**抑郁问卷的异质性：基于对27个抑郁测量问卷的内容分析**

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摘要

关键词

**1. 引言**

[第一段的主旨句]

抑郁障碍的严重性（患病率、社会成本等），青少年期和成年早期是关键的时间。

[第二段的主旨句]

自评量表在抑郁症的研究中广泛使用，也是各类关于青少年与学生政策的基础（中国、世界范围内大规范调查的的数据）

[第三段的主旨句]

但抑郁自评量表数量繁多，被广泛使用的量表也不在少数，有潜在的重大影响（如影响到心理健康问题的检出率）。

[第四段的主旨句]

当前研究发现不同抑郁问题可能在测量不同的内容。Fried（2017年）的研究表明，不同的抑郁量表不能互相替代使用，这给抑郁研究带来了挑战。

[第六段的主旨句]

上述问题可能也延伸到发展中国家，但目前没有实证的数据进行评估，本研究将对用于学生的抑郁自评量表进行分析。

**2. Method**

**2.1** **Questionnaire collection and screening**

Four recent meta-analyses in the section on the Prevalence of Mental Health Problems among Chinese students provided the basis for collecting a total of 34 questionnaires to detect depression. (于晓琪等, 2022; 黄潇潇等, 2022; 张亚利等, 2022; 陈雨濛等, 2022). The specific names of the questionnaires are listed in Table 1.

When addressing instances where the same questionnaire name had varying translated versions, we retrieved all 470 depression-related literature pieces included in the meta-analysis dataset. Subsequently, we compiled and compared these translated versions to determine the definitive choice for analysis (refer to the initial step depicted in Figure 1). The specific criteria we have implemented are: firstly, ensuring reliability and validity; secondly, considering whether authors include symptom names to aid subsequent content analysis. If multiple translated versions lack symptom names, priority is assigned to choosing the translation most commonly used within the meta-analysis dataset. For instance, in the case of the CES-D scale, the 20th item “I could not get going” is more commonly used in the version by 汪向东等(1999), translated as “I walk very slowly”. However, 章婕等(2010) pointed out that “I walk very slowly ” is an incorrect translation. Consequently, this study adopts the version by 章婕等(2010), where the translation is “I lack the motivation to do things”.

Among the mentioned 34 scales, Mini International Neuropsychiatric Interview for children and adolescents (Mini-KID), WHO-CIDI 3.0, Psychological Health Inventory (PHI), and the Symptom Checklist 45 did not provide items for these scales.

The Beck Depression Inventory, Zhang Yuxin Revised Edition, and Short Depression Scale solely presented questionnaire names in the articles featured within the meta-analysis, without offering item details and references. As a result, these measures were ineligible for inclusion in this study. Both "Gu & Chen(2020)" and "季成叶(2007)" were assessed using the "During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing your usual activities?" instrument, differing only in language – one in Chinese and the other in English. As a result, they were combined, with only "季成叶(2007)" being retained. In addition, the Child Behavior Checklist (CBCL) included versions for boys and girls. A total of 27 scales were finally included in the analysis. Regarding the sources of questionnaire items in this study, as well as the origins and quantities of questionnaire items from each scale within the meta-analysis dataset, please refer to Table 1.

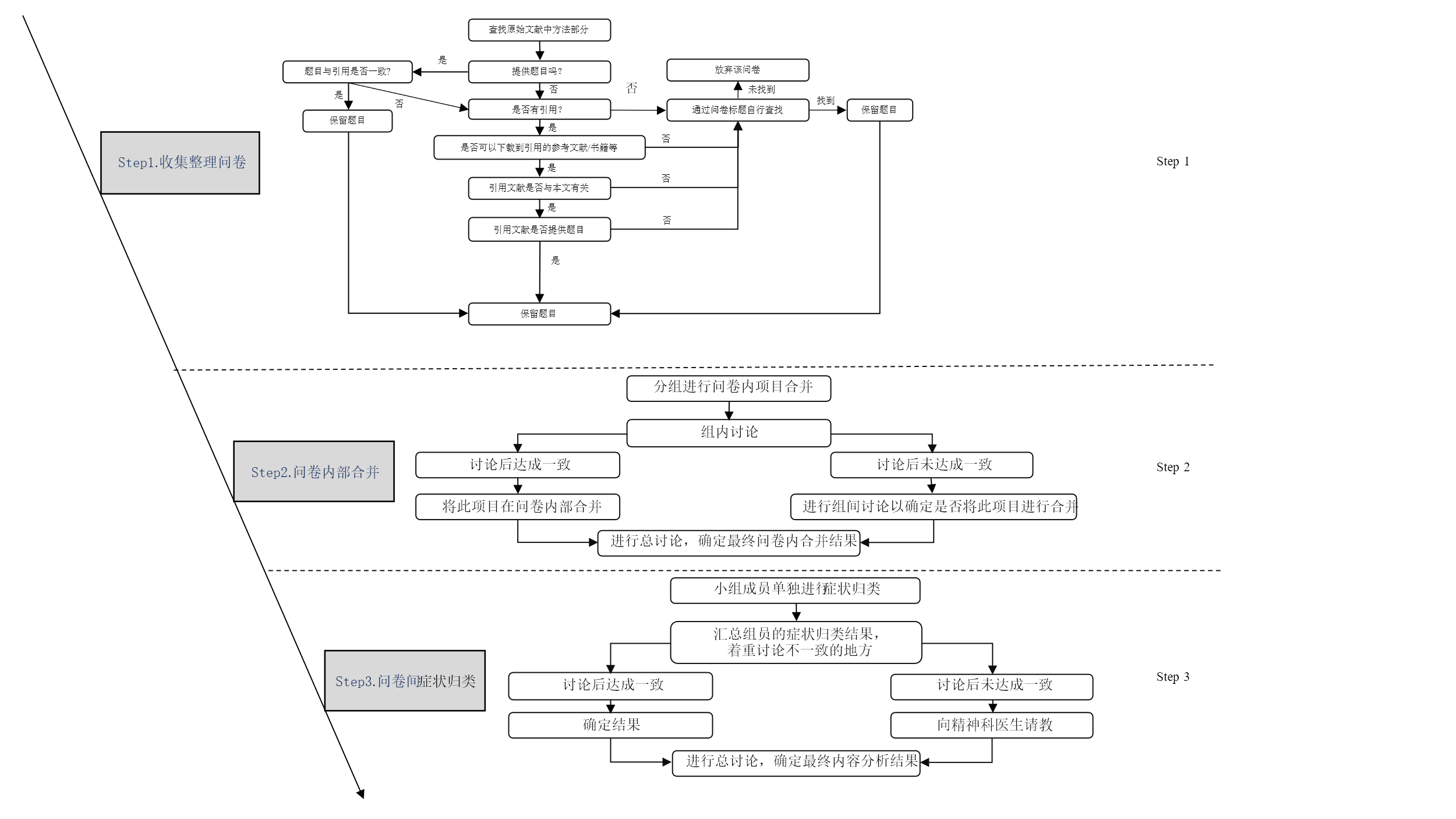
图1 内容分析流程图

表1 量表题目的具体来源及收集情况

| 量表名称27个(共34个，排除7个) | 元分析数据中该量表来源 | 元分析中使用该量表的文章数量 | 本文量表直接来源 | 备注 |
| --- | --- | --- | --- | --- |
| Self- Rating Depression Scale (SDS) | 汪向东等(1999)39篇, 张明园(1998)15篇, 陈姜等(2000)1篇, Jordan et al.(2000)2篇, 王汝展等(2009)1篇, Zung(1965)18篇, 任艳峰等(2015)1篇, 苏春燕等(2003)1篇, 张作记(2005)8篇,姚树桥和孙学礼(2008)1篇, 戴晓阳(2010)2篇, 王俊等(2013)1篇, 崔庆霞和王在翔(2014)1篇, 段泉泉和胜利(2012)1篇, 郑世华等(2016)1篇, 王征宇和迟玉芬(1984)1篇, 张明园等(2015)1篇, Zung(1969)1篇, 崔杰诚和陈国生(1998)。 | 135 | 张明园(1998)20题 | Jordan et al.(2000)、王汝展等(2009)、王俊等(2013)、崔庆霞和王在翔(2014)、段泉泉和胜利(2012)、郑世华等(2016)、Zung(1969)未提供题目。  陈姜等(2000、任艳峰等(2015)、苏春燕等(2003)的与本量表无关。  相对汪向东等(1999)，张明园(1998)在提供条目的同时也直接提供症状，更方便内容分析。  崔杰诚和陈国生(1998)无法获取。 |
| Symptom Checklist 90（SCL-90） | 汪向东等(1999)16篇, 戴晓阳(2010),戴海崎等(2007),仲稳山(2009)1篇, 王征宇(1984),高成阁等(1997), Derogatis et al.(1976)1篇, 陈树林和李凌江(2003)2篇, 张明园(1998)2篇, 黄赐英和裴利华(2005)1篇, 陈国鹏(2005), Mensah & Kiernan(2010)1篇, 金华等(1986)2篇, 张作记(2005)1篇, Derogatis(1973)1篇, Derogatis(1977)1篇, Hoffmann & Overall(1978)1篇 | 114 | 汪向东等(1999)13题 | 戴海崎等(2007)、高成阁等(1997)、王征宇(1984)、Derogatis et al.(1976)、陈树林和李凌江(2003)、黄赐英和裴利华(2005)、陈国鹏(2005)、Mensah & Kiernan(2010)、金华等(1986)、Hoffmann & Overall(1978)未提供题目。  Derogatis(1973)、Derogatis(1977)、仲稳山(2009)未获得。 |
| The Center for Epidemiological Studies Depression Scale (CES-D) | 汪向东等(1999)14篇, 史从戎等(2011)1篇, Radloff(1991)1篇, 戴晓阳(2010)2篇, 张作记(2005)1篇, 章婕等(2010)5篇  Cheng et al.(2012)4篇, Lee et al.(2008)2篇, Cheung & Bagley(1998)1篇, 陈祉妍等(2009)4篇, Wang et al.(2013)2篇, Yang et al.(2015)1篇, Radloff(1977)10篇, 潘丝媛等(2018)1篇, 1篇, Jiang et al.(2019)1篇, 刘平(1999)1篇 | 68 | 章婕等(2010) 20题 | 史从戎等(2011)、Cheng et al.(2012)、Yang et al.(2015)、陈祉妍等(2009)、潘丝媛等(2018)、刘琰等(2015)、Jiang et al.(2019)未提供题目，刘平(1999)未能获得全文。 |
| Children's Depression Inventory (CDI) | Kovacs(1992)6篇, Beck et al.(1961)1篇, 洪忻等(2012)1篇, 陈海燕等(2012)1篇, 俞大维和李旭(2000)3篇, 吴文峰等(2010)2篇, Samm et al.(2008)1篇, Kovas(1985) | 38 | 俞大维和李旭(2000)27题 | Beck et al.(1961)实际是 BDI-I的文章并不是CDI。  洪忻等(2012)、陈海燕等(2012)、吴文峰等(2010)未提供题目。  俞大维和李旭(2000)提供的是症状名，可以用于内容分析，但是无法用于实际测量。  Kovacs(1992)、Kovas(1985)无法获取。 |
| ﻿Depression Self-rating Scale for Children (DSRSC) | 苏林雁等(2003)11篇, 王凯等(2002)4篇。 | 18 | 苏林雁等(2003)18题 | 王凯等(2002)是焦虑的常模与抑郁无关。  苏林雁等(2003)提供的是症状名，可以用于内容分析，但是无法用于实际测量。 |
| Beck Depression Inventory（BDI-I） | 周德新(2006)1篇, 汪向东等(1999)3篇, Beck & Beck(1972)2篇, Beck et al.(1988)1篇, Beck et al.(1961)1篇, Beck & Beamesderfer(1974)1篇 | 16 | 汪向东等(1999)21题 | 徐俊冕(1991)、Beck et al.(1988)未提供题目。  周德新(2006)与本量表无关。 |
| Mental Health Inventroy of Middle-school students（MSSMHS） | 王极盛等(1997)8篇 | 15 | 王极盛(1998)5题 | 王极盛等(1997)未提供题目 |
| Beck Depression Inventory-II（BDI-II） | 杨文辉等(2014), 王振等(2011), Wang et al.(2009), Dere et al.(2015) | 11 | 王振等(2011)21题 | 杨文辉等(2014)、Dere et al.(2015)未提供题目。  Wang et al.(2009) 与本量表无关。 |
| Patient Health Questionnaire-9 items (PHQ-9) | Spitzer et al.(1999)3篇, Kroenke & Spitzer(2002)3篇, Sun et al.(2017)1篇 | 11 | 张明园等(2015)9题 | Sun et al.(2017)未提供题目。  Spitzer et al.(1999),和Kroenke & Spitzer(2002)题目一致。 |
| The Depression Anxiety Stress Scale，DASS -21 (DASS-21) | 苑新群(2014)1篇, Lovibond & Lovibond(1995)3篇, 龚栩等(2010)1篇 | 9 | 龚栩等(2010)7题 | 龚栩等(2010) 提供的是症状名，可以用于内容分析，但是无法用于实际测量。 |
| Child Behavior Checklist (CBCL) | 汪向东等(1999)1篇, 苏林雁等(1998)1篇, 忻仁娥(1994)1篇, Achenbach & Edelbrock(1987)1篇 | 6 | 汪向东等(1999)  男16题，女18题 | 苏林雁等(1998)未提供题目。  汪向东等(1999)提供的抑郁维度男生跟女生的题目不一样。  忻仁娥(1994)、Achenbach & Edelbrock(1987)未获取全文。 |
| Mood and Feelings Questionnaire (MFQ-C) | Wood et al.(1995)1篇 | 3 | 曹枫林等(2009)33题 | Wood et al.(1995)未提供题目。  曹枫林等(2009)中为情绪问卷MFQ，推测是MFQ-C。 |
| Middle school students' depression scale (CSSSDS) | 王极盛等(1997)2篇 | 3 | 王极盛(1998)20题 | 王极盛等(1997)未提供题目。 |
| Center for Epidemiologic Studies Depression Scale for Children (CES-D-C) | William Li et al.(2010) | 2 | William Li et al.(2010)20题 |  |
| Adolescent Depression Inventory（ADI） | Huang & Hsu(2003)1篇 | 1 | 楊雅惠(2003)31题 | Huang & Hsu(2003)未获得全文 |
| Brief Symptom Rating Scale (BSRS-5) | Lee et al.(1990)1篇 | 1 | Lee et al.(1990)7题 |  |
| Short version of Center for Epidemiologic Studies Depression Scale (CES-D-13) | Li et al.(2016), 张宝山和李娟(2011) | 1 | 张宝山和李娟(2011)13题 |  |
| CEPS-constructed scale (CEPS) | Ma et al.(2020)1篇 | 1 | Ma et al.(2020)4题 |  |
| Depression Status Inventory (DSI) | 汪向东等(1999)1篇 | 1 | 汪向东等(1999)20题 |  |
| Gu & Chen(2020) self-designed questionnaire (Gu\_2020) |  | 1 | Gu & Chen(2020)1题 | 与（Ji\_2007）合并 |
| Hospital Anxiety and Depression Scale (HADS) | Zigmond & Snaith(1983)1篇 | 1 | 汪向东等(1999)7题 |  |
| Hamilton Depression Rating Scale for Depression (HAMD) |  | 1 | 汤毓华和张明园(1984)24题 |  |
| Comprehensive Survey Report on Health-Related/Risk Behaviors among Chinese Adolescents. (Ji\_2007) | 季成叶(2007)1篇 | 1 | 季成叶(2007)1题 |  |
| Kutcher Adolescent Depression Scale (KADS-11) | 周慧鸣等(2015)1篇 | 1 | 周慧鸣等(2015)11题 | 周慧鸣等(2015) 提供的是症状名，可以用于内容分析，但是无法用于实际测量。 |
| Sakuma et al.(2010) self-designed questionnaire (Sakuma\_2010) | Sakuma et al.(2010)1篇 | 1 | Sakuma et al.(2010)4题 | 自编 |
| Short Mood and Feelings Questionnaire (SMFQ) | 程培霞等(2009) | 1 | 程培霞等(2009)13题 |  |
| University Personality Inventory (UPI) | Yu & Cai(2007)1篇 | 1 | Huang et al.(2020)12题 | Yu & Cai(2007)未能获得全文，Huang et al.(2020)直接提供了题目，但引用的是Yu & Cai(2007) |
| Chinese College Student Mental Health Scale (CCSMHS) |  | 1 | 张华(2021)8题 |  |
| Mini International Neuropsychiatric Interview for children and adolescents (Mini-KID) | 刘豫鑫等(2010), 刘豫鑫等(2011) | 2 | 未获得 | 刘豫鑫等(2010), 刘豫鑫等(2011)未提供题目 |
| Beck Depression Inventory, Zhang Yuxin Revised Edition |  | 1 | 未选择 | 没有具体引用的文章名，但在附录有题目。 |
| Short Depression Scale |  | 1 | 未选择 | 作者未提供简式抑郁量表(Andrensen (1994)具体的引文，自行搜索应为Andresen et al.(1994)一文，题目完全摘自CES-D，因此排除 |
| WHO-CIDI 3.0 (WHO-CIDI 3.0) | Kessler & Stün(2004)1篇 | 1 | 未获得 | Kessler & Stün(2004)未提供题目 |
| Psychological Health Inventory (PHI) | 宋维真和张建平(1993)1篇 | 1 | 未获得 | 宋维真和张建平(1993)未获得全文 |
| Symptom Checklist 45 (SCL-45) |  | 1 | 未获得 | 附录有题目，但无法得知用于测量抑郁的条目。 |

**2.2** Content analysis

The content analysis of symptoms was conducted following the method described by Fried(2017). Initially, similar symptoms within each questionnaire were consolidated, and subsequently, the symptoms from different questionnaires were compared to identify overlaps.

***2.2.1*** ***Consolidate the items in the questionnaire.***

Items assessing identical or similar symptoms within the questionnaire were consolidated. Four trained coders independently completed the combination of items in each questionnaire, which was then assessed in two separate groups. Subsequently, the two groups collaborated to form a unified combined plan, which was further reviewed. Discrepancies in the combination schemes of the two groups were resolved through discussions involving the four coders and the corresponding author. A clinically trained physician (co-author \*\*\*) provided the final verification.

***2.2.2*** ***Comparative analysis of symptoms across different questionnaires.***

This study compares the measurement of depressive symptoms among various questionnaires after merging them. It also aims to understand the degree of overlap in measuring depressive symptoms between different depression questionnaires. The process is analyzed in a manner similar to the consolidation of items within each questionnaire.

Unlike Fried(2017), we endeavored to preserve the maximum amount of information regarding symptoms. Fried(2017) adopted a highly conservative approach, distinguishing between symptoms only when they are clearly different. He asserted that items were considered equivalent if their phrasing exhibited substantial resemblance, for example, "feeling sad" (IDS), "feeling depressed" (HRSD), and "feeling blue" (SDS), or if their phrasing demonstrated marked contrast, as in "pessimistic" (IDS, BDI, MADRS) and " being hopeful about the future" (SDS, CES-D). In the Chinese context, variations exist in the interpretation of terms such as sadness, depression, and blue. In this study, the compound symptom of depressive mood comprised depression, low mood, sadness, and anhedonia. Similarly, within this study, divergent wording in items was deemed indicative of inequality when comparing symptoms across questionnaires.

To present more comprehensive information, this study simultaneously retained compound symptoms and specific symptoms. Compound symptoms encompass a broader and more comprehensive range of manifestations, whereas specific symptoms exhibit greater precision and pertain to a narrower scope. For example, "appetite changes" are categorized as compound symptoms, whereas "increased appetite" and "decreased appetite" fall under its specific symptoms.

It is important to note that when distinguishing between specific and compound symptoms, partial overlap is also recognized if one questionnaire features specific symptoms while the other incorporates compound symptoms. In the coding process, a score of 2 signifies complete correspondence to compound symptoms in the questionnaire, while a score of 1 indicates coding for specific symptoms under compound symptoms. For instance, for the CDI " Q18 appetite changes" a score of 2 is assigned under the compound symptom "appetite changes," while a score of 1 is assigned for both specific symptoms "increased appetite" and "decreased appetite" (refer to Supplementary Materials for detailed information).

**2.3 Statistic analysis**

Jaccard Index was used to calculate the degree of content overlap between different questionnaires (Fried, 2017). Overlapping of the index in the range is 0 (no overlap among scales) to 1 (complete overlap). The Jaccard Index or Jaccard similarity coefficient, is computed using the formula s/(u1 + u2 + s), where "s" represents the number of items shared by two questionnaires, and "u1" and "u2" denote the number of items that are exclusively present in each of the two scales.

It is interpreted with reference to the Fried(2017) guidelines: very weak 0.00–0.19, weak 0.20–0.39, moderate 0.40–0.59, strong 0.60–0.79, and very strong 0.80–1.0. In addition to the Jaccard Index, the proportions of Idiosyncratic symptoms (symptoms not found on other scales), the respective proportions of compound and specific symptoms, and the proportions of DSM-5 depressive symptoms included were reported.

**3 结果**

3.1 Combined results of items in the questionnaire

27个问卷中，22个条目被合并，其中合并条目最多的问卷是MFQ-C，其包括8个条目，被合并为3个症状。7个问卷仅合并2个条目，19个问卷没有合并条目。最终纳入内容分析的条目总共包括412个（见表2），由于有个别题目一题测量多个症状，最终纳入内容分析的症状数量为383。

表2 问卷内条目合并结果

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 问卷名称 | 合并前条目数 | 合并后条目数 | 合并前条目 | 合并后症状 |
| SDS | 20 | 19 | Q17“我觉得自己是个有用的人,有人需要我(无用感)”，Q19“我认为如果我死了,别人会过得好些(无价值感) ” | 无价值感 |
| BDI-I | 21 | 20 | Q5“0我没有特别的内疚感 1 我对自己做过或该做但没做的许多事感到内疚 2 在大部分时间里我都感到内疚 3 我任何时候都感到内疚”和Q8“0 与过去相比，我没有更多的责备或批评自己 1 我比过去责备自己更多 2 只要我有过失，我就责备自己 3 只要发生不好的事情，我就责备自己” | 内疚 |
| BDI-II | 21 | 20 | Q5“内疚感”，Q8“自责” | 内疚 |
| CBCL男生 | 16 | 15 | Q18“故意伤害自己或企图自杀”& Q91“声言要自杀” | 自杀意念 |
| MFQ-C | 33 | 28 | Q6“活动比平时慢”& Q13“比平时语速慢” | 迟缓 |
| MFQ-C |  |  | Q16“活着不值得”、Q17“想到死亡”，Q19“想到自杀” | 自杀意念 |
| MFQ-C |  |  | Q8“不再是个好人”、Q9“那些不是我做错的事也感到自责”，Q24“认为自己是坏人 | 内疚自责 |
| CSSDS | 20 | 19 | Q4“我对学习没有兴趣”，Q8“我觉得学习枯燥无味” | 无学习兴趣 |
| CES-D-C | 20 | 19 | Q8“Was not happy”& Q17“Was happy(R)” | Happy |
| UPI | 12 | 11 | Q9“lack of confidence”& Q10“feeling self-abased” | Self-abased |

**3.2 跨问卷的症状比较**

An analysis was conducted on a total of 383 symptoms across 27 scales, resulting in the identification of 84 depressive symptoms (refer to Figure 2). Among these, there are 8 symptoms that are compound symptoms. They include "Depressive mood" as the compound symptom, with its specific symptoms being "Blue," "Low mood," "Sad," and "Anhedonia"; "Irritability" as the compound symptom, with its specific symptom being "Prone to anger towards parents"; "Self-abasement" as the compound symptom, with its specific symptoms being "Psychological inferiority" and "Negative body perception"; "Interest/pleasure loss" as the compound symptom, with its specific symptoms being "Interest loss " and "Pleasure loss "; " Somatization" as the compound symptom, with its specific symptoms being "Gastrointestinal," "Sympathetic arousal," and "General somatic symptoms"; "Appetite changes" as the compound symptom, with its specific symptoms being "Appetite increase" and "Appetite decrease"; "Somnipathy" as the compound symptom, with its specific symptoms being "Poor sleep," "Hypersomnia," "Early insomnia," "Middle insomnia," and "Late insomnia"; and " Reduced socialization" as the compound symptom, with its specific symptom being "I didn’t want to see my friends.".

症状平均出现在27个量表中的5.62个。在84个症状中，有18（21.42%）个症状是独特的症状，仅在一个量表中出现。没有任何一个症状出现在所有量表中。出现次数最多的症状是无望感，21/27个量表中出现。出现次数其次的是兴趣丧失其出现在18/27个量表中。值得注意的是，在DSM-5中，重度抑郁的核心症状快感缺乏(anhedonia)被分为兴趣丧失和乐趣丧失，乐趣丧失比兴趣丧失的出现次数少，仅出现在9个量表中。

如前所述，本研究保留了与抑郁情绪有关的多个症状描述，包括抑郁情绪这个复合症状和忧郁、情绪低沉/容易高兴、悲哀、快感缺失这四个特殊症状。其中抑郁情绪出现在了5个量表当中，忧郁出现在10个量表中，情绪低沉出现在15个量表中，悲哀出现在13个量表中，快感缺失出现在16个量表中。如将这些症状均合并为抑郁情绪，则该症状出现26个量表当中，是出现次数最多的症状。表3列出了症状出现在量表中的比例，例如84个症状中有12个症状出现在2个量表当中，占比为12/84 = 14.29%。

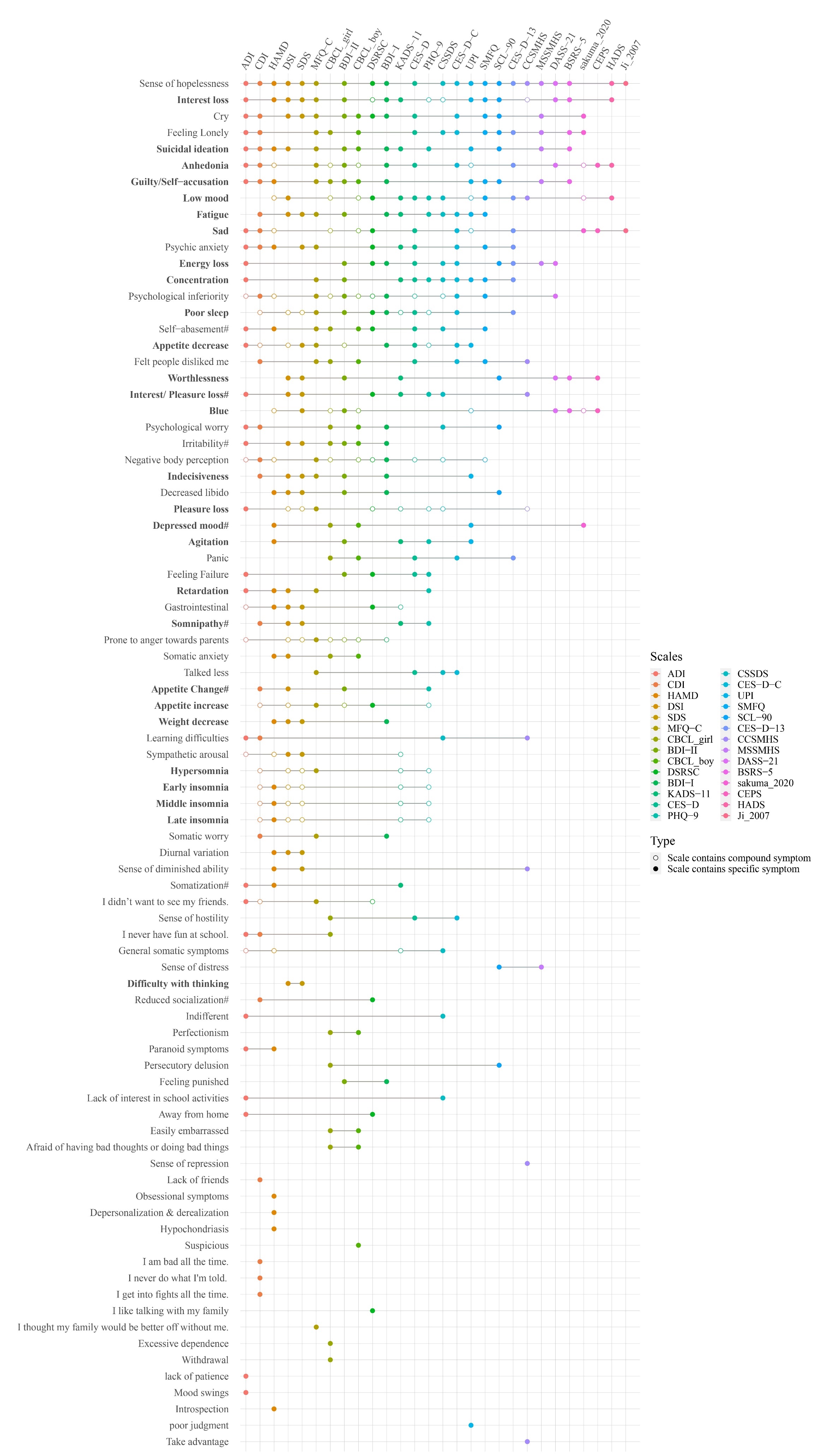


Table 3 症状出现在量表中的比例

|  |  |  |
| --- | --- | --- |
| Symptoms | Scales | % |
| 18 | 1 | 21.43 |
| 12 | 2 | 14.29 |
| 6 | 3 | 7.14 |
| 7 | 4 | 8.33 |
| 7 | 5 | 8.33 |
| 7 | 6 | 8.33 |
| 3 | 7 | 3.57 |
| 4 | 8 | 4.76 |
| 2 | 9 | 2.38 |
| 1 | 10 | 1.19 |
| 5 | 11 | 5.95 |
| 2 | 12 | 2.38 |
| 2 | 13 | 2.38 |
| 3 | 14 | 3.57 |
| 2 | 15 | 2.38 |
| 1 | 16 | 1.19 |
| 1 | 18 | 1.19 |
| 1 | 21 | 1.19 |

3.3 各量表中症状数量的分析

表4总结了每个量表中包含了症状的数量、调整后的量表长度、独特症状的数量，以及复合症状和特殊症状各自的比例以及包含DSM-5抑郁症状的比例。大部分(19)个量表不包含独特症状，CSSMHS包含的独特症状比例最高，为(22.22%)，其余量表包含独特症状的比例在3.85%-12.5%。有10个量表不包换复合症状，其他量表复合症状的比例在7.69%-47.37%之间。包含DSM-5抑郁症状的比例最高的是DSI，其包含了DSM-5九个抑郁症状中的71.42%，最低的是Ji\_2005，其只包含了3.57%，它也是本研究纳入的问卷中题目最少的。

表4 各量表的特性和特殊症状、独特症状的比例

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Scale | Symptoms  captured  (No.) | Adjusted  scale  length  (No.) | Idiosyncratic  symptoms (%) | Specific  symptoms (%) | Compound  symptoms (%) | Scale captures X% of 9 DSM-5 MDD symptoms |
| SDS | 26 | 19 | 0 | 73.08 | 26.92 | 57.14 |
| SCL-90 | 12 | 13 | 0 | 100 | 0 | 17.86 |
| CES-D | 19 | 20 | 0 | 89.47 | 10.53 | 25 |
| CDI | 32 | 27 | 12.5 | 75 | 25 | 53.57 |
| DSRSC | 20 | 18 | 5 | 75 | 25 | 28.57 |
| BDI-I | 20 | 20 | 0 | 95 | 5 | 35.71 |
| MSSMHS | 7 | 5 | 0 | 100 | 0 | 10.71 |
| BDI-II | 23 | 21 | 0 | 86.96 | 13.04 | 53.57 |
| PHQ-9 | 19 | 9 | 0 | 52.63 | 47.37 | 64.29 |
| DASS-21 | 7 | 7 | 0 | 100 | 0 | 17.85 |
| CBCL\_boy | 22 | 15 | 4.55 | 68.18 | 31.82 | 25 |
| CBCL\_girl | 24 | 18 | 8.33 | 70.83 | 29.17 | 21.43 |
| MFQ-C | 26 | 28 | 3.85 | 100 | 0 | 46.43 |
| CSSDS | 18 | 19 | 0 | 77.78 | 22.22 | 25 |
| CES-D-C | 16 | 19 | 0 | 100 | 0 | 25 |
| ADI | 35 | 31 | 5.71 | 82.86 | 17.14 | 39.29 |
| BSRS-5 | 7 | 7 | 0 | 100 | 0 | 17.86 |
| CES-D-13 | 10 | 13 | 0 | 100 | 0 | 21.43 |
| CEPS | 4 | 4 | 0 | 100 | 0 | 14.29 |
| DSI | 29 | 20 | 0 | 68.97 | 31.03 | 71.42 |
| HADS | 4 | 7 | 0 | 100 | 0 | 10.71 |
| HAMD | 32 | 24 | 12.5 | 75 | 25 | 50 |
| Ji\_2005 | 2 | 1 | 0 | 100 | 0 | 3.57 |
| KADS-11 | 20 | 11 | 0 | 55 | 44 | 53.57 |
| Sakuma\_2010 | 7 | 4 | 0 | 57.14 | 42.86 | 17.86 |
| SMFQ | 13 | 13 | 0 | 92.31 | 7.69 | 17.86 |
| UPI | 15 | 11 | 6.67 | 73.33 | 26.67 | 46.43 |
| CSSMHS | 9 | 8 | 22.22 | 77.78 | 22.22 | 14.29 |

3.4 问卷间条目的重叠度

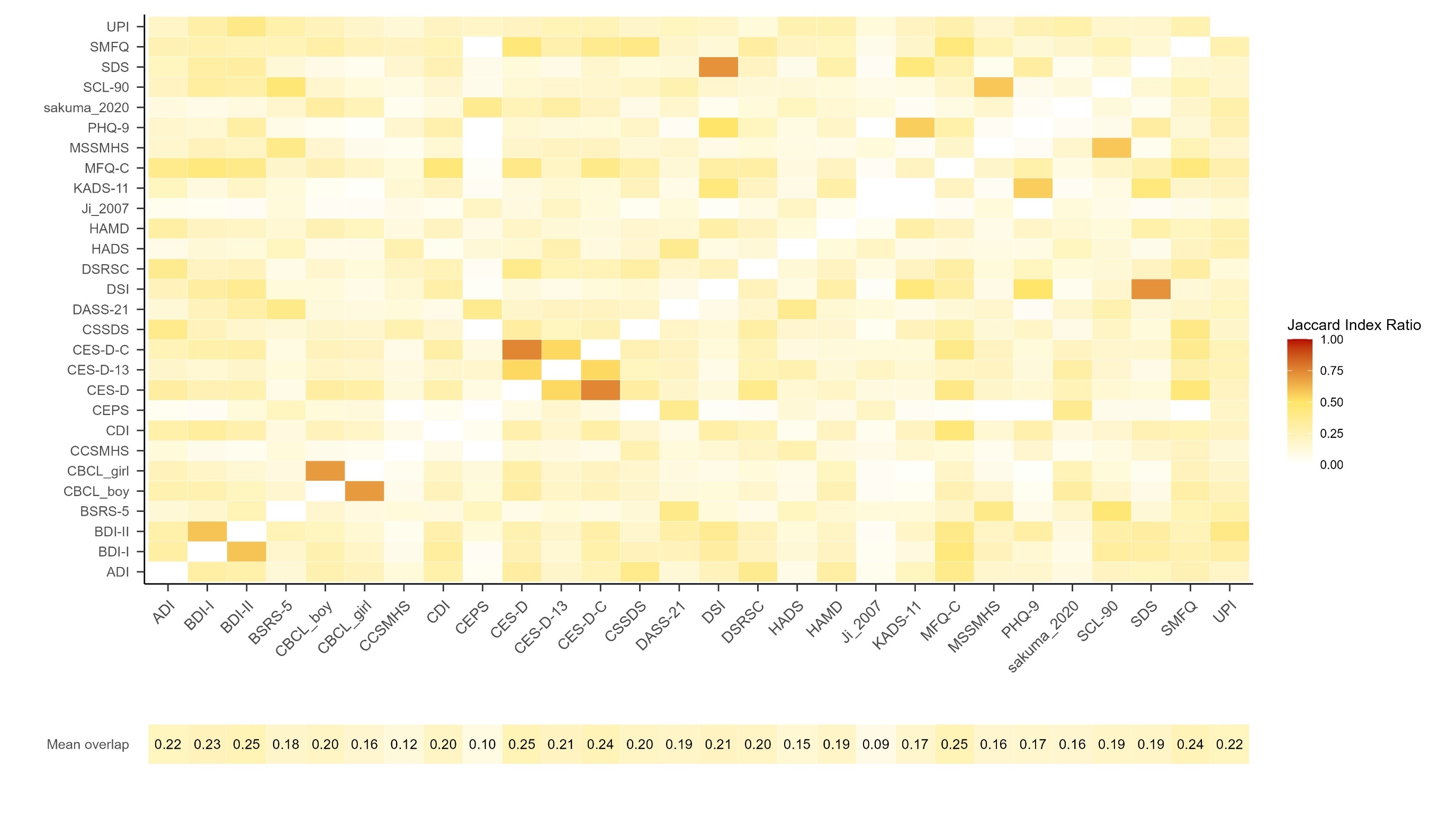
通过Jaccard系数计算了量表之间的重叠程度。所有量表的平均重叠度是0.19，意味着这些量表之间的相似性非常低。具体各个量表之间的重叠程度以及各个量表和其他量表之间的平均重叠程度见图2。

没有任何一个量表与其他量表之间的平均重叠程度（Mean overlap）到达中等水平（0.40–0.59）。CES-D与其他量表的平均重叠程度最高，为0.25，其他量表的平均重叠程度在0.08-0.25之间。重叠度最高的两个量表是CES-D和CES-D-C，为0.75,其次是DSI和SDS为0.72。

有很多量表之间重叠度为0，即他们之间所测量内容完全无关。具体包括：MSSMHS与CEPS无重叠；PHQ-9与CEPS和Ji\_2005这两个问卷均无重叠；CSSDS与CEPS无重叠；CEPS与SMFQ和 CSSMHS这个问卷无重叠；Ji\_2005与KADS-11无重叠。

各个量表和其他量表之间的平均重叠程度与量表中包含了症状的数量的相关系数为0.71，与调整后的长度相关系数为0.55。这表明了较长的量表与其他的量表重叠度较高，因此具有较强的代表性。

图2 27个抑郁量表条目的重叠度



**4 . 讨论**

[第一段的主旨句]

综上所述，各量表之间平均没有实现有意义的重叠，从整体上看，各量表在项目内容上差异较大。

[第二段的主旨句]

Cesd 理由1 cesd版本 理由2独特症状

这些量表在内容上的异质性可能导致对其互换性的误解，需要谨慎比较和选择，以确保研究结果的可靠性和临床的准确性。

[第三段的主旨句]

焦虑的异质性源于焦虑的概念广泛性和缺乏构念的清晰度，需要对焦虑进行更清晰和详细的构念阐释。

[第四段的主旨句]

量表之间的项目重叠度不足和异质性不一定是问题，但在选择测量焦虑的工具时值得考虑其他因素，并将评估的目的和目标纳入考虑。

[第五段的主旨句]

DSM-5与题目长度

**Limitations**

1主观

2系数

**Future Directions and Implications**

**1 我们敦促研究人员和临床医生在选择焦虑相关的量表时要谨慎，并警惕不要将它们简单地互换使用，而且使用不同焦虑量表得到的结果应该谨慎比较和整合。同时，开发者在评估量表时应该考虑内容重叠以及其他常规测试的心理测量性质。**

**柳青的系统**

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