# Supplementary A Summary of four systematic reviews in similar topic

No	Author/ Year	Objective	Databases	Inclusion Criteria	Exclusion criteria	n	Descriptions and findings
1	Harrandi et al. (2017)	To investigate the effect size of the relationship between social support and mental health in studies in Iran.	Iranian Research Institute of Information Science and Technology (IRANDOC), Scientific Information Database (SID), Magiran, Comprehensive Portal of Human Sciences, Noor specialized magazine, Proquest, PubMed, Scopus, ERIC, Iranmedex, Google Scholar.	1)Unpublished or published studies, thesis or dissertations. 2)Studies should be performed on the correlation of social support with mental health. 3)The theses should be related to the M.Sc. or Ph.D. degree (available in IRANDOC). 4)The method should be experimental, quasi-experimental, post-event, or co relational. 5)Studies should be performed during the years 1996 through 2015. 6)Language include Persian and English.	1) Failure to investigate the relationship between social support and mental health. 2) Absence of full-text of article. 3) Failure to report statistics to calculate effect sizes. 4) Descriptive study or review.	64	General population in Iran including older adults. The mean effect size of the total studies was 0.356 (fixed-effect model) and 0.330 (random-effect model). Nine studies with older adults as the population had a mean effect size of 0.257 (p<0.001).
2	Gariepy et al. (2016)	To summarise existing knowledge on social support and protection from depression.	PubMed Medline, ISI, Web of Science, PsychINFO.	<ol> <li>Observational study from the general population, across any life period</li> <li>Assessed the association between social support and depression or depressive symptoms.</li> <li>Original publications based on individual-level data.</li> <li>Provides quantitative measure of association.</li> <li>Western studies.</li> </ol>	Excluded studies on specific subpopulations.	100	Studies were divided into children (n=31) and adolescents (n=36), adults, and older adults (n=33). The older adults were 50 years and above. Over 90% of the studies among older adults found a significant association between social support and protection from depression (pooled OR= 0.56, 95% CI 0.55-0.57, OR range= 0.06 to 1.49). Spouses were the main source of support associated with lower depression, followed by friends. Evidence for family support were less consistent. Emotional and instrumental

3	Schwarzbach et al. (2014)	To analyse the association of social relations and depression in older adults.	MEDLINE, Web of Science, Cochrane Library, PSYNDEXplus, EMBASE, and PsychInfo	<ul> <li>6) Language: English, French, Finnish.</li> <li>1) Papers published from January 2000 to December 2012.</li> <li>2) Populations aged 60 years and above.</li> <li>3) Language: English and German.</li> <li>4) Studies assessing social support, network, or relations as risk factors of depression</li> <li>5) Nationally or regionally representative studies</li> <li>6) Multivariate analysis adjusting for confounders</li> <li>7) Acceptable definition of depression (diagnostic</li> </ul>			37	support was also associated with protection from depression. Older adults in 13 countries. 10 studies from South and East Asia were included in the study. Social relationship terminology was used encompassing a wide range of dimensions in a comprehensive framework. Social support, quality of relations, and presence of confidants were factors of social relations that were found to be associated with depression. Cultural differences was found in terms of frequency of contact and marital status and their association with depression among eastern and western countries.
4	Tajvar et al. (2013)	To systematically review quantitative studies exploring the association between social support (SS) and the health of older people in Middle Eastern countries.	Embase (since 1974), Medline via Ovid (since 1948), Ovid: Full Text Journals PubMed, Web of Science, PsycEXTRA, PsycINFO, Global Health, Age Info, Eldis, IMEMR, Asia- Pacific Population Journal, Eastern Mediterranean Health Journal, Middle East Journal of Age and Ageing, Iran Medical	criteria or cut-off on a depression rating scale).  1) Original studies conducted in the Middle East.	,	Studies that included only participants younger than 60 years old. Studies which measured both SS and health but did not examine the association between them; qualitative studies, commentaries, editorial letters	22	General population including older adults. Nine studies had older adults only. It included studies with population with specific diseases and multiple health outcomes; mental health, functional health, health related quality of life and self-rated health.  Perceived social support was the most researched, showing strong association with mental health compared to received social support. Strong and positive relationship was found between social support and mental health, while inconsistent results were found with other health outcomes.

Index, Iranian
Information and
Documentation Centre
(IRANDOC), Scientific
Information Database,
Iranian Journal of
Ageing.

and descriptive discussions.

## Supplementary B

## Search protocol performed in PubMed

#1	Search ((((((((((((((((((((((((((((((((((((	Concept 1
	relation*'[Title/Abstract]) OR 'social relationship*'[Title/Abstract]) OR 'social	333571
	network*'[Title/Abstract]) OR 'social capital'[Title/Abstract]) OR 'social	
	isolation'[Title/Abstract]) OR 'social participation'[Title/Abstract]) OR	
	'interpersonal relation*'[Title/Abstract]) OR 'interpersonal	
	support'[Title/Abstract]) OR 'family support'[Title/Abstract]) OR 'family	
	structure'[Title/Abstract]) OR 'familial context'[Title/Abstract]) OR 'family	
	relations*'[Title/Abstract]) OR 'familial support'[Title/Abstract]) OR	
	'emotional support'[Title/Abstract]) OR 'financial support'[Title/Abstract])	
	OR 'instrumental support'[Title/Abstract]) OR 'tangible	
	support'[Title/Abstract]) OR 'informational support'[Title/Abstract]) OR	
	'appraisal support'[Title/Abstract]) OR 'companionship support'[Title/Abstract]) OR 'structural support'[Title/Abstract]) OR	
	'functional support'[Title/Abstract]) OR 'perceived social	
	support'[Title/Abstract]) OR 'received social support'[Title/Abstract]) OR	
	'perceived isolation'[Title/Abstract]) OR 'received support'[Title/Abstract])	
	OR 'social resources' [Title/Abstract]) OR 'support	
	satisfaction'[Title/Abstract]) OR 'relationship satisfaction'[Title/Abstract]))	0 10
#2	Search ((((((((((((((((((((((((((((((((((((	Concept 2
	"middle age*"[MeSH Terms]) OR "older person*"[MeSH Terms]) OR	
	geriatric*[MeSH Terms]) OR senior*[MeSH Terms]) OR elder*[MeSH	
	Terms]) OR old*[MeSH Terms]) OR aged[MeSH Terms]) OR	
	ag\$ing[Title/Abstract]) OR retire*[Title/Abstract]) OR "middle	
	age*"[Title/Abstract]) OR "older person*"[Title/Abstract]) OR	
	geriatric*[Title/Abstract]) OR senior*[Title/Abstract]) OR	
	elder*[Title/Abstract]) OR old*[Title/Abstract]) OR aged[Title/Abstract]))))	
#3	Search ((((((community[Title/Abstract]) OR	Concept 3
	'community\$dwelling'[Title/Abstract]) OR community[MeSH Terms]) OR	
	'community\$dwelling'[MeSH Terms])))	
#4	Search ((((((((((((((((((((((((((((((((((((	Concept 4
	outcome'[Title/Abstract]) OR 'health outcome'[MeSH Terms]) OR 'mental	
	health'[Title/Abstract]) OR 'mental health'[MeSH Terms]) OR 'physical	
	health'[Title/Abstract]) OR 'physical health'[MeSH Terms]) OR	
	depression[Title/Abstract]) OR depression[MeSH Terms]) OR	
	depressive[Title/Abstract]) OR depressive[MeSH Terms]	
#5	#1 AND #2 AND ## AND #4	All

## Search protocol in CINAHL, Psychology and Behavioural Sciences Collection and SocINDEX via Ebscohost.

S1	TI "social support*" OR TI "social relation*" OR TI "social relationship*" OR TI "social network* OR TI "social capital" OR TI "social isolation" OR TI "social participation" OR TI "interpersonal relation*" OR TI "interpersonal support" OR TI "family support" OR TI "family structure" OR TI "familial context" OR TI "family relation*" OR TI "familial support" OR TI "emotional support" OR TI "financial support" OR TI "instrumental support" OR TI "tangible support" OR TI "informational support" OR TI "appraisal support OR TI "companionship support" OR TI "structural social support" OR TI "functional social support" OR TI "perceived support" OR TI "received support" OR TI "social resources" OR TI "perceives isolation" OR TI "received support" OR TI "support satisfaction" OR TI "relationship satisfaction"	Concept 1
S2	AB "social support" OR AB "social relation*" OR AB "social relationship" OR AB "social network* OR AB "social capital"" OR AB "social isolation" OR AB "social participation" OR AB "interpersonal relation*" OR AB "interpersonal support" OR AB "family support" OR AB "family structure" OR AB "familial context" OR AB "family relation*" OR AB "familial support" OR AB "emotional support" OR AB "financial support" OR AB "instrumental support" OR AB "tangible support" OR AB "informational support" OR AB "appraisal support OR AB "companionship support" OR AB "structural social support" OR AB "functional social support" OR AB "perceived support" OR AB "received support" OR AB "social resources" OR AB "perceives isolation" OR AB "received support" OR AB "support satisfaction" OR AB "relationship satisfaction"	Concept 1
\$3	MW "social support*" OR MW "social relation*" OR MW "social relationship" OR MW "social network* OR MW "social capital"" OR MW "social isolation" OR MW "social participation" OR MW "interpersonal relation*" OR MW "interpersonal support" OR MW "family support" OR MW "family structure" OR MW "familial context" OR MW "family relation*" OR MW "familial support" OR MW "emotional support" OR MW "financial support" OR MW "instrumental support" OR MW "tangible support" OR MW "informational support" OR MW "appraisal support OR MW "companionship support" OR MW "structural social support" OR MW "functional social support" OR MW "perceived support" OR MW "received support" OR MW "social resources" OR MW "perceives isolation" OR MW "received support" OR MW "support satisfaction" OR MW "relationship satisfaction"	Concept 1
S4	TI aged OR TI old* OR TI elder* OR TI senior* OR TI geriatric OR TI "older person*" OR TI "middle age*" OR TI retire* OR TI ageing OR TI aging OR AB aged OR AB old* OR AB elder* OR AB senior* OR AB geriatric OR AB "older person*" OR AB "middle age*" OR AB retire* OR AB ageing OR AB aging OR	Concept 2

	MW aged OR MW old* OR MW elder* OR MW senior* OR MW geriatric OR MW "older person*" OR MW "middle age*" OR MW retire* OR MW ageing	
	OR MW aging	
S5	TI community OR AB community OR MW community OR TI	Concept 3
	"community*dwelling" OR AB "community*dwelling" OR MW	
	"community*dwelling"	
S6	TI health OR AB health OR MW health OR TI "health outcome*" OR AB	Concept 4
	"health outcome*" OR MW "health outcome*" OR TI "mental health" OR	
	AB "mental health" OR MW "mental health" OR TI "physical health" OR AB	
	"physical health" OR MW "physical health" OR TI depression OR MW	
	depression OR TI depressive OR MW depressive	
S7	S1 OR S2 OR S3	Concept 1
S8	(S1 OR S2 OR S3) AND (S4 AND S5 AND S6 AND S7)	All

#### Search protocol in PsychINFO

#1	( <social support*=""> or <social relation*=""> or <social relationship=""> or <social capital=""> or <social network*=""> or <social <social="" isolation="" or="" participation=""> or <interpersonal relation*=""> or <interpersonal support=""> or <family support=""> or <family structure=""> or <familial context=""> or <family relationship*=""> or <familial support=""> or <emotional support=""> or <financial support=""> or <instrumental support=""> or <tangible support=""> or <informational support=""> or <appraisal support=""> or <companionship support=""> or <structural social="" support=""> or <fireceived social="" support=""> or <perceived social="" support=""> or <received support=""> or <received support=""> or <social resource*=""> or <relationship satisfaction=""> or <support satisfaction="">).ab.</support></relationship></social></received></received></perceived></fireceived></structural></companionship></appraisal></informational></tangible></instrumental></financial></emotional></familial></family></familial></family></family></interpersonal></interpersonal></social></social></social></social></social></social>	Concept 1
#2	TOPIC: ("perceived isolation") OR TOPIC: ("received support") OR TOPIC: ("social ( <social support"=""> or <social relation*=""> or <social relationship=""> or <social capital=""> or <social network*=""> or <social <social="" isolation="" or="" participation=""> or <interpersonal relation*=""> or <interpersonal support=""> or <family support=""> or <family structure=""> or <familial context=""> or <family relationship*=""> or <familial support=""> or <emotional support=""> or <financial support=""> or <li>or <tangible support=""> or <informational support=""> or <appraisal support=""> or <companionship support=""> or <structural social="" support=""> or <functional social="" support=""> or <pre> or <pre> or <pre> or <pre> or <pre> ceived social support &gt; or <received support=""> or <received support=""> or </received></received></pre> or <pre> or <pre> ceived support &gt; or <received support=""> or <received support=""> or </received></received></pre> or <pre> or <pre> ceived support &gt; or </pre> or <pre> or </pre> or <pre> ceived support &gt; or </pre> or <pre> or </pre> or <pre> ceived support &gt; or </pre> or <pre> or </pre> or <pre> ceived support &gt; or </pre> or <pre> or </pre> or <pre> ceived support &gt; or </pre></pre></pre></pre></pre></pre></pre></functional></structural></companionship></appraisal></informational></tangible></li></financial></emotional></familial></family></familial></family></family></interpersonal></interpersonal></social></social></social></social></social></social>	Concept 1
#3	( <social support*=""> or <social relation*=""> or <social relationship=""> or <social capital=""> or <social network*=""> or <social <social="" isolation="" or="" participation=""> or</social></social></social></social></social></social>	Concept 1

	<pre><interpersonal relation*=""> or <interpersonal support=""> or <family support=""> or <family structure=""> or <familial context=""> or <family relationship*=""> or <familial support=""> or <emotional support=""> or <financial support=""> or <instrumental support=""> or <tangible support=""> or <informational support=""> or <appraisal support=""> or <companionship support=""> or <structural social="" support=""> or <functional social="" support=""> or <perceived social="" support=""> or <received social="" support=""> or <perceived support=""> or <received support=""> or <social resource*=""> or <relationship satisfaction=""> or <support satisfaction="">).ti.</support></relationship></social></received></perceived></received></perceived></functional></structural></companionship></appraisal></informational></tangible></instrumental></financial></emotional></familial></family></familial></family></family></interpersonal></interpersonal></pre>	
#4	1 or 2 or 3	Concept 1
#5	(aged or old* or elder* or senior* or geriatric or <older person*=""> or <middle age*=""> or retire* or ageing or aging).ti.</middle></older>	Concept 2
#6	(aged or old* or elder* or senior* or geriatric or <older person*=""> or <middle age*=""> or retire* or ageing or aging).ab.</middle></older>	Concept 2
#7	(aged or old* or elder* or senior* or geriatric or <older person*=""> or <middle age*=""> or retire* or ageing or aging).mh.</middle></older>	Concept 2
#8	5 or 6 or 7	Concept 2
#9	(community or <community*dwelling>).mh. or (community or <community*dwelling>).ti.</community*dwelling></community*dwelling>	Concept 3
#10	( <quality life="" of=""> or health or <health outcome*=""> or <mental health=""> or <physical health=""> or depression or depressive).mh. or (<quality life="" of=""> or health or <health outcome*=""> or <mental health=""> or <physical health=""> or depression or depressive).ab. or (<quality life="" of=""> or health or <health outcome*=""> or <mental health=""> or <physical health=""> or depression or depressive).ti.</physical></mental></health></quality></physical></mental></health></quality></physical></mental></health></quality>	Concept 3
#11	(health or <health outcome*=""> or <mental health=""> or <physical health=""> or <depression> or <depressive>).mh. or (health or <health outcome*=""> or <mental health=""> or <physical health=""> or <depression> or <depressive>).ab. or (health or <health outcome*=""> or <mental health=""> or <physical health=""> or <depression> or <depression> or <depressive>).ti.</depressive></depression></depression></physical></mental></health></depressive></depression></physical></mental></health></depressive></depression></physical></mental></health>	Concept 3
#12	9 or 10 or 11	Concept 3
#13	4 or 8 or 12	All

## Search protocol in Web of Science

#1	TOPIC: ("social support*") <i>OR</i> TOPIC: ("social relation*") <i>OR</i> TOPIC: ("social relationship*") <i>OR</i> TOPIC: ("social capital") <i>OR</i> TOPIC: ("social network*") <i>OR</i> TOPIC: ("social isolation") <i>OR</i> TOPIC: ("social participation") <i>OR</i> TOPIC: ("interpersonal relation*") <i>OR</i> TOPIC: ("interpersonal support") <i>OR</i> TOPIC: ("family support") <i>OR</i> TOPIC: ("family	Concept 1
	structure") OR TOPIC: ("familial context") OR TOPIC: ("family	
	relationship*") OR TOPIC: ("familial support") OR TOPIC: ("emotional support") ORTOPIC: ("financial support") OR TOPIC: ("instrumental	
	support") OR TOPIC: ("tangible support") OR TOPIC: ("informational	
	support") OR TOPIC: ("appraisal support") OR TOPIC: ("companionship	
	support") OR TOPIC: ("structural social support") ORTOPIC: ("functional social	
	support") OR TOPIC: ("perceived social support") OR TOPIC: ("received social support")	
	Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	
#2	TOPIC: ("perceived isolation") OR TOPIC: ("received support") OR TOPIC: ("social	Concept 1
	resources") OR TOPIC: ("relationship satisfaction") OR TOPIC: ("support	
	satisfaction") Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	
#3	#1 OR #2	Concept 1
	Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	'
#4	TOPIC: ("aged") OR TOPIC: ("elder") OR TOPIC: ("senior") OR TOPIC: ("geriatric")	Concept 2
	OR TOPIC: ("older person") OR TOPIC: ("middle age") OR TOPIC: ("retire") OR	
	TOPIC: ("aging") Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	
#5	TOPIC: (community) OR TOPIC: (community-dwelling) OR TOPIC: (community	Concept 3
	dwelling)	'
	Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	
#6	TOPIC: (health) OR TOPIC: ("mental health") OR TOPIC: ("physical	Concept 4
	health") OR TOPIC: ("health outcome*") OR TOPIC: (depressive)	
	Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	
#7	#3 AND #4 AND #5 AND #6	All
	Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	

## Supplementary C

#### DATA EXTRACTION FORM

Title			Year
Author(s)			
Country/ se	otting		
	.ttilig		
Aims			
Clear objec	tives?		
Ethics			
Study desig	n	Cohort / Cross sectional	
Sampling			
method			
Population			
Sampling fr	ame		
Sample size			
Recruitmen			
Time study			
conducted			
Response ra	ate		
Inclusion			
Exclusion			
Exclusion			
Is there a			
comparato	r grp?		

De	Definition							
Soc	cial support							
Me	ethods							
	Exposure	Tools	Validation					
1								
2								
3								
4								
5								

#### OUTCOME

	Outcome	Tools	Validation
1			
2			
3			
4			
5			

#### **RESULTS**

Outcome	Effect size	Confounding factors	Statistical test	Is the test appropriate? yes/no
1.				
2.				
3.				
4.				

**SUMMARY FINDINGS** 

## Supplementary D

## NEWCASTLE-OTTAWA SCALE (adapted for cross-sectional studies)

Article/ Author: _		
Title:		

ı	Selection: (Maximum 5 stars)	Notes
	<ol> <li>Representativeness of the sample:         <ul> <li>a) Truly representative of the average in the target population. *</li> <li>(all subjects or random sampling).</li> <li>b) Somewhat representative of the average in the target population.</li> <li>* (nonrandom sampling).</li> <li>c) Selected group of users.</li> <li>d) No description of the sampling strategy.</li> </ul> </li> </ol>	
	<ul><li>2) Sample size:</li><li>a) Justified and satisfactory. *</li><li>b) Not justified.</li></ul>	
	3) Non-respondents: a) Comparability between respondents and non-respondents characteristic cross-sectional is established, and the response rate is satisfactory. * b) The response rate is unsatisfactory, or the comparability between respondents and non-respondents is unsatisfactory. c) No description of the response rate or the characteristic cross-sectional of the responders and the non-responders. 4) Ascertainment of the exposure (risk factor): a) Validated measurement tool. ** b) Non-validated measurement tool, but the tool is available or described.* c) No description of the measurement tool.	
II	Comparability: (Maximum 2 stars)	
	1) The subjects in different outcome groups are comparable, based on the study design or analysis. Confounding factors are controlled.  a) The study controls for the most important factor (select one). *  b) The study control for any additional factor. *	
Ш	Outcome: (Maximum 3 stars)	
	1) Assessment of the outcome: a) Independent blind assessment. ** b) Record linkage. ** c) Self report. * d) No description.	

- 2) Statistical test:
- a) The statistical test used to analyze the data is clearly described and appropriate, and the measurement of the association is presented, including confidence intervals and the probability level (p value). \*
- b) The statistical test is not appropriate, not described or incomplete.

Thresholds for converting the Newcastle-Ottawa scales to AHRQ standards (good, fair, and poor):

- Good quality: 3 or 4 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain
- Fair quality: 2 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain
- **Poor quality**: 0 or 1 star in selection domain OR 0 stars in comparability domain OR 0 or 1 stars in outcome/exposure domain

#### Supplementary E

#### Newcastle-Ottawa Quality Assessment Form for Cohort Studies

Note: A study can be given a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability.

1) Representativeness of the exposed cohort  a) Truly representative *  b) Somewhat representative *  c) Selected group  d) No description of the derivation of the cohort  2) Selection of the non-exposed cohort  a) Drawn from the same community as the exposed	_
b) Somewhat representative * c) Selected group d) No description of the derivation of the cohort 2) Selection of the non-exposed cohort	
c) Selected group d) No description of the derivation of the cohort 2) Selection of the non-exposed cohort	
d) No description of the derivation of the cohort  2) Selection of the non-exposed cohort	
2) Selection of the non-exposed cohort	
a) Drawn from the same community as the exposed	
a) brawn from the same community as the exposed	
cohort *	
b) Drawn from a different source	
c) No description of the derivation of the non-exposed	
cohort	
3) Ascertainment of exposure	
a) Secure record (e.g., surgical record) *	
b) Structured interview *	
c) Written self-report	
d) No description	
e) Other	
4) Demonstration that outcome of interest was not	
present at start of study	
a) Yes * b) No	
II Comparability (Maximum 2 stars)	
1) Comparability of cohorts on the basis of the design or	
analysis controlled for confounders	
a) The study controls for age, sex, and marital status *	
b) Study controls for other factors (list)  *	
c) Cohorts are not comparable on the basis of the	
design or analysis controlled for confounders	
III Outcome ( Maximum 3 stars)	
1) Assessment of outcome	
a) Independent blind assessment *	
b) Record linkage *	
c) Self report	
d) No description	
e) Other	

2) Was follow-up long enough for outcomes to occur	
a) Yes *	
b) No Indicate the median duration of follow-up and a	
brief rationale for the assessment	
above:	
3) Adequacy of follow-up of cohorts	
a) Complete follow up- all subject accounted for *	
b) Subjects lost to follow up unlikely to introduce bias-	
number lost less than or equal to 20% or description of	
those lost suggested no different from those followed.	
*	
c) Follow up rate less than 80% and no description of	
those lost	
d) No statement	

Thresholds for converting the Newcastle-Ottawa scales to AHRQ standards (good, fair, and poor):

- Good quality: 3 or 4 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain.
- Fair quality: 2 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain.
- **Poor quality**: 0 or 1 star in selection domain OR 0 stars in comparability domain OR 0 or 1 stars in outcome/exposure domain.

## Supplementary F

#### List of excluded articles

No	Citation	Reason for exclusion
1	Bai X, Lai DWL, Guo A. Ageism and Depression: Perceptions of Older	Article not retrieved
	People as a Burden in China. J Soc Issues 2016;72:26–46.	
	doi:10.1111/josi.12154	
2	Tong H, Lai D, Guo A. Social exclusion and mental well-being of older	Article not retrieved
	people in rural China. Int J aging Soc 2016;6:1—	
	15.http://hdl.handle.net/10397/68912	
3	Chou KL, Chi I, Boey KW. Determinants of depressive symptoms	Did not fulfill
	among elderly Chinese living alone. Clin Gerontol 1999;20:15–27	population definition
4	Lin HW, Hsu HC, Chang MC. Gender differences in the association	Did not fulfill
	between stress trajectories and depressive symptoms among middle	population definition
	aged and older adults in Taiwan. J Women Aging 2011;23:233–45.	
	doi:10.1080/08952841.2011.587738	
5	Lin PC, Wang HH. Factors associated with depressive symptoms	Did not fulfill
	among older adults living alone: An analysis of sex difference. Aging	population definition
	Ment Heal 2011; <b>15</b> :1038–44. doi:10.1080/13607863.2011.583623	
6	Wang J, Zhao X, Liu L, et al. Family functioning, social support and	Did not fulfill
	depression in a Chinese population. <i>Psychopathology</i> 2012; <b>45</b> :334.	population definition
	doi:10.1159/000336218	
7	Wu CS, Yu SH, Lee CY, et al. Prevalence of and risk factors for minor	Did not fulfill
	and major depression among community-dwelling older adults in	population definition
	Taiwan. Int Psychogeriatrics 2017;29:1113–21.	
	doi:10.1017/S1041610217000199	
8	Xie LQ, Zhang JP, Peng F, et al. Prevalence and related influencing	Did not fulfill
	factors of depressive symptoms for empty-nest elderly living in the	population definition
	rural area of YongZhou, China. Arch Gerontol Geriatr 2010; <b>50</b> :24–9.	
	doi:10.1016/j.archger.2009.01.003	

9	Zimmer Z, Chen FF. Social support and change in depression among	Did not fulfill
	older adults in Taiwan. J Appl Gerontol 2012;31:764–82.	population definition
10	Chan SWC, Shoumei JIA, Thompson DR, et al. A cross-sectional study	Depression not the
	on the health related quality of life of depressed Chinese older people	outcome
	in Shanghai. Int J Geriatr Psychiatry 2006;21:883–9.	
	doi:10.1002/gps.1578	
11	Chan SWC, Chiu H, Chien WT, et al. Predicting changes in the health-	Depression not the
	related quality of life of Chinese depressed older people. Int J Geriatr	outcome
	Psychiatry 2009; <b>24</b> :41–7. doi:10.1002/gps.2068	
12	Chung S, Jeon H, Song A. The Influence of social networks and social	Depression not the
	support on health among older Koreans at high risk of depression.	outcome
	Care Manag Journals 2016; <b>17</b> :70–80. doi:10.1891/1521-0987.17.2.70	
13	Ibrahim N, Din NC, Ahmad M, et al. Relationships between social	Depression not the
	support and depression, and quality of life of the elderly in a rural	outcome
	community in Malaysia. Asia-Pacific Psychiatry 2013;5:59–66.	
	doi:10.1111/appy.12068	
14	Yang PS. Surviving social support: Care challenges facing Taiwanese	Depression not the
	centenarians. Int J Soc Welf 2013; <b>22</b> :396–405. doi:10.1111/ijsw.12004	outcome
15	Wang CW, Iwaya T, Kumano H, et al. Relationship of health status and	Depression not the
	social support to the life satisfaction of older adults. Tohoku J Exp Med	outcome
	2002; <b>198</b> :141–9. doi:https://doi.org/10.1620/tjem.198.141	
16	Zhang JP, Huang HS, Ye M, et al. Factors influencing the subjective	Depression not the
	well being (SWB) in a sample of older adults in an economically	outcome
	depressed area of China. Arch Gerontol Geriatr 2008;46:335–47.	
	doi:10.1016/j.archger.2007.05.006	
17	Chou KL, Chi I. Social comparison in Chinese older adults. Aging Ment	Not relevant
	Health 2001; <b>5</b> :242–52.	
	doi:https://doi.org/10.1080/13607860120065032	
18	Kuroda A, Tanaka T, Hirano H, et al. Eating Alone as Social	Not relevant
	Disengagement is Strongly Associated With Depressive Symptoms in	
	Japanese Community-Dwelling Older Adults. J Am Med Dir Assoc	
	2015; <b>16</b> :578–85. doi:10.1016/j.jamda.2015.01.078	

19	Lee H, Park S, Kwon E, et al. Socioeconomic disparity in later-year group trajectories of depressive symptoms: Role of health and social	Not relevant
	engagement change. Int J Environ Res Public Health 2017;14:588.	
	doi:10.3390/ijerph14060588	
20	Vaingankar JA, Subramaniam M, Abdin E, et al. Socio-demographic	Not relevant
	correlates of positive mental health and differences by depression and	
	anxiety in an Asian community sample. Ann Acad Med Singapore	
	2013; <b>42</b> :514–23.	
21	Li J, Theng YL, Foo S. Does psychological resilience mediate the impact	Did not adjust for
	of social support on geriatric depression? An exploratory study among	confounders
	Chinese older adults in Singapore. Asian J Psychiatr 2015;14:22–7.	
22	Munshi YI, Iqbal M, Rafique H, et al. Geriatric morbidity pattern and	Did not adjust for
	depression in relation to family support in aged population of Kashmir	confounders
	valley. Internet J Geriatr Gerontol 2008;4.	
23	Patil B, Shetty N, Subramanyam A, et al. Study of perceived and	Did not adjust for
	received social support in elderly depressed patients. J Geriatr Ment	confounders
	Heal 2014; <b>1</b> :28–31.	
24	Rajendra K, Ramegowda. A Sociological study on the Prevalence of	Did not adjust for
	Depression among Elderly. IOSR J Humanit Soc Sci 2014;19:24–6.	confounders
25	Ambo H, Meguro K, Ishizaki J, et al. Depressive symptoms and	Social support not
	associated factors in a cognitively normal elderly population: the Tajiri	the exposure
	Project. Int J Geriatr Psychiatry 2001; <b>16</b> :780–8.	
	doi:https://doi.org/10.1002/gps.431	
26	Barua A, Acharya D, Nagaraj K, et al. Depression in elderly: A cross-	Social support not
	sectional study in rural south India. <i>JIMSA</i> 2007; <b>20</b> :259–61	the exposure
27	Chen W, Ishimoto Y, Kimura Y, et al. Association Between Geriatric	Social support not
	Function and Subjective Economy in Elderly Adults Living in a Rural	the exposure
	Community in Japan. J Am Geriatr Soc 2012;60:802–3.	
	doi:10.1111/j.1532-5415.2012.03875.x	
28	Chiao C, Weng LJ, Botticello AL. Social participation reduces	Social support not
	depressive symptoms among older adults: An 18-year longitudinal	the exposure

	2458-11-292	
29	Chou K-L, Chi I. Stressful Events and Depressive Symptoms among Old	Social support not
	Women and Men: A Longitudinal Study. Int J Aging Hum Dev	the exposure
	2000; <b>51</b> :275–93. doi:10.2190/vnjc-tq4w-6t3r-6v9k	
30	Chou K-L, Chi I. Stressful Life Events and Depressive Symptoms: Social	Social support not
	Support and Sense of Control as Mediators or Moderators? Int J Aging	the exposure
	Hum Dev 2001; <b>52</b> :155–71. doi:10.2190/9c97-lca5-ewb7-xk2w	
31	Chou KL. Everyday competence and depressive symptoms: social	Social support not
	support and sense of control as mediators or moderators? Aging Ment	the exposure
	Heal 2005; <b>9</b> :177–83.	
32	Jeon SW, Han C, Lee J, et al. Perspectives on the happiness of	Social support not
	community-dwelling elderly in Korea. <i>Psychiatry Investig</i> 2016; <b>13</b> :50.	the exposure
	doi:10.4306/pi.2016.13.1.50	
33	Kaneko Y, Motohashi Y, Sasaki H, et al. Prevalence of depressive	Social support not
	symptoms and related risk factors for depressive symptoms among	the exposure
	elderly persons living in a rural Japanese community: A cross-sectional	
	study. <i>Community Ment Health J</i> 2007; <b>43</b> :583–90.	
	doi:10.1007/s10597-007-9096-5	
34	Katsumata Y, Arai A, Ishida K, et al. Which categories of social and	Social support not
	lifestyle activities moderate the association between negative life	the exposure
	events and depressive symptoms among community-dwelling older	
	adults in Japan? Int Psychogeriatrics 2012; <b>24</b> :307–315.	
	doi:10.1017/S1041610211001736	
35	Kim JI, Choe MA, Chae YR. Prevalence and predictors of geriatric	Social support not
	depression in community-dwelling elderly. Asian Nurs Res (Korean Soc	the exposure
	Nurs Sci) 2009; <b>3</b> :121–9. doi:10.1016/S1976-1317(09)60023-2	
36	Lu CH, Liu CY, Yu S. Depressive disorders among the Chinese elderly in	Social support not
	a suburban community. <i>Public Health Nurs</i> 1998; <b>15</b> :196–200.	the exposure
	doi:https://doi.org/10.1111/j.1525-1446.1998.tb00339.x	

analysis in Taiwan. BMC Public Health 2011;11:292. doi:10.1186/1471-

37	Lu L. Leisure experiences and depressive symptoms among Chinese	Social support not
	older people: A national survey in Taiwan. Educ Gerontol	the exposure
	2011; <b>37</b> :753–71. doi:10.1080/03601271003744632	
38	Malhotra R, Chan A, Ostbye T. Prevalence and correlates of clinically	Social support not
	significant depressive symptoms among elderly people in Sri Lanka:	the exposure
	Findings from a national survey. Int Psychogeriatrics 2010;22:227–36	
39	Rajkumar AP, Thangadurai P, Senthilkumar P, et al. Nature, prevalence	Social support not
	and factors associated with depression among the elderly in a rural	the exposure
	south Indian community. Int Psychogeriatrics 2009;21:372–8.	
	doi:10.1017/S1041610209008527	
40	Shao P, Xu Y, Pan C-W. Factors associated with and prevalence of	Social support not
	depressive features amongst older adults in an urban city in eastern	the exposure
	China. South African J Psychiatry 2017; <b>23</b> :1–7.	
	doi:10.4102/sajpsychiatry.v23i0.1064	
41	Shibusawa T, Chen S. Determinants of depressive symptoms among	Social support not
	Japanese elders receiving care from spouses, daughters and	the exposure
	daughters-in-law. Clin Gerontol 2003;26:31–42.	
	doi:https://doi.org/10.1300/J018v26n01_04	
42	Takagi D, Kondo K, Kondo N, et al. (2013). Social disorganization/social	Social support not
	fragmentation and risk of depression among older people in Japan:	the exposure
	Multilevel investigation of indices of social distance. Soc Sci Med	
	2013; <b>83</b> :81–9. doi:https://doi.org/10.1016/j.socscimed.2013.01.001	
43	Tani Y, Sasaki Y, Haseda M, et al. Eating alone and depression in older	Social support not
	men and women by cohabitation status: The JAGES longitudinal	the exposure
	survey. Age Ageing 2015; <b>44</b> :1019–26. doi:10.1093/ageing/afv145	
44	Zhang B, Li J. Gender and marital status differences in depressive	Social support not
	symptoms among elderly adults: The roles of family support and	the exposure
	friend support. Aging Ment Heal 2011; <b>15</b> :844–54.	
	doi:10.1080/13607863.2011.569481	

## Supplementary G

## Prevalence of depression reported in the studies

Author (Year of Publication)	Prevalence of depression	
Chan et al. (2009)	11.9%	
Chan et al. (2011)	8.6%	
Chen et al. (2012)	11.3%	
Gong et al. (2012)	Mild 16.5%	
Gorig et al. (2012)	Moderate to severe 7.2%	
Hashimoto et al. (1999)	31%	
Li et al. (2015)	34.6%	
Li et al. (2016)	2.549 higher points in the rural area	
Li et al. (2016)	compare to the urban area	
Ng et al. (2014)	7.8%	
	Overall 46%	
Diboon at al. (2012)	Mild 36%	
Piboon et al. (2012)	Moderate 9%	
	Severe 1%	
Suttajit et al. (2010)	27.2%	
Tsai et al. (2005)	27.5%	
Wee et al. (2005)	Japan 19.8%	
vvee et al. (2003)	Korea 15.2%	
Wee et al. (2014)	22.9%	

**Supplementary H**Results of appraisal with the Newcastle Ottawa Scale.

Cross-sectional studies

No	Author	Year	Selection (Maximum score 5)	Comparability (Maximum score 2)	Outcome (Maximum score 3)	Total	Quality
1	Ang & Malhotra	2016	3	2	2	7	Good
2	Chan & Zeng	2009	4	2	2	8	Good
3	Chan & Zeng	2011	4	2	2	8	Good
4	Chi & Chou	2001	2	2	2	6	Fair
5	Gong et al.	2012	2	2	2	6	Fair
6	Lee et al.	2005	3	2	2	8	Good
7	Leung et al.	2007	3	2	2	7	Good
8	Li et al.	2016	2	2	2	6	Fair
9	Li et al.	2015	2	1	2	5	Poor
10	Ng et al.	2014	2	2	2	6	Fair
11	Piboon et al.	2012	3	2	2	7	Good
12	Shin et al.	2008	3	2	2	7	Good
13	Suttajit	2010	3	2	2	7	Good
14	Tiedt	2010	2	2	2	6	Fair
15	Tsai et al.	2005	3	2	2	7	Good
16	Tsuboi	2016	3	2	2	7	Good
17	Wang et al.	2012	3	2	2	7	Good
18	Wee et al.	2014	3	2	2	7	Good
19	Yoo et al.	2016	4	2	2	8	Good

#### Cohort studies

No	Author	Year	Selection (Maximum score 5)	Comparability (Maximum score 2)	Outcome (Maximum score 3)	Total	Quality
20	Chao	2011	4	2	1	7	Good
21	Chen et al	2012	4	2	1	7	Good
22	Chou & Chi	2003	4	2	2	8	Good
23	Hashimoto et al.	1999	3	2	1	6	Fair
24	Koizumi et al	2005	4	2	2	8	Good

## Supplementary I

Measurement description for social support reported in included articles.

	Author (Year)	Social support measurement	Measurement	Validation
1	Ang et al. (2016)		Number of types of received social support. In the past 12 months, did you receive [item] from any of your family members, other than your spouse?  • Money • Housework • Help to go to the doctors, market, shopping, go out to visit friends, using	No
			<ul><li>public transportation</li><li>Emotional support or advice</li></ul>	
2	Chan & Zeng (2009)	Lubben Social Network Scale-10	A questionnaire that consists of 10 items that explores social relationship. It measures three aspects of social networks: family network, networks of friends, confidence in relationships and living arrangements.	Yes
3	Chan & Zeng (2011)	Lubben Social Network Scale-10	As previously described	Yes
4	Chao (2011)	Social Support	Structural:  Social network size  Composition Frequency of contact Proximity Received social support: Types	No
			<ul><li>Helping others</li><li>Satisfaction with support</li></ul>	
5	Chen et al. (2012)		Living arrangement Lubben Social Network Scale	Yes
6	Chi et al. (2001)		<ol> <li>Social network size</li> <li>Network composition</li> <li>Social contact frequency</li> <li>Satisfaction of social support</li> <li>Instrumental/emotional support: Lubben Social Network Scale</li> <li>Helping others</li> </ol>	Yes
7	Chou & Chi (2003)	Lubben Social Network Scale 6	A questionnaire that consists of 6 items that explores social relationship. It measures family network, networks of friends, frequency of contact, confidant, and availability of help.	Yes
8	Gong et al. (2012)	Family characteristic of social support	Living with spouse Living with descendant. Support of family members. Assess support of family members from 5 sources: 1. Spouse 2. Parents 3. Sons and/or daughters 4. Siblings 5. Other relatives Self-reported family economic status.	No

9	Hashimoto et al. (1999)	Social Support Questionnaire (SSQ)	The scale rates the degree of 5 relational provision = spouses, other family members which are living with, neighbours, social welfare communicators, and others to supply four support (two emotional and two instrumental). Items of support are on a five-point scale with a higher score indicating higher social support.	Yes
10	Koizumi et al. (2005)		Five questions asking about the social support availability to each participant.  Do you have someone with whom you can consult when you are in trouble?  Do you have someone with whom you can consult when your physical condition is not good?  Do you have someone who can help you with your daily housework?  Do you have someone who can take care of you to a hospital when you do not feel well?  Do you have someone who can take care of you when you are ill in bed?	No
11	Lee et al. (2005)	Social Support Index	The questionnaire consists of receiving and giving social support.  Do you have someone to:  1. have a good time with 2. get together with for relaxation 3. do things to get mind off things 4. do something enjoyable with?  Total score ranges from 0 to 16.	Yes
12	Leung et al. (2007)	Social Support Rating Scale (SSRS)	This scale measures perceived instrumental and emotional support. It is a 20-item questionnaire with a score range between 10-40.	Yes
13	Li et al. (2015)	DUKE Social Support Index-10	This questionnaire consists of 10 items designed to assess subjective social support among the elderly. It asks about social interaction and satisfaction with social support.  Score ranges from 10 to 30.	Yes
14	Li et al. (2016)	Social support and participation	Social support and participation:  1. partnered status: marital status  2. children nearby: living with children or living in the same community  3. social participation  4. elderly activity centre in community	No
15	Ng et al. (2014)		Living arrangement Frequency spending leisure time Whether they feel socially isolated	No
16	Piboon et al. (2012)	Personal Resource Questionnaire	15 items were used to measure social support. The scale was designed to measure the respondents' perceived level of social support. Each item was rated on a seven- point scale from "strongly disagree" (1) to "strongly agree" (7). The total score ranges from 15 to 105. A high scores indicate higher levels of perceived social support.	Yes
17	Shin et al. (2008)	Medical Outcome Study Social	Consists of 19 item questionnaire covering emotional/ informational, tangible and affectionate	Yes

		Support Survey (MOS-SSS)	support, positive social interaction. It is a self- administered measure of functional social support in community dwelling.	
18	Suttajit et al. (2010)	Six social support deficits	This questionnaire consists of 6 questions regarding the lack of social support. These questions were found to be highly salient to depression.  1. Living alone with your child or other relative  2. Seeing a child or other relative less often than once per week  3. Lack reciprocity with neighbours, through asking about amount to which neighbours depend on each other in their village  4. Lack of reciprocity between children and extended family members, through asking about amount to which children and relatives care about each other  5. Difficulty in relationship with one or more relatives, through asking about severe problems in relationships between the participant and any of their children or relatives in the last year lasting more than a few weeks  6. Dissatisfaction with support from children.  7. Each item was scored 0 or 1 and summed to produce a score. A higher score represents a higher level of social support deficit.	No
19	Tiedt (2010)	Social support and its inverse state	Social support and its inverse state, isolation:  • Marital status  • Household size  • Co-residency  • Community contact  • Transfers both to and from adult children	No
20	Tsai et al. (2005)		This scale consists of three subscales: social support network, quantities of social support, and satisfaction with social support subscales from 5 sources (spouse, children, relatives, neighbours, friends).  Each item has a four point Likert scale response.	Yes
21	Tsuboi (2016)	2-Way Social Support Scale	The dimensions consist of:  (a) receiving emotional support (RES)  (b) giving (providing) emotional support (GES)  (c) receiving instrumental (tangible) support (RIS)  (d) giving instrumental support (GIS)  Each support was measured by a single item from different sources: "spouse," "children," and "neighbours or friends."	Yes
22	Wang et al. (2012)	Multidimensional Scale Perceived Social Support (MSPSS)	This scale consists of a 12-item self-report instrument with a seven-point scale. It also asks the different sources of support:  1. Family 2. Friends 3. Significant others	Yes
23	Wee et al. (2014)	Lubben Social Network Scale-6	6 questions from the Lubben Social Network Scale.	Yes

24	Yoo et al. (2016)	Perceived Social Support Scale	Consists of 20 items that assesses four domains of support: informational, tangible, emotional	Yes
			support, and self-esteem. Participants were asked to indicate how often they received support from	
			significant others, using a 4-point Likert. The total score ranges from 20 to 80. Higher scores indicate	
			greater perceived social support.	

## Supplementary J

Table of significant outcomes between social support and depression.

Social Support	Description	Effect size	Author (Year publication)	Quality
Structural				
Marital status	Marital status	B= -1.343 SE B= 0.650, β= -0.067	Chi et al. (2001)	Fair
	Partnered	Coef=-0.738 (SE= 0.200) p<0.001	Li et al (2016)	Fair
	Marital status	B= -1.914 p<0.036 (- 0.181- 3.069)	Wang et al. (2012)	Good
	Married men and women have more significant association between social support and depression compared to single men and women	As described in types of social support	Tsuboi et al. (2012)	Good
Living arrangement	Living alone compared to living with someone	B= 0.551, SE= 0.373, p= 0.035*, OR= 0.57, 95% CI (0.68-1.68)	Chen et al. (2012)	Good
	Living alone or with domestic helper compared to living with spouse with children/ grandchildren	Adjusted OR= 2.73 95% CI (1.31-5.69) p= 0.007	Ng et al. (2014)	Fair
	Living with son	Health model: b= - 0.80, B= 0.29 p< 0.01 Gender differences: b= - 0.90, B= 0.28, p< 0.01	Tiedt et al. (2010)	Fair
	Living with daughter	Health model: b= - 0.68, B= 0.33 p< 0.05	Tiedt et al. (2010)	Fair
		Gender differences: b= - 0.74, B= 0.33, p< 0.05		
	Living with a married son	E= -0.106 SE (0.012) p≤0.001	Chao (2011)	Good
Size of network	With spouse	E= -0.105 SE (0.013) p≤0.001	Chao (2011)	Good
	No of children	E= -0.009 SE (0.002) p≤0.001	Chao (2011)	Good

	No of relatives	E= -0.069 SE (0.007) p≤0.001	Chao (2011)	Good
	No of friends	E= -0.061 SE (0.007) p≤0.001	Chao (2011)	Good
	Number of friends feel close to	B= -0.314, SE B= 0.128, β= -0.136 p< 0.05	Chi et al. (2001)	Fair
	Number of relatives felt close to	B= -0.299, SE B= 0.064, β= -0.157 <i>p</i> < 0.0001	Chi et al. (2001)	Fair
	Social support network	OR= 0.88, 95% CI (0.82, 0.94) p<0.01	Tsai et al. (2005)	Good
Frequency of contact		E= -0.052 SE (0.006) p≤0.001	Chao (2011)	Good
	Frequency of contact with relatives	B= -0.549, SE B= 0.183, β= -0.087	Chi et al. (2001)	Fair
	Frequency of leisure time spent Less than once a month Reference: at least once a month	Adjusted OR= 1.51 95% CI (1.04-2.19) p= 0.028	Ng et al. (2014)	Fair
	Frequency of leisure time spent Childless Reference: at least once a month	Adjusted OR= 1.14 95% CI (1.14-2.60) p= 0.009	Ng et al. (2014)	Fair
Composition	Family = 25-49.99%	E= -0.128 SE (0.041) p≤0.001	Chao (2011)	Good
Source of support	Social support from family members not living with elders	b =-0.59, β =-0.11,* p<0.05	Chou (2003)	Good
	Support from family:	Bad OR= 6.93** (3.26, 14.70)	Gong et al. (2012)	Fair
	Bad support	Fair OR= 2.90**	(2012)	
	Fair support	(1.52, 5.53)		
	Good support	Good 1.00 P <0.01		
	Lack of reciprocity with neighbours	Adjusted OR= 1.9 95% CI (1.4, 2.5)	Suttajit et al. (2010)	Good
	Lack of reciprocity between children and extended family	Adjusted OR= 2.6, 95% CI (1.9, 3.6)	Suttajit et al. (2010)	Good

	Friend support	0.091 to 0.369	(2012)	Good
Functional supp	ort			
Overall social support	Direct effect of social support on depressive symptoms among females	β= -0.29 (bootstrap SE= 0.07) p<0.001	Ang et al. (2016)	Good
	Social support score of 19 and below	OR= 3.63, 95% CI (2.35-5.60) <i>p</i> < 0.001**	Chan et al. (2009)	Good
	Poor compared to enough/ good	OR= 3.63 95% CI (2.35-5.60) p<0.001	Chan et al. (2009)	Good
	Social support score of 19 and below	OR= 2.2, 95% CI (1.26-3.83) p= 0.005	Chan et al. (2011)	Good
	Poor compared to enough/ good	OR= 2.2 95% CI (1.26-3.83) p<0.01	Chan et al. (2011)	Good
	Low social support	M= 17.6, p<0.05, F=11.5, d.f (2,159)	Hashimoto et al. (1999)	Fair
	Middle social support	M= 15, p<0.05, F=11.5, d.f (2,159)	Hashimoto et al. (1999)	Fair
	High social support	M= 15, p<0.05, F=11.5, d.f (2,159)	Hashimoto et al. (1999)	Fair
	Low social support	Anyang OR= 0.85 95% CI (0.79-0.91) p< 0.05	Lee et al. (2005)	Good
		Yoita OR= 0.94 95% CI (0.89-0.99) p< 0.05		
		Total OR= 0.90 95% CI (0.86-0.94) p< 0.05		
	Duke score	β= -0.18 p<0.05	Li et al. (2015)	Poor
	Overall social support	$\gamma$ = -0.21, $p$ < 0.001	Piboon et al. (2012)	Good
	Poor social support	OR= 3.05, 95% CI (1.77-5.27)	Shin et al. (2008)	Good
	Social support score of >12 (good) vs ≤12 (poor)	Adjusted OR= 0.27 95% CI (0.14-0.51) p<0.001	Wee et al. (2014)	Good

B= 0.229, p<0.002\*\*, Wang et al.

Good

Friend support

	Social support Group I: older adults with low incomes who stayed at home most of the time and used visiting health services from public health centres.	Group I: β= -0.11, p= 0.04	Yoo et al. 2016	Good
Types of social support	No assistance (instrumental)	E= 0.183, SE (0.019) p≤0.001	Chao (2011)	Good
	Emotional support	E= -0.103, SE (0.005) p≤0.001	Chao (2011)	Good
	Emotional support	P.E.= -0.227, S.E (0.084) p<0.01	Leung et al. (2007)	Good
	Emotional support from child	Health model b= - 0.51, B= 0.26 p<0.05	Tiedt et al. (2010)	Fair
		Gender differences: b= -0.69, B=0.31 p<0.05		
	Receiving emotional  Married men & women	From partner: Men: B= 0.045, 95% CI (-0.43, -0.10) p<0.005	Tsuboi et al. (2016)	Good
			(2010)	
		Women: B= -0.068, 95% CI (- 0.55, -0.21) p<0.0005		
	Receiving emotional	From children: Men: B= 0.045, 95%	Tsuboi et al. (2016)	Good
	Married men & women	CI (0.12, 0.41) p<0.0005	(2010)	
	Financial support	E= -0.053 SE (0.012) p≤0.001	Chao (2011)	Good
	Tangible help from relatives living with respondent	B= -0.239, SE B= 0.133, β= -0.060	Chi et al. (2001)	Fair
	(instrumental)			
	Reliable in giving care when ill	B= -0.719, SE B= 0.317, β= -0.076	Chi et al. (2001)	Fair
	(instrumental)	p<0.05		
	To take care of you (instrumental)	OR= 3.0 95% CI (1.4-6.1)	Koizumi et al. (2005)	Good
	Instrumental support from child	Baseline: b= 0.86, B= 0.35, p<0.05	Tiedt et al. (2010)	Fair

Health model: 0.83, 0.34, p<0.05

Gender differences:

		0.16, 0.36.		
	Receiving Instrumental support  Married men & women	From partner: Men: B= -0.024, 95% CI (-0.47, -0.02) p<0.05	Tsuboi et al. (2016)	Good
		Women: B= -0.058, 95% CI (-0.54, -0.19) p<0.0005		
	Receiving Instrumental support  Married men & women	From children: Men: B= -0.041, 95% CI (-0.36, -0.09) p<0.005	Tsuboi et al. (2016)	Good
		Women: B= -0.044, 95% CI (-0.38, -0.08) p<0.005		
	Receiving Instrumental support  Married men & women	From outside: Men: B= 0.030, 95% CI (0.15, 0.84) p<0.005	Tsuboi et al. (2016)	Good
	To consult in trouble	OR= 2.6, 95% CI (1.2-5.3)	Koizumi et al. (2005)	Good
	Frequency of discussion about decisions	B= -0.285, SE B= 0.242, β= -0.043	Chi et al. (2001)	Fair
Satisfaction with support	Dissatisfaction with support from children	Adjusted OR=1.9, 95% CI (1.2, 3.0)	Suttajit et al. (2010)	Good
	Satisfaction with support	E= -0.208 SE (0.006), p≤0.001	Chao (2011)	Good
	Satisfaction with social support	B= -1.777, SE B= 0.389, β= -0.146, p<0.0001	Chi et al. (2001)	Fair
Functional Support	Difficulty in relationship with one or more relatives	Adjusted OR=2.3, 95% CI (1.4, 3.7)	Suttajit et al. (2010)	Good
	Poor positive social interaction	OR= 2.25, 95% CI (1.07-4.73) p<0.05	Shin et al. (2008)	Good

Social isolation	Occasionally of often Reference never or rarely	Adjusted OR= 7.12, 95% CI (4.87-10.40) p<0.001	Ng et al. (2014)	Fair	
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Table of non-significant outcomes between social support and depression.

Social Support	Description	Effect size	Author (Year publication)	Quality
Structural				
Marital status	Not married	Health model: b= 0.45, B= 0.27	Tiedt et al. (2010)	Fair
		Gender differences: b= 0.47, B= 0.26		
Living	Spouse only	OR= 1.05, 95% CI	Ng et al. (2014)	Fair
arrangement	Reference against spouse with children/ grandchildren	(0.57-1.93)		
	Children/ grandchildren	OR= 0.74, 95% CI (0.31-1.77)	Ng et al. (2014)	Fair
	Reference against spouse with children/ grandchildren	(0.51-1.77)		
	Others	OR= 1.82, 95% CI	Ng et al. (2014)	Fair
	Reference against spouse with children/ grandchildren	(0.78-4.24) p=0.166		
	Living alone without a child or other relative	OR= 0.7, 95% CI (0.4-1.1)	Suttajit et al. (2010)	Good
	Living with spouse No compared to yes	OR= 0.80, 95% CI (0.56-1.14)	Gong et al (2012)	Fair
	Living with descendant No compared to Yes	OR= 1.02, 95% CI (0.73-1.42)	Gong et al (2012)	Fair
Proximity	Children nearby	Coef= -0.163 (SE= 0.220) p>0.05	Li et al. (2016)	Poor
Size of network	Number of relatives	B=0.025, SE B= 0.040, β= 0.023	Chi et al. (2001)	Fair
	Number of relatives seen once a month	B= -0.057, SE B= 0.054, β= 0.047	Chi et al. (2001)	Fair

	Number of friends seen once a month	B= -0.234, SE B= 0.139, β=-0.101	Chi et al. (2001)	Fair
	Number of friends felt close to	B= 0.128, SE B= 0.153, β= 0.050	Chi et al. (2001)	Fair
Frequency of contact	Frequency of contact with friends	B=282, SE B= 0.181, β= -0.055	Chi et al. (2001)	Fair
	Seeing a child or other relative less often than once per week	Adjusted OR= 1.3 95% CI (0.5-3.1)	Suttajit et al. (2010)	Good
Composition	Network composition of relatives and friends felt close to	B= -0.405, SE B= 0.374, β= -0.050	Chi et al. (2001)	Fair
	Family <24.99%	E= -0.076 SE (0.045)	Chao 2011	Good
	Family 50-99.99%	E= -0.076 SE (0.038)	Chao 2011	Good
Source of support	Social support from family members living with elders	b= -0.17, β= -0.06	Chou et al. (2003)	Good
	Family social support	B= 0.243, p=0.180 95% CI (-0.599 to - 0.114)	Wang et al (2012)	Good
	Other	B= 0.049 p= 0.778, 95% CI (-0.391 to - 0.294)	Wang et al (2012)	Good
	Family social support		Chen et al. (2012)	Good
	Support from children, neighbours, friends, spouse, relatives.		Tsai et al. (2005)	Good
Functional supp	port			
Overall Social support	Group II: Older adults who visited small community halls; Group III: Older adults who	Group II: β= -0.14, p= 0.06	Yoo et al. (2016)	Good
	visited senior welfare centres.	Group III: β= 0.07, p= 0.27		
	Direct effect of social support on depressive symptoms among males	β= -0.01 (bootstrap SE= 0.07)	Ang et al. (2016)	Good

Types of social support	Poor emotional/ information support	OR= 1.90 95% CI (0.98-3.68)	Shin et al. (2008)	Good
	Poor tangible support	OR= 1.24 95% CI (0.63-2.44)	Shin et al. (2008)	Good
	Poor affectionate support (emotional)	OR= 0.89 95% CI (0.42-1.90)	Shin et al. (2008)	Good
	Frequency of discussion about decisions (emotional)	B= -0.285, SE B= 0.242, β= -0.043	Chi et al. (2001)	Fair
	Tangible help from relatives not living with respondents (instrumental)	B= -4.70, SE B= 0.125, β= -0.118, p<0.0001	Chi et al. (2001)	Fair
	Willing to listen to respondents problems (emotional)	B= -0.11, SE B= 0.330, β= 0.00, p<0.0001	Chi et al. (2001)	Fair
	Receiving emotional support Single men & women	From children: Men: B= 0.028, 95% CI (-0.27,0.60) Women: B= -0.028, 95% CI (-0.35, 0.04) From outside: Men: B= -0.006, 95% CI (-0.51, 0.44) Women: B= 0.028, 95% CI (-0.05, 0.35)	Tsuboi et al. (2016)	Good
	Receiving emotional	From children: Women: B= 0.018, 95% CI (-0.06, 0.24)	Tsuboi et al. (2016)	Good
	Married men & women			
	Receiving emotional support	From outside: Men: B= -0.014,	Tsuboi et al. (2016)	Good
	Married men & women	95% CI (-0.24, 0.07)		
		Women: B= 0.014, 95% CI (-0.09, 0.23)		
	Receiving instrumental support	From outside: Women: B= -0.015, 95% CI (-0.42, 0.11)	Tsuboi et al. (2016)	Good
	Married men & women			
	Receiving instrumental support	From children: Men: B= -0.129, 95% CI (-1.29, - 0.39)	Tsuboi et al. (2016)	Good
	Single men & women			

		Women: B= -0.037, 95% CI (-0.49, - 0.03)		
	To consult in bad physical condition (emotional)	OR= 1.7, 95% CI (0.8-3.7)	Koizumi et al. (2005)	Good
	To help with your daily housework (emotional)	OR= 1.1, 95% CI (0.6-2.3)	Koizumi et al. (2005)	Good
	To take to a hospital	OR= 1.8, 95% CI (0.9-3.8)	Koizumi et al. (2005)	Good
Satisfaction with support	Satisfaction of social support, Satisfaction with emotional support, satisfaction with informational support, satisfaction with instrumental support, satisfaction with approval support.		Tsai et al. (2005)	Good

M= Male; F= Female; E= estimate; OR= Odds Ratio; M= least square mean for depression; B= Beta coefficient; P.E.= parameter estimate; SE= Standard error.