SEARCH QUERY FOR PUBMED

All Queries

((Randomised controlled trial[Title/Abstract] OR Randomized controlled trial[Title/Abstract] OR Random allocation[Title/Abstract] OR Double blind method[Title/Abstract] OR Clinical trial[Title/Abstract] OR Control group[Title/Abstract] OR Intervent*[Title/Abstract] OR Comparative study[Title/Abstract] OR Controlled Study[Title/Abstract] OR Human experiment[Title/Abstract] OR Study[Title/Abstract] OR Trial[Title/Abstract] OR Evaluat*[Title/Abstract] OR Intervention[Title/Abstract] OR Random*[Title/Abstract] OR RCT[Title/Abstract] OR CCT[Title/Abstract] OR CBA[Title/Abstract] OR quasiexperiment*[Title/Abstract] OR quasi experiment*[Title/Abstract] OR test[Title/Abstract] OR exposure[Title/Abstract] OR intervention study[Title/Abstract] OR control[Title/Abstract] OR comparison[Title/Abstract] OR experimental[Title/Abstract]) AND (("Child Restraint Systems"[Mesh]) OR (((((((((Child Restraint System*) OR (Restraint System*, Child)) OR (System*, Child Restraint)) OR (Child Safety Seat*)) OR (Safety Seat*, Child)) OR (Seats, Child Safety)) OR (car seat)) OR (booster seat)) OR (child passenger safety)))) AND (("Parents"[Mesh]) OR (((((((((Parent) OR (Parenthood Status)) OR (Status, Parenthood)) OR (Step-Parent*)) OR (Step parents)) OR (Parental Age)) OR (Age, Parental)) OR (Ages, Parental)) OR (Parental Ages)))

SEARCH QUERY FOR EMBASE

#49. #11 AND #22 AND #48	288
#48. #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47	17,149,053
#47. 'experimental':ab	1,127,569
#46. 'comparison':ab	1,048,337
#45. 'control':ab	3,507,900
#44. 'intervention study':ab	12,263
#43. 'exposure':ab	1,113,859
#42. 'test':ab	2,251,289
#41. 'quasi experiment*':ab	19,908
#40. 'quasiexperiment*':ab	19,573
#39. 'cba':ab	13,513
#38. 'cct':ab	9,536
#37. 'rct':ab	42,333
#36. 'random*':ab	1,693,005
#35. 'evaluat*':ab	5,147,379
#34. 'trial':ab	851,552
#33. 'study':ab	10,695,840
#32. 'human experiment':ab	126
#31. 'controlled study':ab	47,240
#30. 'comparative study':ab	40,165
#29. 'intervent*':ab	1,542,674
#28. 'control group':ab	659,281
#27. 'clinical trial':ab	202,548
#26. 'double blind method':ab	480
#25. 'random allocation':ab	2,256
#24. 'randomized controlled trial':ab	78,431
#23. 'randomised controlled trial':ab	25,028
#22. #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR#19 OR #20 OR #21	1,477
#21. 'child passenger safety':ab,ti	244
#20. 'booster seat':ab,ti	197
#19. 'car seat':ab,ti	532
#18. 'seats, child safety':ab,ti	1
#17. 'safety seat*, child':ab,ti	1
#16. 'child safety seat*':ab,ti	241
#15. 'system*, child restraint':ab,ti	0
#14. 'restraint system*, child':ab,ti	0
#13. 'child restraint system*':ab,ti	186
#12. 'child restraint system'/exp	664
#11. #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10	431,748
#10. 'parental ages':ab,ti	212
#9. 'ages, parental':ab,ti	15
#8. 'age, parental':ab,ti	488
#7. 'parental age':ab,ti	1,627
#6. 'step parents':ab,ti	53
#5. 'step-parent*':ab,ti	122
#4. 'status, parenthood':ab,ti	29
#3. 'parenthood status':ab,ti	50
#2. 'parents':ab,ti	242,922
#1. 'parent'/exp	263,529

SEARCH QUERY FOR Cochrane Library

#1. MeSH descriptor: [Child Restraint Systems] explode all trees	29
#2. (Safety Seat*, Child):ti,ab,kw OR (Restraint System*, Child):ti,ab,kw OR (Child Restraint System*):ti,ab,kw OR (System*, Child Restraint):ti,ab,kw OR (Child Safety Seat*):ti,ab,kw	182
#3. (Safety Seat*, Child):ti,ab,kw OR (Seats, Child Safety):ti,ab,kw OR (car seat):ti,ab,kw OR (booster seat):ti,ab,kw OR (child passenger safety):ti,ab,kw	201
#4. #1 or #2 or #3	282
#5. MeSH descriptor: [Parenting] in all MeSH products	1466
#6. (Parent):ti,ab,kw OR (Parenthood Status):ti,ab,kw OR (Status, Parenthood):ti,ab,kw OR (Step-Parent*):ti,ab,kw OR (Parental Age):ti,ab,kw	37777
#7. (Age, Parental):ti,ab,kw OR (Ages, Parental):ti,ab,kw OR (Parental Ages):ti,ab,kw	21878
#8. #5 or #6 or #7	37777
#9. #4 and #8	117

SEARCH QUERY FOR Web of Science

#1. (((((((TS=(Parents)) OR TS=(Parenthood Status)) OR TS=(Status, Parenthood)) OR TS=(Step-Parent*)) OR TS=(Parental Age)) OR TS=(Age, Parental)) OR TS=(Ages, Parental)) OR TS=(Parental Ages)	640,352
#2. (((((((((TS=(child safety seat)) OR TS=(Child Restraint System*)) OR TS=(Restraint System*, Child)) OR TS=(System*, Child Restraint)) OR TS=(Child Safety Seat*)) OR TS=(Safety Seat*, Child)) OR TS=(Seats, Child Safety)) OR TS=(car seat)) OR TS=(booster seat)) OR TS=(child passenger safety)	7,113
#3. AB=(Randomised controlled trial or Randomized controlled trial or Random allocation or Double blind method or Clinical trial or Control group or Intervent* or Comparative study or Controlled Study or Human experiment or Study or Trial or Evaluat* or Random* or RCT or CCT or CBA or quasiexperiment* or quasi experiment* or test or exposure or intervention study or control or comparison or experimental)	34,928,034
#4. #3 AND #2 AND #1	641

Table S1 Definition of study interventions/exposures and outcomes

Terms	Definition
Intervention/exposure	
Child	The International Convention on the Rights of the Child defines a child as anyone under the age of 18. This study refers to children and infants aged 0–12 years
Mobile communication	Mobile communication refers to the communication between mobile objects or between mobile objects and fixed objects. A moving body refers to people, cars, trains, ships, radios, and other objects in the moving state
Study outcomes	
Child safety seats	Child safety seats (CSS), also known as child restraint systems (CRS), are designed for children of different ages (or weights) and installed in cars to effectively improve the safety of children. ECE R44/03 defines a child safety seat as a child safety protection system that can be fixed to a motor vehicle and consists of a safety belt component with a buckle or a flexible part, adjustment mechanism, accessories, etc. It can be combined with additional devices, such as portable cribs, baby baskets, booster seats or crash protectors. In the case of car collision or sudden deceleration, it can reduce the impact on children and restrict their body movement to reduce the injury to them, to ensure the safety of children in the car
Booster seat	Booster seat is a cushion specially designed to enhance children's driving safety, which is used to raise the child seat

Table S2 Basic information and quality evaluation results of the included research

Source	Total sample size	Setting	Design	Delivery	Theory	Components		Outcome	Quality evaluation
						Intervention	Control		
Istre et al., 2011 (28)	3554	Community	NR	Traditional intervention	The Safe Communities model	Awareness program, educational classes, voucher system, and check-up events	Comparison communities with no intervention or exposure	CRS usage	B
Yellman et al., 2018 (23)	14928	Educational institution	NR	Traditional intervention	Not based on at theory	Installation demonstration, tailored communication, elevated seat inspection	No child safety seat education	Use of child booster seat	A
Liu et al., 2016 (29)	88	Hospital	R	Traditional intervention	Not based on at theory	Child passenger safety education book, free CRS and professional installation training	Educational booklet on nutrition and food safety	Knowledge, driving behavior, and CRS use	A
Aitken et al., 2013 (27)	761	Community	NR	Traditional intervention	Strike Out model, Consumer Information Processing model	Community capacity building, awareness, education, and check-up events	Comparison communities that received information only	CRS usage	B
Macy et al., 2019 (22)	347	Hospital	R	Traditional intervention	Not based on at theory	Tailor made educational books, motivational interview	No child safety seat education	CRS usage	A
Gielen et al., 2007 (25)	901	Hospital	R	Computer Kiosk	The Precaution Adoption Process Model (PAPM)	Tailored, stage-based child safety information	Report on the theme of child health	Knowledge and CRS usage	B
Shields et al., 2013 (26)	720	Hospital	R	Safety in Seconds™ program	The Precaution Adoption Process Model (PAPM)	Tailored security information, smoke detector, poison storage, use of child safety seat	General information	Knowledge and observation of CRS usage	A
Gielen et al., 2018 (24)	742	Hospital	R	Safety in Seconds v2.0TM	The Elaboration Likelihood Model and the Precaution Adoption Process Model	Tailored information about CRS use	Information about fire safety	CRS usage	B
Yan et al., 2020 (16)	206	Educational institution	R	WeChat	Not based on at theory	Education and skills training on the use of child restraint systems	No child safety seat education	CRS knowledge, attitude and use	A

CRS, child restraint systems; NR, nonrandomized; R, randomized.

Table S3 Effect estimate and precision

Study	OR	Pooled effect size (95% CI)
Istre *et al.*, 2011 (28)	1.60	(1.20, 2.20)
Yellman *et al.*, 2018 (23)	2.70	(2.20, 3.20)
Liu *et al.*, 2016 (29)	3.09	(1.21, 8.60)
Aitken *et al.*, 2013 (27)	1.56	(1.16, 2.10)
Macy *et al.*, 2019 (22)	0.75	(0.42, 1.35)
Gielen *et al.*, 2007 (25)	1.32	(1.03, 1.72)
Shields *et al.*, 2013 (26)	1.36	(1.05, 1.77)
Gielen *et al.*, 2018 (24)	1.45	(1.04, 2.00)
Yan *et al.*, 2020 (16)	3.45	(1.27, 9.09)

OR, odds ratio