INPLASY

Prevalence of Internet addiction in Chinese university students: a meta-analysis and bibliometric analysis

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ADMINISTRATIVE INFORMATION

INTRODUCTION

Review question / Objective Participants (P): university students in China; Intervention (I): not applicable; Comparison (C): not applicable; Outcomes (O): prevalence of Internet addiction or data that could calculate the prevalence of Internet addiction. Internet addiction was assessed using standardized instruments, such as the Chen Internet Addiction Scale, Young's Diagnostic Questionnaire (YDQ), and Internet Addiction Test (IAT); Study design (S): cross-sectional study with accessible data.

Rationale The number of university students in China accounts for about 20% of the total number of university students in the world. Epidemiological survey data show that, the prevalence of Internet addiction in Chinese university students varies greatly due to differences in social and cultural factors, economic development level, sampling method and measurement instrument. In addition, some studies showed that university students with a male gender, higher grade and urban abode reported a higher prevalence of Internet addiction. Moreover, the coronavirus disease 2019 (COVID-19) epidemic is also a risk factor for increasing Internet addiction. In view of these factors, it is necessary to review the prevalence and related associated factors of Internet addiction in Chinese university students through Meta-analysis.

Condition being studied Internet addiction refers to the uncontrolled, excessive and compulsive use of the Internet that causes a series of physical, social and emotional problems in individuals. It is an impulse control disorder also a behavioral addiction.

METHODS

Search strategy Databases: English (Web of Science, PubMed, PsycINFO, EMBASE) and non-English (Chinese Nation Knowledge Infrastructure (CNKI), and WANFANG) databases. Term: [(Internet addition) OR (Problematic Internet use) OR (pathological Internet use) OR (Internet dependent) OR (compulsive Internet use) OR (excessive Internet use) OR (Internet overuse) OR (heavy Internet use) OR (Internet dependence) OR (netaholic) OR (cyberaddition) OR (Addiction Disorder, Internet) OR (Addiction Disorders, Internet) OR (Addiction, Internet) OR (Addictions, Internet) OR (Internet Addictions)] AND [(university students) OR (college students) OR (undergraduate students) OR (young adults)] AND [(China) OR (Chinese)] AND [(prevalence) OR (epidemic) OR (epidemiological)]**.**

Participant or population Chinese university students.

Intervention NA.

Comparator NA.

Study designs to be included cross-sectional study.

Eligibility criteria Exclusion criteria : (1) studies that not published in English or Chinese language; (2) Internet addiction defined by a single question or non-validated scale; (3) sampling method and cut-off value of Internet addiction were not introduced; (4) studies conducted among special population (e.g., medical university students, university athletes).

Information sources Databases: international (Web of Science, PubMed, PsycINFO, EMBASE) and Chinese (Chinese Nation Knowledge Infrastructure (CNKI), and WANFANG) databases.

Main outcome(s) This meta-analysis explores the pooled prevalence and associated factors of Internet addiction in Chinese univerisity students.

Additional outcome(s) Bibliometric analysis focuses on the current status of literature publication in the field of Internet addiction among univerisity students around the world.

Quality assessment / Risk of bias analysis Study quality was assessed using a standardized instrument for epidemiological studies with following eight items: (1) target population was defined clearly; (2) probability sampling or entire population surveyed; (3) response rate was ≥80%; (4) non-responders were clearly described; (5) sample was representative of the target population; (6) data collection methods were standardized; (7) validated criteria were used to judge Internet addition; and (8) prevalence estimates were given with confidence intervals (CIs) and detailed by subgroups (if applicable). Studies with a total score of "7–8" were considered "high quality", "4–6" was "moderate quality", and "0–3" was "low quality".

Strategy of data synthesis Meta-analyses were conducted using the R softwave. A random-effects model was used to calculate the pooled prevalence of Internet addition and its 95%CI or odds ratio (OR). Heterogeneity between studies was assessed with the I2 statistic. Subgroup and meta-regression analyses were performed to investigate the source of heterogeneity and identify associated factors of the pooled prevalence of Internet addiction.

Subgroup analysis Subgroup and meta-regression analyses were performed to investigate the source of heterogeneity and identify associated factors of the pooled prevalence of Internet addiction.

Sensitivity analysis Sensitivity analyses were performed to examine outlying studies by removing each study sequentially. Publication bias was estimated with funnel plot and the Egger's test.

Language restriction It is just limited in English and Chinese.

Country(ies) involved China.

Keywords Internet addiction; university student, meta-analysis, prevalence.

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