Supplementary material

Index：

1. Database search strategy

2. Quality assessment of studies

3. Sensitivity analysis: Leave-one-out analyses

4. Egger's test

5. Forest plot of subgroup analyses

5.1 Forest plot of specific type subgroup analyses

5.1.1 Forest plot of specific type subgroup analyses-Male

5.1.2 Forest plot of specific type subgroup analyses-Female

5.2 Forest plot of duration of illness subgroup analyses

5.3 Forest plot of assessment tools subgroup analyses

5.4 Forest plot of mean ages subgroup analyses

5.5 Forest plot of study region subgroup analyses

5.6 Forest plot of gender subgroup analyses

5.7 Forest plot of research setting subgroup analyses

5.8 Forest plot of marital status subgroup analyses

5.9 Forest plot of publication years subgroup analyses

5.10 Forest plot of antipsychotics subgroup analyses

6. Meta-regression analyses and Bubble plot

1. Database search strategy

Pubmed:

#1 Search: "Schizophrenia"[Mesh]

#2 Search: Schizophrenia [Title/Abstract] OR schizophrenias [Title/Abstract] OR schizoaffective [Title/Abstract] OR 'schizophrenic disorders' [Title/Abstract] OR 'disorders schizophrenic' [Title/Abstract] OR 'schizophrenic disorder' [Title/Abstract] OR psychotic [Title/Abstract] OR Psychosis [Title/Abstract] OR 'dementia praecox' [Title/Abstract]

#3 Search: #1 or #2

#4 Search: "Sexual Dysfunction, Physiological"[Mesh]

#5 Search: 'Sexual dysfunction' [Title/Abstract] OR 'sexual adverse events' [Title/Abstract] OR 'sexual side effects' [Title/Abstract] OR 'sexual disorder' [Title/Abstract] OR libido [Title/Abstract] OR 'hypersex' [Title/Abstract] OR orgasm [Title/Abstract] OR anorgasm* [Title/Abstract] OR dyspareuni* [Title/Abstract] OR penis dysfunction [Title/Abstract] OR impotence [Title/Abstract]

#6 Search: #4 or #5

#7 Search: #3 and #6

Web of Science:

#1 ((TS=(Schizophrenia)) OR TI=(Schizophrenia or schizophrenic disorders* or schizo* or psychotic or Psychosis or dementia praecox)) OR AB=(Schizophrenia or schizophrenic disorders* or schizo* or psychotic or Psychosis or dementia praecox)

#2 ((TS=(Sexual Dysfunction, Physiological)) OR TI=(Sexual dysfunction or sexual adverse events or sexual side effects or sexual disorder or libido or hyper sex or orgasm or anorgasm* or dyspareuni* or penis dysfunction or impotence)) OR AB=(Sexual dysfunction or sexual adverse events or sexual side effects or sexual disorder or libido or hyper sex or orgasm or anorgasm* or dyspareuni* or penis dysfunction or impotence)

#3 1 and 2

Embase:

#1 'schizophrenia'/exp OR schizophrenia OR schizophrenias OR schizoaffective OR 'schizophrenic disorders' OR 'disorder schizophrenic' OR 'schizophrenic disorder' OR 'psychotic'/exp OR psychotic OR 'psychosis'/exp OR psychosis OR 'dementia praecox'/exp OR 'dementia praecox'

#2 ('Sexual dysfunction' or 'sexual adverse events' or 'sexual side effects' or 'sexual disorder' or libido or 'hyper sex' or orgasm or anorgasm* or dyspareuni* or penis dysfunction or impotence)

#3 #1 AND #2

PsycINFO:

1 MA Schizophrenia OR TI (Schizophrenia or schizophrenic disorders* or schizo* or psychotic or Psychosis or dementia praecox) OR AB (Schizophrenia or schizophrenic disorders* or schizo* or psychotic or Psychosis or dementia praecox)

2 TI (Sexual dysfunction or sexual adverse events or sexual side effects or sexual disorder or libido or hyper sex or orgasm or anorgasm* or dyspareuni* or penis dysfunction or impotence) OR AB (Sexual dysfunction or sexual adverse events or sexual side effects or sexual disorder or libido or hyper sex or orgasm or anorgasm* or dyspareuni* or penis dysfunction or impotence)

3 S1 AND S2

China National Knowledge Infrastructure (CNKI) 中国知网:

(主题: 精神分裂症 + 分裂样精神病 + 精神障碍(精确)) AND (主题: 性功能障碍 + 性副作用 + 性不良事件 + 性别障碍 + 性欲 + 性欲亢进 + 性高潮 + 性变态 + 性交困难 + 阴茎功能障碍 + 阳痿(精确))

China Science and Technology Journal Database 维普:

题名或关键词=精神分裂症 or 分裂样精神病 or 精神障碍 AND 题名或关键词=性功能障碍 or 性副作用 or 性不良事件 or 性别障碍 or 性欲 or 性欲亢进 or 性高潮 or 性变态 or 性交困难 or 阴茎功能障碍 or 阳痿

Wanfang Medical Network 万方医学网:

主题:(精神分裂症 or 分裂样精神病 or 精神障碍) and 主题:(性功能障碍 or 性副作用 or 性不良事件 or 性别障碍 or 性欲 or 性欲亢进 or 性高潮 or 性变态 or 性交困难 or 阴茎功能障碍 or 阳痿)

Huayi Academic Literature Database 台湾华艺数据库:

(精神分裂症 or 分裂样精神病 or 精神障碍) = 题名.关键词.摘要 AND (性功能障碍 or 性副作用 or 性不良事件 or 性别障碍 or 性欲 or 性欲亢进 or 性高潮 or 性变态 or 性交困难 or 阴茎功能障碍 or 阳痿) = 题名.关键词.摘要

2. Quality assessment of studies

Included studies	1	2	3	4	5	6	7	8	9	10	11	Total
Tsai-2011	Y	Y	Y	Y	UR	Y	Y	Y	Y	Y	N	9
Gong-1992	Y	Y	N	Y	UR	Y	UR	Y	N	N	N	5
Hou-2016	Y	Y	Y	Y	UR	Y	Y	Y	N	Y	N	8
Huang-2019	Y	Y	N	Y	UR	Y	Y	Y	N	Y	N	7
Liu-2021	Y	Y	Y	Y	UR	N	Y	Y	Y	Y	N	8
Ma-2018	Y	Y	Y	Y	UR	Y	Y	Y	Y	Y	N	9
Ng-2004	Y	Y	N	Y	UR	N	Y	Y	N	N	N	5
Shi-2003	Y	N	N	Y	UR	Y	UR	Y	N	N	N	4
Wang-2016	Y	Y	N	Y	UR	Y	N	Y	N	Y	N	6
Xu-2009	Y	Y	N	Y	UR	N	UR	Y	N	N	N	4
Xiang-2011	Y	Y	Y	Y	UR	N	N	Y	N	Y	N	6
Yan-2014	Y	Y	Y	Y	UR	N	UR	Y	N	N	N	5
Zhang-1992	Y	Y	Y	Y	UR	N	UR	Y	N	N	N	5
Zou1994	Y	Y	Y	Y	UR	N	UR	Y	N	N	N	5
Zhang-2001	Y	Y	N	Y	UR	N	UR	Y	N	N	N	4
Zhang-2018	Y	Y	Y	Y	UR	N	UR	Y	Y	Y	N	7

'Y'=Yes; 'N'=No; 'UR'=Unclear

'1'= Has the source of the data been clearly stated?

'2'= Have the inclusion and exclusion criteria for the exposed and non-exposed groups been listed?

'3'= Have the time period for patient identification been specified?

'4'= If it's not a population source, are the study subjects continuous?

'5'= Has the evaluator's subjective factors obscured other aspects of the study subjects?

'6'= Has any evaluation been described to ensure quality?

'7'= Have the reasons for excluding any patients been explained?

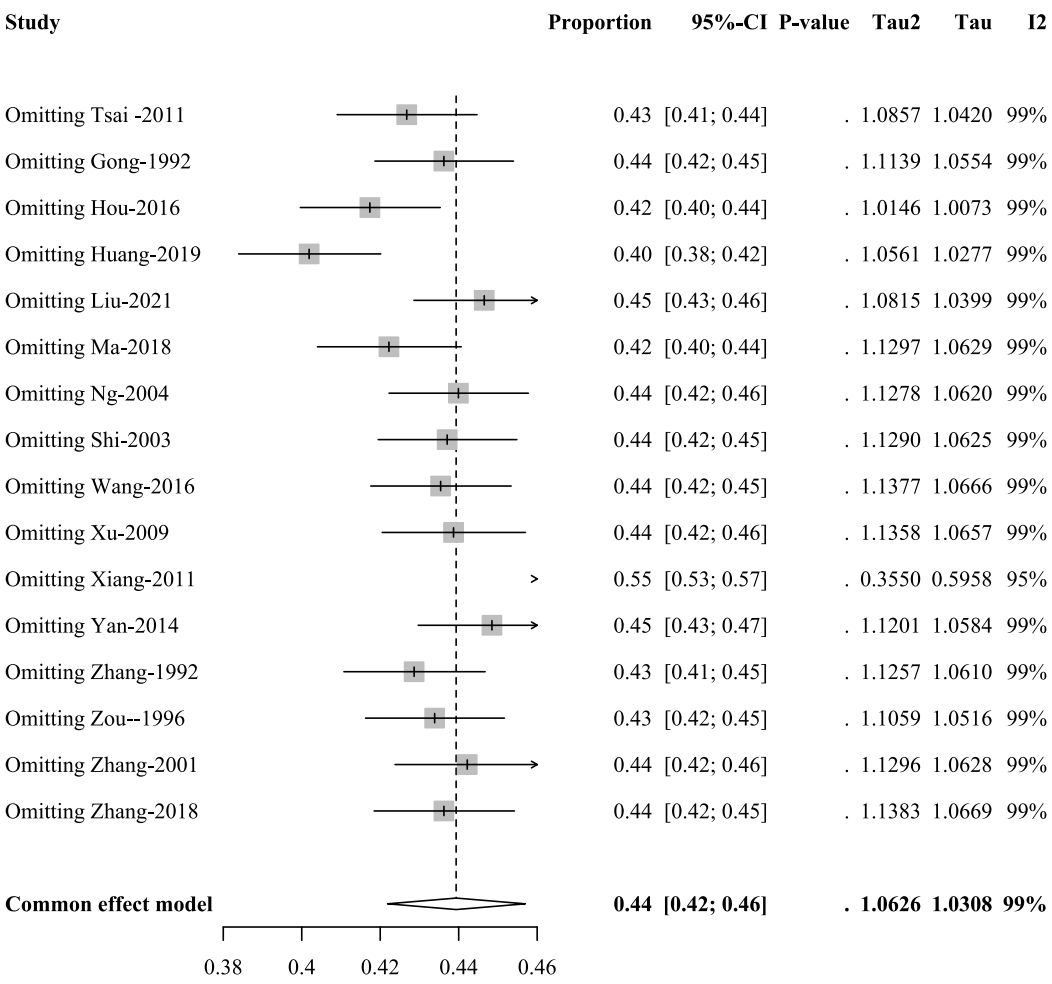
'8'= Have measures for evaluating and/or controlling confounding factors been described?

'9'= If possible, has an explanation been provided for how missing data was handled in the analysis?

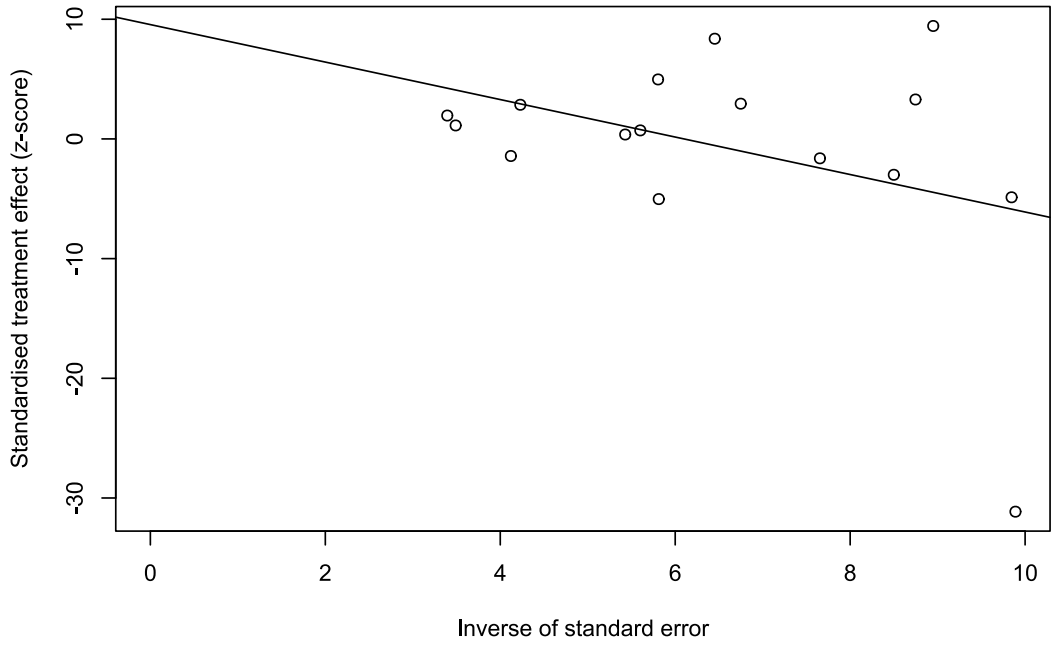
'10'= Has the patient response rate and data collection completeness been summarized?

'11'= If follow-up is available, has the percentage of patient incomplete data or follow-up outcomes been described?

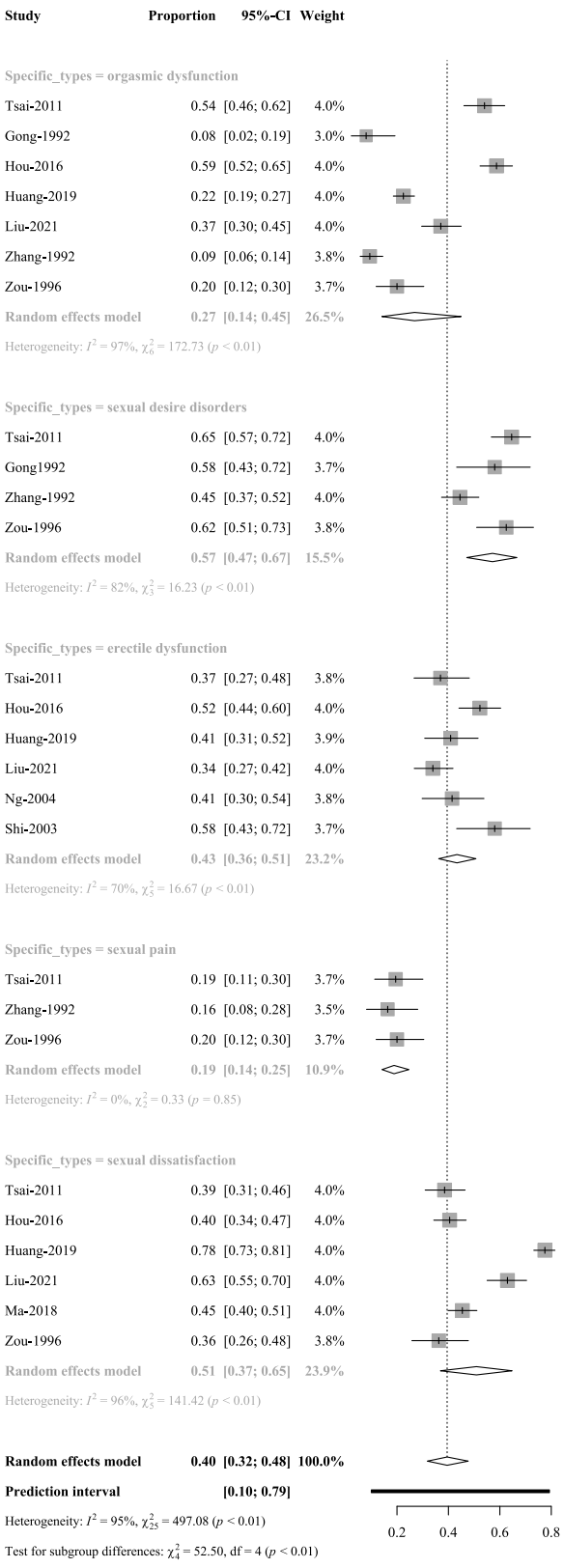
3. Sensitivity analysis: Leave-one-out analyses



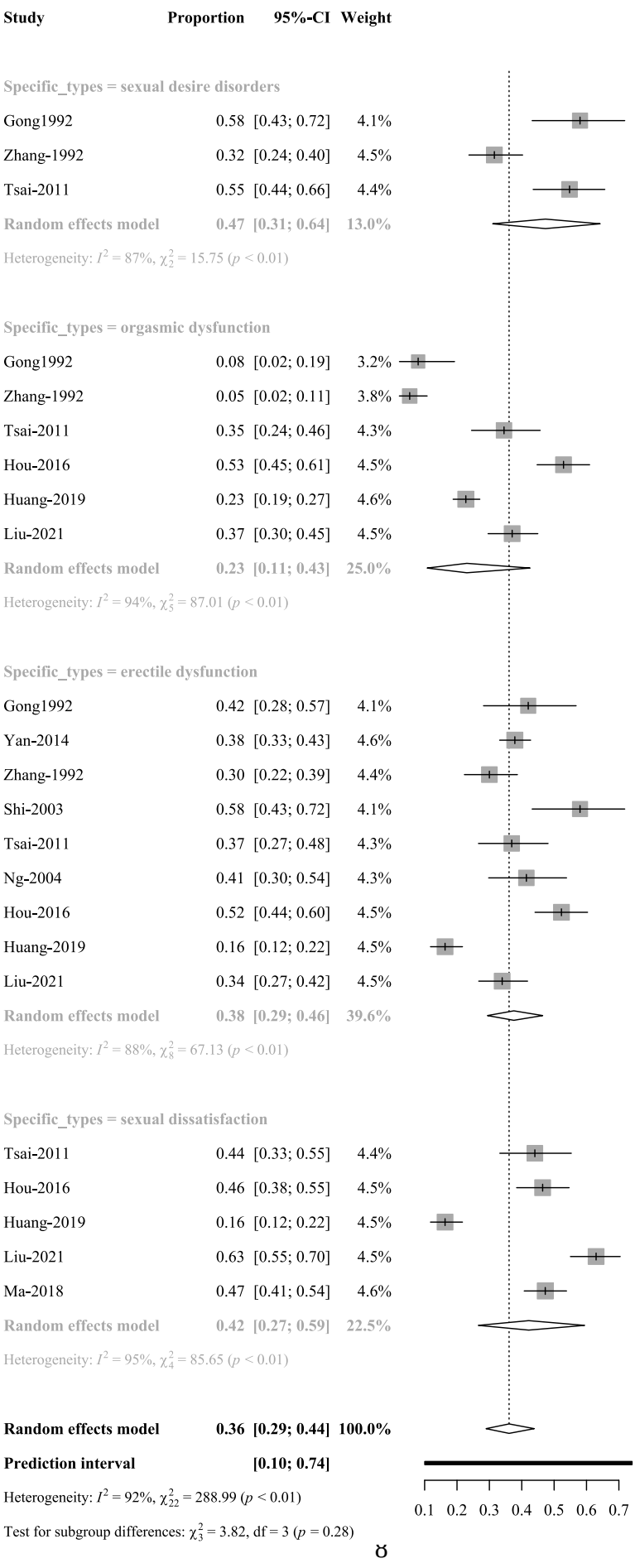
4. Egger’s test



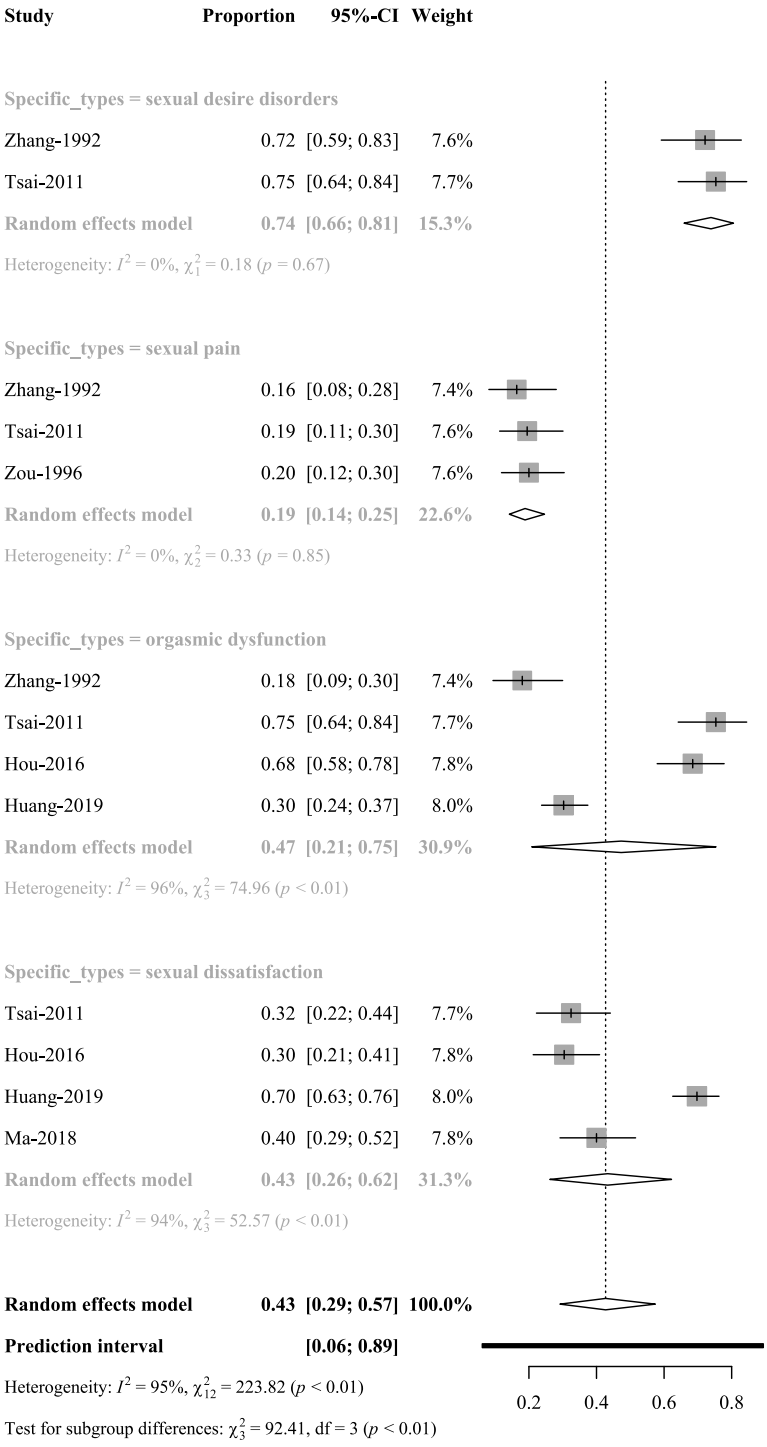
5.1 Forest plot of specific type subgroup analyses



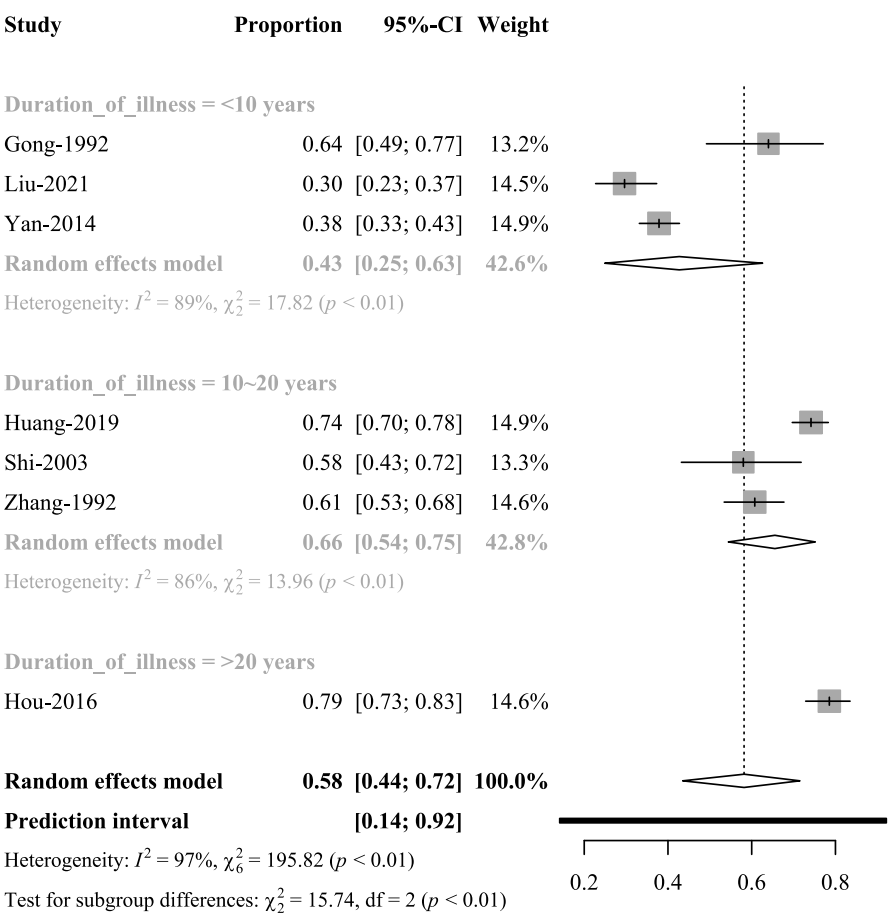
5.1.1 Forest plot of specific type subgroup analyses-Male


Study Proportion 95%-CI Weight
Specific_types = sexual desire disorders
Gong1992 0.58 [0.43; 0.72] 4.1%
Zhang-1992 0.32 [0.24; 0.40] 4.5%
Tsai-2011 0.55 [0.44; 0.66] 4.4%
Random effects model 0.47 [0.31; 0.64] 13.0%
Heterogeneity: I^2 = 87%, χ^2_2 = 15.75 (p < 0.01)
Specific_types = orgasmic dysfunction
Gong1992 0.08 [0.02; 0.19] 3.2%
Zhang-1992 0.05 [0.02; 0.11] 3.8%
Tsai-2011 0.35 [0.24; 0.46] 4.3%
Hou-2016 0.53 [0.45; 0.61] 4.5%
Huang-2019 0.23 [0.19; 0.27] 4.6%
Liu-2021 0.37 [0.30; 0.45] 4.5%
Random effects model 0.23 [0.11; 0.43] 25.0%
Heterogeneity: I^2 = 94%, χ^2_5 = 87.01 (p < 0.01)
Specific_types = erectile dysfunction
Gong1992 0.42 [0.28; 0.57] 4.1%
Yan-2014 0.38 [0.33; 0.43] 4.6%
Zhang-1992 0.30 [0.22; 0.39] 4.4%
Shi-2003 0.58 [0.43; 0.72] 4.1%
Tsai-2011 0.37 [0.27; 0.48] 4.3%
Ng-2004 0.41 [0.30; 0.54] 4.3%
Hou-2016 0.52 [0.44; 0.60] 4.5%
Huang-2019 0.16 [0.12; 0.22] 4.5%
Liu-2021 0.34 [0.27; 0.42] 4.5%
Random effects model 0.38 [0.29; 0.46] 39.6%
Heterogeneity: I^2 = 88%, χ^2_8 = 67.13 (p < 0.01)
Specific_types = sexual dissatisfaction
Tsai-2011 0.44 [0.33; 0.55] 4.4%
Hou-2016 0.46 [0.38; 0.55] 4.5%
Huang-2019 0.16 [0.12; 0.22] 4.5%
Liu-2021 0.63 [0.55; 0.70] 4.5%
Ma-2018 0.47 [0.41; 0.54] 4.6%
Random effects model 0.42 [0.27; 0.59] 22.5%
Heterogeneity: I^2 = 95%, χ^2_4 = 85.65 (p < 0.01)
Random effects model 0.36 [0.29; 0.44] 100.0%
Prediction interval [0.10; 0.74]
Heterogeneity: I^2 = 92%, χ^2_{22} = 288.99 (p < 0.01)
Test for subgroup differences: χ^2_3 = 3.82, df = 3 (p = 0.28)
0.1 0.2 0.3 0.4 0.5 0.6 0.7

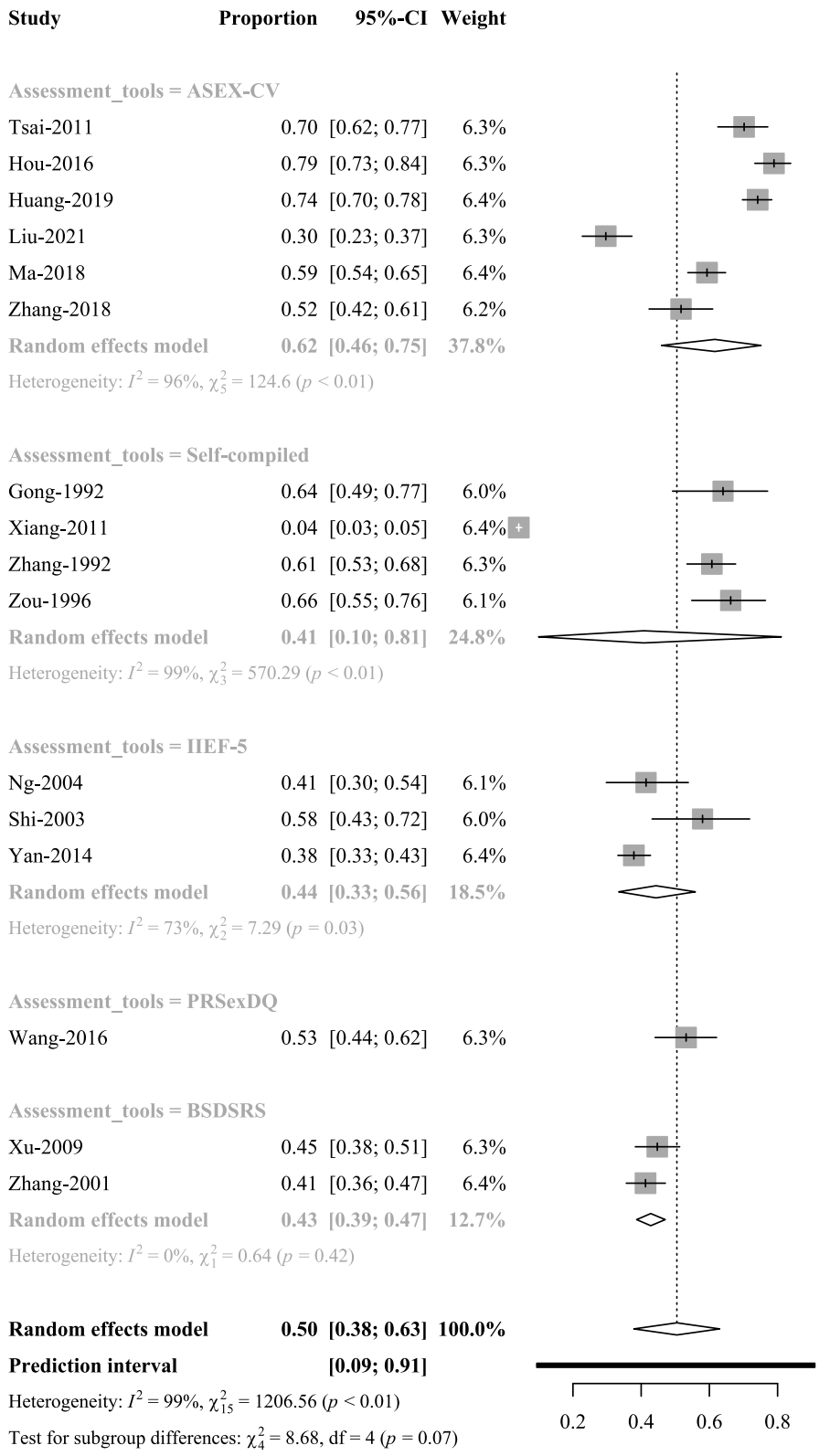
5.1.2 Forest plot of specific type subgroup analyses-Female



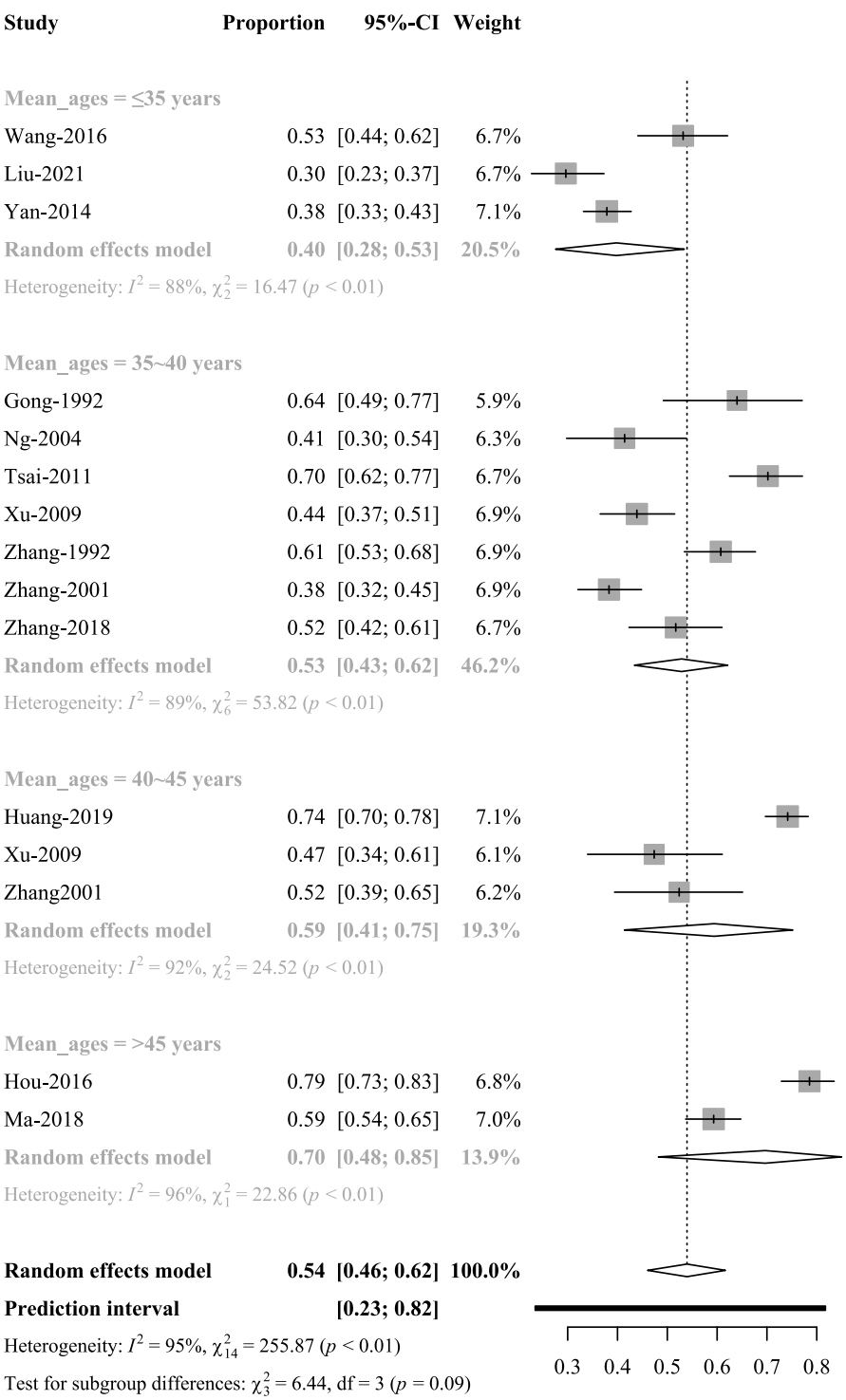
5.2 Forest plot of duration of illness subgroup analyses



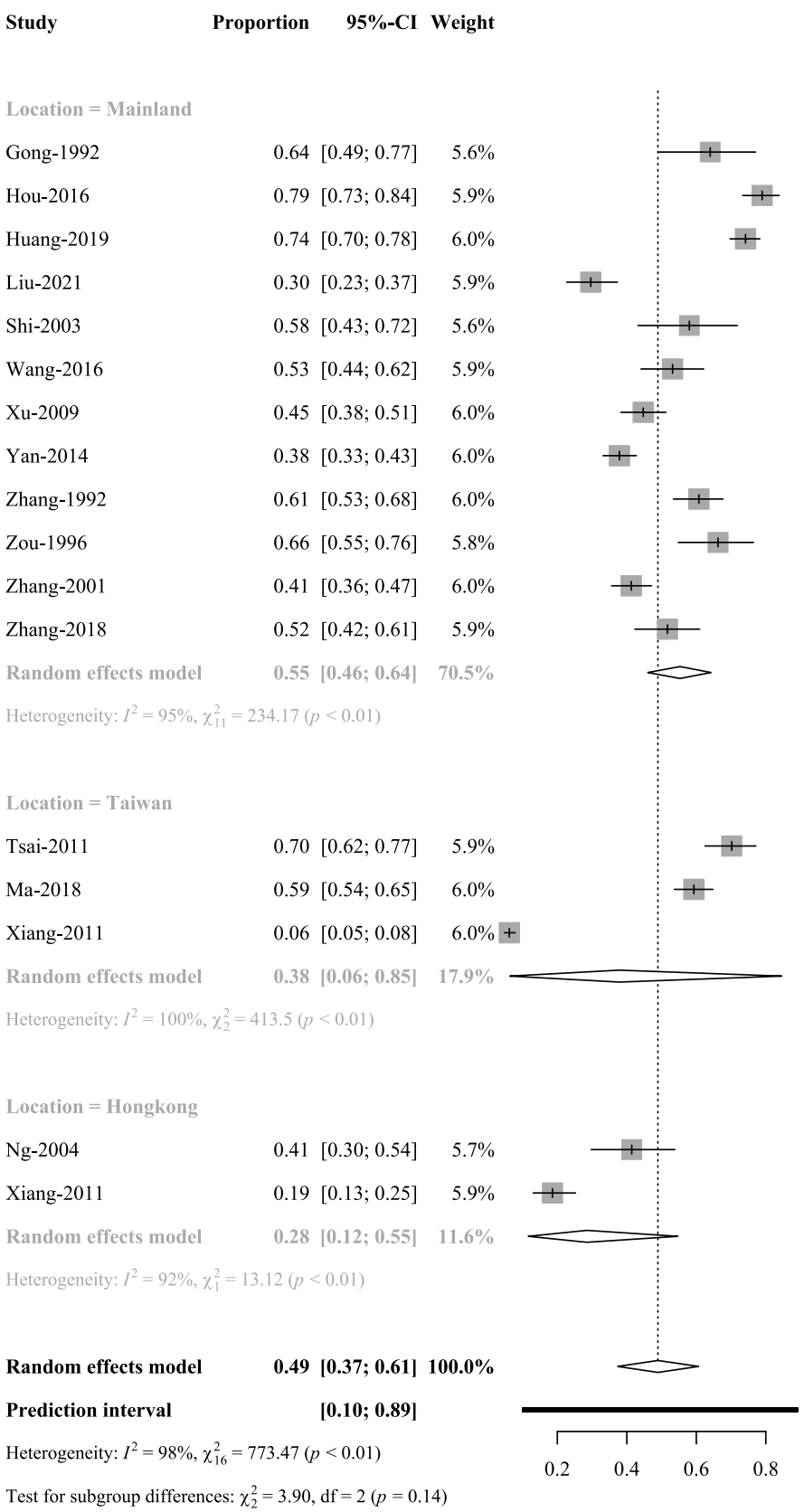
5.3 Forest plot of assessment tools subgroup analyses



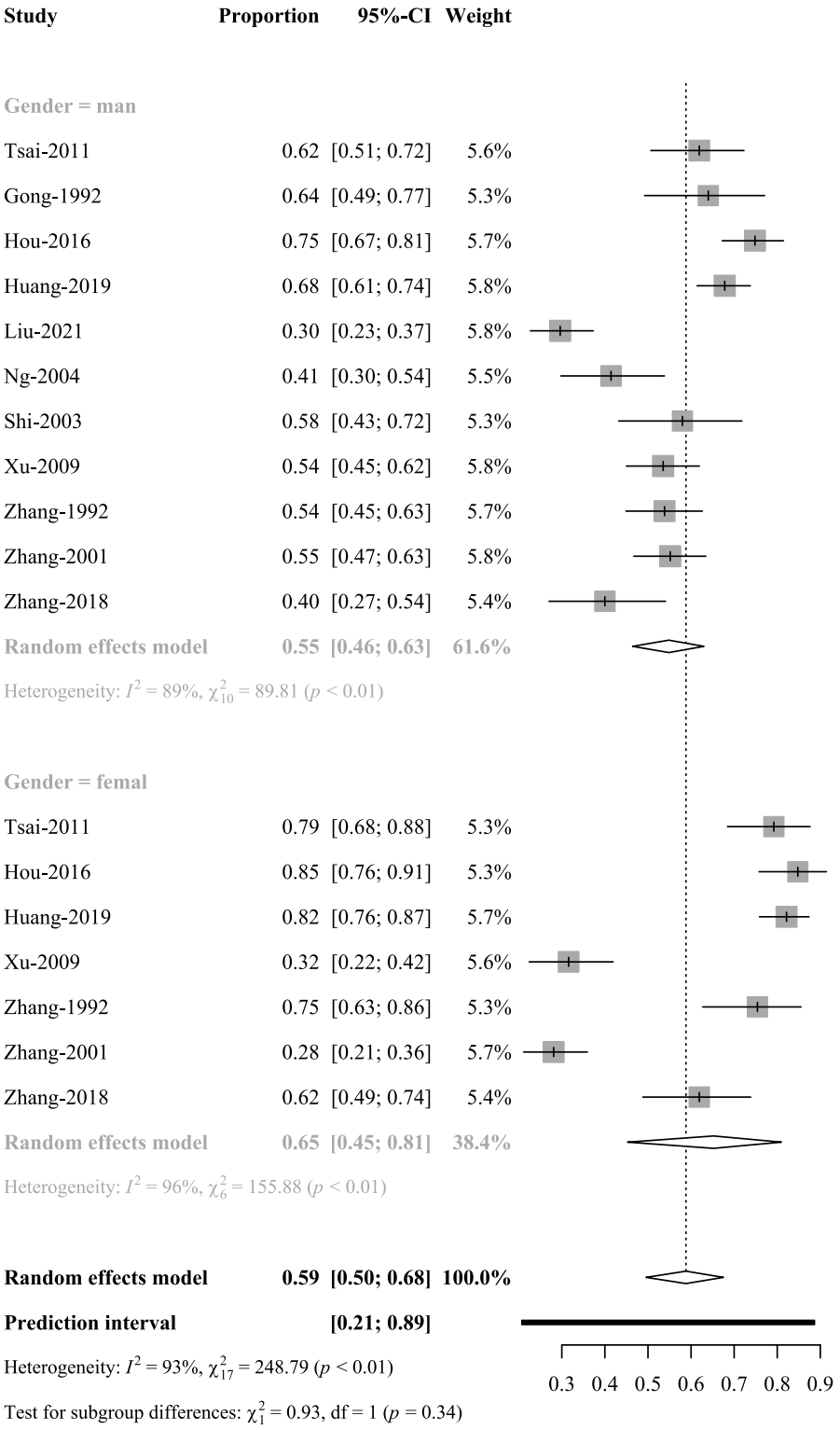
5.4 Forest plot of mean ages subgroup analyses



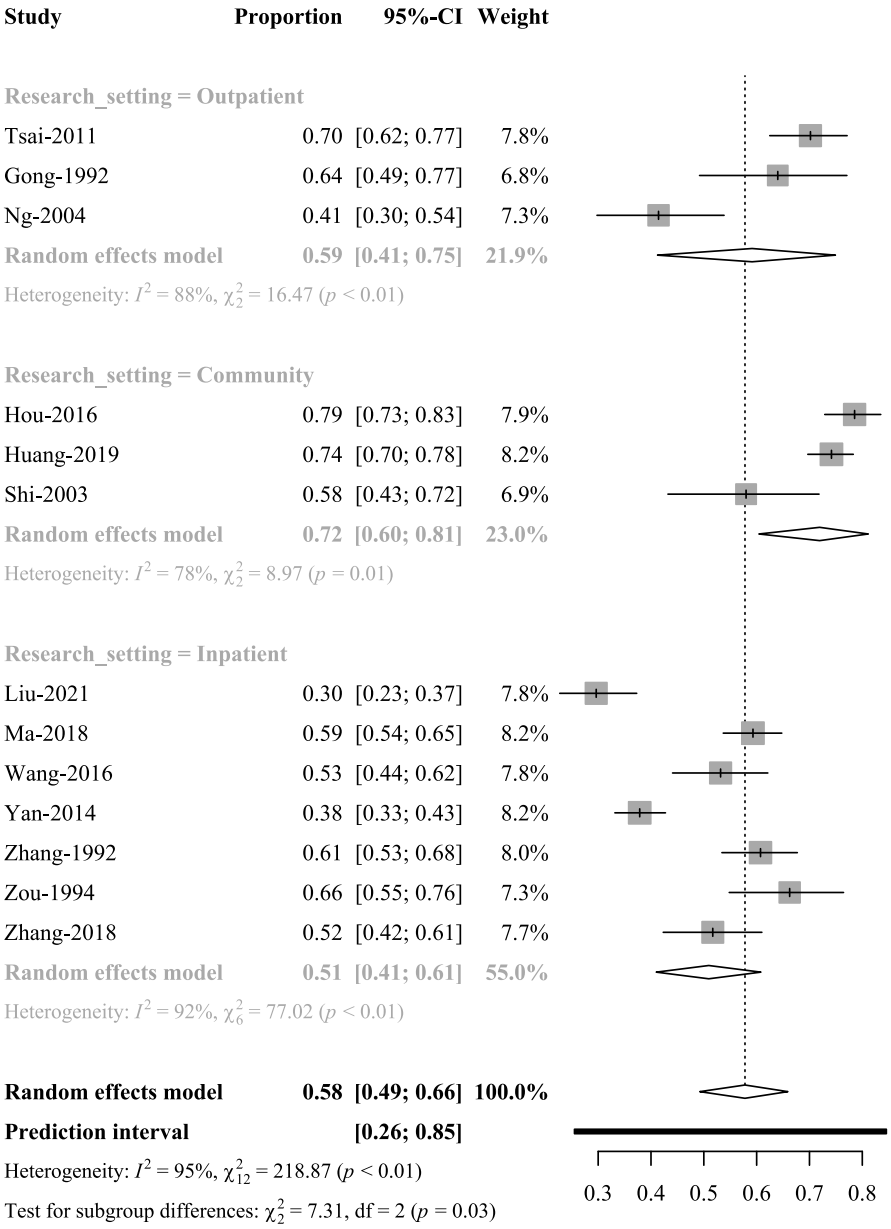
5.5 Forest plot of study region subgroup analyses



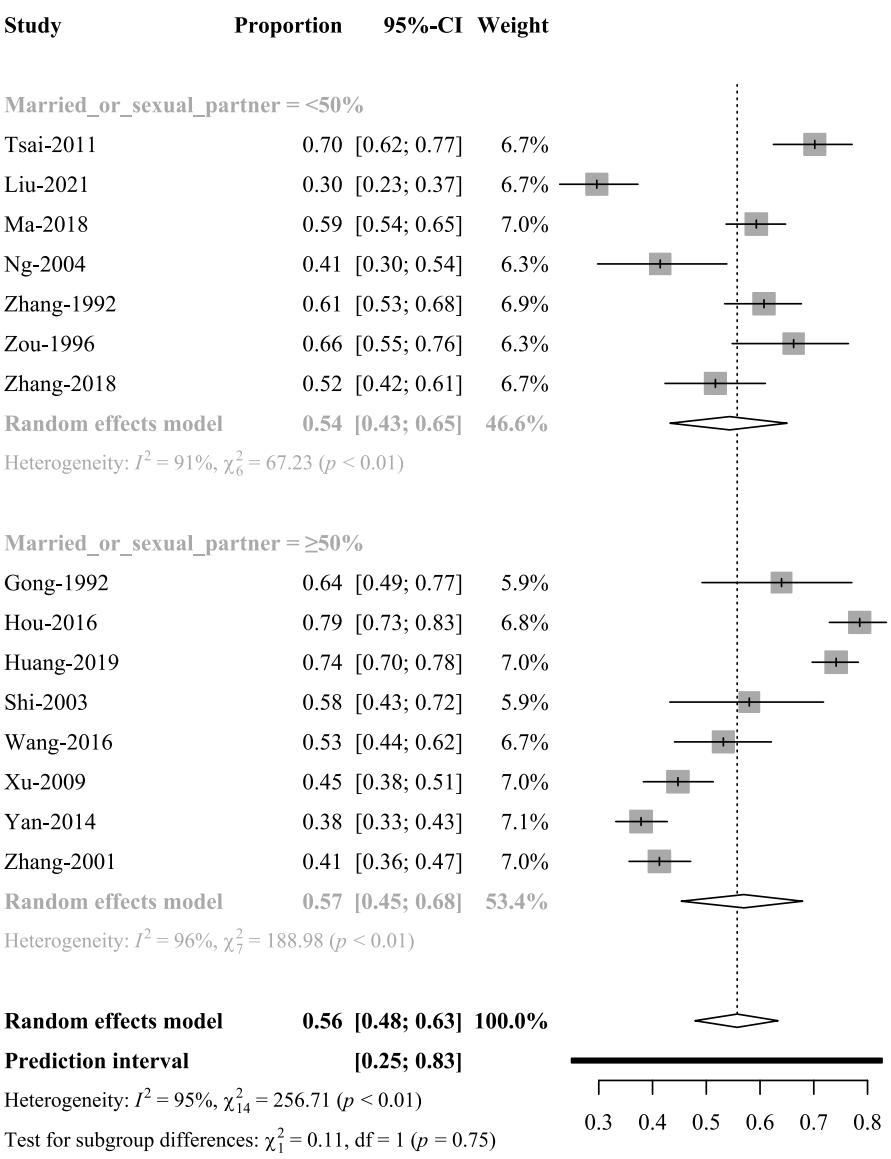
5.6 Forest plot of gender subgroup analyses



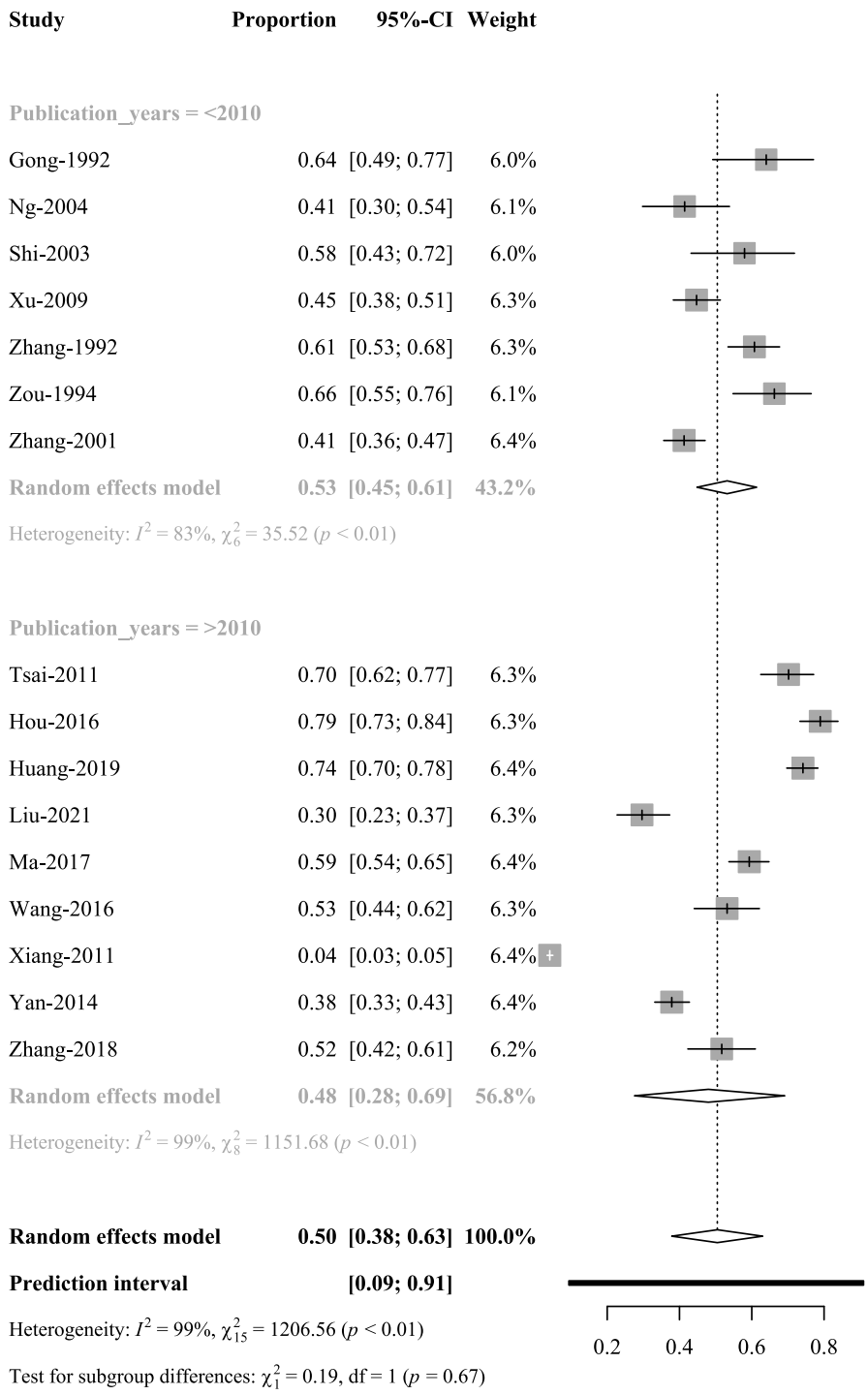
5.7 Forest plot of research setting subgroup analyses



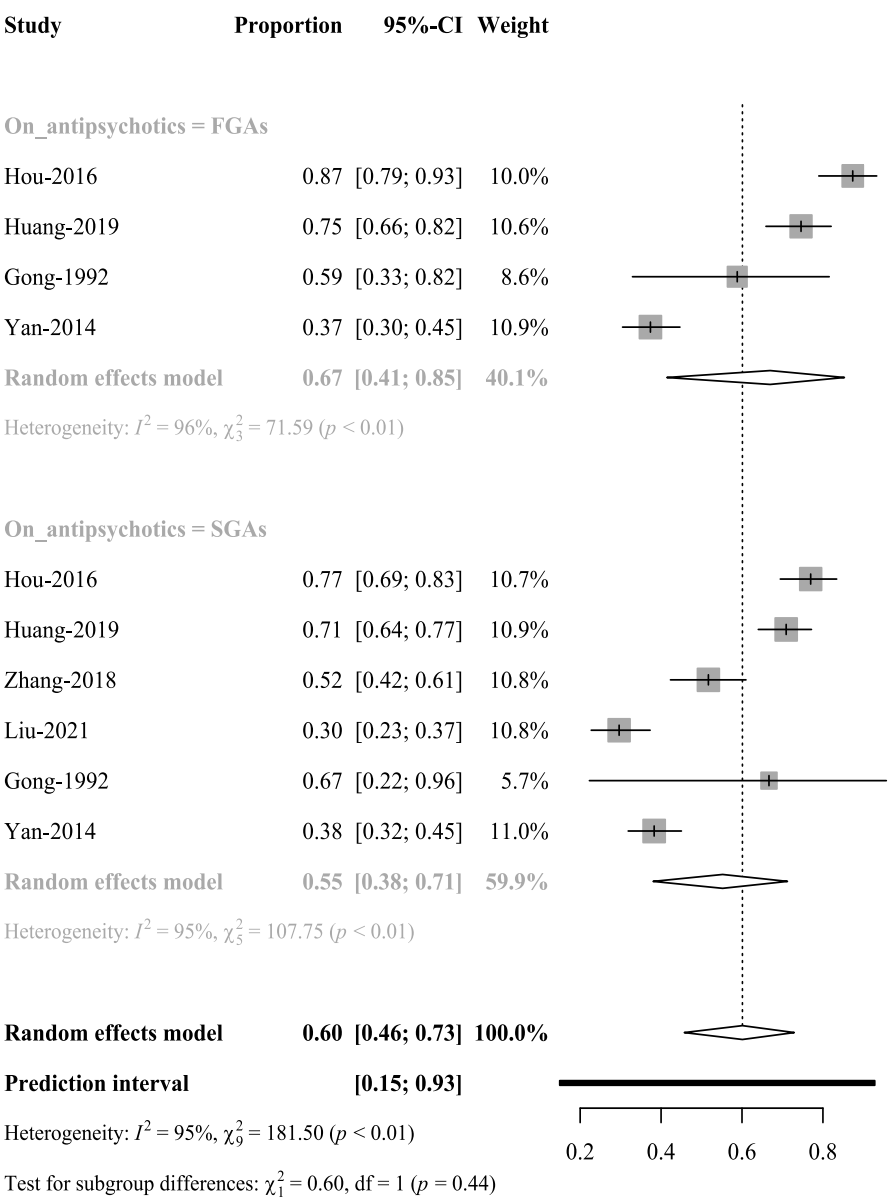
5.8 Forest plot of marital status subgroup analyses



5.9 Forest plot of publication years subgroup analyses

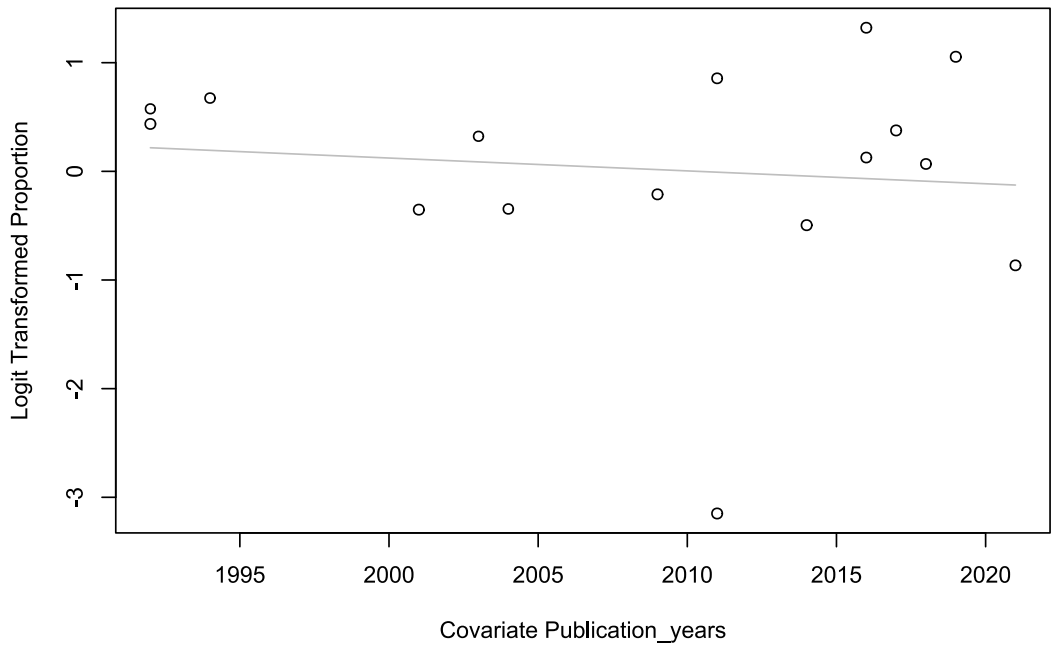


5.10 Forest plot of antipsychotics subgroup analyses



6. Meta-regression analyses

Variables	Estimate	Lower limit	Upper limit	p-value
Specific type				
anorgasmia	referent	referent	referent	referent
erectile dysfunction	-0.4798	-1.2905	0.3309	0.25
orgasmic dysfunction	**-1.1757**	**-1.9628**	**-0.3886**	**＜0.01**
sexual desire disorders	0.0754	-0.8239	0.9748	0.87
sexual pain	**-1.6974**	**-2.7093**	**-0.6855**	**＜0.01**
Duration of illness				
<10 years	referent	referent	referent	referent
10~20 years	**0.9368**	**0.0292**	**1.8445**	**0.04**
>20 years	**1.6088**	**0.3450**	**2.8727**	**0.01**
Assessment tools				
ASEX-CV	referent	referent	referent	referent
self-designed	-0.8614	-2.2956	0.5728	0.24
IIEF-5	-0.6505	-2.2251	0.9242	0.42
PRSexDQ	-0.3434	-2.7390	2.0522	0.78
BSDSRS	-0.7528	-2.5544	1.0487	0.41
Mean ages				
≤35 years	referent	referent	referent	referent
35~40 years	**-1.2426**	**-2.2032**	**-0.2819**	**0.01**
40~45 years	-0.7126	-1.5594	0.1342	0.10
>45 years	-0.4365	-1.4124	0.5393	0.38
Study region				
Hongkong	referent	referent	referent	referent
Taiwan	0.4172	-1.3102	2.1445	0.64
Mainland	1.1347	-0.3178	2.5872	0.13
Gender				
female	referent	referent	referent	referent
male	-0.4272	-1.1961	0.3417	0.28
Research setting				
Community	referent	referent	referent	referent
Outpatient	-0.5546	-1.4496	0.3404	0.22
Inpatient	**-0.8895**	**-1.6302**	**-0.1487**	**0.02**
Marital status				
Married/sexual partner＜50%	referent	referent	referent	referent
Married/sexual partner≥50%	0.1067	-0.5467	0.7600	0.75
Publication years	-0.0118	-0.0676	0.0439	0.68
On antipsychotics				
FGAs	referent	referent	referent	referent
SGAs	-0.4901	-1.6955	0.7153	0.43

Bubble plot of meta-regression analyses

Publication years