

**Supplementary Table 1. The detailed search strategy for all three databases incl. search terms used for the systematic literature searches**

Database	Search Term	Result
PubMed	#1: "self injurious behavior"[MeSH Terms] OR ("self injurious"[All Fields] AND "behavior"[All Fields]) OR "self injurious behavior"[All Fields] OR ("nonsuicidal"[All Fields] AND "self"[All Fields] AND "injury"[All Fields]) OR "nonsuicidal self injury"[All Fields] OR ("self injurious behavior"[MeSH Terms] OR ("self injurious"[All Fields] AND "behavior"[All Fields]) OR "self injurious behavior"[All Fields] OR ("non"[All Fields] AND "suicidal"[All Fields] AND "self"[All Fields] AND "injury"[All Fields]) OR "non suicidal self injury"[All Fields]) OR "NSSI"[All Fields]	89,627
	#2: "migrat*"[All Fields] OR "migrant*"[All Fields] OR "emigrat*"[All Fields] OR "immigrat*"[All Fields] OR "transient*"[All Fields] OR ("left"[All Fields] AND "behind"[All Fields])	898,005
	#3: #1 AND #2	1,008
Web of Science	#1: TS=(nonsuicidal self-injury OR non-suicidal self-injury OR NSSI)	4,591
	#2: TS=(migrat* OR migrant* OR emigrat* OR immigrat* OR transient* OR left behind)	2,300,324
	#3: #1 AND #2	45
EMBASE	#1: 'nonsuicidal self-injury' OR (nonsuicidal AND ('self injury'/exp OR 'self injury')) OR 'non-suicidal self-injury'/exp OR 'non-suicidal self-injury' OR ('non suicidal' AND ('self injury'/exp OR 'self injury')) OR nnsi	28,296
	#2: migrat* OR migrant* OR emigrat* OR immigrat* OR transient* OR (left AND behind)	1,224,392
	#3: #1 AND #2	444
Time	October 25, 2024	

**Supplementary Table 2. Characteristics of included studies investigating the impact of parental migration on nonsuicidal self-injury**

<b>Number</b>	<b>First author, publication year</b>	<b>Study design (period)</b>	<b>No. of LBCAs /NSSI</b>	<b>No. of controls/NSSI</b>	<b>Definition of LBCAs and type of migration; participant demographics</b>	<b>NSSI Assessment</b>
1	Huang C, 2022	CS (2020-2021)	366/140	412/124	Children whose parents work (ever or currently) in other cities; more than half a year; mean (SD) 12.68y (1.34y); 50.3% male	A screening questionnaire for NSSI
2	Li XY, 2020	CS (2018)	610/92	1674/247	Both parents have been away, or one parent has been out, and the other party does not have the ability to support and monitor; more than 6 months; mean (SD) 7-16y; 52.9% male	Youth Risk Behavior Surveillance System (YRBSS) questionnaire
3	Ma Y, 2021	CS (2015)	1152/1152*19.3% (Less frequent NSSI) 702/702*11.8% (More frequent NSSI)	1483/1483*15.9% (Less frequent NSSI) 1081/1081*11.6% (More frequent NSSI)	Father or/and mother migrated to an urban area for employment and not living with their children; at least half a year mean (SD) 15.1y (1.8y); 51.6% male	The Chinese version of the Functional Assessment of Self-mutilation
4	Wang DF,2023	CS (2021)	22855/3292	101502/9467	One or both parents stay away from the place their children are living for a minimum of 6 months; mean (SD) 13.23y (1.93y); 54.2% male	An investigation questionnaire

5	Wang F, 2021	CS (2018-2019)	1322/181 (S- LBCAs) 1026/158 (B- LBCAs)	1160/132	One parent was currently migrating away for work and no longer lived with their children (SLBC); both father and mother were currently migrating to others places for work (BLBC); more than 6 months mean (SD) 13.0y (1.3y); 55.4% male	Composite International Diagnostic Interview (CIDI)
6	Wang QQ, 2020	CS (NA)	431/431*33.6%	447/447*31.6%	NA; mean (SD) 11-17y; 47.7% male	The Deliberate Self-Harm Inventory (DSHI)
7	Xie QW, 2022	CS (2020)	1054/76 (currently LBCAs for NSSI) 1054/170 (currently LBCAs for Pre-NSSI) 780/45 (Previously LBCAs for NSSI) 780/152 (Previously LBCAs for Pre-NSSI)	903/43 (never LBC for NSSI) 903/130 (never LBC for Pre-NSSI)	One or both parents were currently or previously absent; over six months; mean (SD) 11.93y (1.23y); 50.6% male	A self-designed question
8	Yong N, 2023	CS (2020)	6096/282	10770/359	Rural children younger than 18 years who are left at home when one or both parents migrate to the city for work; more than 6 months; mean (SD) 10-18y;52.8% male	The Ottawa Self-Injury Inventory (OSI)

9	Yu L, 2022	CS (2020)	3596/243	5854/300	Children whose parents or one of them had been working outside the household registration place; three months or more; mean (SD) 12-18y; 52.11% male (LBCAs)	The Chinese version of the Ottawa Self-injury Inventory (OSI Chinese version)
10	Wang F, 2024	CS(2020)	1570/498	785/498	NA grades 5–8; 50.8% male	a question from the Composite International Diagnostic Interview

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LBCAs:left-behind children and adolescents; NSSI: non-suicidal self-injury;CS: cross-sectional survey