use)) OR TS=(compulsive internet use)) OR TS=(internet dependency)) OR TS=(internet gaming addiction)) OR TS=(internet gaming disorders)) OR TS=(computer addiction)) OR TS=(internet use disorder)) OR TS=(electronic device addiction)) OR TS=(media addiction)) OR TS=(mobile addiction)) OR TS=(phone addiction)) OR TS=(smartphone addiction))	63,308
2	((((((((((TS= (Youth)) OR TS=(youth)) OR TS= (youths)) OR TS=(adolescent)) OR TS=(adolescents)) OR TS=(teenager)) OR TS=(teenagers)) OR TS= (child)) OR TS= (children)) OR TS= (student)) OR TS=(students))	6,237,846
3	(((TS= (substance use)) OR TS= (sexual health)) OR TS= (mental health)) OR TS= (weight and physical exercise)) OR TS=(violence)) OR TS= (physical health status and conditions))	1,768,170
4	((#2) AND #3) AND #4	7805

Table S2. Qualities of studies included in the systematic review and meta-analysis

[illegible]

(Dong, Yang, Lu, & Hao, 2020)	Y	N	Y	Y	U	Y	Y	Y	U	6
(Ekinici, Çelik, Savaş, & Toros, 2014)	Y	Y	Y	Y	Y	N	U	Y	Y	7
(Esen, Kutlu, & Cihan, 2021)	Y	Y	Y	N	U	Y	Y	Y	U	6
(Evren, Dalbudak, Evren, & Demirci, 2014)	Y	Y	Y	N	Y	N	Y	Y	Y	7
(Fernández-Villa et al., 2015)	Y	Y	Y	N	U	Y	Y	Y	U	6
(Gansner et al., 2019)	Y	N	N	Y	U	Y	Y	Y	U	5
(Lan et al., 2018)	N	N	Y	Y	Y	N	Y	Y	Y	6
(M. Gao et al., 2022)	Y	N	Y	Y	Y	Y	Y	Y	Y	8
(T. Gao et al., 2020)	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
(Garakani, Zhai, Hoff, Krishnan-Sarin, & Potenza, 2021)	Y	Y	Y	Y	Y	N	Y	Y	Y	8
(Ge, Se, & Zhang, 2014)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(J. Guo et al., 2012)	Y	Y	Y	Y	U	Y	U	Y	Y	7
(W. Guo et al., 2020)	Y	Y	Y	N	U	Y	Y	Y	Y	7
(Han et al., 2021)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(Heidarimoghadam et al., 2020)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(Hossin, Islam, Billah, Haque, & Uddin, 2022)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(Huang et al., 2020)	Y	Y	U	Y	U	Y	Y	Y	Y	7
(Iwasaki, Kakuta, & Ansai, 2022)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(Karimy et al., 2020)	Y	Y	Y	Y	U	Y	U	Y	Y	7
(Khalil, Kamal, & Elkholy, 2022)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(H. J. Kim, Min, Kim, & Min, 2019)	Y	Y	Y	Y	U	Y	Y	Y	Y	8

(Peltzer, Pengpid, & Apidechkul, 2014)	Y	Y	N	N	U	Y	Y	Y	Y	6
(Pengpid & Peltzer, 2018)	Y	Y	N	U	U	Y	U	Y	Y	5
(Pereira, Bevilacqua, Coimbra, & Andrade, 2020)	Y	Y	Y	Y	Y	Y	U	Y	U	7
(Phomprasith et al., 2022)	Y	N	Y	N	Y	Y	Y	Y	N	5
(Poorolajal et al., 2019)	Y	Y	Y	Y	U	Y	Y	Y	U	7
(Ramón-Arbués et al., 2021)	Y	Y	Y	N	Y	Y	Y	Y	Y	7
(Restrepo et al., 2020)	Y	Y	N	Y	Y	Y	Y	Y	U	7
(Rücker, Akre, Berchtold, & Suris, 2015)	Y	Y	Y	Y	U	Y	U	Y	Y	7
(Saffari et al., 2022)	Y	Y	N	N	U	Y	Y	Y	Y	6
(Saikia, Das, Barman, & Bharali, 2019)	Y	Y	Y	Y	U	Y	U	Y	U	6
(Seyrek, Cop, Sinir, Ugurlu, & Şenel, 2017)	Y	Y	Y	Y	U	Y	U	Y	U	6
(Shen et al., 2021)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(Shinetsetseg, Jung, Park, Park, & Jang, 2022)	Y	Y	Y	N	U	Y	Y	Y	Y	7
(Stevens, Zhang, Cherkerzian, Chen, & Liu, 2020)	Y	Y	Y	Y	U	Y	Y	Y	N	7
(Sung, Lee, Noh, Park, & Ahn, 2013)	Y	Y	Y	Y	U	Y	U	Y	Y	7
(Suris et al., 2014)	Y	Y	Y	Y	Y	Y	Y	Y	U	8
(Taha, Shehzad, Alamro, & Wadi, 2019)	Y	Y	Y	Y	U	Y	Y	Y	Y	8

(Tran et al., 2017)	Y	Y	Y	Y	U	Y	Y	Y	U	6
(Tzang, Chang, & Chang, 2022)	Y	Y	N	Y	U	Y	Y	Y	U	6
(Ustinavičienė et al., 2016)	Y	Y	Y	Y	U	Y	U	Y	Y	7
(Venkatesh, Jemal, & Samani, 2017)	Y	Y	Y	N	N	Y	U	Y	Y	6
(Vigna-Taglianti et al., 2017)	Y	Y	Y	Y	Y	Y	Y	Y	U	8
(W. Wang et al., 2019)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(Xu et al., 2020)	Y	Y	Y	Y	U	Y	U	Y	U	6
(S. Y. Yang, Fu, Chen, Hsieh, & Lin, 2019)	Y	Y	Y	N	U	Y	U	Y	U	5
(Ye et al., 2016)	Y	Y	Y	N	U	N	U	Y	Y	5
(Yen, Ko, Yen, & Cheng, 2008)	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
(J. Y. Yen et al., 2008)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(Younes et al., 2016)	Y	Y	Y	N	Y	Y	Y	Y	Y	8
(Yücens & Üzer, 2018)	Y	Y	N	N	Y	Y	Y	Y	U	6
(Zenebe et al., 2021)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(Zhang, Hao, Liu, Cui, & Yu, 2022)	Y	Y	Y	N	U	Y	Y	Y	U	6
(Zhang et al., 2021)	Y	Y	Y	Y	U	Y	Y	Y	Y	8
(M. Zhang et al., 2022)	Y	Y	Y	N	U	Y	Y	Y	U	6
(Y. Zhao et al., 2021)	Y	Y	Y	N	U	Y	Y	Y	N	6
(Daniyal, Javaid, Hassan, & Khan, 2022)	Y	Y	N	N	U	Y	Y	Y	N	5
(Mahmoodi et al., 2018)	Y	Y	Y	Y	U	Y	U	Y	Y	7

(Pattanaseri, Atsariyasing, Pornnoppadol, Sanguanpanich, & Srifuengfung, 2022)	Y	Y	N	N	U	Y	Y	Y	N	5
(Sharma, Amandeep, Mathur, & Jeenger, 2019)	Y	Y	Y	N	U	Y	Y	Y	U	6
("Relationship of night sleep duration with health lifestyle, depressive symptoms, internet addiction in Chinese High school Students," 2022)	Y	Y	Y	Y	U	Y	Y	Y	U	7
(Hirjak et al., 2022)	Y	Y	N	Y	Y	Y	Y	Y	U	7
(Horvath et al., 2020)	Y	Y	N	Y	Y	Y	Y	Y	U	7
(H. J. Kim et al., 2019)	Y	Y	N	Y	Y	Y	Y	Y	U	7
(D. Lee, Namkoong, Lee, Lee, & Jung, 2019)	Y	Y	N	Y	Y	Y	Y	Y	U	7
(F. Lin et al., 2012)	Y	Y	N	Y	Y	Y	Y	Y	U	7
(Schmitgen et al., 2020)	Y	Y	N	Y	U	Y	Y	Y	U	6
(Siste et al., 2022)	Y	Y	N	Y	Y	Y	Y	Y	U	7
(Zou et al., 2021)	Y	Y	Y	N	U	Y	Y	Y	U	6
(Zou et al., 2022)	Y	N	Y	Y	Y	Y	Y	Y	U	7
(Y. Wang et al., 2016)	Y	Y	Y	N	Y	Y	Y	Y	N	7
(Onukwuli et al., 2023)	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
(Perez-Oyola et al., 2023)	Y	Y	Y	Y	Y	Y	U	Y	U	7
(Wu et al., 2022)	Y	N	Y	Y	Y	Y	U	Y	U	6
(Sujarwoto, Saputri, & Yumarni, 2023)	Y	Y	Y	U	Y	Y	Y	Y	Y	8
(Albikawi, 2023)	Y	Y	N	N	Y	Y	U	Y	N	5

(Aleebrahim, Daneshvar, & Tarrahi, 2022)	Y	Y	N	N	Y	Y	U	Y	U	5
(Çelik & Haney, 2023)	Y	N	Y	Y	U	Y	U	Y	U	5
(Frydenlund, Guldager, Frederiksen, & Egebæk, 2023)	Y	Y	Y	N	Y	Y	Y	Y	N	7
(Islam, Hasan Apu, et al., 2023)	Y	N	Y	Y	Y	Y	U	Y	U	6
(Islam, Tushar, et al., 2023)	Y	Y	N	N	Y	Y	U	Y	N	5
(Jeong et al., 2023)	Y	Y	Y	N	Y	Y	Y	Y	N	7
(J. Zhao et al., 2022)	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
(Lakhdar et al., 2022)	Y	Y	Y	Y	Y	Y	Y	Y	N	8
(N. F. Mohamed et al., 2023)	Y	Y	Y	N	Y	Y	U	Y	U	6
(Moñino-García et al., 2022)	Y	Y	Y	Y	Y	Y	Y	Y	U	8
(Muslić, Rukavina, Markelić, & Musić Milanović, 2023)	Y	Y	Y	Y	Y	Y	Y	Y	U	8
(Nahidi et al., 2023)	Y	Y	N	Y	Y	Y	Y	Y	U	7
(Song et al., 2023)	Y	Y	Y	N	U	Y	U	Y	U	5
(Mahmoud et al., 2023)	Y	Y	Y	Y	Y	Y	U	Y	U	7
(Tsilosani, Chan, Steffens, Bolton, & Kowalczyk, 2023)	Y	Y	N	Y	Y	Y	Y	Y	U	7
(Kubo, Masuyama, & Sugawara, 2023)	Y	Y	Y	Y	Y	Y	Y	Y	U	8
(Feng, Chen, & Wu, 2023)	Y	Y	Y	N	Y	N	N	Y	U	5
(Abuhamdah & Naser, 2023)	Y	Y	Y	N	Y	Y	Y	Y	U	7
(Mayerhofer et al., 2024)	Y	U	Y	N	Y	Y	Y	Y	U	6
(K. O. Mohamed et al., 2024)	Y	Y	N	N	Y	Y	Y	Y	U	6
(Ouni et al., 2024)	Y	Y	Y	N	U	Y	Y	Y	Y	7
(Peng, 2023)	Y	U	Y	Y	Y	Y	Y	Y	Y	8

(Ran et al., 2024)	Y	U	Y	U	Y	Y	Y	Y	Y	7
(Tan, Deng, Zhang, Peng, & Peng, 2023)	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
(Vengadessin, Ramasubramani, & Saya, 2024)	Y	Y	N	U	Y	Y	Y	Y	Y	7
(W. Wang et al., 2023)	Y	U	Y	U	Y	Y	Y	Y	Y	7
(L. Yao, Liang, Zhang, & Chi, 2023)	Y	N	Y	Y	U	Y	Y	Y	U	6
(Yuan et al., 2023)	Y	Y	Y	N	U	Y	Y	Y	U	6
(C. Zhang et al., 2024)	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
(L. Zhang et al., 2024)	Y	Y	Y	N	Y	Y	Y	Y	Y	8
(Y. Zhang et al., 2024)	Y	Y	Y	Y	Y	Y	U	Y	U	7
(Amara et al., 2024)	Y	Y	Y	Y	Y	Y	Y	Y	Y	9
(Banna et al., 2023)	Y	Y	Y	U	U	Y	U	Y	Y	6
(Chau, Perrin, & Chau, 2024)	Y	U	Y	U	Y	U	U	Y	Y	5
(F. Cheng et al., 2024)	Y	Y	Y	U	Y	Y	Y	Y	Y	8
(Di Carlo et al., 2024)	Y	U	Y	U	Y	Y	Y	Y	U	6
(Dien et al., 2023)	Y	Y	Y	N	Y	Y	U	Y	U	6
(Hu, Wu, Wang, Zhou, & Yin, 2024)	Y	Y	Y	N	Y	Y	Y	Y	U	7
(Idrees, Sampasa-Kanyinga, Hamilton, & Chaput, 2024)	Y	Y	Y	Y	Y	Y	Y	Y	N	8
(Kwon, Kim, & Lee, 2023)	Y	U	Y	Y	Y	Y	Y	Y	U	7
(S. R. Lee, Kim, Ha, & Kim, 2023)	Y	Y	Y	Y	Y	Y	Y	Y	U	9
(Cui, Gao, Sun, & Wang, 2023)	Y	U	Y	U	Y	U	U	Y	Y	5
(Shen et al., 2023)	Y	Y	Y	N	U	Y	Y	Y	U	6
(Liu et al., 2023)	Y	U	Y	N	Y	Y	Y	Y	U	6

Keys:

Q1–Q9 represent questions used to assess the quality of included studies, which are listed below

- Q1. Was the sample frame appropriate to address the target populations?
- Q2. Were the study participants sampled appropriately?
- Q3. Was the sample size adequate?
- Q4. Were the study subjects and setting described in detail?
- Q5. Was the data analysis conducted with sufficient coverage of the identified sample?
- Q6. Was a valid method used in the identification of conditions?
- Q7. Was the condition measured in a standard, reliable way for all participants?
- Q8. Was there an appropriate statistical analysis?
- Q9. Was the response rate adequate, and if not, was the low response rate managed appropriately?
- Y: yes; N no; U unclear

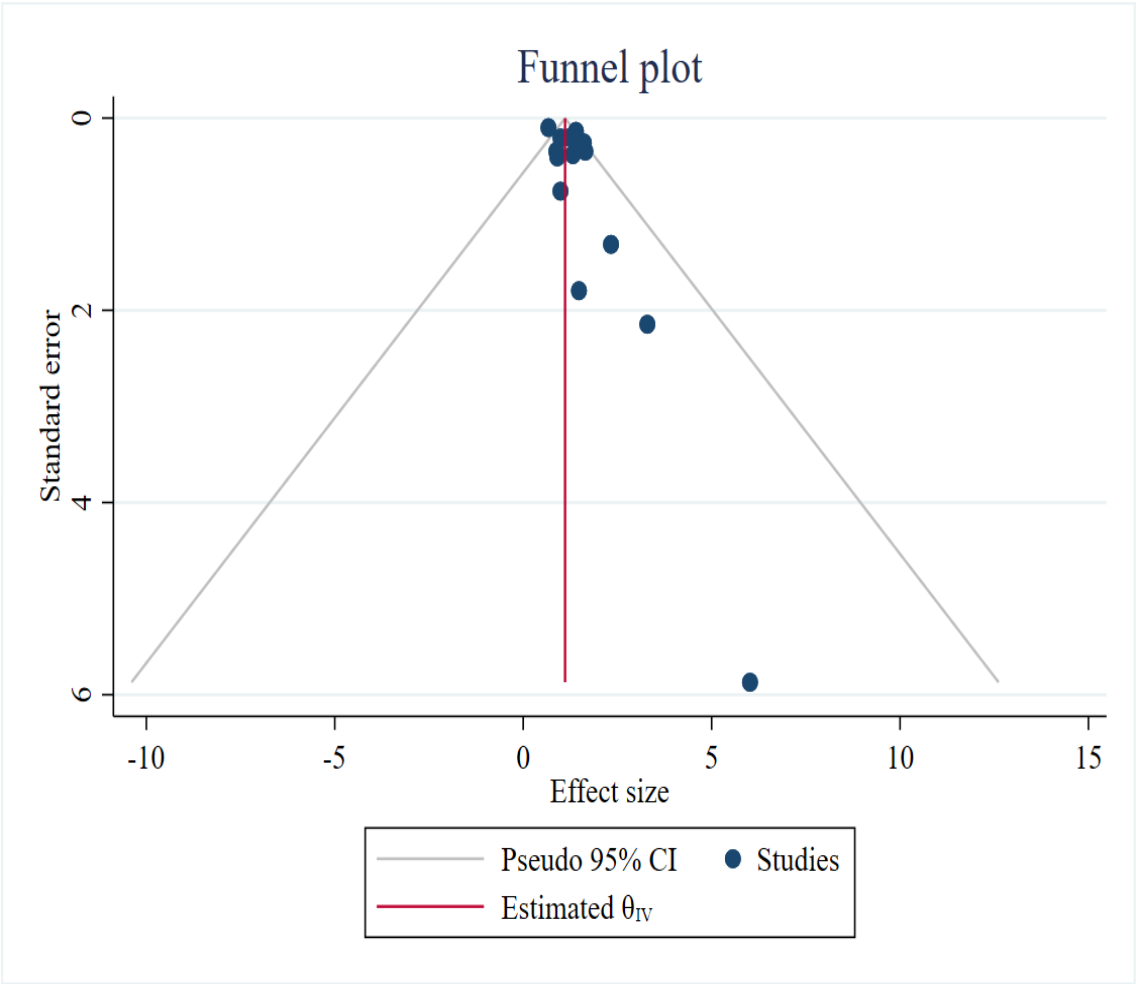
NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE CASE CONTROL STUDIES									
Study (Author, year)	Selection				Comparability	Exposure			Total Score
	Is the case definition adequate?	Representativeness of the cases	Selection of Controls	Definition of Controls	Comparability of cases and controls on the basis of the design or analysis	Ascertainment of exposure	Same method of ascertainment for cases and controls	Non-Response rate	
(Tsitsika et al., 2011)	✱	✱	✱	✱	✱✱	✱	✱		8

(B. Yao, Han, Zeng, & Guo, 2013)	*	*		*	**	*	*		7
(Eliacik et al., 2016)	*	*	*	*	**	*	*		8
(J. Chen et al., 2020)	*	*	*	*	**	*	*		8
(Kang, Jung, Park, & Han, 2018)	*	*	*	*	**	*	*		8
(Liu et al., 2010)	*	*		*	**	*	*		7
(Park et al., 2017)	*	*	*	*	*	*	*		7
(Weng et al., 2013)	*	*	*	*	**	*	*		8
NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE COHORT STUDIES									
Study (Author, year)	Selection				Comparability	Outcome			Total Score
	Representativeness	Selection	Ascertainment Exposure	Outcome		Assessment	Follow - Up	Adequacy	
(Lau, Wu, Gross, Cheng, & Lau, 2017)	*	*	*		**		*	*	7
(X. Yang et al., 2022)	*	*	*	*	**		*		6
(Otsuka, Kaneita, Itani, & Tokiya, 2020)	*	*	*	*	**	*	*	*	9
(Rouleau, Beaugard, & Beaudry, 2023)	*		*		**	*		*	6
(Borges et al., 2023)	*	*		*		*	*	*	6
(Liu, Charmaraman, & Bickham, 2024)	*	*	*	*	**		*	*	8

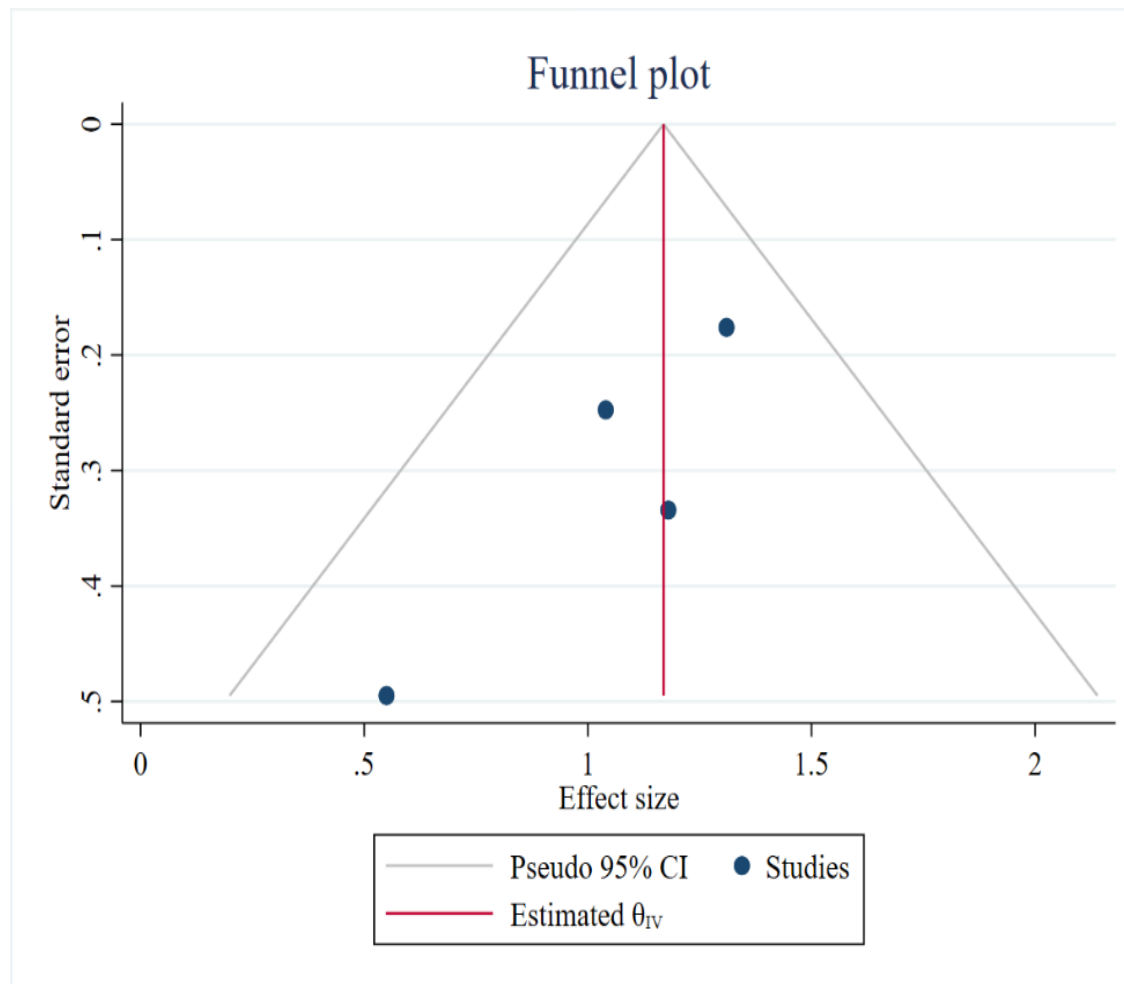
Table S3. Publication bias of included articles (Begg's test and Egger's test)

	Overweight/obesity	Underweight	Fatigue	Sedentary lifestyle issues
Begg's test	<i>P</i> =0.58	<i>P</i> =0.91	<i>P</i> =0.31	<i>P</i> =0.47
Egger's test	<i>P</i> =0.13	<i>P</i> =0.17	<i>P</i> =0.03	<i>P</i> =0.11
	Poor self-rated health	Pain	Sleep problems	Violence
Begg's test	<i>P</i> =0.16	<i>P</i> =0.62	<i>P</i> =0.85	<i>P</i> =0.44
Egger's test	<i>P</i> <0.01	<i>P</i> =0.05	<i>P</i> <0.01	<i>P</i> =0.10
	Eating disorders	Self-reported smoking behavior	Problematic alcohol use	Drug use
Begg's test	1.00	<i>P</i> =0.77	<i>P</i> =0.12	<i>P</i> =0.14
Egger's test	0.28	<i>P</i> =0.81	<i>P</i> =0.54	<i>P</i> <0.01
	Gambling	ADHD	Depressive symptoms	Stress symptoms
Begg's test	<i>P</i> =1.00	<i>P</i> =0.09	<i>P</i> =0.67	<i>P</i> =0.69
Egger's test	<i>P</i> <0.01	<i>P</i> <0.01	<i>P</i> <0.01	<i>P</i> <0.01
	Anxiety symptoms	Suicide	Other mental health	
Begg's test	<i>P</i> =0.53	<i>P</i> <0.01	<i>P</i> =0.36	
Egger's test	<i>P</i> <0.01	<i>P</i> =0.05	<i>P</i> <0.01	

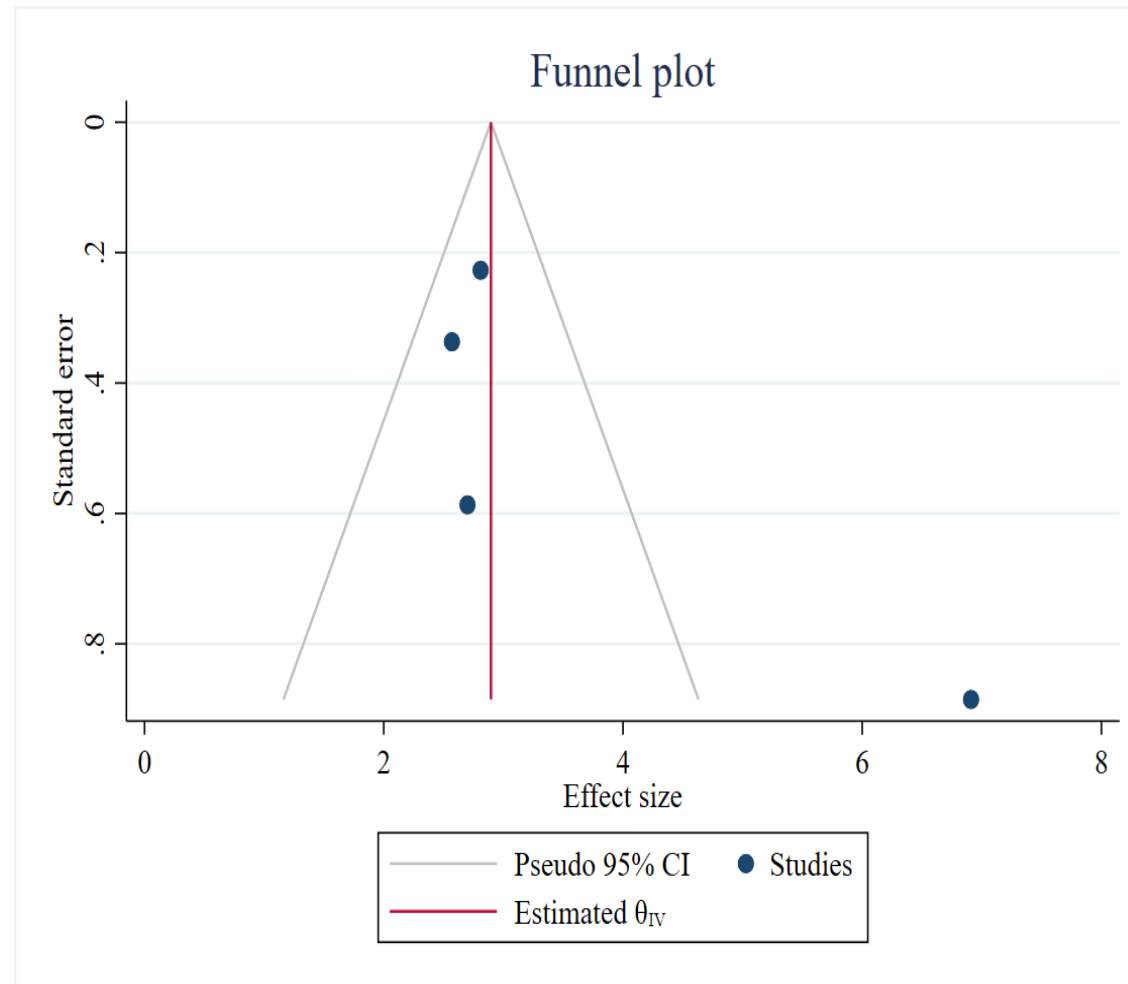
Figure S1: Funnel plot of the meta-analysis
a. Overweight/obesity



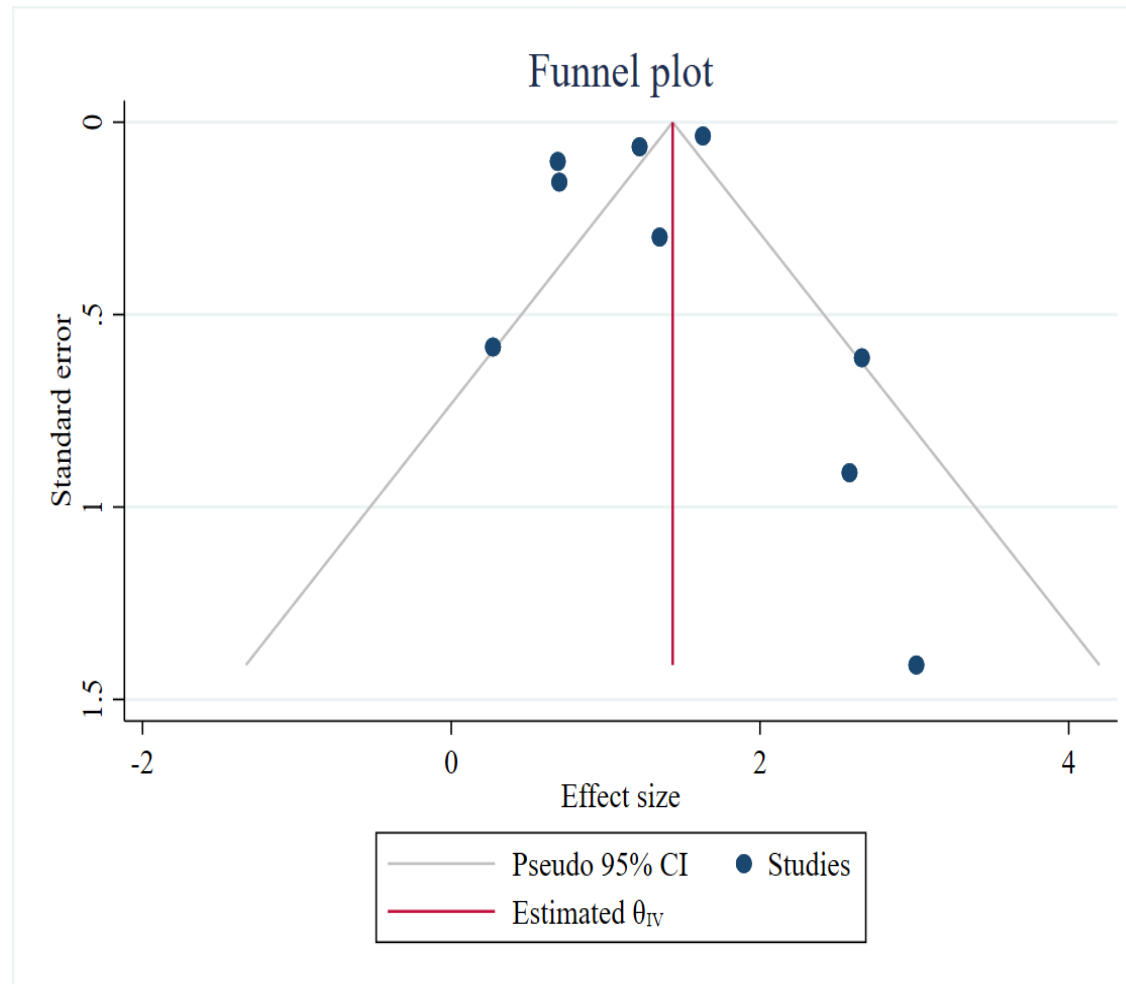
b. Underweight



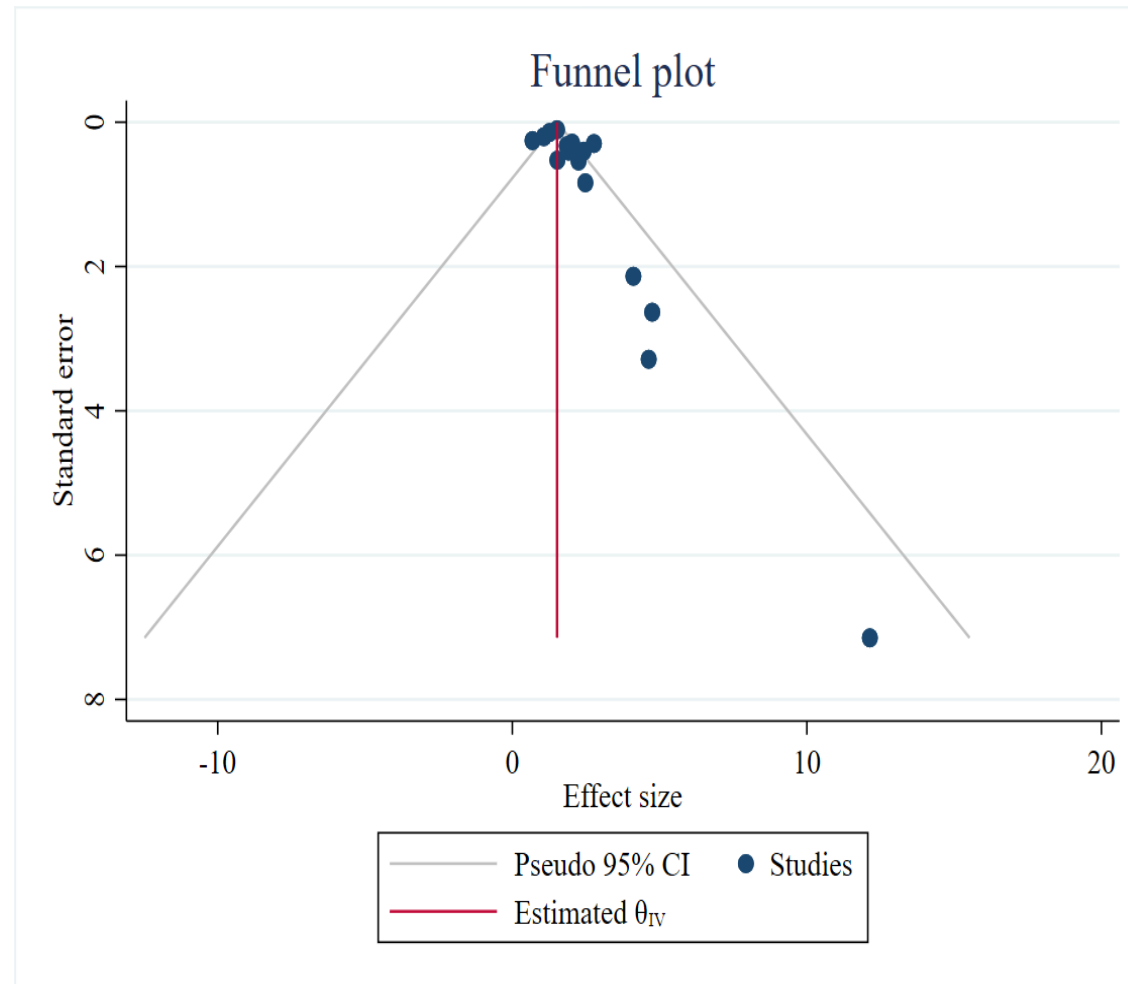
c. Fatigue



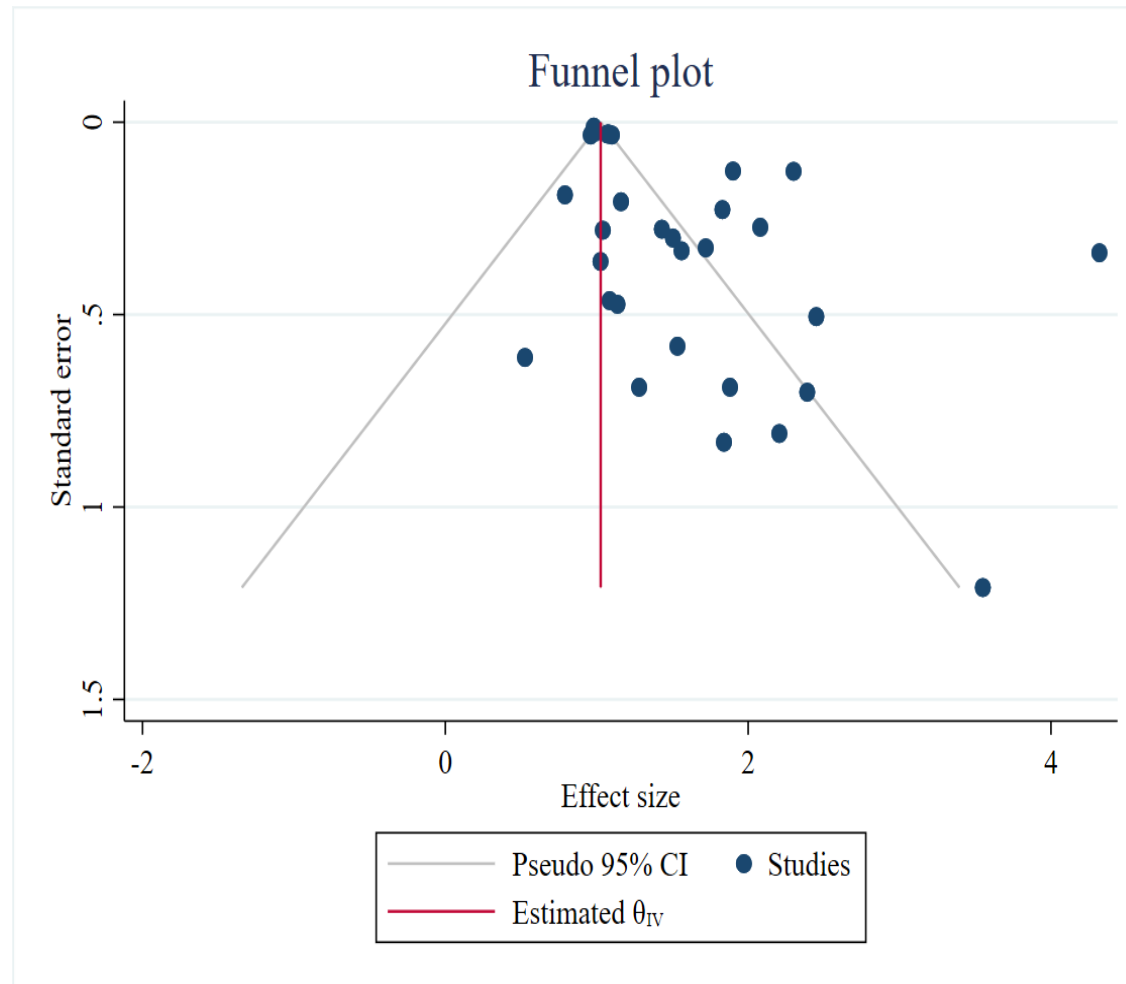
d. Sedentary lifestyle issues



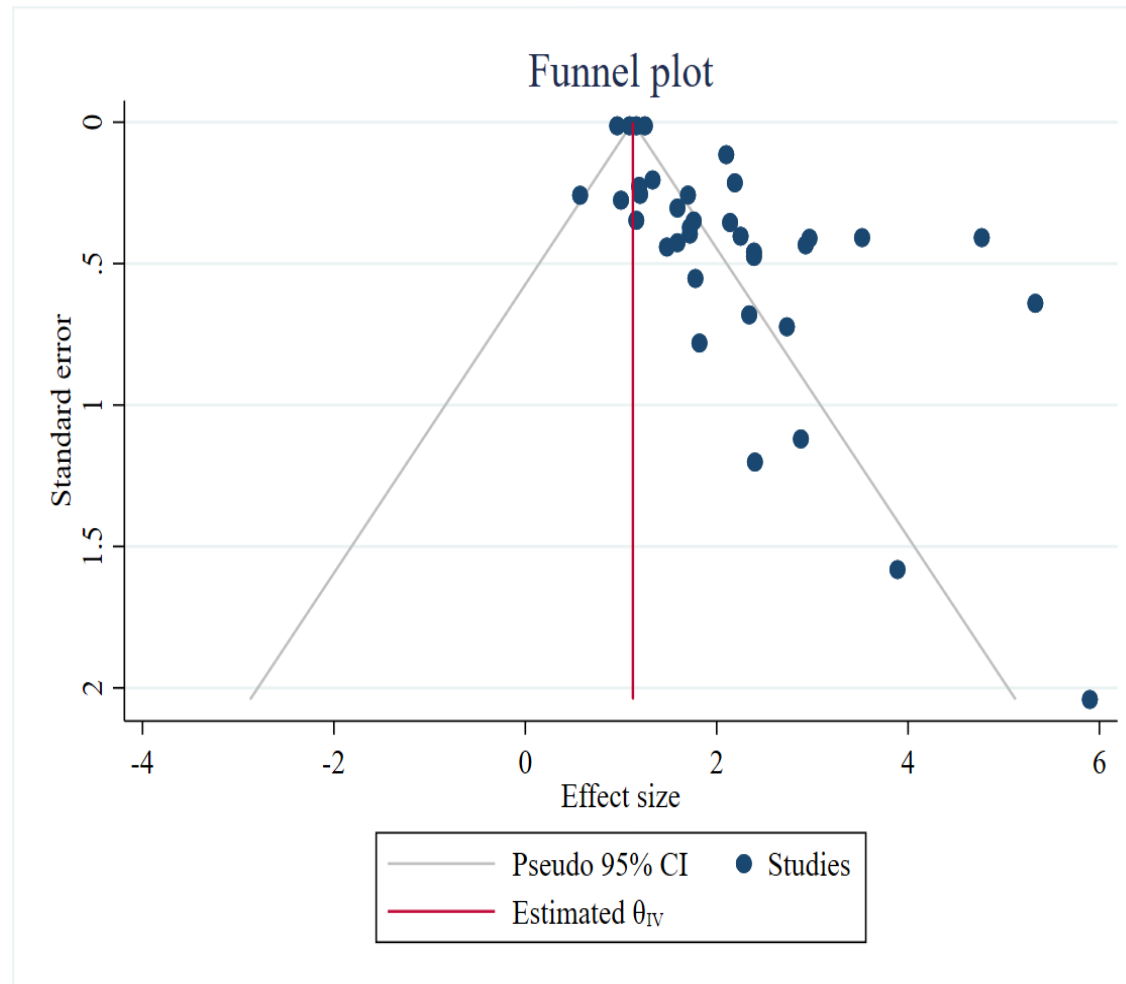
e. Poor self-rated health



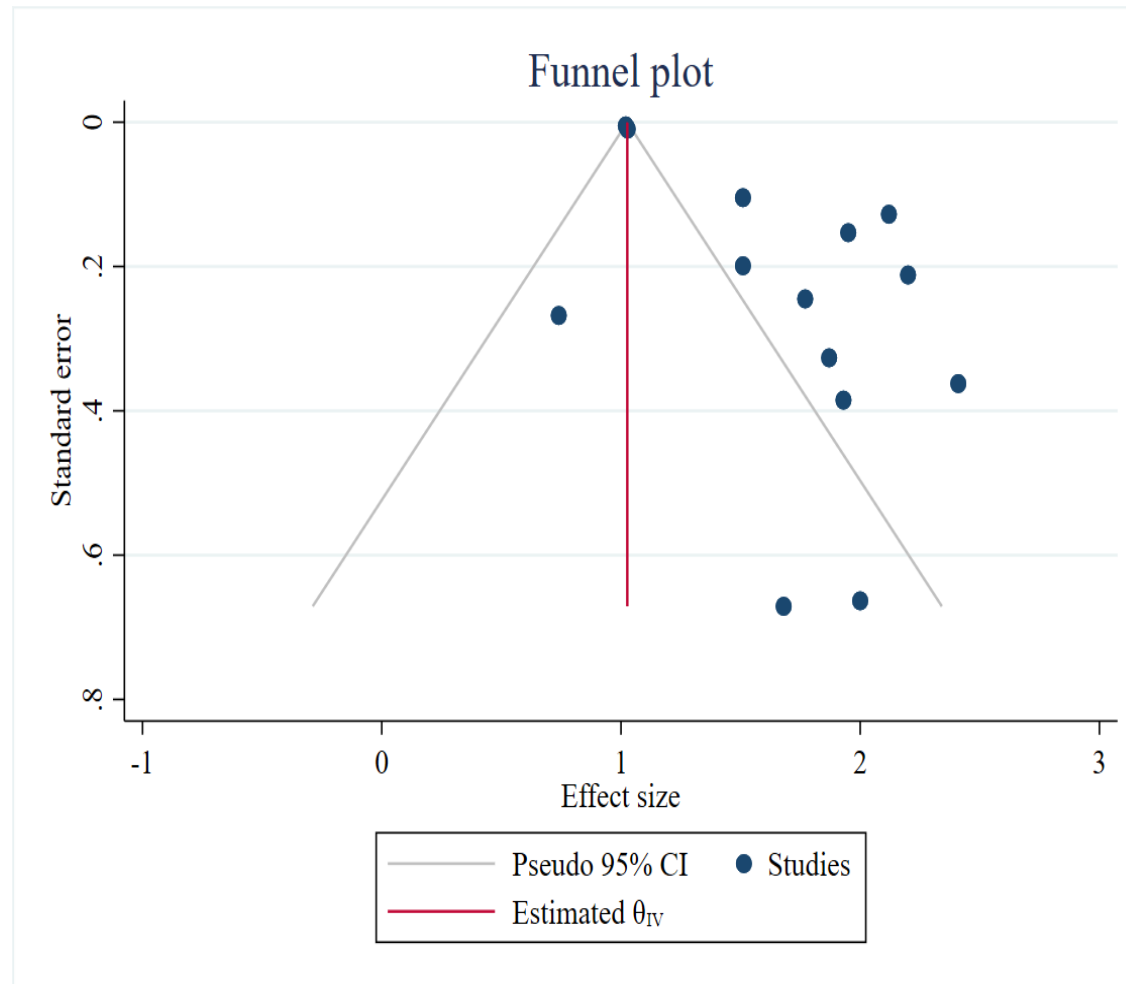
f. Pain



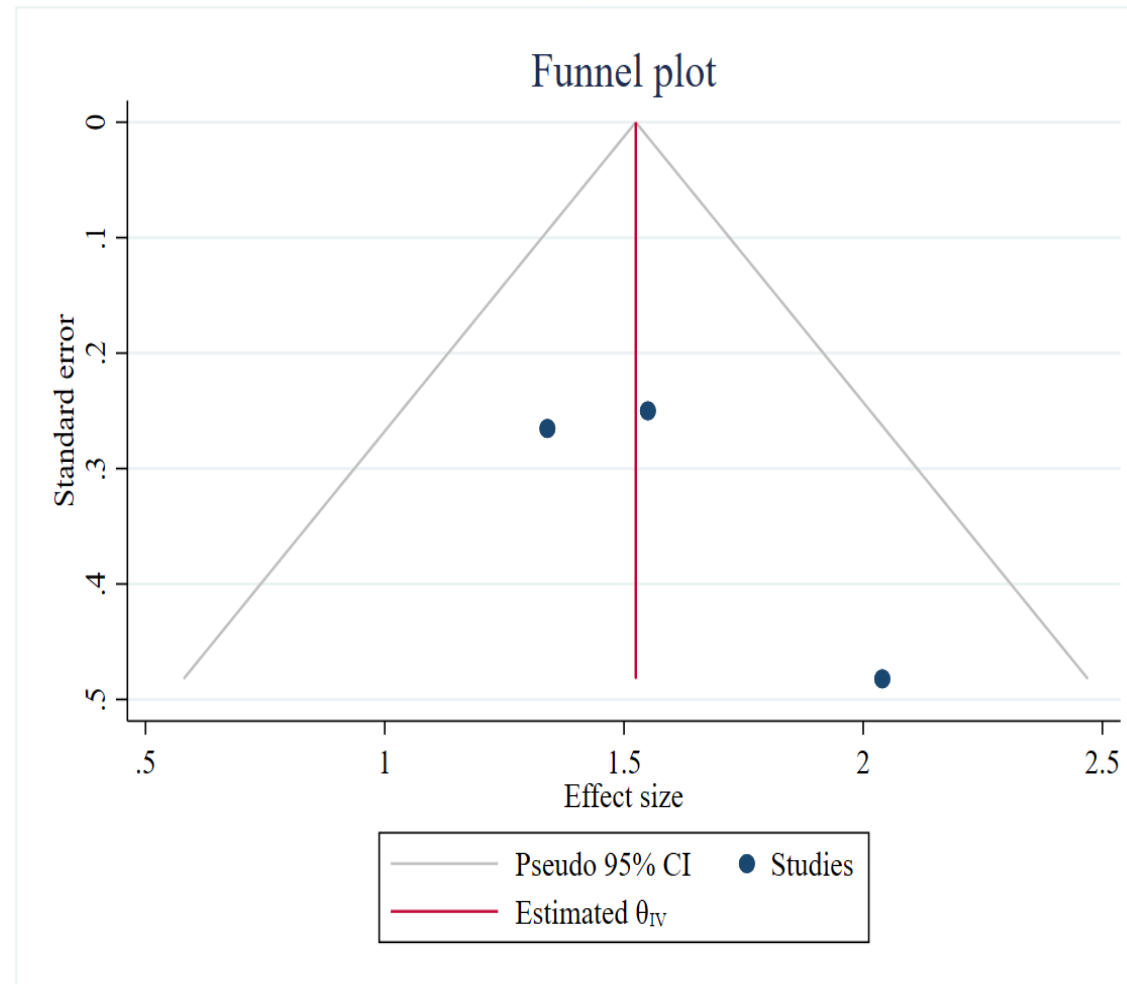
g. Sleep problems



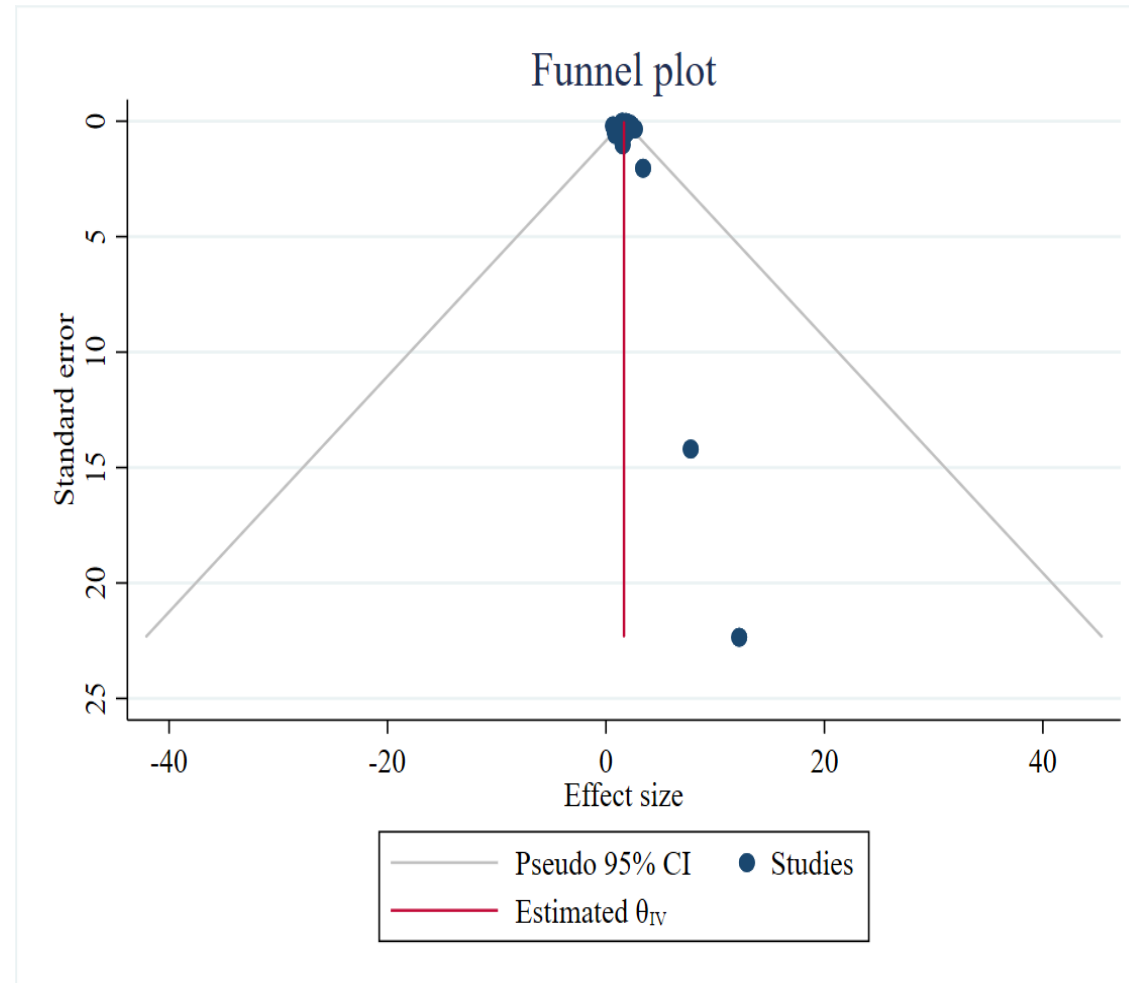
h. Violence



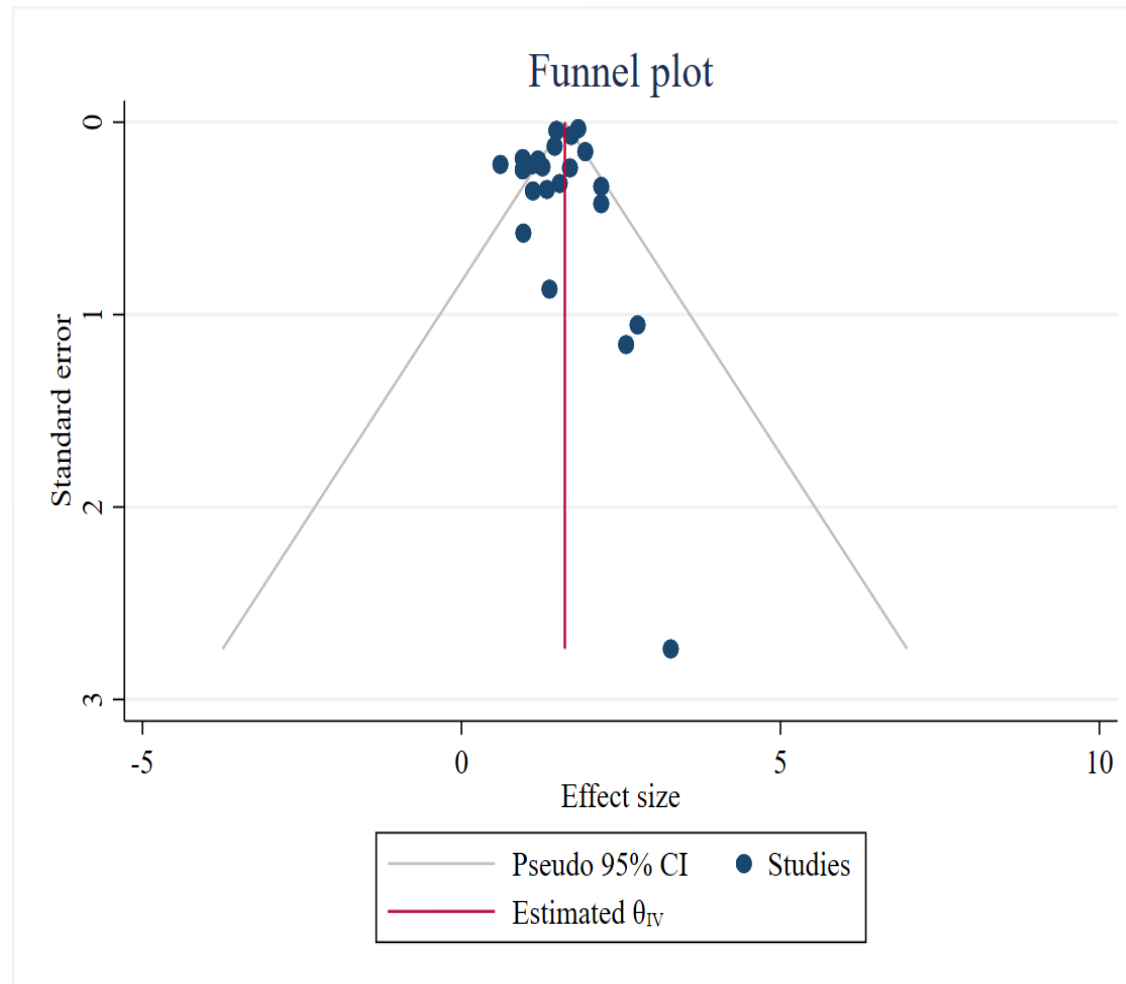
i. Eating disorders



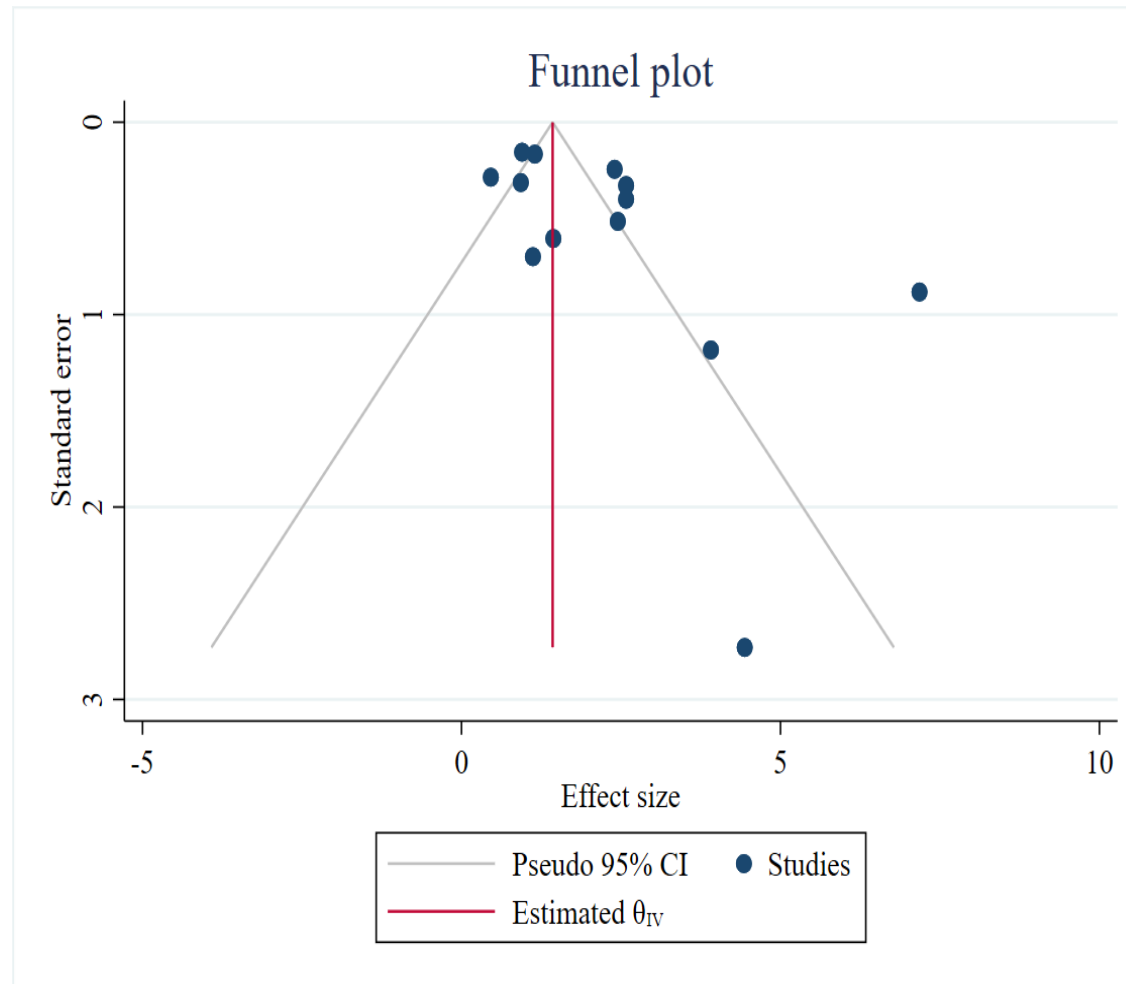
j. Self-reported smoking behavior



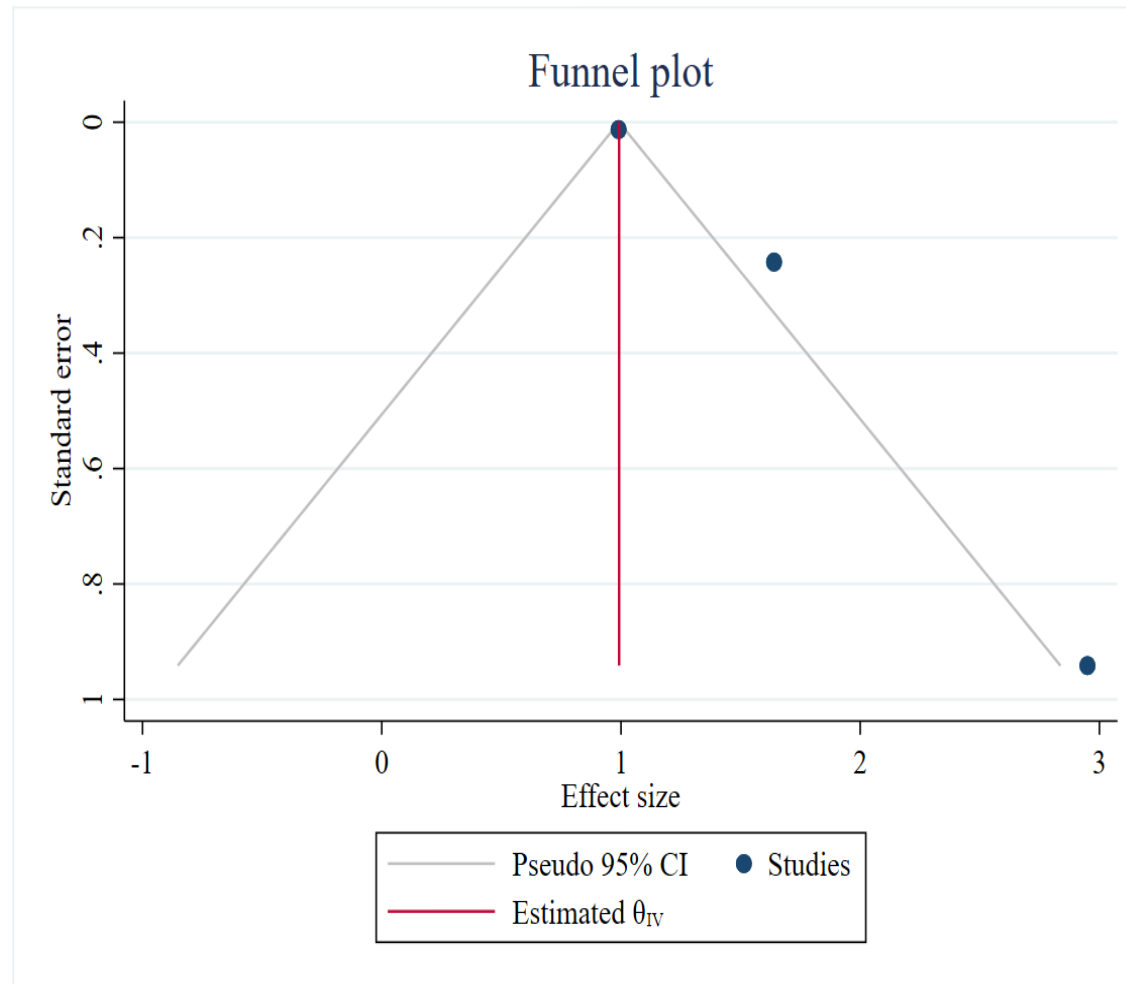
k. Problematic alcohol use



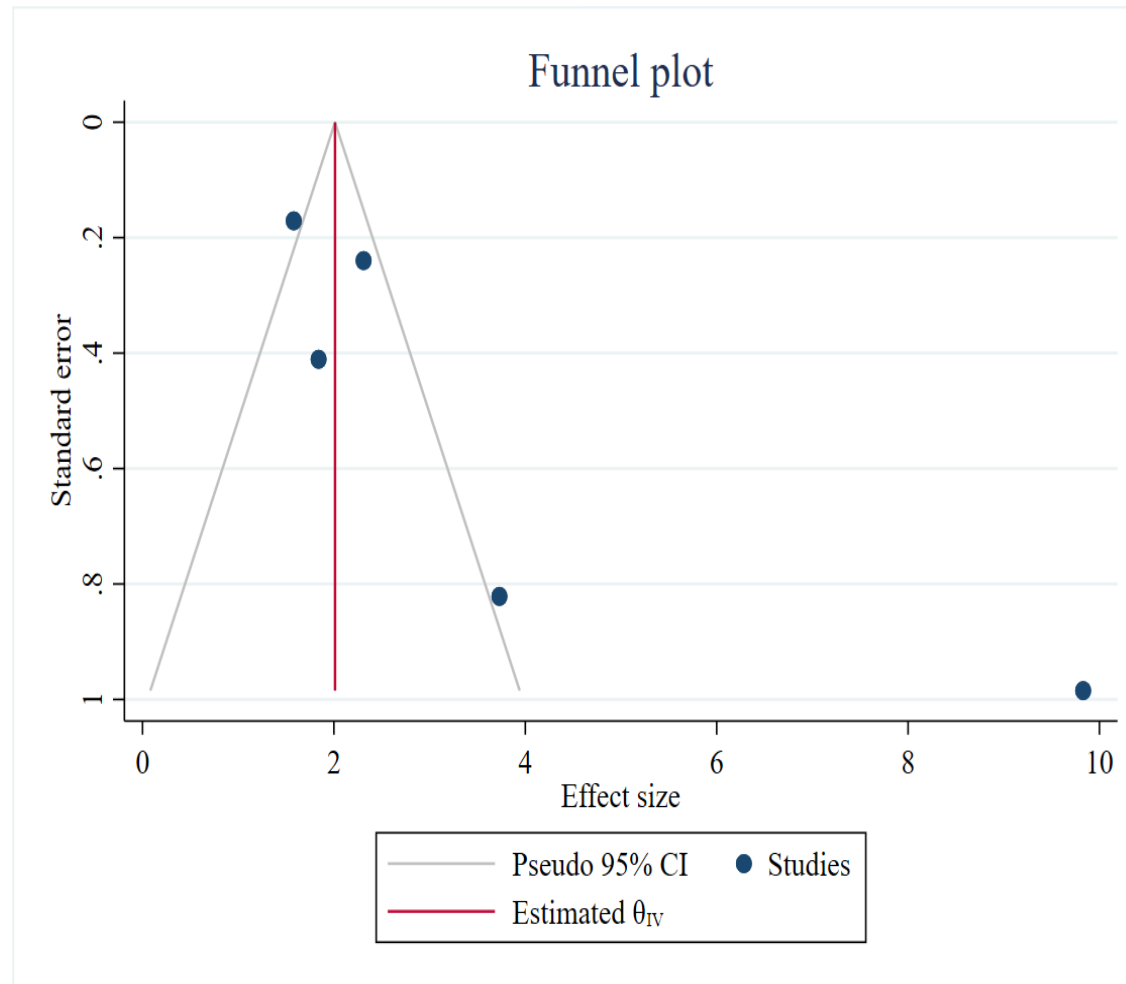
1. drug



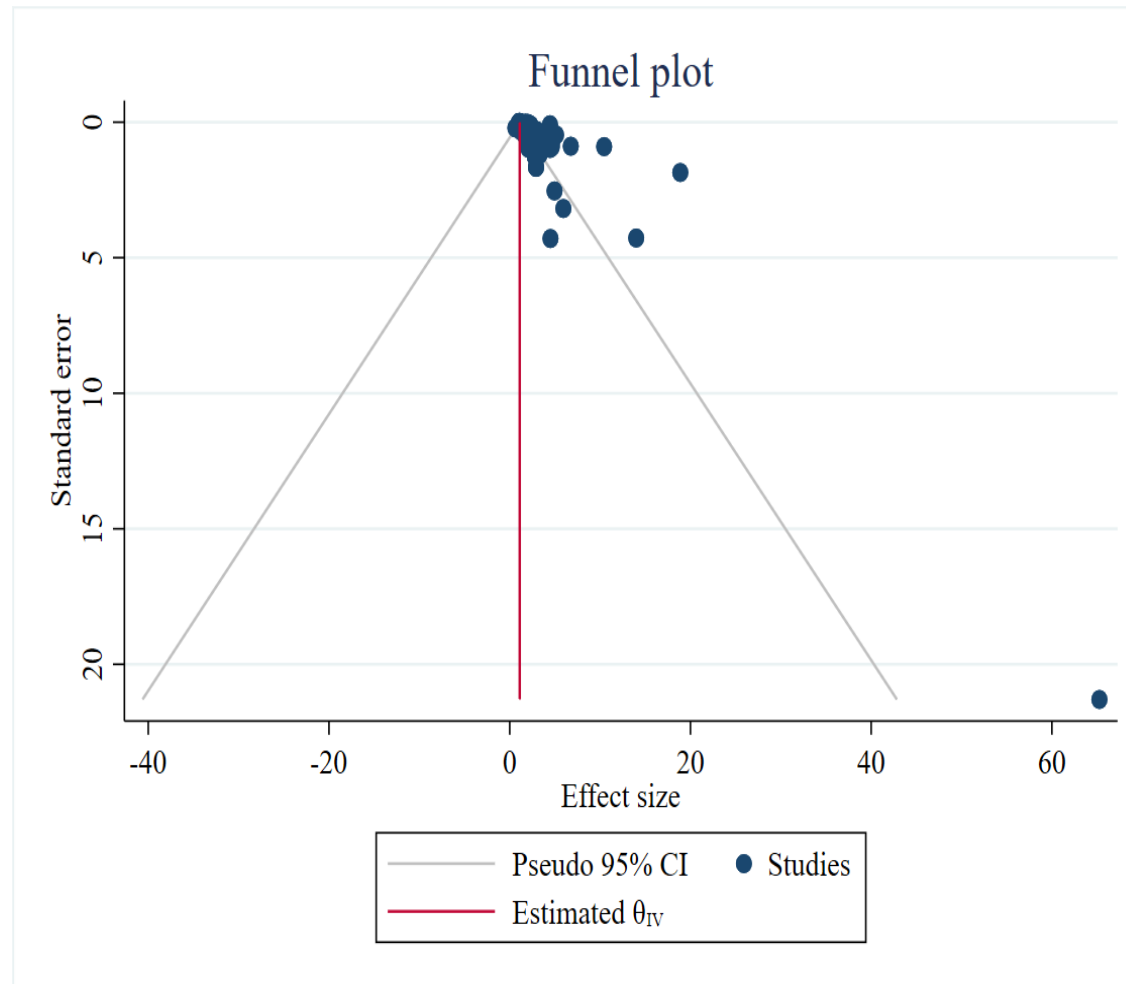
m. Gambling



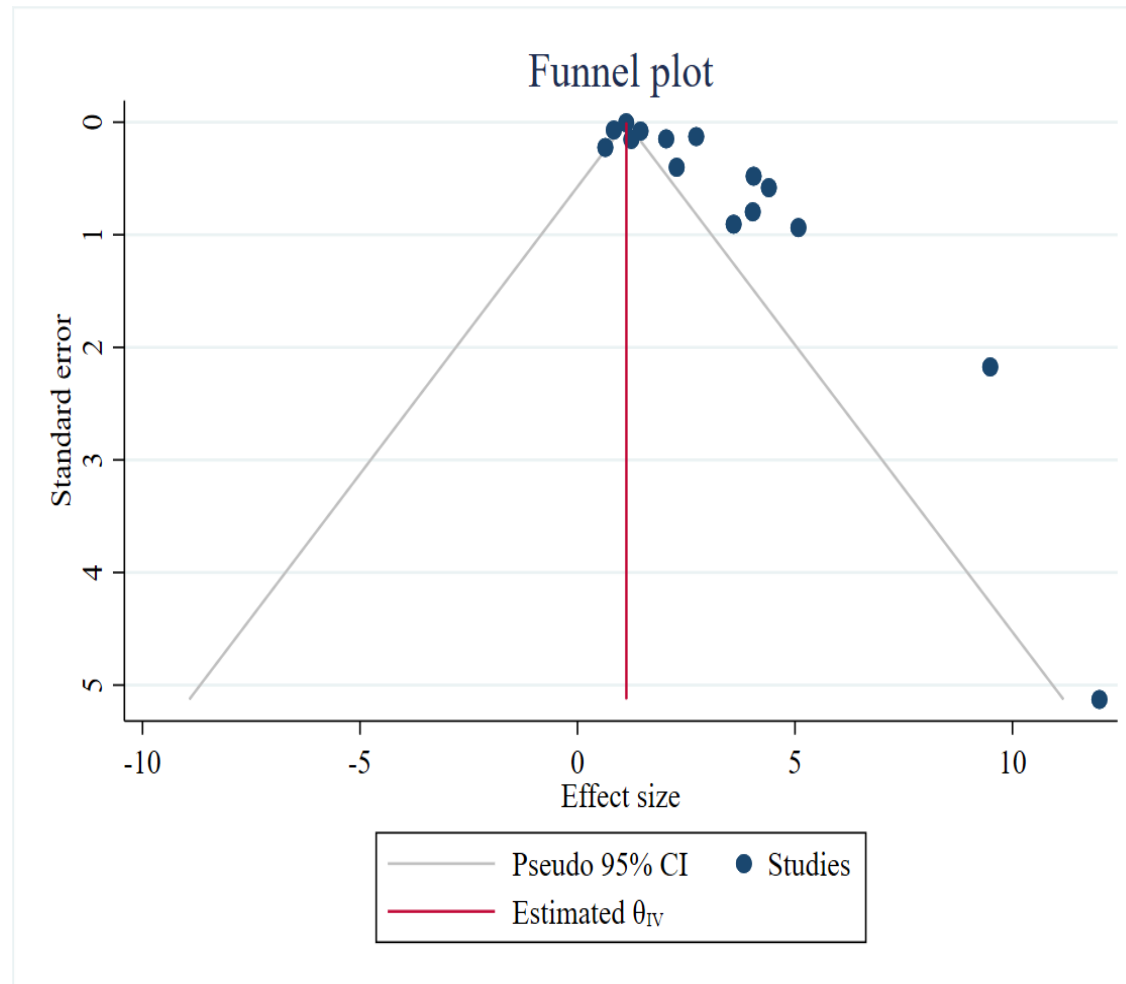
n. ADHD



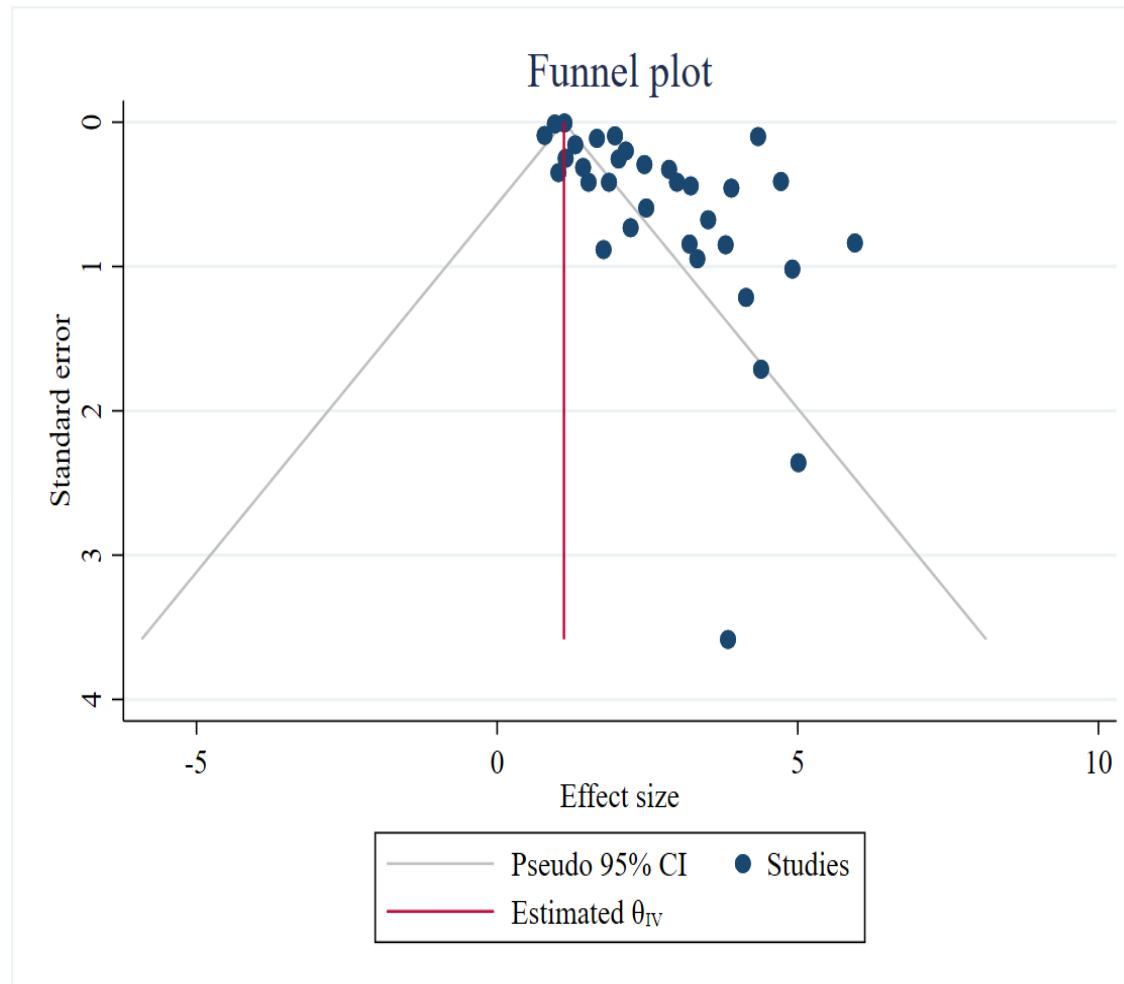
o. Depressive symptoms



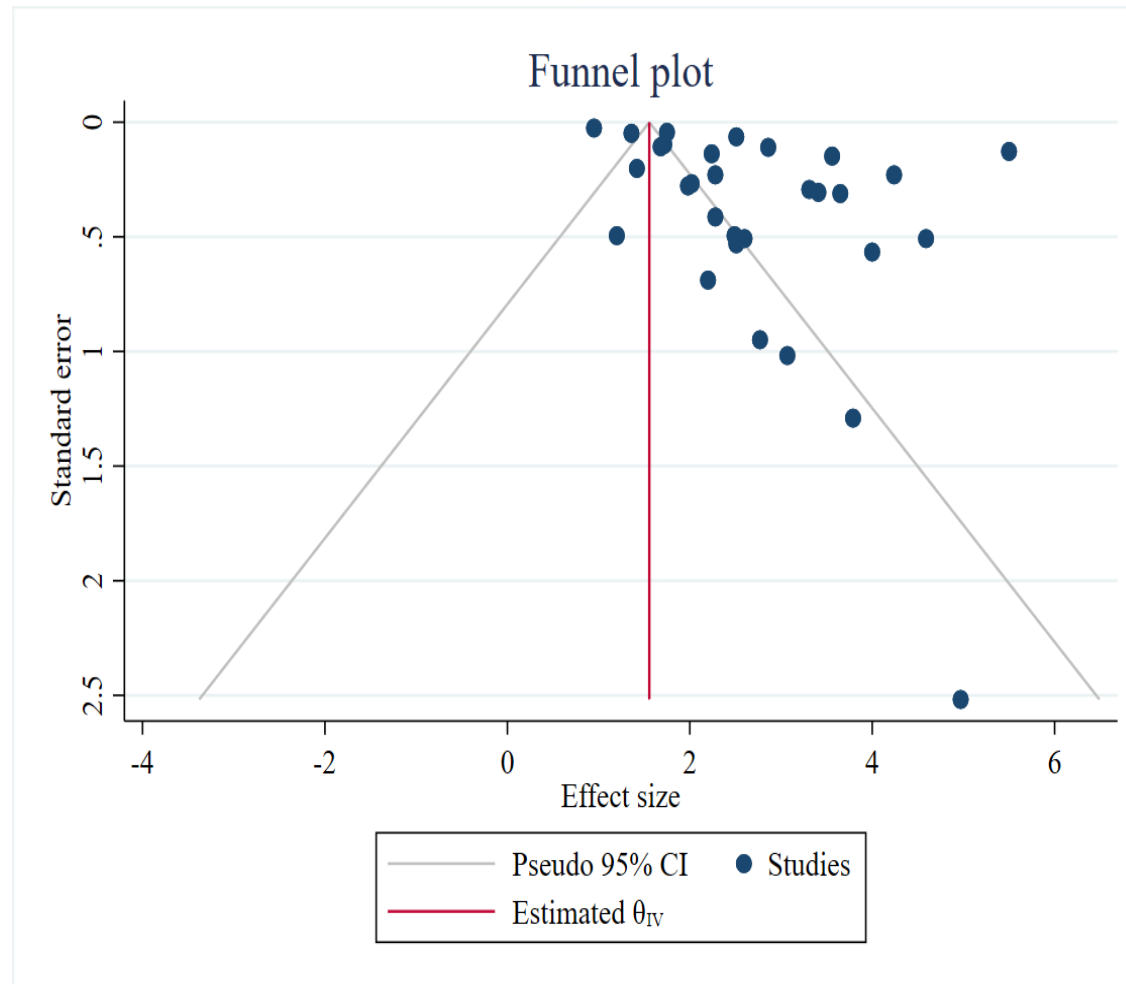
p. Stress symptoms



q. Anxiety symptoms



r. Suicide



s. Other mental health

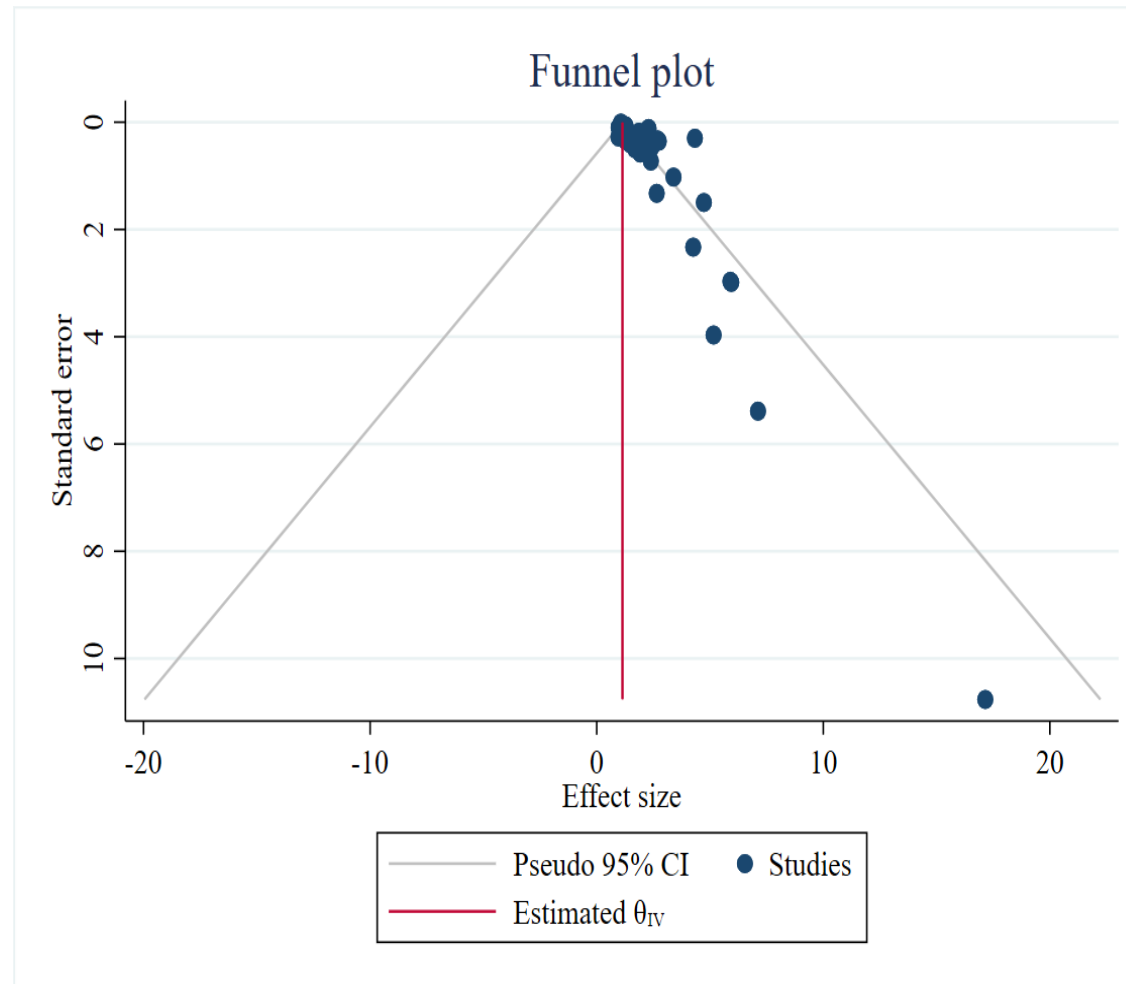
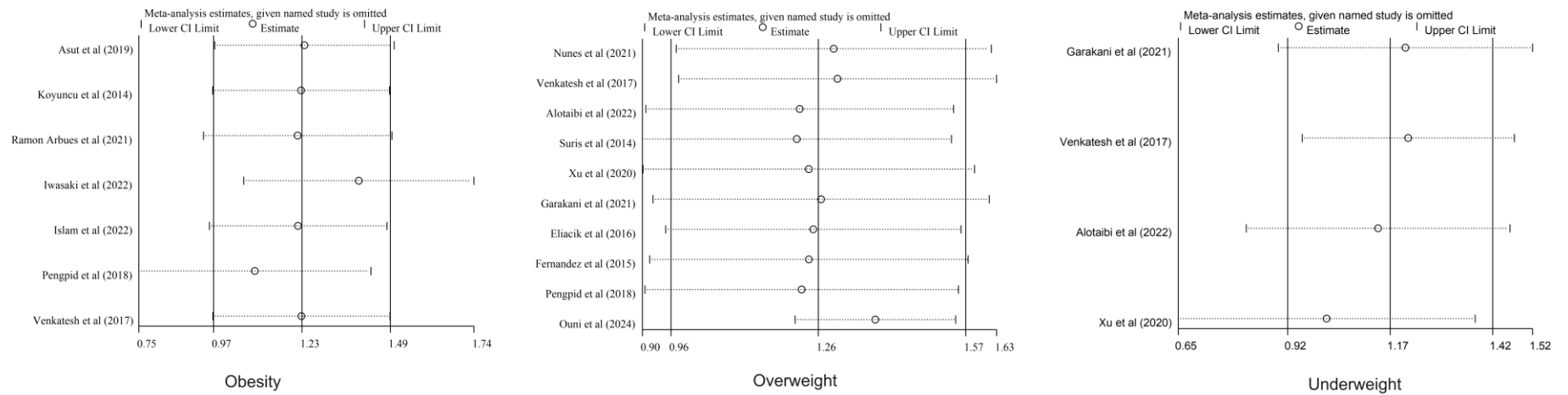
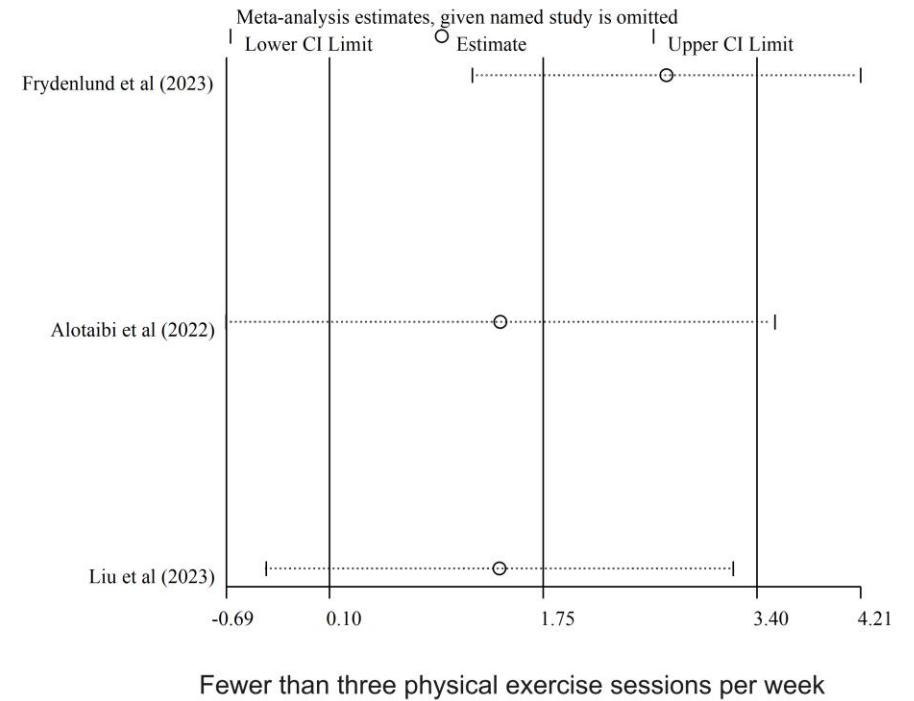
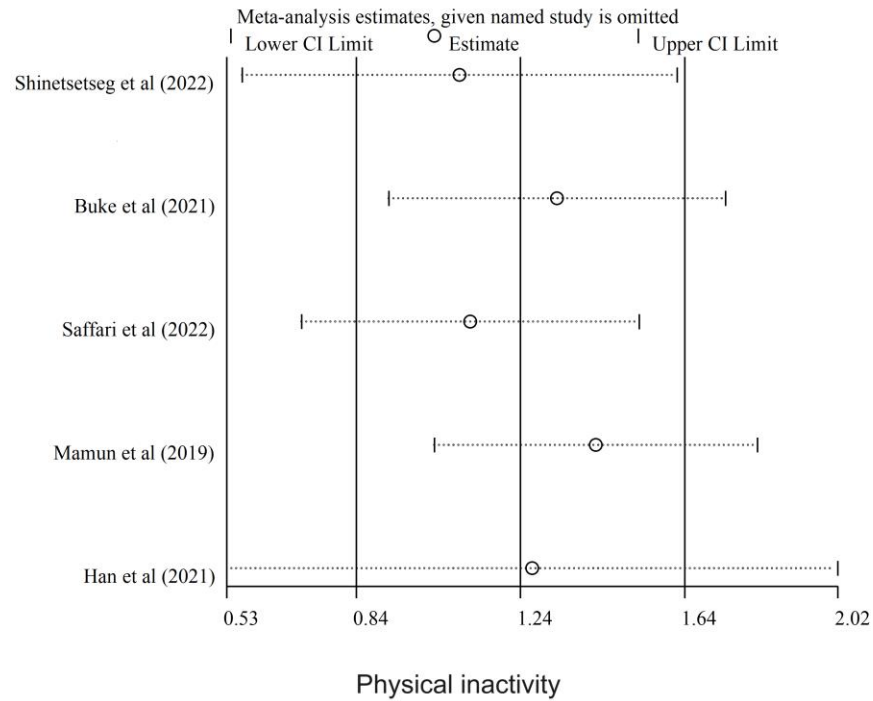


Figure S2: Sensitive analysis of the meta-analysis

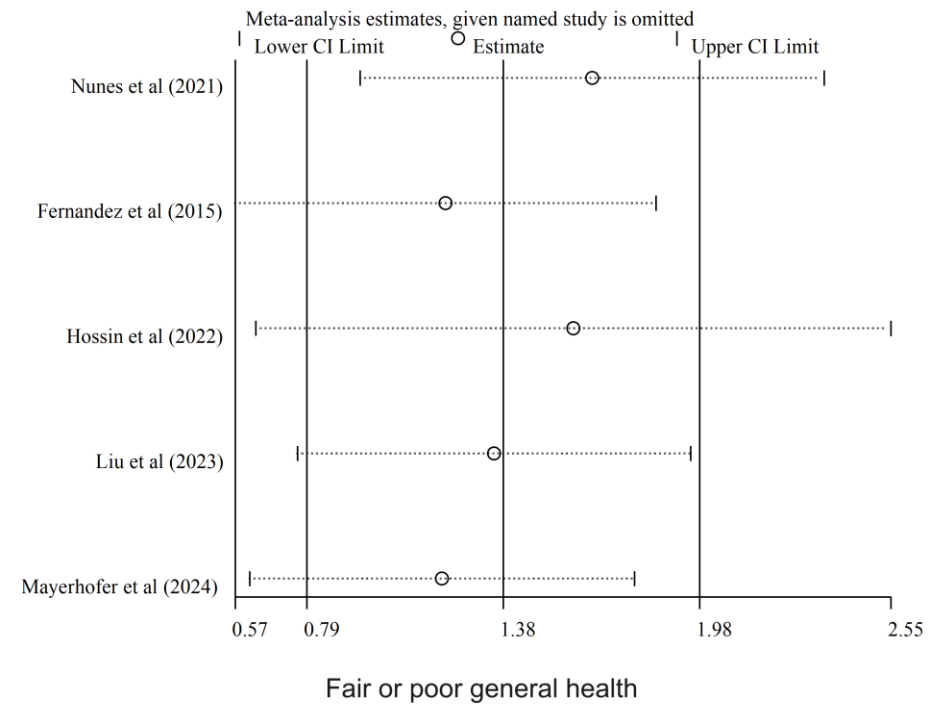
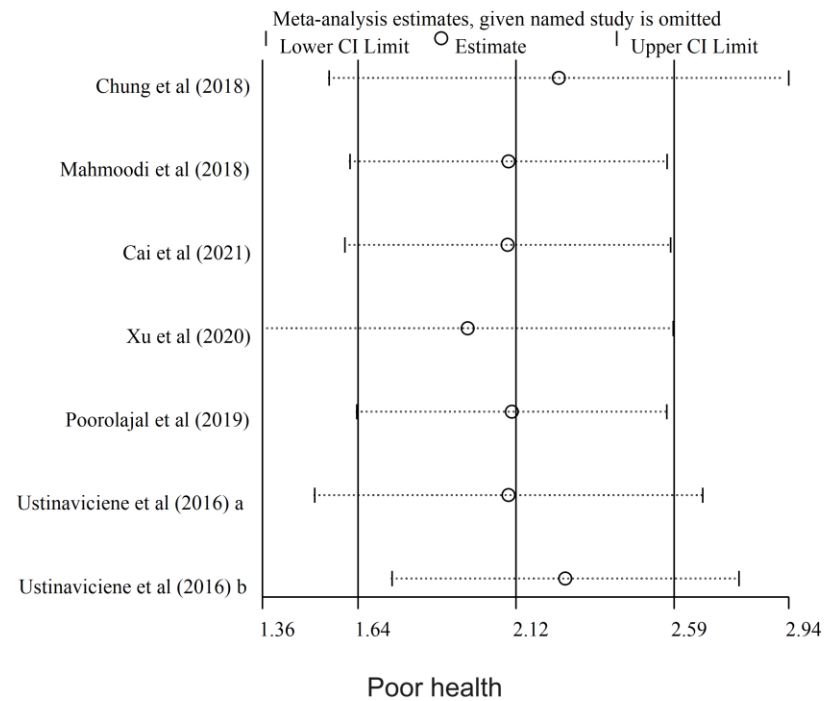
a. weight



b. Sedentary lifestyle issues

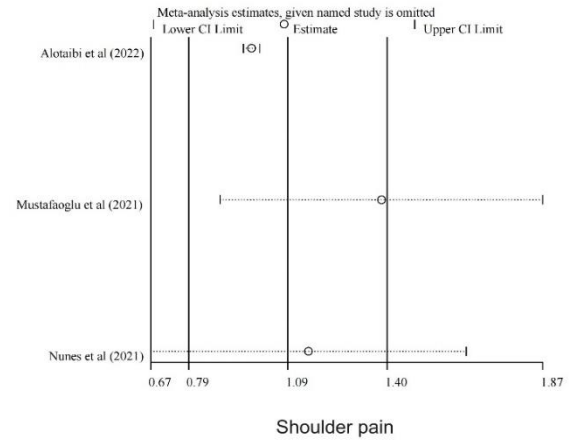
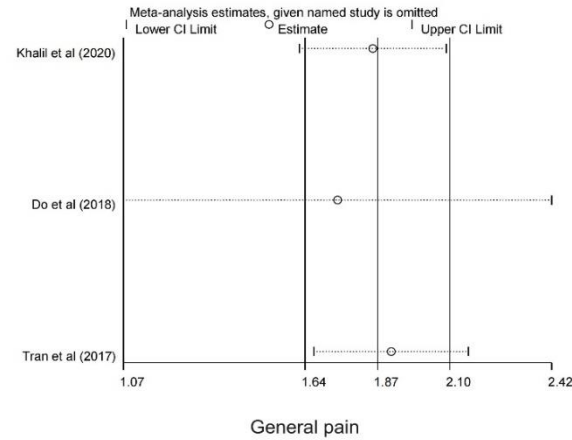
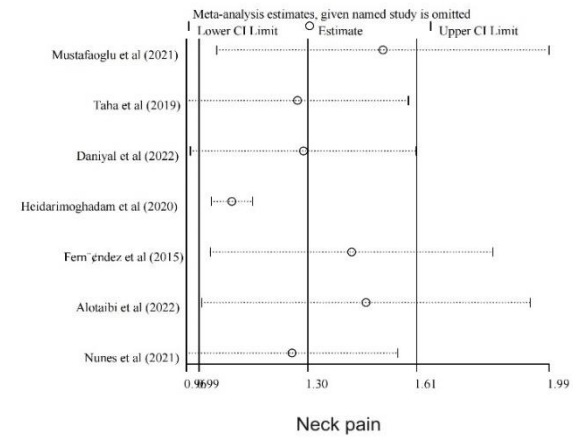
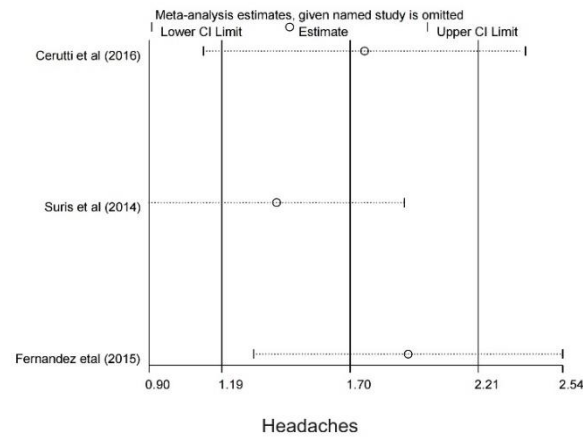


c. Poor self-rated health

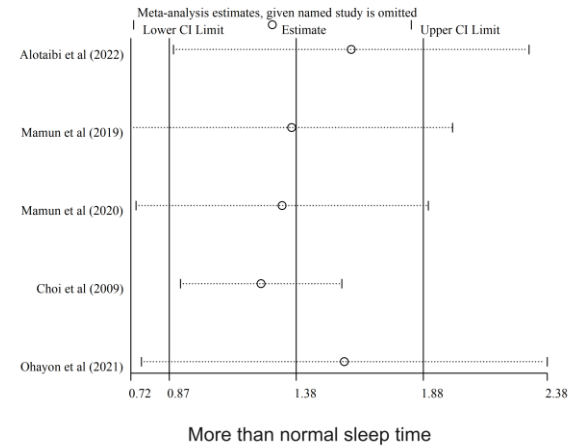
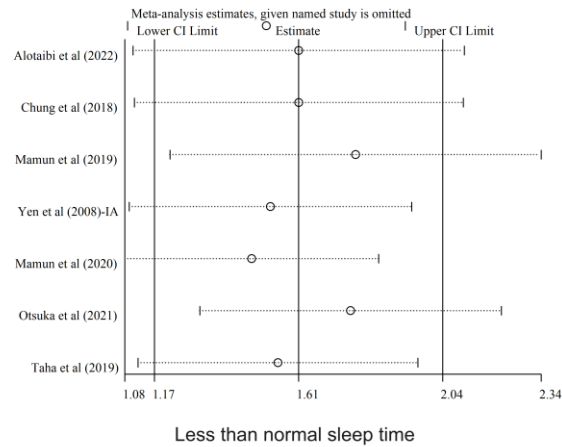
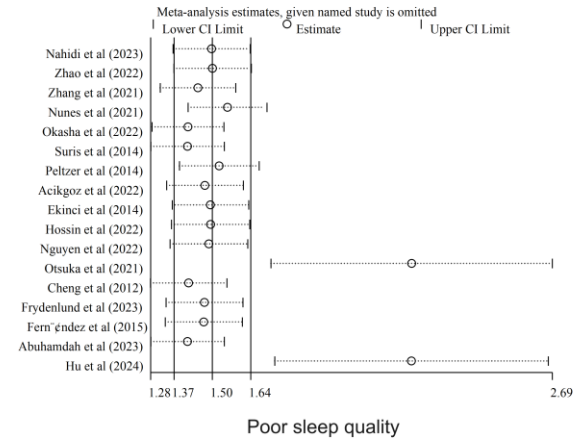
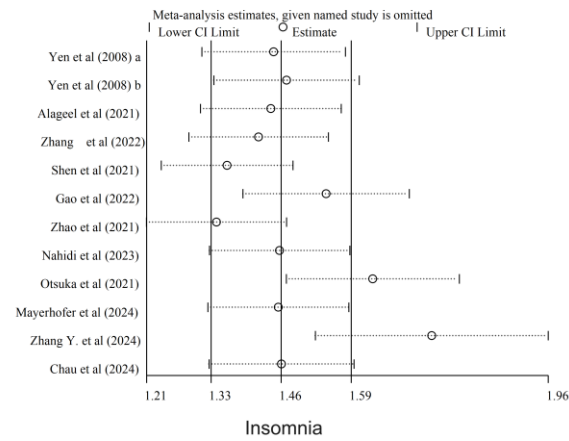


Ustinaviciene et al (2016) a: Male; Ustinaviciene et al (2016) b: Female

d. Pain

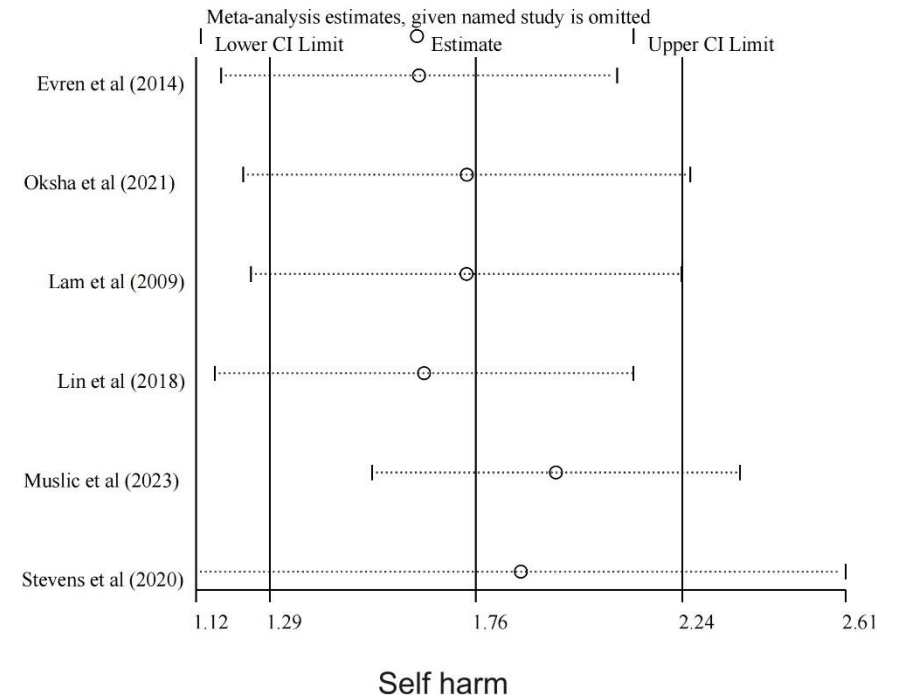
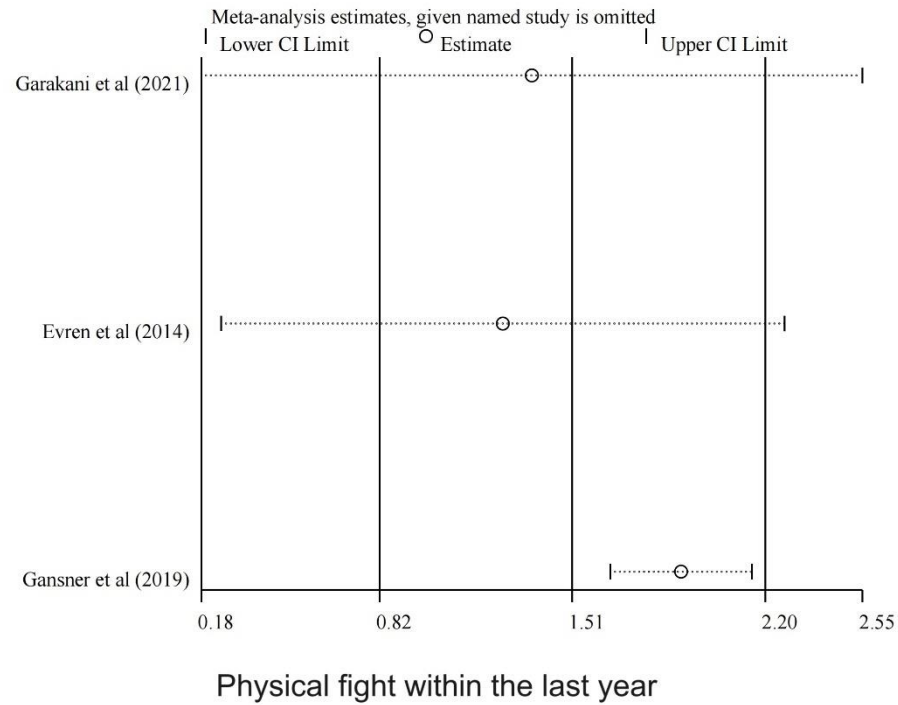


e. Sleep problems

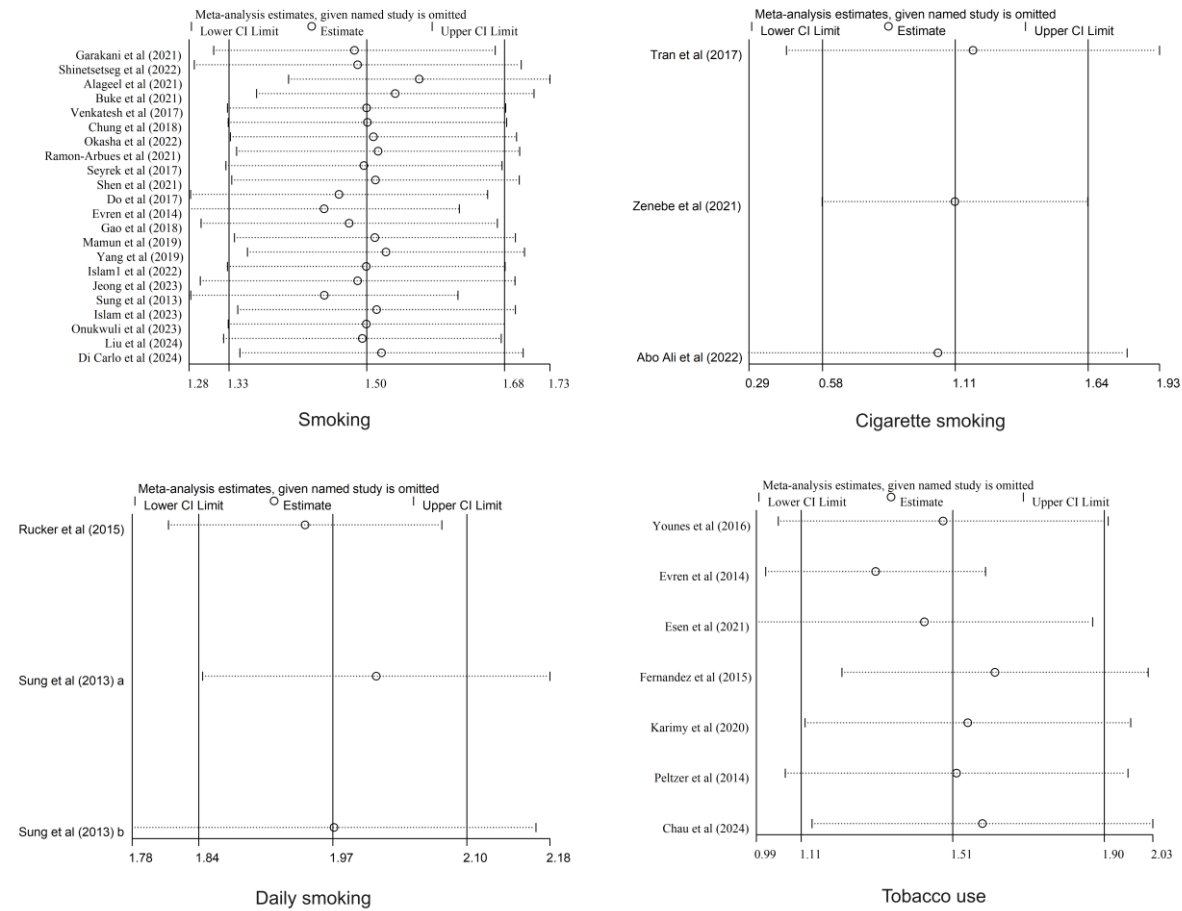


Yen et al (2008) a: Internet addiction; Yen et al (2008) b: Smartphone addiction

f. Violence

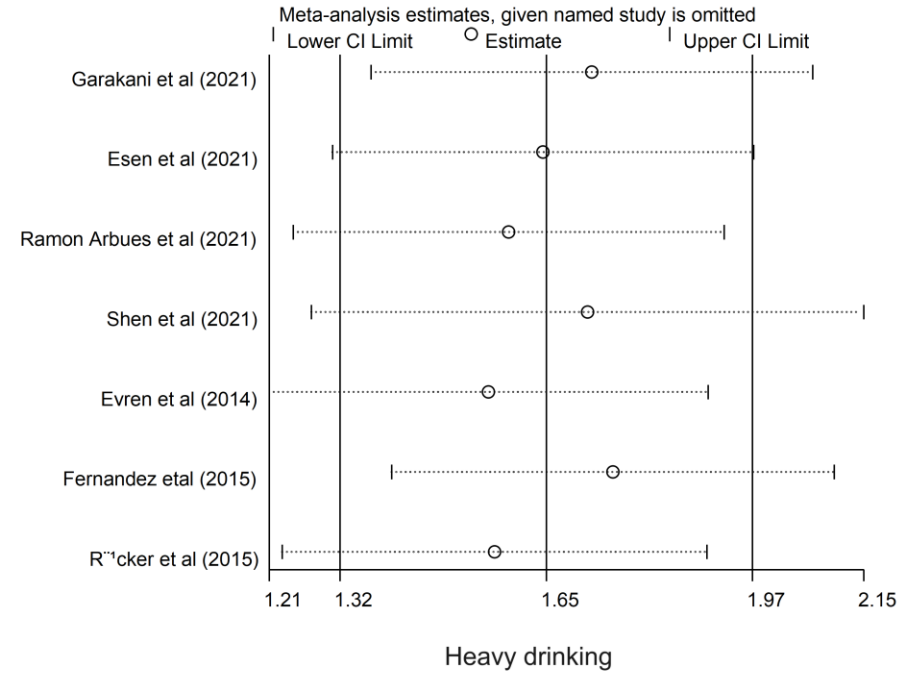
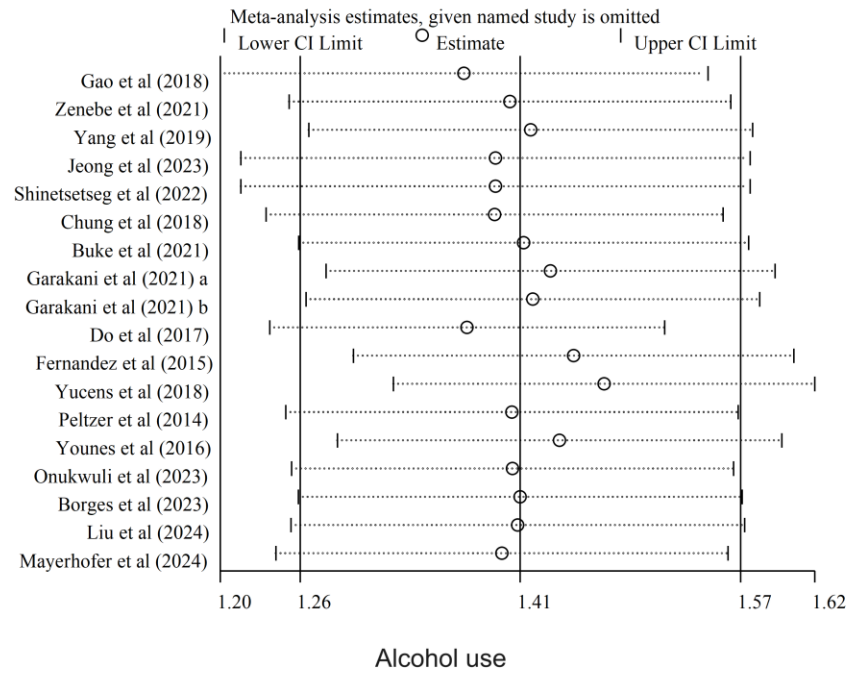


g. Self-reported smoking behavior



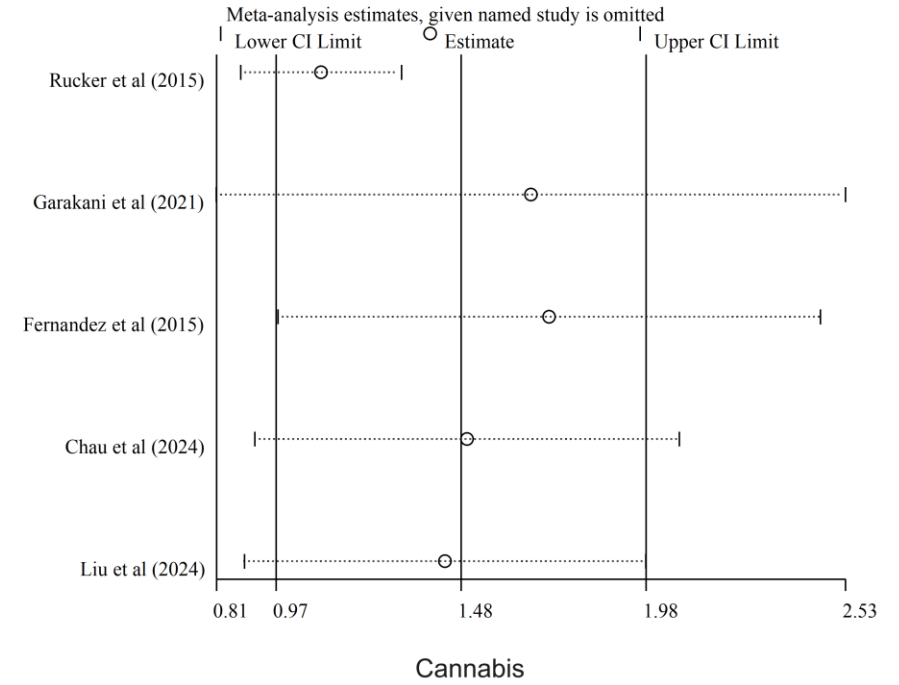
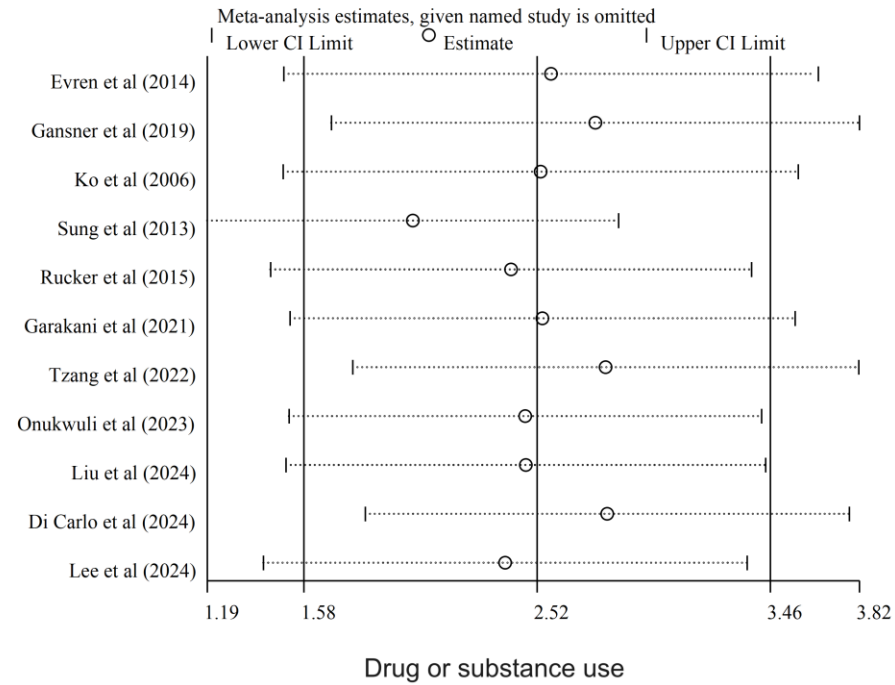
Sung et al (2013) a: low Internet addiction; Sung et al (2013) b: high Internet addiction

h. Problematic alcohol use

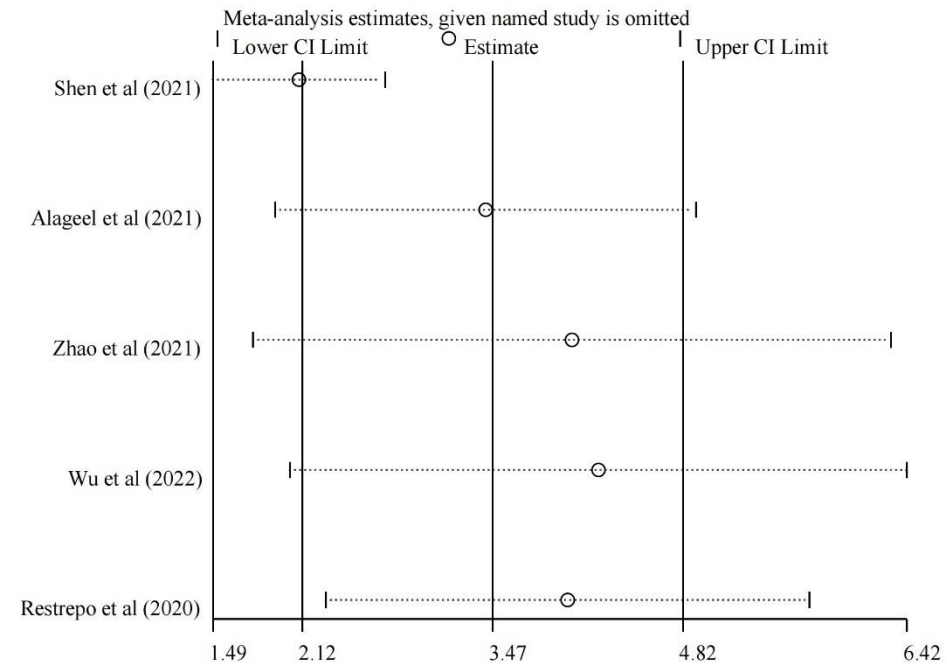


Garakani et al (2021) a: Alcohol use; Garakani et al (2021) b: Binge alcohol use

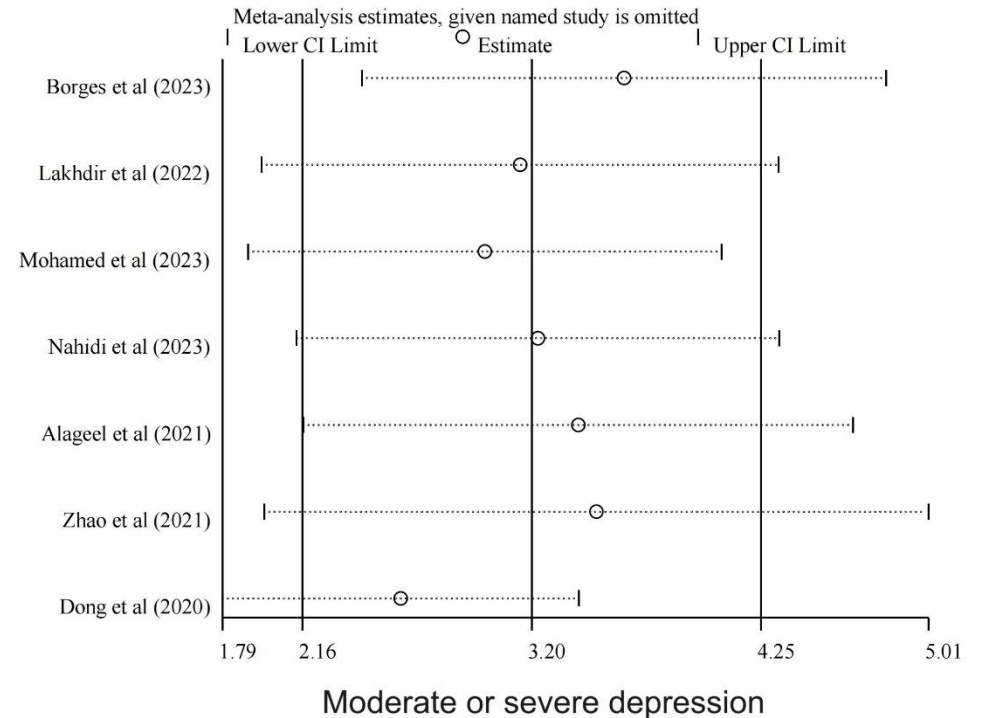
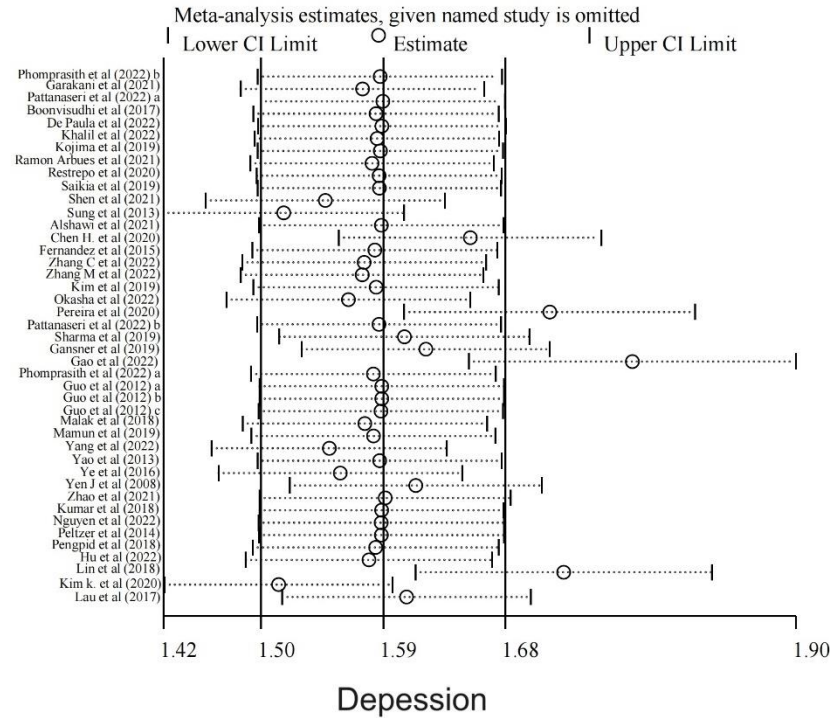
i. Drug use



j. ADHD

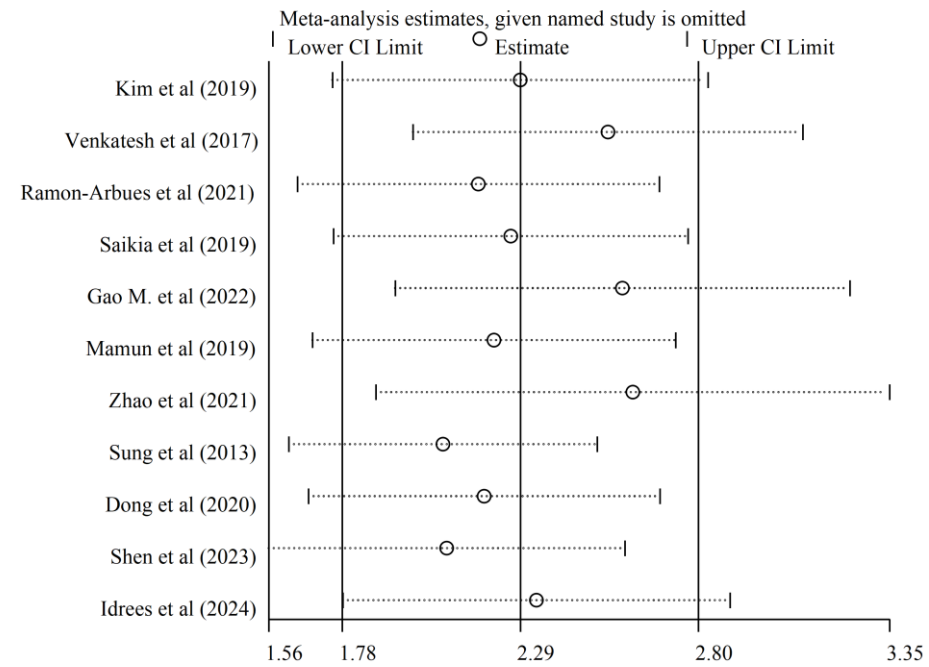


k. Depressive symptoms

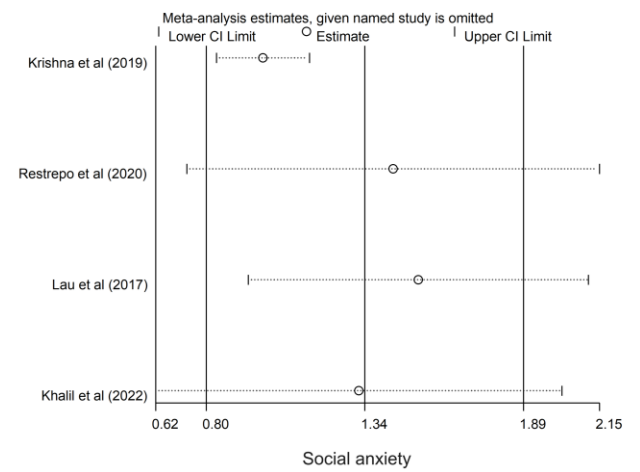
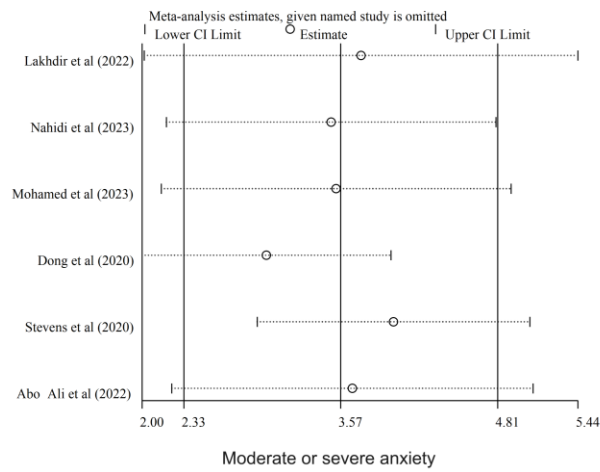
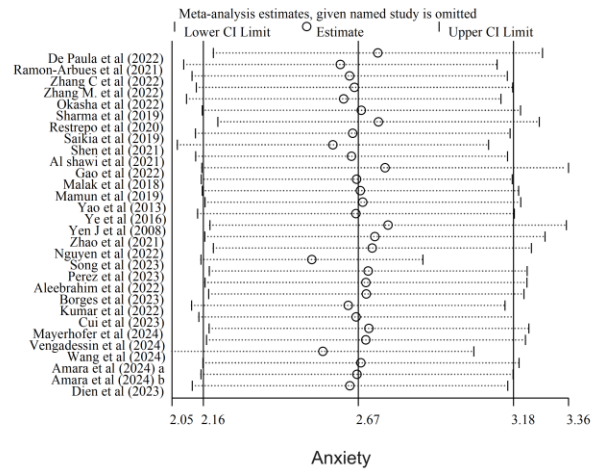


Phomprasith et al (2022) a: Gaming addiction; Pattanasari et al (2022) a: Gaming addiction; Pattanasari et al (2022) b: Smartphone addiction; Phomprasith et al (2022) b: Internet addiction; Guo et al (2012) a: Mild Internet addiction; Guo et al (2012) b: Moderate Internet addiction; Guo et al (2012) c: Severe Internet addiction; Guo et al (2020) a: Mild Internet addiction; Guo et al (2020) b: Moderate Internet addiction; Guo et al (2020) c: Severe Internet addiction

I. Stress symptoms

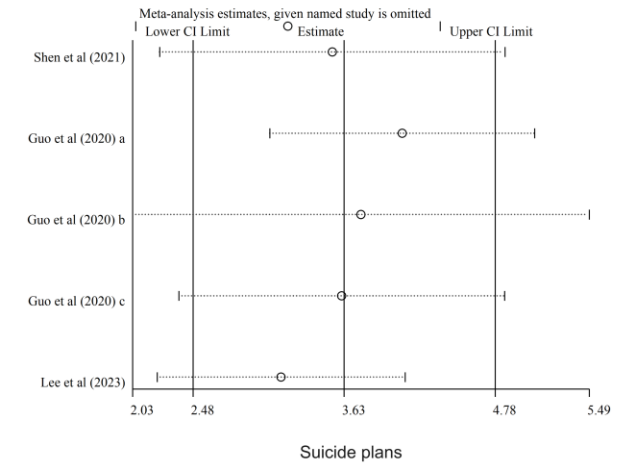
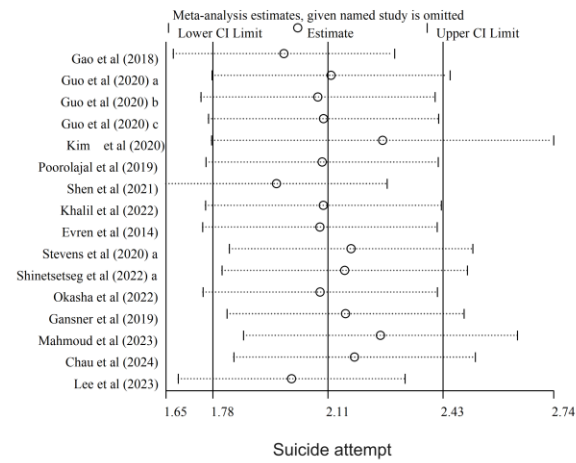
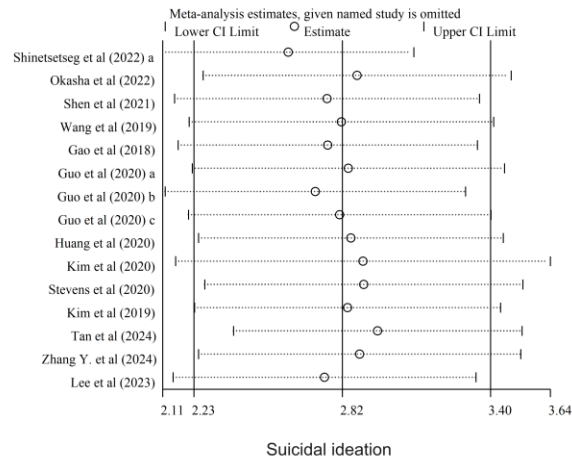


m. Anxiety symptoms



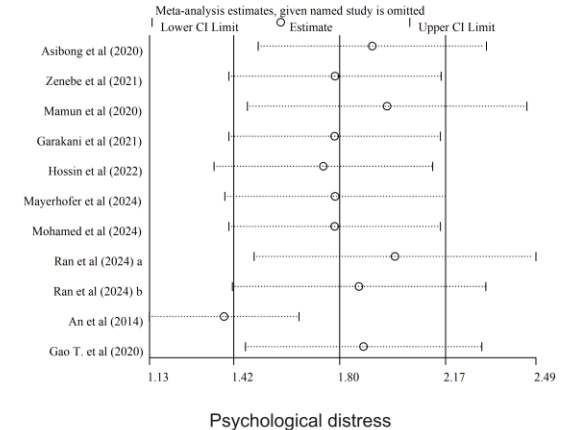
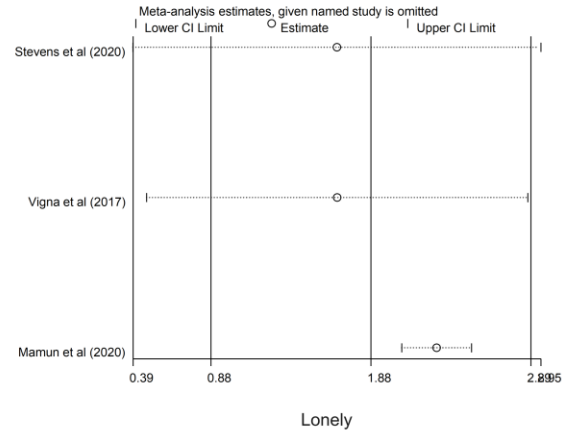
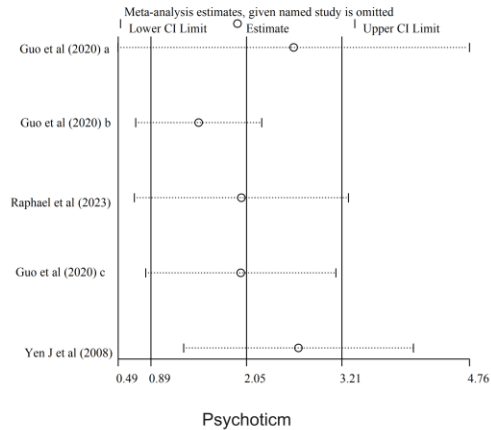
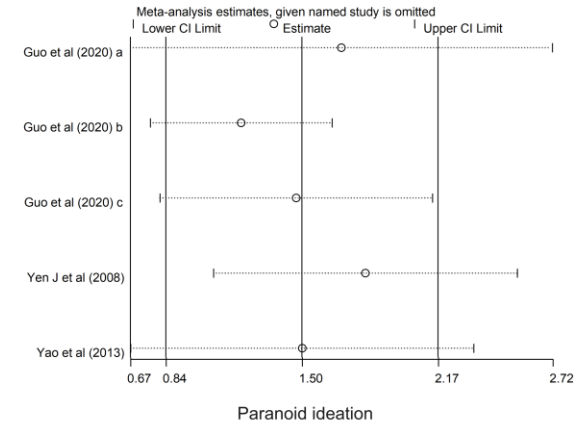
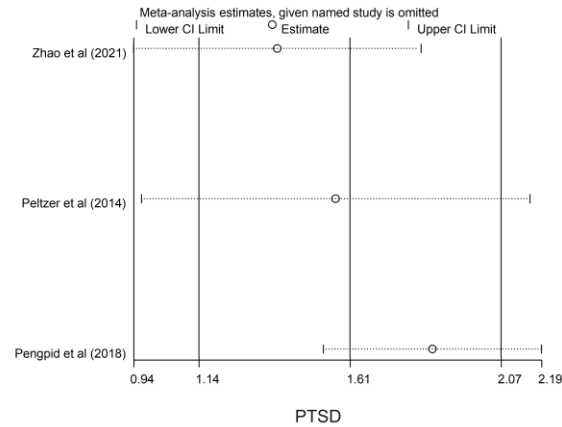
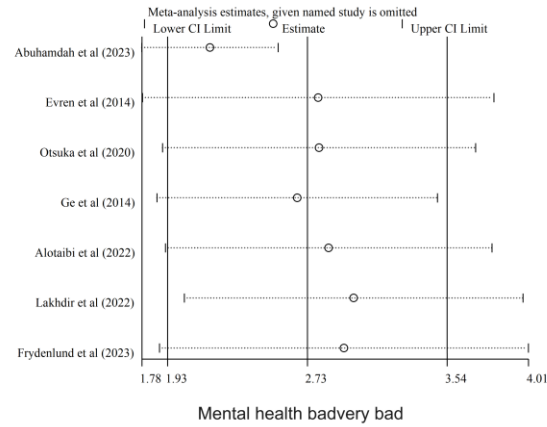
Amara et al (2024) a: Internet gaming disorder; Amara et al (2024) b: Internet addiction

n. Suicide



Shinetseseg et al (2022) a: Smartphone addiction; Guo et al (2020) a: Mild Internet addiction; Guo et al (2020) b: Moderate Internet addiction; Guo et al (2020) c: Severe Internet addiction

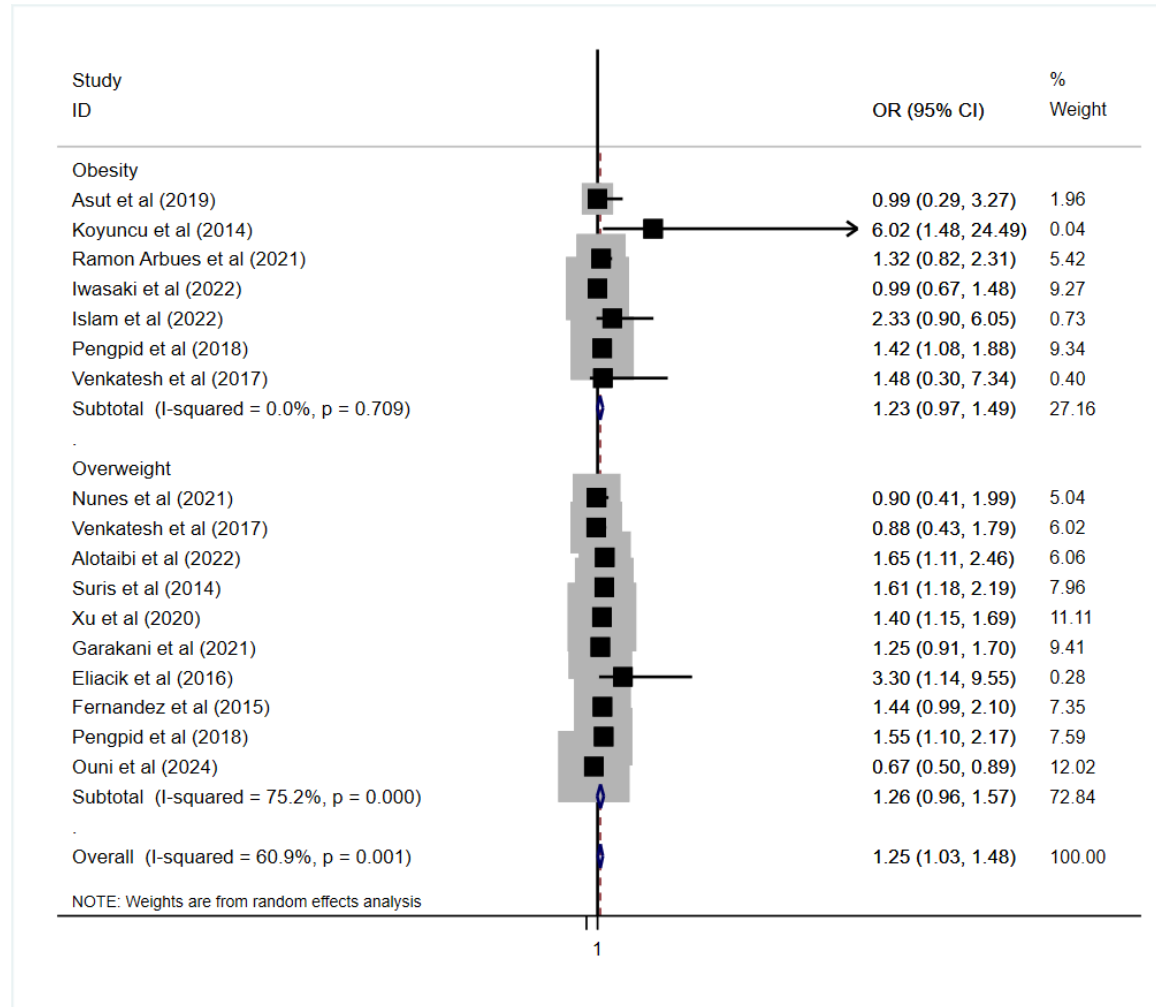
o. Other mental Health



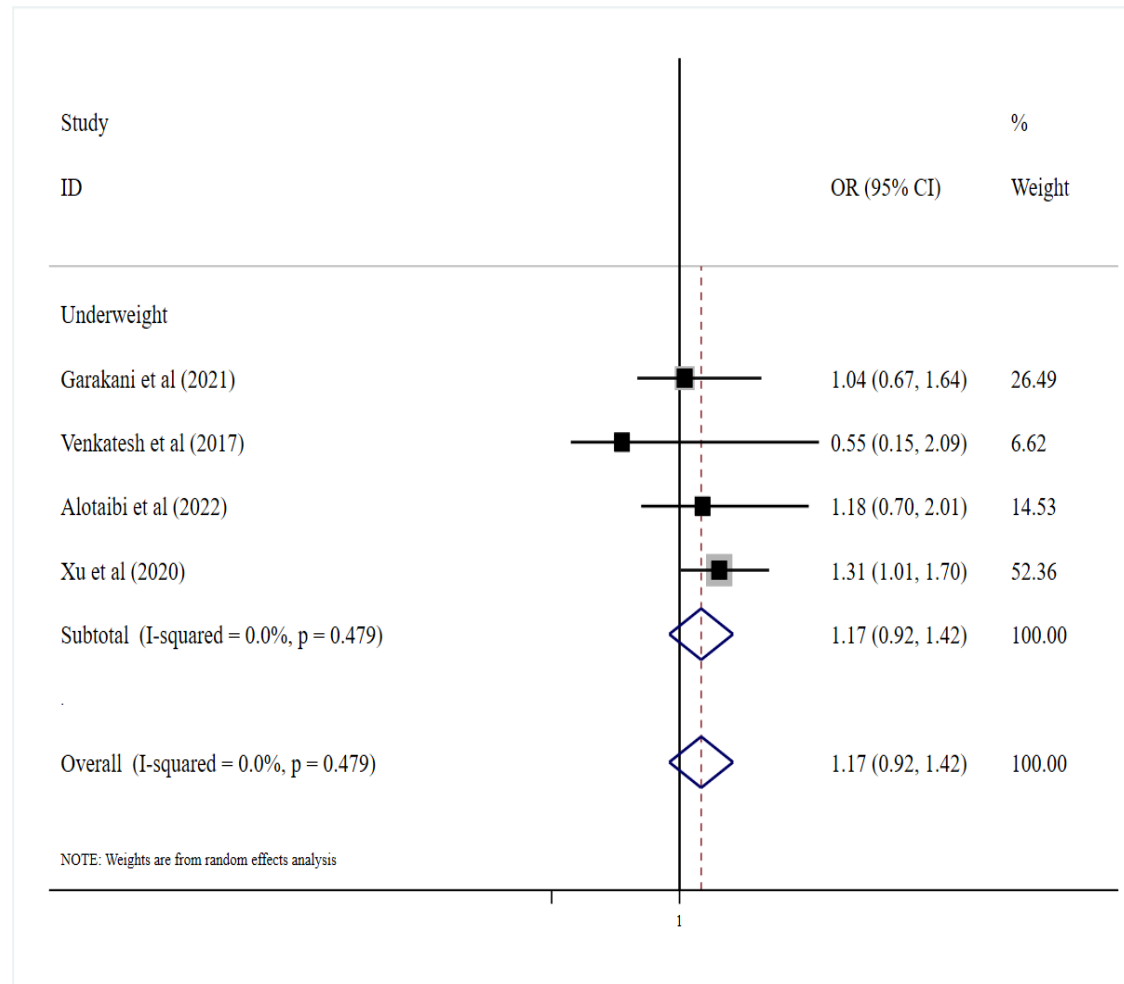
Guo et al (2020) a: Mild Internet addiction; Guo et al (2020) b: Moderate Internet addiction; Guo et al (2020) c: Severe Internet addiction; Ran et al (2024) a: low psychological stress; Ran et al (2024) b: high psychological stress

Figure S3: summary meta-analysis plot (random effects)

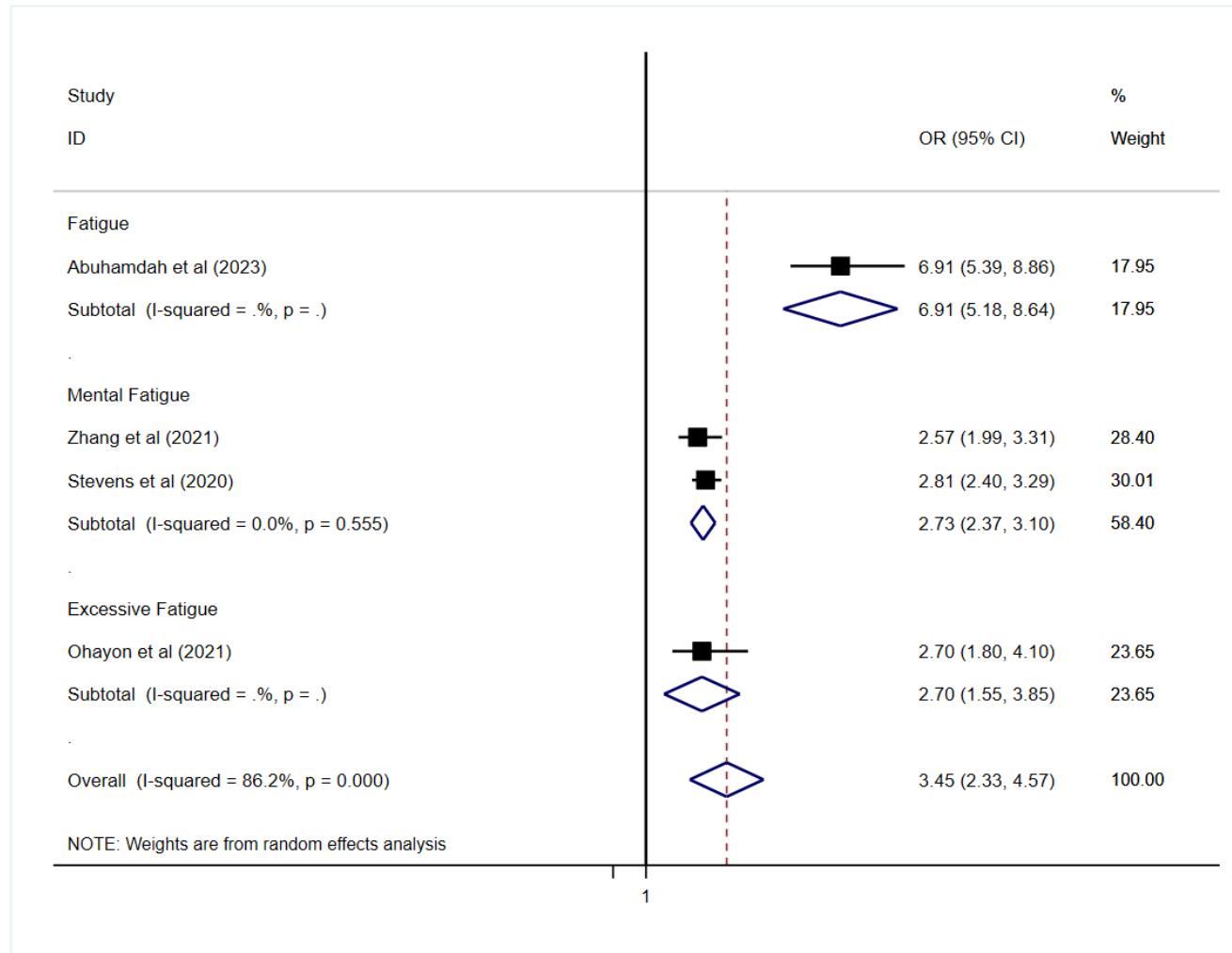
a. Overweight/obesity



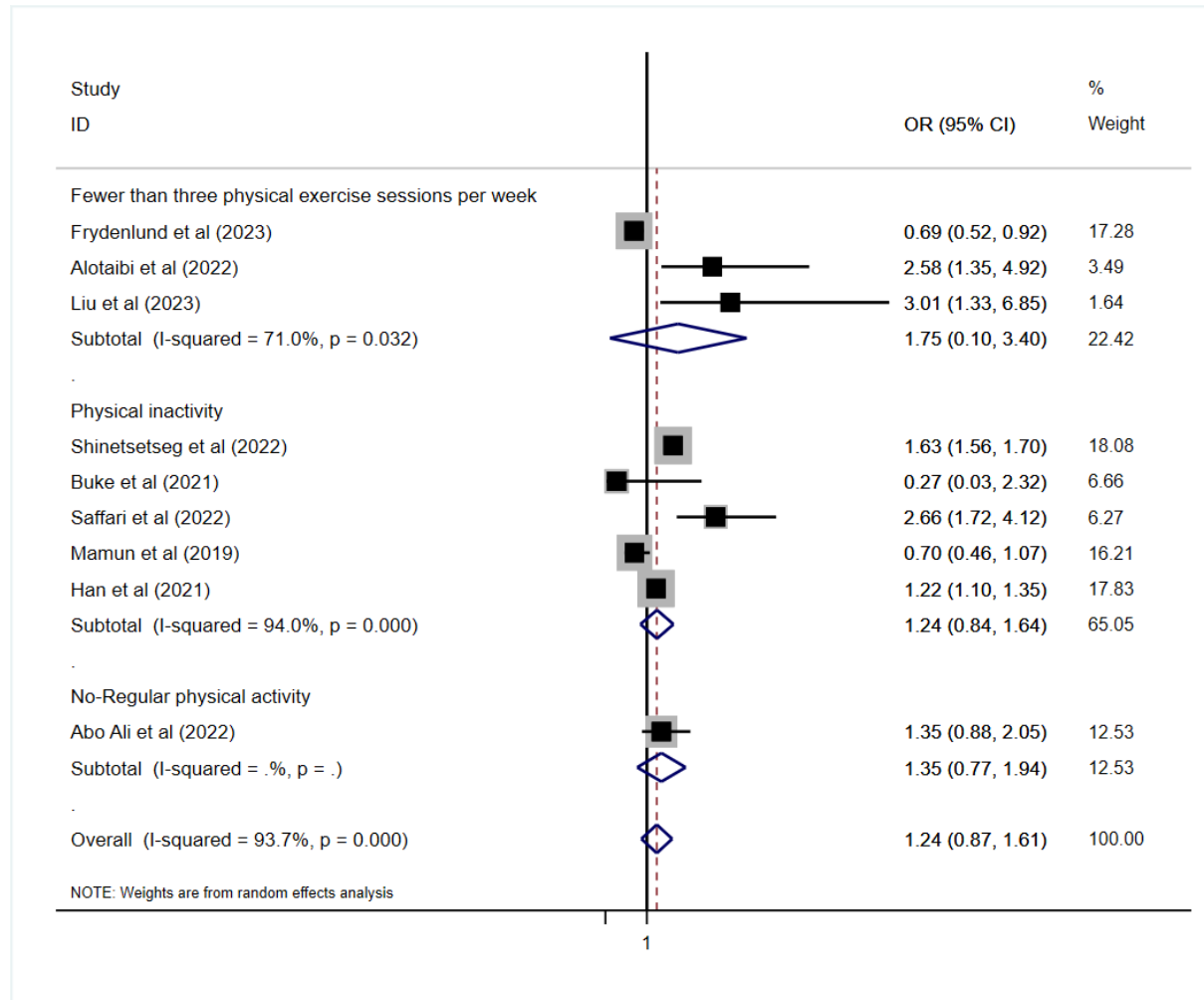
b. Underweight



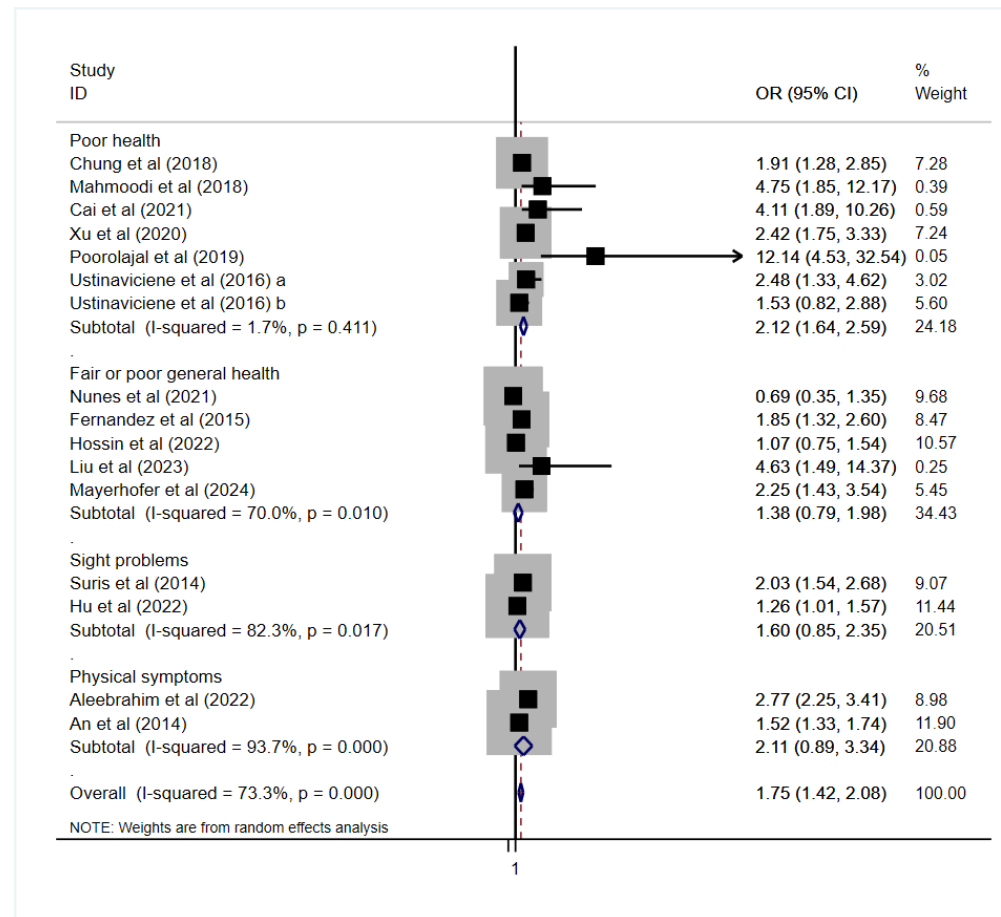
c. Fatigue



d. Sedentary lifestyle issues

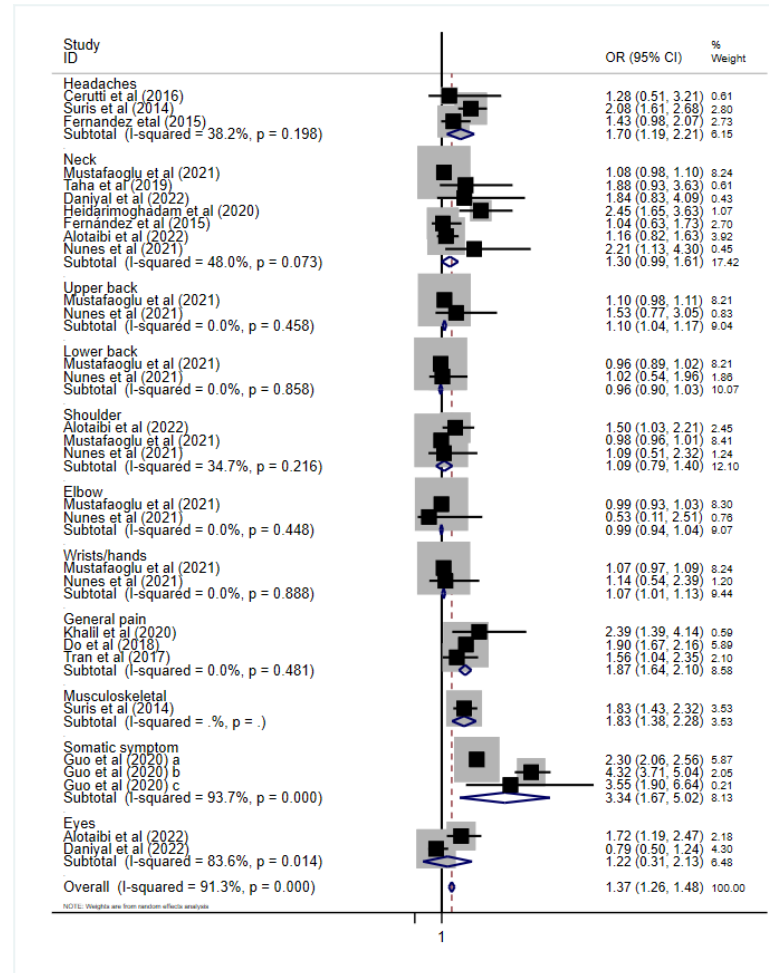


e. Poor self-rated health



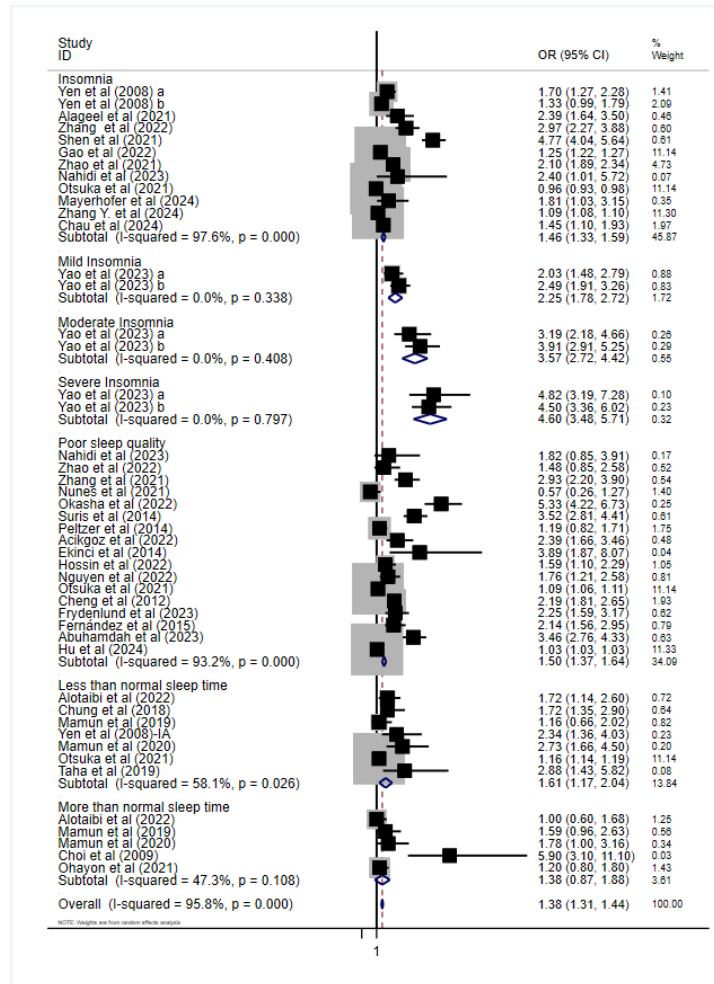
Ustinaviciene et al (2016) a: Male; Ustinaviciene et al (2016) b: Female

f. Pain



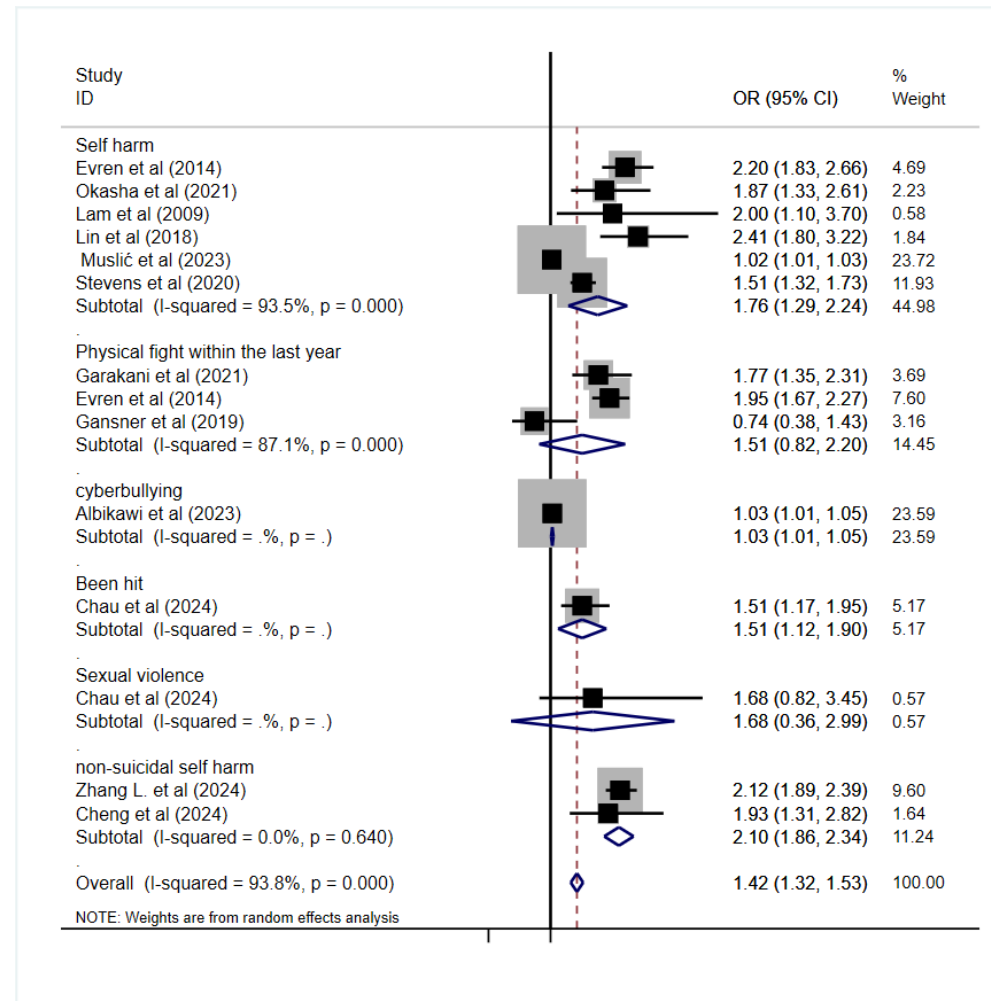
Guo et al (2020) a: Mild Internet addiction; Guo et al (2020) b: Moderate Internet addiction; Guo et al (2020) c: Severe Internet addiction

g. Sleep problems

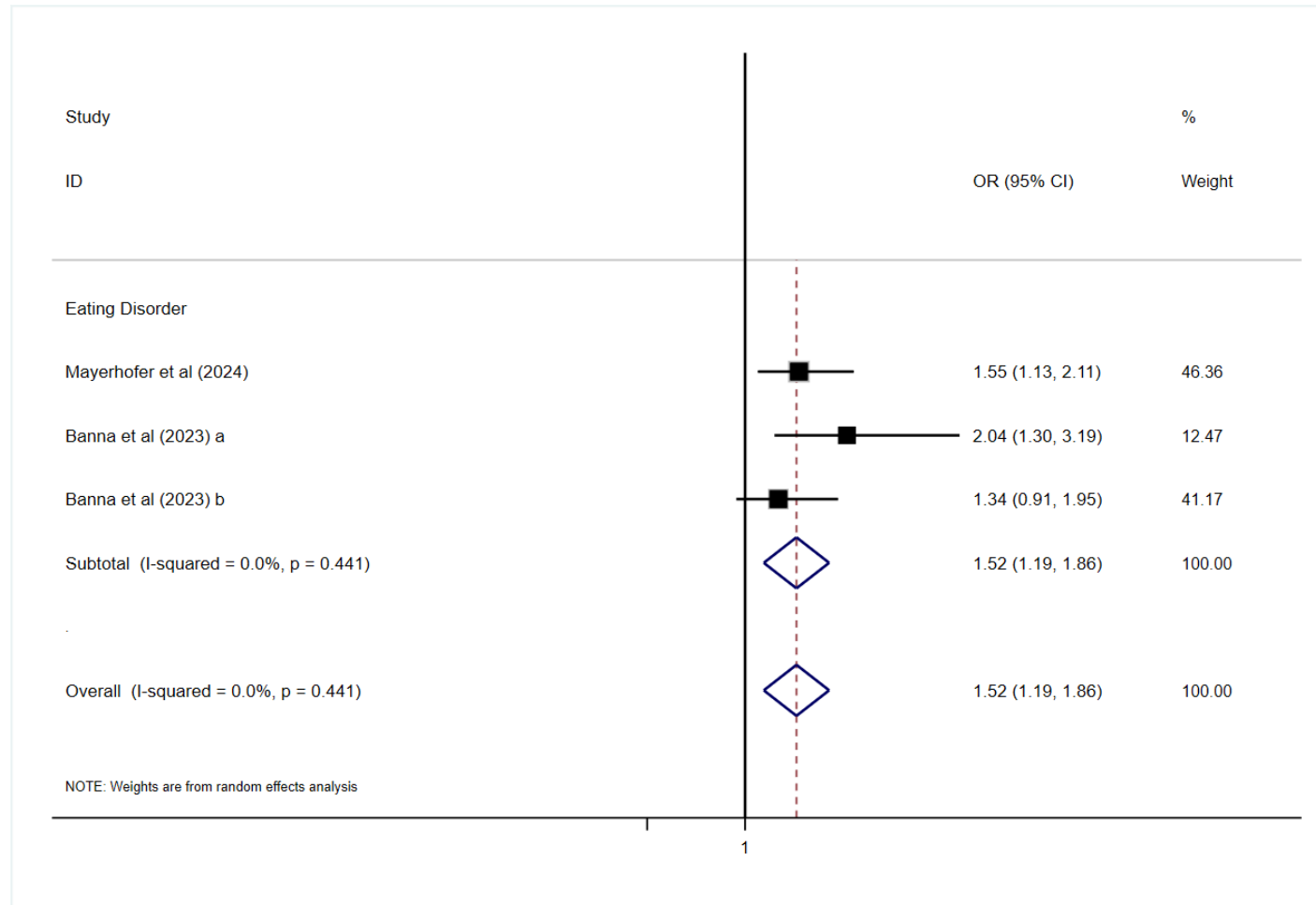


Yen et al (2008) a: Internet addiction; Yen et al (2008) b: Smartphone addiction; Yao et al (2023) a: Male; Yao et al (2023) b: Female

h. Violence

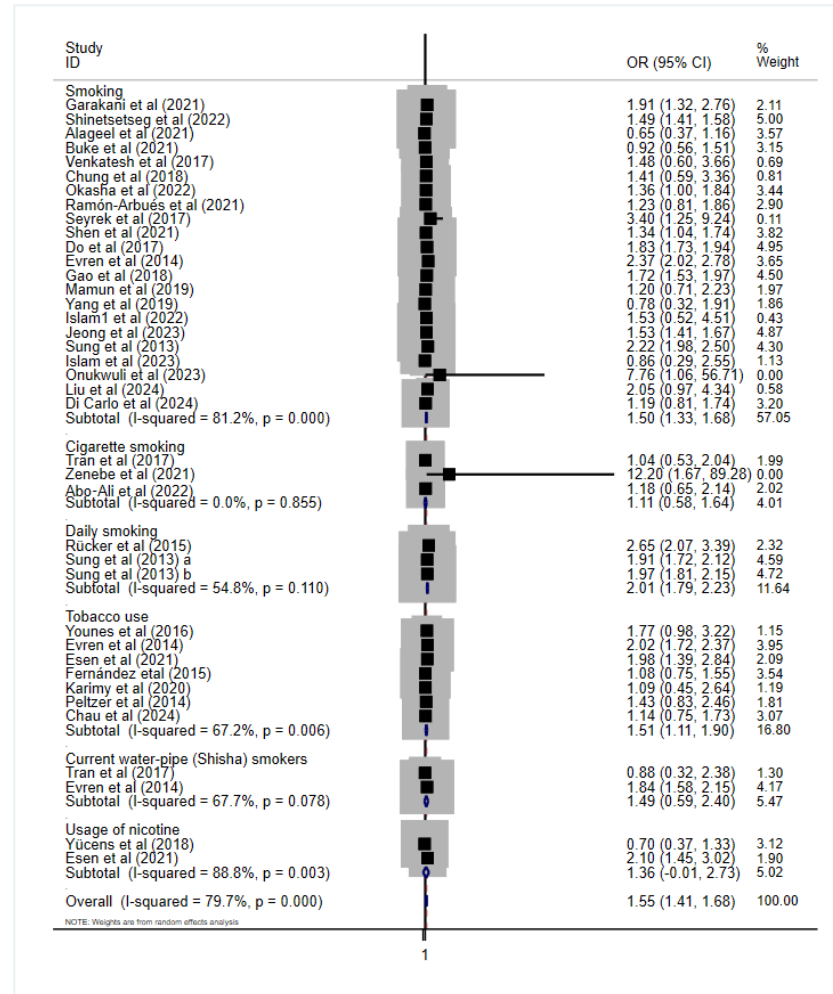


i. Eating disorders



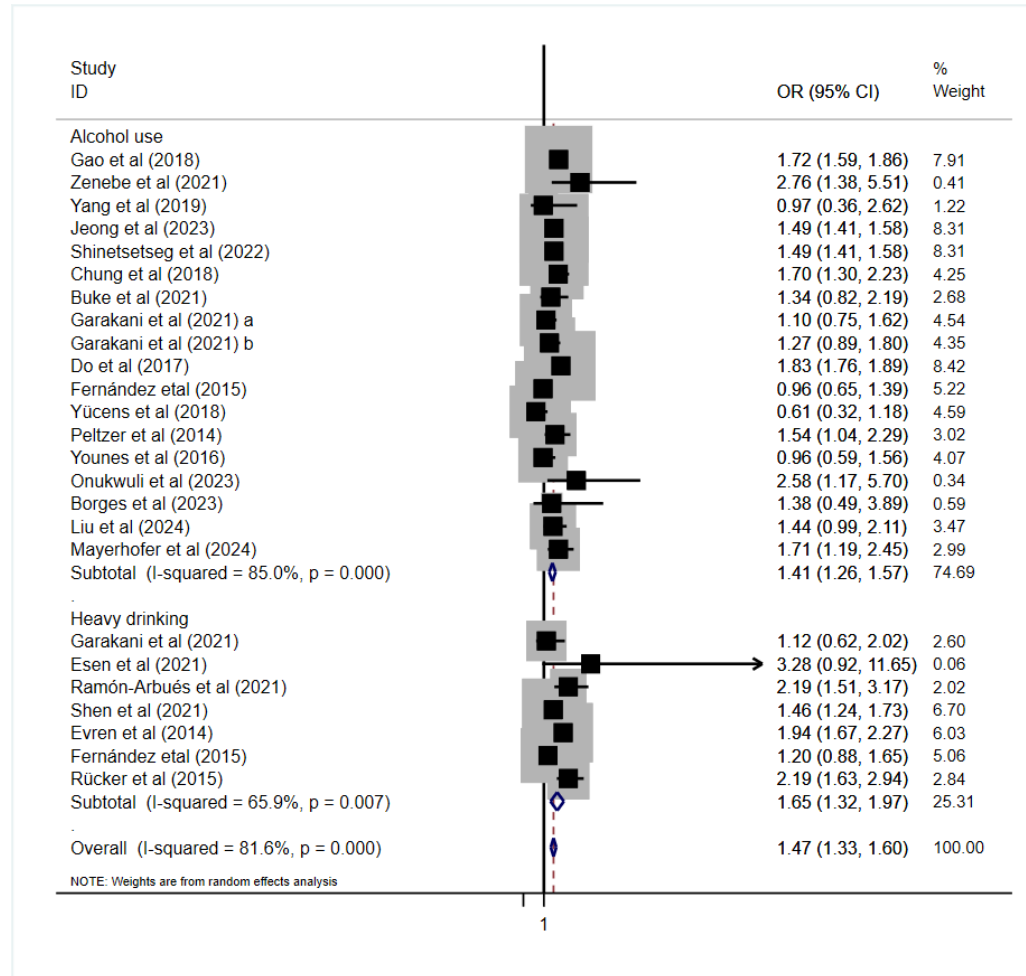
Banna et al (2023) a: Severe Internet addiction; Banna et al (2023) a b: Moderate Internet addiction

j. Self-reported smoking behavior



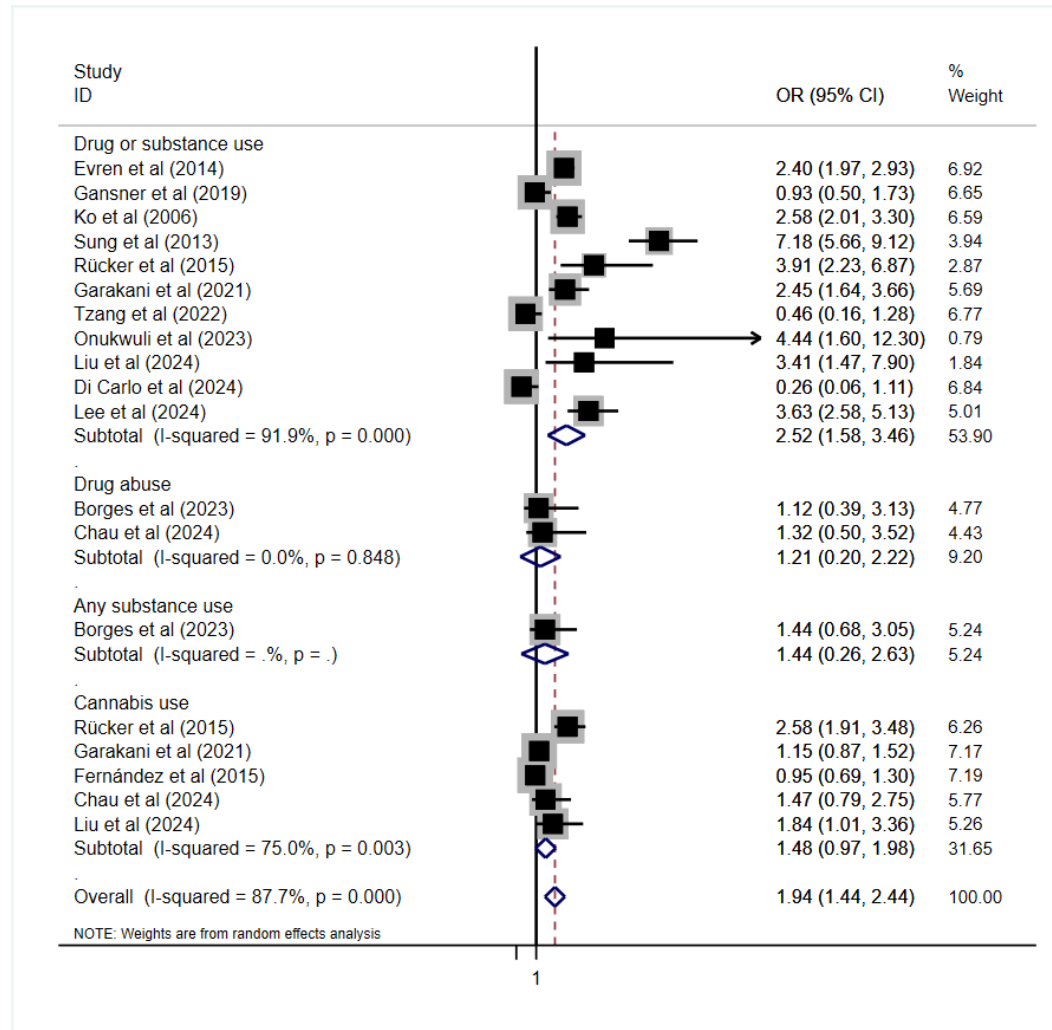
Sung et al (2013) a: Low Internet addiction; Sung et al (2013) b: High Internet addiction

k. Problematic alcohol use

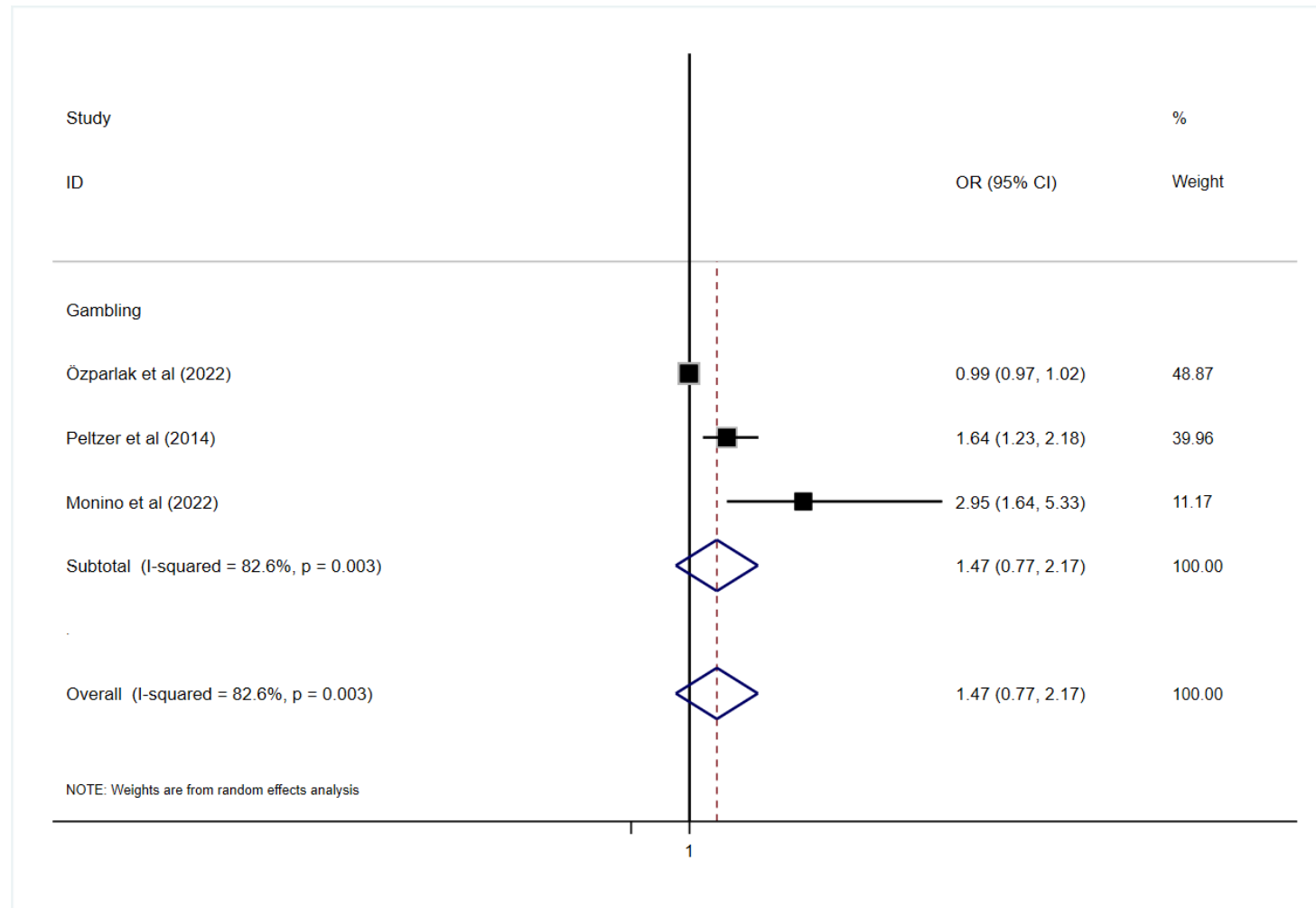


Garakani et al (2021) a- alcohol use; Garakani et al (2021) b- Binge alcohol use

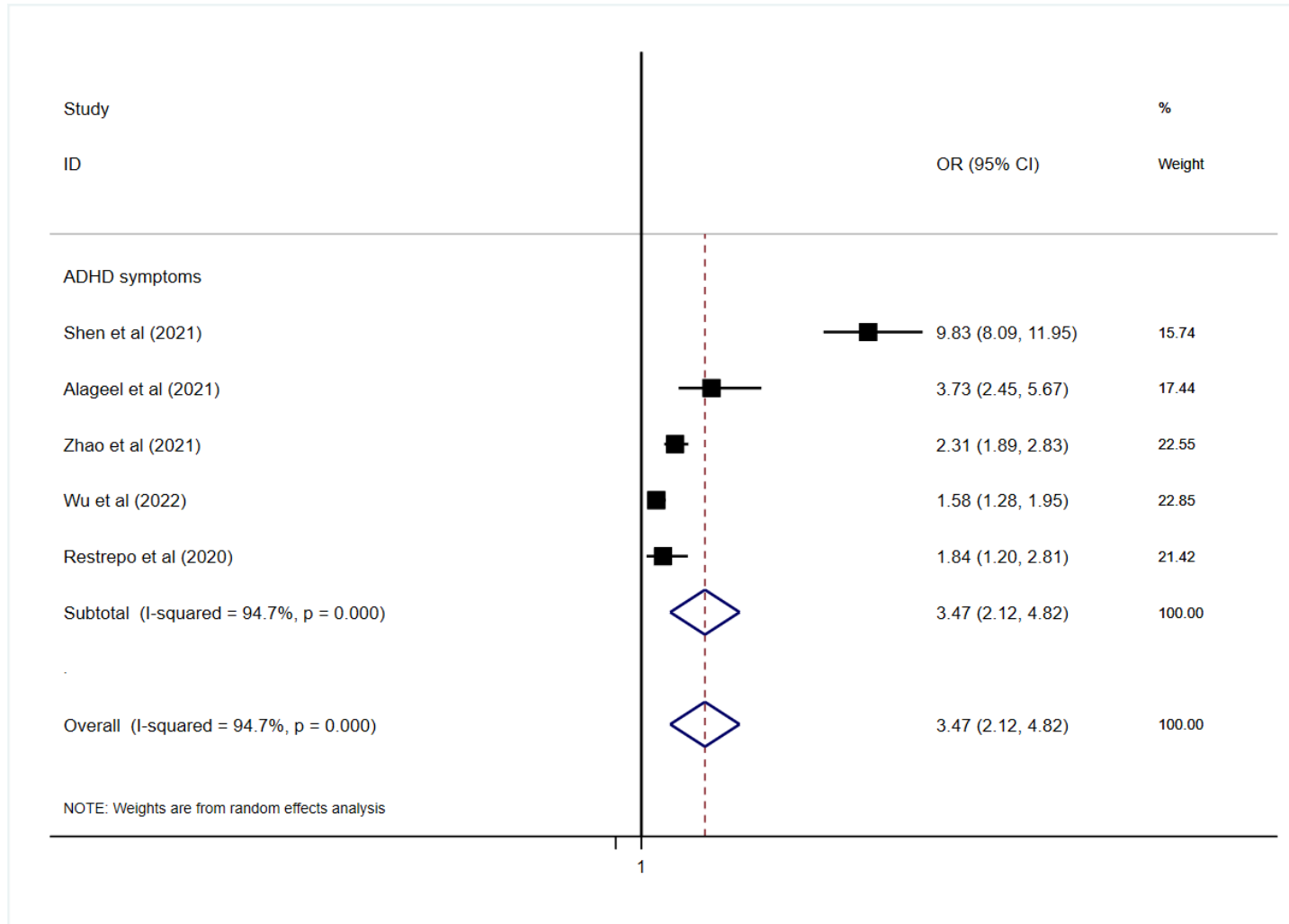
I. Drug use



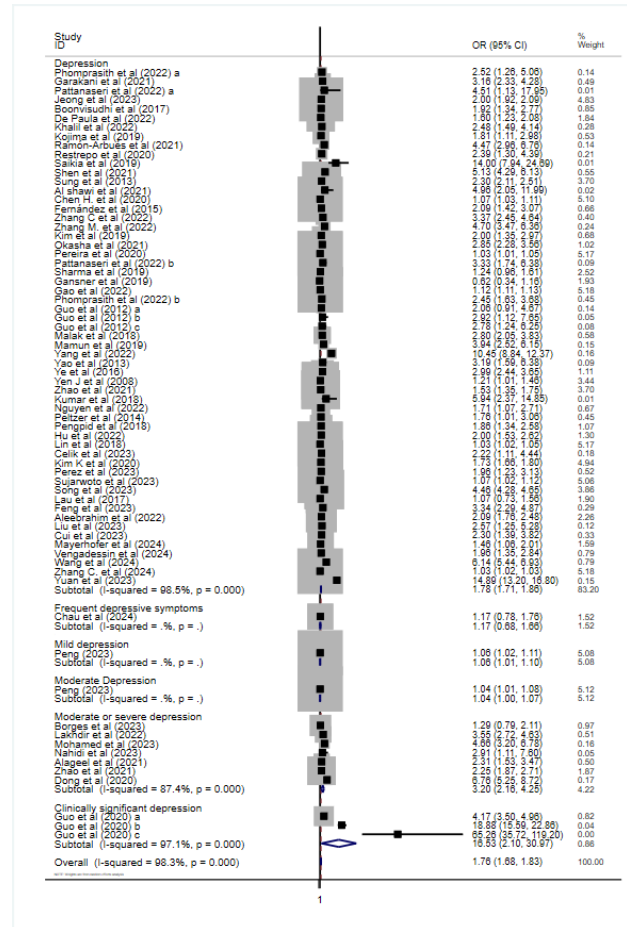
m. Gambling



n. ADHD

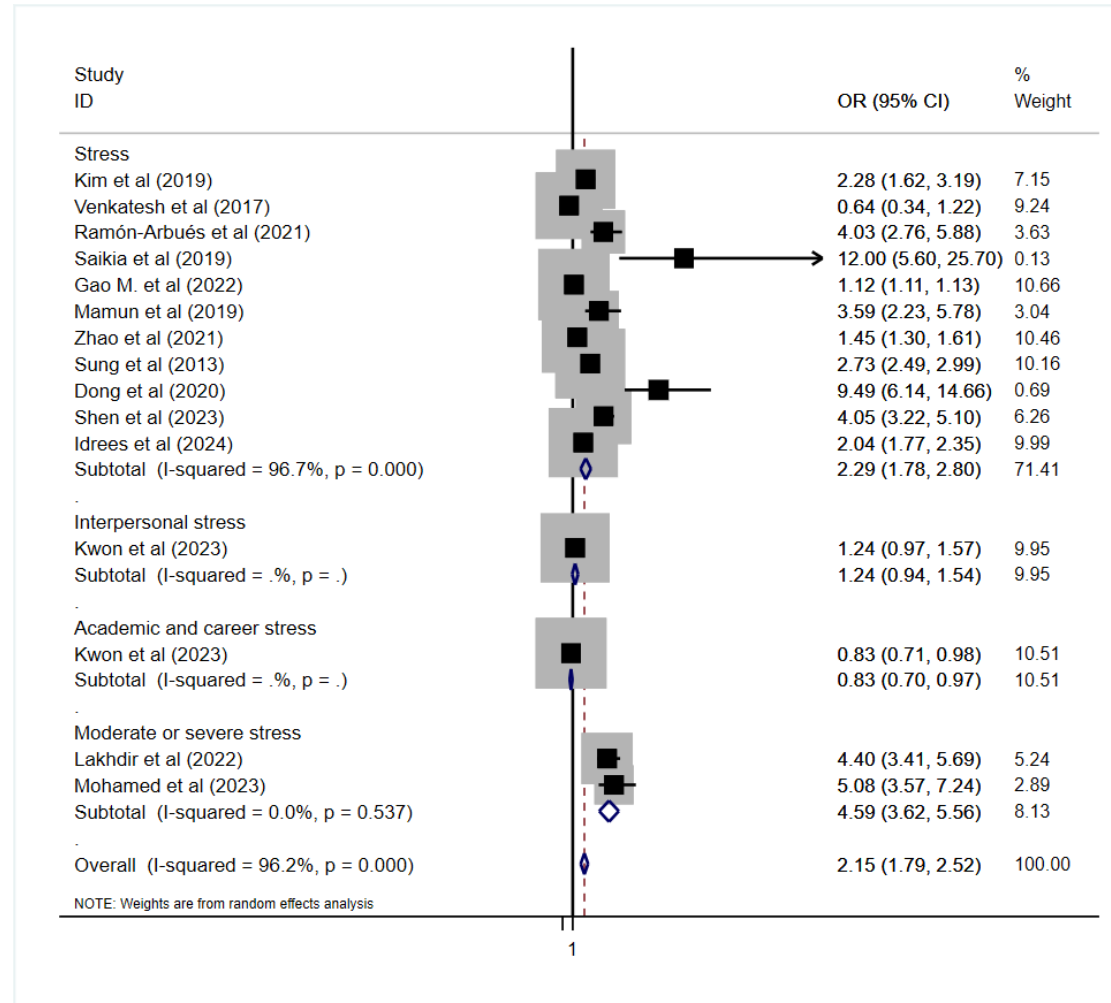


o. Depressive symptoms

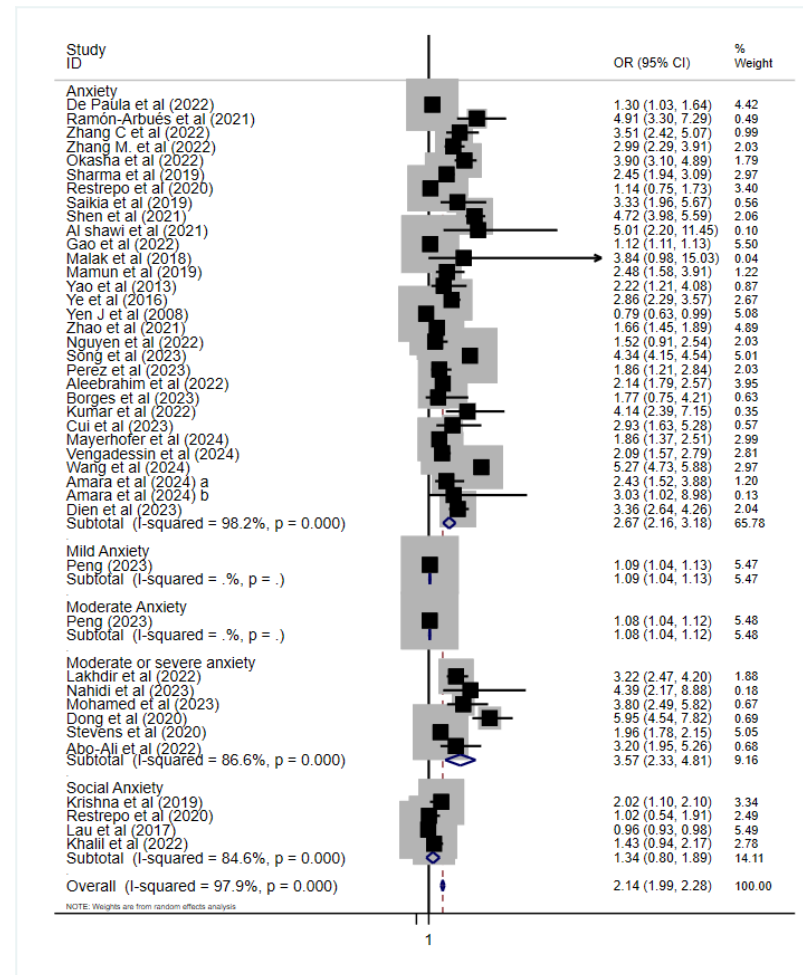


Phomprasith et al (2022) a: Gaming addiction; Pattanasari et al (2022) a: Gaming addiction; Pattanasari et al (2022) b: Smartphone addiction; Phomprasith et al (2022) b: Internet addiction; Guo et al (2012) a: Mild Internet addiction; Guo et al (2012) b: Moderate Internet addiction; Guo et al (2012) c: Severe Internet addiction; Guo et al (2020) a: Mild Internet addiction; Guo et al (2020) b: Moderate Internet addiction; Guo et al (2020) c: Severe Internet addiction

p. Stress symptoms

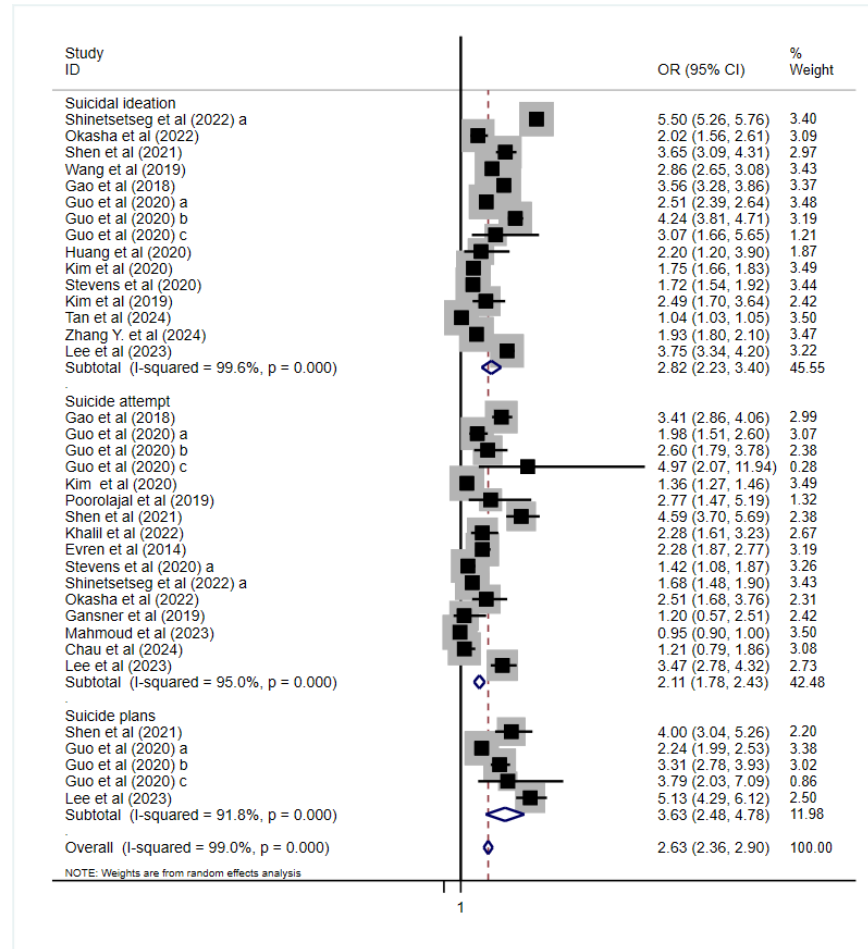


q. Anxiety symptoms



Amara et al (2024) a: Internet Gaming Disorder; Amara et al (2024) b: Internet addiction

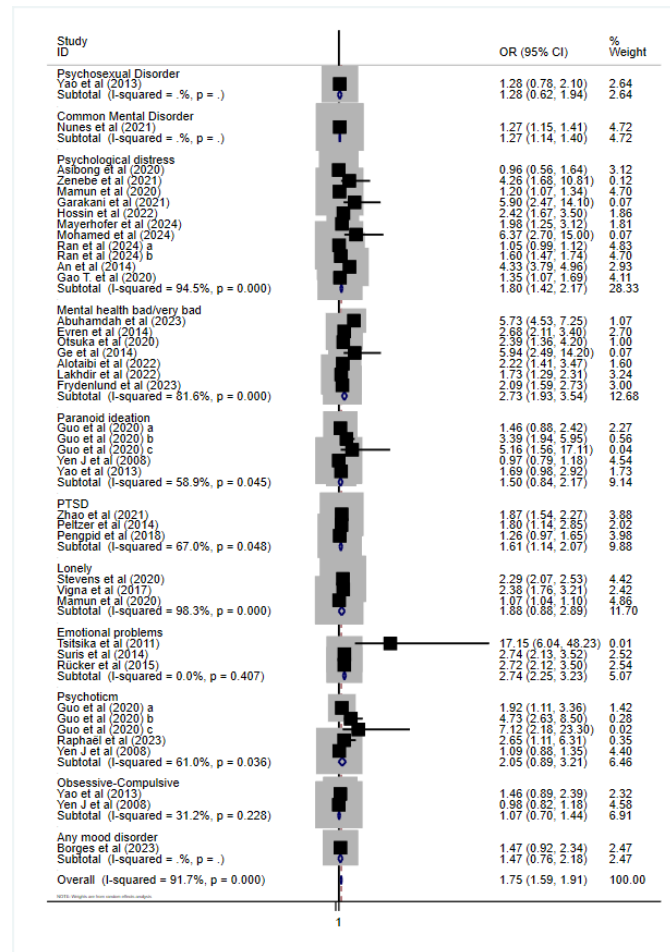
r. Suicide



Shinetssetseg et al (2022) a: Smartphone addiction; Stevens et al (2020) a: Internet addiction; Guo et al (2020) a: Mild Internet addiction; Guo et al (2020) b: Moderate Internet addiction; Guo et al (2020) c: Severe

Internet addiction

s. Other mental health



Guo et al (2020) a: Mild Internet addiction; Guo et al (2020) b: Moderate Internet addiction; Guo et al (2020) c: Severe Internet addiction; Ran et al (2024) a: Low Psychological distress; Ran et al (2024) b: High Psychological distress

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