

INPLASY

Regional Disparities and Driving Factors of Third-child Fertility Intention Among Reproductive-age Populations in Eastern China : A Systematic Review and Meta-Analysis

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Corresponding author:

Xiaonan Zhou

xiaonanzhou20@163.com

Author Affiliation:

School of Public Health and Management, Guangzhou University of Chinese Medicine.

Zhou, XN; Si, JC; Ye, XH; Lv, XY; Lin, B; Zhou, JG.

ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Formal screening of search results against eligibility criteria.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 16 May 2026 and was last updated on 16 May 2026.

INTRODUCTION

Review question / Objective The purpose of this study is to explore the pooled prevalence of two types of fertility intention among fertile adults in Eastern China after the launch of the three-child policy, as well as their regional disparities and relevant influencing factors. Under the PICOS framework, the participants (P) are fertile adults in Eastern China; the interventions/exposures (I) and comparisons (C) cover demographic characteristics, urban hierarchy and social security-related influencing factors; the outcomes (O) include general third-child fertility intention and re-fertility intention among families with two children; and the study design (S) is restricted to cross-sectional studies.

Condition being studied Pooled prevalence of third-child fertility intention among fertile populations and subsequent fertility intention among families with two children in Eastern China and their associated influencing factors.

METHODS

Participant or population Reproductive-age Populations in Eastern China.

Intervention Various socio-economic and demographic influencing factors related to fertility decision-making.

Comparator Different subgroups of population characteristics and social attributes.

Study designs to be included Cross-sectional studies focusing on fertility intention investigation.

Eligibility criteria Inclusion criteria: Study subjects were fertile adults residing in Eastern China. Studies reported data on third-child fertility intention or re-fertility intention among two-child families. Original observational cross-sectional studies published in Chinese or English.

Sufficient available data for calculating pooled prevalence and effect sizes.

Exclusion criteria:

Reviews, letters, conference abstracts, case reports and duplicated publications.

Studies lacking valid original data or unclear outcome indicators.

Studies conducted outside Eastern China or targeting non-childbearing populations.

Intervention trials, cohort studies and case-control studies.

Information sources Web of Science, Embase, PubMed, Cochrane Library, China National Knowledge Infrastructure (CNKI), China Science and Technology Journal Database (VIP), Chinese Biomedical Literature Database (CBM) and Wanfang.

Main outcome(s) This study established two outcome indicators. The first was the third-child fertility intention among fertile populations in Eastern China, defined as the proportion of general fertile individuals willing to have three or more children. The second was the re-fertility intention among fertile populations in Eastern China, referring to the proportion of individuals who already have two children and are willing to have one more child.

Quality assessment / Risk of bias analysis The Joanna Briggs Institute (JBI) critical appraisal checklist for cross-sectional studies was adopted to assess the methodological quality of included literature.

Strategy of data synthesis Given the significant high heterogeneity among included studies, the random-effects model was used to synthesize the pooled prevalence of two types of fertility intention. Subgroup analyses were conducted according to publication year, population characteristics and urban hierarchy to explore potential sources of heterogeneity. Sensitivity analysis was performed to evaluate the stability of synthetic results. Meanwhile, random-effects model was also adopted to merge odds ratios for analyzing relevant influencing factors. All statistical analyses were completed via Stata software.

Subgroup analysis Subgroup analyses were stratified by publication year, population characteristics and urban grade to explore sources of heterogeneity.

Sensitivity analysis Sensitivity analysis will be conducted by excluding individual studies one by one to verify the robustness of pooled results.

Country(ies) involved China.

Keywords Eastern China, Reproductive-age Populations, three-child policy, fertility intention, influencing factor, cross-sectional study.

Contributions of each author

Author 1 - Xiaonan Zhou.

Email: xiaonanzhou20@163.com

Author 2 - Jianchao Si.

Email: sijianchao19960126@163.com

Author 3 - Xiaohan Ye.

Email: 2306268259@qq.com

Author 4 - Xiayu Lyu.

Email: lyuxiyayu@foxmail.com

Author 5 - Bin Lin.

Email: linbin@gzucm.edu.cn

Author 6 - Jianguo Zhou.

Email: zhoujianguo123@163.com