



HEALTH AND HEALTH INEQUALITY IMPACTS OF REMOTE WORKING INCLUDING WORKING FROM HOME: OUTLINE MAPPING REVIEW OF EVIDENCE

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Introduction:

The objective of this initial phase of review work was to map out and broadly describe the published literature on the health and health inequality impacts of remote working including working from home. The intention was to use the result of this mapping exercise to guide decisions about subsequent focused review work.

Two previous reviews were identified prior to the search being undertaken:

Oakman et al. 2020: identified 23 studies considering the health impacts of home working during the Covid-19 pandemic. Ten health outcomes were reported: pain,self-reported health, safety, well-being, stress, depression, fatigue, quality of life, strain and happiness. The impact on health outcomes was strongly influenced by the degree of organisational support available to employees, colleague support, social connectedness (outside of work), and levels of work to family conflict. Overall, women were less likely to experience improved health outcomes when working at home.

de Macedo et al. 2020: looked at the impact of remote working on worker wellbeing. Results suggest that telecommuting can be a valuable tool for balancing professional and family life, which helps to improve the well-being of workers; however, several factors can influence the overall remote working experience which leads to the need for companies to adopt unique strategies reflecting their unique situation.

For the purpose of mapping the literature we included all published evidence and applied broad inclusion criteria to include all forms of remote working including papers published before and during the Covid-19 pandemic, which covered aspects of remote working including working from home. For clarity, the definition did not include working in "remote" locations (e.g. very rural areas), but rather focused on work being conducted away from the "usual" or "typical" work location; e.g. an officer worker working from home.

As is typical for a mapping review, we did not complete extractions of papers at the full paper level. In order to allow us to categorise, described and generate a typology of literature we extracted information from the title and abstract of included papers only.

Methods:

Review objectives

The objective of the mapping review was to identify published evidence, which supplemented by

stakeholder consultation, will be used to identify and clarify gaps in the evidence, and key systematic

review research questions related to the health and health inequality impacts of working remotely,

including working from home.

Search strategy

Mapping searches were conducted in the following databases: Medline/Embase and PsycINFO.

The search strategy combined a number of terms relating to remote working and health impacts;

and included both subject (MeSH) and free-text searches. In addition, searches were limited to

English language and publications since 2010. In line with mapping review methods grey literature

and citation searches were not conducted, and quality appraisal of sources was not undertaken at

this stage.

The full search strategy and further details of search filters are provided in Appendix 1.

Inclusion criteria

Population: whole population of working age

Intervention: remote working including work from home

Comparator: any or no comparison

Outcome: health and health inequality impact

Screening process

Search results were downloaded in a reference manager database (Endnote) screened by one

reviewer and coded using the Keyword function. Papers which were identified as potential relevant

were coded and saved alongside their abstracts. Coding was based on title and abstract (where

available) only. Where the title and abstract did not give a clear indication of whether the paper

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should be considered or not, an inclusive approach was taken with the full paper being included in the mapping review.

Data extraction

For studies judged to be relevant, the following minimal data was extracted and tabulated: Author/Year, Study design and methodology, Covid/pre-covid, type of work, and any subpopulations.

Synthesis method

The outline findings were synthesised narratively, and a typology of interventions developed, in order to define the literature base and make recommendations for developing a full systematic review.

Patient and public involvement

A public advisory group consisting of 4 individuals from across the country who had experience of working from home and/or remote working provided advisory input via teleconference during the analysis and synthesis stage of this work. The group provided very valuable input in regard to understanding the experience of working from home, highlighted the changing nature of the working environment (due to Covid-19, but also looking forward), emphasised the need to learn from the effect of the pandemic, and outlined the concern that papers published prior to the pandemic may be less relevant due to irreversible changes to working practices for some people. Their input was key in developing the recommendation to be considered for a full systematic review.

Results

After duplication, the searches generated 3033 records, of which 57 were considered to be relevant to the review question (Appendix 2). Of these, 19 considered the impact of the Covid-19 pandemic and focused on working from home specifically, and the remaining 38 considered remote working more generally (mostly in the time prior to Covid-19). The literature also consisted of papers which discussed the impact of remote and homeworking on overall health and wellbeing (n=34), and a distinct second group of studies which considered the impact of "work-home interference" on work-

life balance and worker wellbeing (n=23). These included aspects of working remotely (or away from the "normal place of work) including having access to work systems and colleagues outside the normal working environment (e.g. due to mobile phones and increased access to email).

The papers mostly reported on primary studies (n=45 overall), with the addition of two systematic reviews (n=2). These were further supplemented by discursive articles (n=10). Therefore, there is a limited systematic review evidence base, with one paper focusing on the impact of Covid-19 on home working and the second considering the impact of "telecommuting" and remote working on worker wellbeing. The reviews are supported by a developing primary evidence base which has been augmented due to the Covid-19 pandemic. A summary of the literature identified is provided in Table 1 and 2.

Table 1. Work at home papers typology summary

Condition	Discursive paper / book	Primary study	Secondary (review)	Total
Non-covid	5	12 (2 case study, 1 cohort, 4 cross- sectional survey, 1 longitudinal survey, 2 model, 1 qual, 1 intervention)	1	18
Covid	4	11 (8 cross-sectional survey, 1 longitudinal survey, 1 model, 1 qual)	1	16
Total	9	23	2	34

Table 2. Work interference papers typology summary

Condition	Discursive paper / book	Primary study	Secondary	Total
Non-covid	1	19 (8 cross sectional survey, 4 longitudinal survey, 4 model, 1 mixed methods, 2 qualitative	0	20
Covid	0	3 (2 cross sectional survey, 1 mixed methods)	0	3
Total	1	22	0	23

Various terminology was used in the literature to describe remote and home working. Working from home was described as "working from home, home working, and working in home office" in a total of 18 studies. The definitions used to describe remote working (other than home working specifically) included (n=16) "remote working, working away from the usual place, another location than at the office or at the clients' location, online working, flexible working arrangements (location), telecommuting, and telework. Of the 23 additional studies considering work home interference, remote working was mentioned specifically in the abstract of 5 of these studies but implied in almost all the others.

In terms of the type of workers involved in the studies, many of the abstracts did not state the industry or type of work under consideration (although many implied desk-based jobs which would be normally conducted in an office environment). Of those which did mention office based occupations (n= 10), the types of workers involved were described as: suburban commuters, working at a computer, mobile workers, office workers, tele commuters, white collar workers, IT professionals, office work station users, insurance employees, and workers in a public administration office. In addition, one study defined a population of "on call workers" but did not define the industry. A further 5 studies reported specific occupations including four in health care (health care workers (n=2), male nurses, and primary care doctors), and one study was conducted with teachers. These studies were mostly considering the impact of working at home due to Covid-19 restrictions Finally one study focused specifically on the self-employed.

Most studies consider the impacts of home/remote working on the working population overall (including their households and families in the work life interference studies). However, a small number of studies focused on inequalities in the working population with 7 studies considering how remote and home working impact may differ by gender. One additional study looked at the impact of working at home on parents during the Covid-19 pandemic.

Discussion: Considerations for systematic review

The mapping exercise to establish the extent of the literature on remote and homework indicates that there is a volume of evidence published prior to Covid-19 which has been supplemented over the last year by studies relating to changes in home working as a result of the pandemic. The literature includes studies which look specifically at remote and home working along with a subset of literature which is relevant to homeworking but considers issues of work life balance and the "interference" of work on the home environment due to home working practices. In order to

develop the most useful review questions and make the best sense of the available literature a number of issues should be considered.

Defining the scope of the review:

- 1. Home working. For the purpose of setting inclusion criteria for a full review, there is a need to define "home working" and how it relates to remote working overall. Within the literature identified by this mapping work the terms relating to "flexible" and "remote" working can be seen to overlap with "home working" (where the workplace is defined as being the worker's own home). However, in some studies, flexible working also includes definitions that do not overlap with home working (e.g. papers about flexible office hours or working in remote locations away from the home, along with the impact of work accessibility (remote access to emails etc. on home life). Therefore, there is a need to clarify whether the focus for the review is specifically on the health implications of the workplace also being the worker's home (home working specifically), or whether a broader criteria around working away from the "usual" or "traditional" place of work, along with access to work systems leading to work interactions outside of the normal workplace, are to be considered. This also raises further questions about whether employed and self-employed workers should be included, and whether flexible working hours as well as flexible working location should also be considered. The question over work interference (work-life balance) inclusion is important as there seems to be a specific, but overlapping literature on this.
- 2. **Types of work.** There is also a need to define the scope of home working included in terms of the types of work or the industries included. For example, most of the literature focus on work which would usually (or traditionally) be conducted in an office setting. However, other types of jobs including small scale manufacturing e.g. clothing or food products; and the provision of services e.g. therapists, childcare, and teaching (where customers/clients/pupils come to the worker's home) could also come under a definition of home working. Although no studies on these types of jobs were identified in this initial search, it would be important to determine whether they sit within the inclusion criteria of a full review.
- 3. The impact of Covid-19. In order to "future proof" the systematic review, it will be important to consider the at extent to which Covid-19-related papers are specific to impacts of lockdown restrictions (and home working during a lockdown) including the impact of school and offices closures leading to enforced homeworking for a wide range of professions rather than the impact of home working per se which may limit generalisability of these studies. Enforced home working during a pandemic is likely to result in more negative outcomes than where home or remote working is an option for workers and a balance between working remotely and working in the "normal" or

"traditional" work location can be achieved to suit an individual. However, it will be important to consider the impact of the pandemic in changing remote and home working practices moving forwards. Remote working would previously not be available to occupations such as schoolteachers, or health care workers in times prior to Covid-19. It will be important to separate out studies of professions where home working is temporary and as a direct result of Covid-19 restrictions, compared to professions where home working may become more normal as a result of the pandemic.

4. **Presenting and interpreting findings.** In developing a protocol and scope for a full systematic reiview, the complexity of the area would need to be considered. Developing an apriori framework would help with defining direct and indirect "effects of home working" and limiting the range of factors that might (or might not) be associated by the location of the workplace (depending on what the alternative workplace would be).

Suggested systematic review approach

- A broad definition of remote working including home working (because definitions and studies overlap)
- Consider the impact of Covid-19 as a subgroup analysis as well as changes to working practices moving forwards
- Not limited to specific industries (may have to say limited evidence for non-office workers)
- Inclusion criteria at the primary study level (limited review level evidence)

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Appendix 1

Search strategy

Database: Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily <1946 to January 19, 2021>

Search Strategy:

- 1 home work\$.ab,ti. (606)
- 2 homework\$.ab,ti. (1716)
- 3 (work adj2 home).ab,ti. (2339)
- 4 remote work\$.ab,ti. (136)
- 5 work\$ remote\$.ab,ti. (92)
- 6 1 or 2 or 3 or 4 or 5 (4488)
- 7 Musculoskeletal Diseases/ (13057)
- 8 (musculoskeletal risk\$ or musculoskeletal disorder\$).ab,ti. (7601)
- 9 Neck Pain/ (7240)
- 10 Neck Injuries/ (5007)
- 11 (neck pain or neck injur\$).ab,ti. (11805)
- 12 Back Pain/ (17796)
- 13 Back Injuries/ (1556)

- 14 (back pain or back injur\$).ab,ti. (49733)
- 15 Shoulder Pain/ (4976)
- 16 Shoulder Pain/ (4976)
- 17 Shoulder Injuries/ (2039)
- 18 (shoulder pain or shoulder injur\$).ab,ti. (8026)
- 19 Wrist Injuries/ (6344)
- 20 (wrist pain or wrist injur\$).ab,ti. (2111)
- 21 Arm Injuries/ (5805)
- 22 (arm pain or arm injur\$).ab,ti. (1584)
- 23 Carpal Tunnel Syndrome/ (8730)
- 24 carpal tunnel syndrome.ab,ti. (8608)
- 25 Occupational Injuries/ (2963)
- 26 (work related injur\$ or work related musculoskeletal disorder\$ or WMSD\$ or MSD\$).ab,ti. (7442)
- 27 (occupational overuse or neck tension or muscular function\$ or muscle pain or limb disorder\$).ab,ti. (4900)
- 28 Mental Health/ (41168)
- 29 (mental health or psychological issue\$).ab,ti. (154337)
- 30 Depression/ (123388)
- 31 depress\$.ab,ti. (475474)
- 32 Anxiety/ (84288)
- 33 anxiet\$.ab,ti. (202585)
- 34 Stress, Psychological/ (123144)
- 35 stress.ab,ti. (772854)
- 36 (wellbeing or well being or wellness).ab,ti. (107057)
- 37 happiness.ab,ti. (7194)
- 38 Happiness/ (4483)
- 39 (comfort or security or safety).ab,ti. (608693)
- 40 Physical Fitness/ (27733)
- 41 (good physical condition or fitness or healthiness or physical fitness).ab,ti. (78198)
- 42 inequalit\$.ab,ti. (32570)
- 43 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 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 (2353515)
- 44 6 and 43 (1537)
- 45 limit 44 to english language (1466)

- 46 limit 45 to yr="2010 -Current" (967)
- 47 limit 46 to yr="2015 -Current" (693)
- 48 health.ab,ti. (1967816)
- 49 health status/ or health status disparities/ (99159)
- 50 48 or 49 (1991733)
- 51 43 or 50 (3882846)
- 52 6 and 51 (2398)
- 53 limit 52 to english language (2277)
- 54 limit 53 to yr="2010 -Current" (1500)
- 55 limit 54 to yr="2015 -Current" (1053)
- 56 54 not 46 (533)

Appendix 2

Data extraction of included studies

Paper	Home working / Work interference	Туре	Method	Covid	Type of job	Definition of working
Bouziri H, Smith DRM, Descatha A, Dab W, Jean K. Working from home in the time of COVID-19: how to best preserve occupational health? Occup Environ Med. 2020;77(7):509-10.	H	Discursive	Discursive		NS	Working from home
Felstead A, Henseke G. Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. New Technology, Work, and Employment.	Н	Discursive	Discursive		NS	Working away from the usual place.

2017;32(3):195- 212.					
Sullivan C. Remote working and work-life balance. Work and quality of life: Ethical practices in organizations. New York, NY: Springer Science + Business Media; US; 2012. p. 275-90.	H	Discursive	Discursive	NS	Remote forms of working (most commonly telework and working at home)
Yuan RK, Pardilla- Delgado E, Zitting KM, Duffy JF. Tips for circadian sleep health while working from home. Southwest j. 2020;20(4):126-7	Н	Discursive	Discursive	NS	Working from home
Felstead A, Henseke G. Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. New Technology, Work, and Employment. 2017;32(3):195- 212.	H	Discursive	Discursive	NS	Remote working – detachment of work from place.
Phillips J, Phillips P, Robinson R. A case study of ROI in organizational performance of working at home. Performance Improvement Quarterly. 2013;25(4):111-31.	Н	Primary	Case study	Suburban commuters	Working at home
Vink P, Blok M, Formanoy M, de Korte E, Groenesteijn L. The effects of new ways of work in the	Н	Primary	Case study	Working at a computer	Remote working: Another location than at the office or at the clients' location

	T	T		T	T
Netherlands:					
national data and a					
case study. Work.					
2012;41 Suppl					
1:2600-4.					
Shepherd-Banigan	Н	Primary	Cohort	Gender impact	Working from
M, Bell JF, Basu A,					home
Booth-LaForce C,					
Harris JR.					
Workplace Stress					
and Working from					
Home Influence					
Depressive					
Symptoms Among					
Employed Women					
with Young					
Children. Int J					
Behav Med.					
2016;23(1):102-11					
Hill EJ, Erickson JJ,	Н	Primary	Cross	NS	flexibility in
Holmes EK, Ferris			survey		where (work-at-
M. Workplace			,		home) and when
Flexibility, Work					(perceived
Hours, and Work-					schedule
Life Conflict:					flexibility) workers engage
Finding an Extra					in work-related
Day or Two. J Fam					tasks.
Psychol.					
2010;24(3):349-58.					
Moretti A, Menna	Н	Primary	Cross	Mobile	Home working
F, Aulicino M,			survey	workers	
Paoletta M, Liguori			·		
S, Iolascon G.					
Characterization of					
Home Working					
Population during					
COVID-19					
Emergency: A					
Cross-Sectional					
Analysis. Int J					
Environ Res Public					
Health.					
2020;17(17):28.					
Morganson VJ,	Н	Primary	Cross	Office wokers	Compared
Major DA, Oborn		,	survey		work at: main
KL, Verive JM,			·		office, client
Heelan MP.					location, satellite
Comparing					office, and home
telework locations					
and traditional					
work					
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arrangements: Differences in work-life balance support, job satisfaction, and inclusion. Journal of Managerial Psychology. 2010;25(6):578-95.					
Restrepo BJ, Zeballos E. The effect of working from home on major time allocations with a focus on food- related activities. Rev Econ Househ. 2020:1-23.	Н	Primary	Cross survey	Telecommuters	Work from home
Sherman EL. Discretionary remote working helps mothers without harming non-mothers: Evidence from a field experiment. Management Science. 2020;66(3):1351- 74.	Н	Primary	Intervention	NS	Remote working
Trougakos JP, Chawla N, McCarthy JM. Working in a pandemic: Exploring the impact of COVID-19 health anxiety on work, family, and health outcomes. J Appl Psychol. 2020;105(11):1234- 45.	Н	Primary	Long survey	NS	Working during a pandemic
Senthanar S, Varatharajan S, Bigelow P. Flexible Work Arrangements and	Н	Primary	Qual	White collar workers	Flexible work arrangements (remote)

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Health in White-						
Collar Urban						
Professionals. New						
solut.						
2021;30(4):294-304						
Dongarwar D,	Н	Primary	Model		NS	Teleworking
Yusuf KK, Maiyegun						(remote)
SO, Ibrahimi S,						(remote)
Ikedionwu C, Salihu						
HM. Covid-19 and						
Neuro-Behavioral						
Economics: A						
Conceptual						
Framework to						
Improve Physical						
and Mental Health						
among Remote						
Workers. Int.						
2020;9(3):360-3.						
Spieler I, Scheibe S,	Н	Primary	Model		NS	Remote and
Stamov-Rosnagel C,	П	Filliary	iviouei		INS	flexible
_						
Kappas A. Help or						working
hindrance? Day-						
level relationships						
between flextime						
use, work-nonwork						
boundaries, and						
affective well-						
being. J Appl						
Psychol.						
2017;102(1):67-87.						
de Macedo TAM,	Н	Secondary	Review		NS	Telecommuters
Cabral E, Silva						Home office
Castro WR, de						
Souza Junior CC, da						
Costa Junior JF,						
Pedrosa FM, et al.						
Ergonomics and						
telework: A						
systematic review.						
Work.						
2020;66(4):777-88.						
2020,00(4).777 00.						
Bandyopadhyay SK,	Н	Discursive	Discursive	Covid	IT professionals	Working at
Goyal V, Dutta S.						home
Problems and						
Solutions Due to						
Mental Anxiety of						
IT Professionals						
Work at Home						
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during COVID-19. Psychiatr. 2020;32(3-4):604- 5. Chanana N, Sangeeta. Employee engagement practices during COVID-19	Н	Discursive	Discursive	Covid	NS	Remote working
lockdown. J Public Aff. 2020:e2508.						
Khanna R, Murnane T, Kumar S, Rolfe T, Dimitrieski S, McKeown M, et al. Making working from home work: reflections on adapting to change. Australas. 2020;28(5):504-7.	Н	Discursive	Discursive	Covid	NS	Working from home
Kramer A, Kramer KZ. The potential impact of the Covid-19 pandemic on occupational status, work from home, and occupational mobility. J Vocat Behav. 2020;119:103442.	H	Discursive	Discursive	Covid	NS	Work from home
Bonacini L, Gallo G, Scicchitano S. Working from home and income inequality: risks of a 'new normal' with COVID-19. J popul econ. 2020:1-58.	Н	Primary	Cross survey	Covid	NS	Work from home
Conroy DA, Hadler NL, Cho E, Moreira A, MacKenzie C, Swanson LM, et al.	Н	Primary	Cross survey	Covid	Health care workers	Work from home

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The effects of						
COVID-19 stay-at-						
home order on						
sleep, health, and						
working patterns: a						
survey study of						
United States						
health care						
workers. J Clin						
Sleep Med.						
2020;25:25.						
Fisher KA, Olson	Н	Primary	Cross	Covid	NS	Telework
SM, Tenforde MW,		Timiary	survey	Covia	143	Remote
Feldstein LR,			Survey			working
Lindsell CJ, Shapiro						WOIKING
NI, et al. Telework						
Before Illness						
Onset Among						
Symptomatic						
Adults Aged >=18						
Years With and						
Without COVID-19						
in 11 Outpatient						
Health Care						
Facilities - United						
States, July 2020.						
MMWR Morb						
Mortal Wkly Rep.						
2020;69(44):1648-						
53.						
Spagnoli P, Molino	Н	Primary	Cross	Covid	NS	Remote
M, Molinaro D,			survey			working
Giancaspro ML,						_
Manuti A, Ghislieri						
C. Workaholism						
and Technostress						
During the COVID-						
19 Emergency: The						
Crucial Role of the						
Leaders on Remote						
Working. Front						
Psychol.						
2020;11:620310.						
2020,11.020310.						
Nash M, Churchill	Н	Primary	Cross	Covid	Women	Remote
B. Caring during			survey	23110		working
COVID-19: A			Janvey			
gendered analysis						
of Australian						
university						
*						
responses to						

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managing remote working and caring responsibilities. Gender, Work and Organization. 2020;27(5):833-46.						
Shockley KM, Clark MA, Dodd H, King EB. Work-family strategies during COVID-19: Examining gender dynamics among dual-earner couples with young children. J Appl Psychol. 2021;106(1):15-28.	Н	Primary	Cross survey	Covid	Gender impacts	Remote working
Staller N, Randler C. Changes in sleep schedule and chronotype due to COVID-19 restrictions and home office. Somnologie. 2020:1-7.	Н	Primary	Cross survey	Covid	NS	Working in home office
Xiao Y, Becerik- Gerber B, Lucas G, Roll SC. Impacts of Working from Home during COVID-19 Pandemic on Physical and Mental Well-Being of Office Workstation Users. J Occup Environ Med. 2020;23:23.	Н	Primary	Cross survey	Covid	Office workstation users	Work from home
Chong S, Huang Y, Chang CD. Supporting interdependent telework employees: A moderated-	Н	Primary	Long survey	Covid	NS	Telework Remote working

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mediation model						
linking daily COVID-						
19 task setbacks to						
next-day work						
withdrawal. J Appl						
Psychol.						
2020;105(12):1408-						
22.						
Panisoara IO, Lazar	Н	Primary	Model	Covid	Teachers	Online working
I, Panisoara G,						Remote
Chirca R, Ursu AS.						working
Motivation and						
Continuance						
Intention towards						
Online Instruction						
among Teachers						
during the COVID-						
19 Pandemic: The						
Mediating Effect of						
Burnout and						
Technostress. Int J						
Environ Res Public						
Health.						
2020;17(21):30.						
Yamamura E,	Н	Primary	Qual	Covid	Parents	Working from
Tsustsui Y. The		, , , , ,		00110		home
impact of closing						
schools on working						
from home during						
the COVID-19						
pandemic:						
evidence using						
panel data from						
Japan. Rev Econ						
Househ. 2021:1-20.						
Oakman J, Kinsman	Н	Secondary	Review	Covid	NS	Working at
N, Stuckey R,	••	Secondary	I TO TO TO	Covia	113	home
Graham M, Weale						nome
V. A rapid review of						
mental and						
physical health						
effects of working						
at home: how do						
we optimise						
health? BMC Public						
Health.						
2020;20(1):1825.						
Lu C-q, Xu X-m,	1	Discursive	Book		NS	Work home
Caughlin DE. Work-		שואכנעו	DOOK		143	interference
home interference						mierierence
and employees'						
and employees						

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well-being and performance: The moderating role of Chinese work value. Handbook of research on work-life balance in Asia. Northampton, MA: Edward Elgar Publishing; US; 2015. p. 116-36.					
Merecz D, Andysz A. Burnout and demographic characteristics of workers experiencing different types of work-home interaction. Int J Occup Med Environ Health. 2014;27(6):933-49.	I	Primary	Cross survey	NS	Work home interactions
Babic A, Stinglhamber F, Bertrand F, Hansez I. Work-home interface and well- being: A cross- lagged analysis. Journal of Personnel Psychology. 2017;16(1):46-55		Primary	Long Survey	NS	Work family conflict
Leineweber C, Kecklund G, Lindfors P, Magnusson Hanson LL. Change in Work-Time Control and Work-Home Interference Among Swedish Working Men and Women: Findings from the SLOSH Cohort Study. Int J Behav Med. 2016;23(6):670-8.		Primary	Long survey	Gender impact	Work home interference

Godin I, Desmarez P, Mahieu C. Company size, work-home interference, and well-being of self-employed entrepreneurs. Arch. 2017;75:69.		Primary	Cross survey	Self employed	Work home interference
Ziebertz CM, van Hooff ML, Beckers DG, Hooftman WE, Kompier MA, Geurts SA. The Relationship of On- Call Work with Fatigue, Work- Home Interference, and Perceived Performance Difficulties. Biomed Res Int. 2015;2015:643413.		Primary	Cross survey	On call workers	Work home interference
Svedberg P, Mather L, Bergstrom G, Lindfors P, Blom V. Work-Home Interference, Perceived Total Workload, and the Risk of Future Sickness Absence Due to Stress-Related Mental Diagnoses Among Women and Men: a Prospective Twin Study. Int J Behav Med. 2018;25(1):103-11.		Primary	Cross survey	NS	Work home interference
Turner N, Hershcovis M, Reich TC, Totterdell P. Work-family interference, psychological distress, and workplace injuries.	I	Primary	Cross survey	Health care workers	Work home interference

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Journal of Occupational and Organizational Psychology. 2014;87(4):715-32.					
Lu C-q, Wang B, Siu O-l, Lu L, Du D-y. Work-home interference and work values in greater China. Journal of Managerial Psychology. 2015;30(7):801-14.	I	Primary	Cross survey	NS	Work home interference
Oosthuizen RM, Visser D, Mudzimu PT. Work stress, work-home interference and perceptions of organisational culture amongst insurance employees in Zimbabwe. Journal of Psychology in Africa. 2014;24(2):144-53.		Primary	Cross survey	Insurance employees	Work home interference
Nijp HH, Beckers DG, Kompier MA, van den Bossche SN, Geurts SA. Worktime control access, need and use in relation to work-home interference, fatigue, and job motivation. Scand J Work Environ Health. 2015;41(4):347-55.		Primary	Cross survey	NS	Work home interference
Leineweber C, Kecklund G, Lindfors P, Magnusson Hanson	I	Primary	Long survey	Gender impacts	Work home interference

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LL. Change in						
Work-Time Control						
and Work-Home						
Interference						
Among Swedish						
Working Men and						
Women: Findings						
from the SLOSH						
Cohort Study. Int J						
Behav Med.						
2016;23(6):670-8.						
Gorgievski MJ, Van	1	Primary	Long survey		Male nurses	Work home
der Heijden BI,						interference
Bakker AB. Effort-						
reward imbalance						
and work-home						
interference: A						
two-wave study						
among European						
male nurses. Work						
& Stress.						
2019;33(4):315-33.						
2015,55(4).515-55.						
Falco A, Girardi D,		Primary	Mixed		Public	Work home
Dal Corso L, Di			methods		administration	interference
Sipio A, De Carlo					office	interreneinee
NA. Fear of					Office	
workload, job						
autonomy, and						
work-related						
stress: The						
mediating role of						
work-home						
interference. TPM-						
Testing,						
Psychometrics,						
Methodology in						
Applied						
Psychology.						
2013;20(3):217-34.						
Perry SJ, Rubino C,	1	Primary	Model		NS	Work home
Hunter EM. Stress	'	i i i i i i i a i y	IVIOGEI		140	interference
in remote work:						interiorence
						Remote work
Two studies testing the Demand-						remote work
Control-Person						
model. European						
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Psychology. 2018;27(5):577-93					
Putnik K, Houkes I. Work related characteristics, work-home and home-work interference and burnout among primary healthcare physicians: a gender perspective in a Serbian context. BMC Public Health. 2011;11:716.		Primary	Qual	Primary care doctors	Work home interference
Grant CA, Wallace LM, Spurgeon PC. An exploration of the psychological factors affecting remote e-worker's job effectiveness, well-being and work-life balance. Employee Relations. 2013;35(5):527-46.	I	Primary	Qual	NS	Work home interference Remote e-work
Casini A, Clays E, Godin I, De Backer G, Kornitzer M, Kittel F. The differential impact of job isostrain and home-work interference on indicators of physical and mental health in women and men. J Occup Environ Med. 2010;52(12):1236- 44.		Primary	model	Gender impact	Work home interference
Babic A, Stinglhamber F, Hansez I.	I	Primary	Model	NS	Work home interference

Organizational Justice and Perceived Organizational Support: Impact on Negative Work- Home Interference and Well-being Outcomes. Psychol Belg. 2015;55(3):134-58.					
Hanson LL, Leineweber C, Chungkham HS, Westerlund H. Work-home interference and its prospective relation to major depression and treatment with antidepressants. Scand J Work Environ Health. 2014;40(1):66-73.	Primary	Model		NS	Work home interference
Wang B, Liu Y, Qian J, Parker SK. Achieving Effective Remote Working During the COVID-19 Pandemic: A Work Design Perspective. Appl Psychol. 2020;05:05.	Primary	Mixed method	Covid	NS	Work home interference Remote working
Spagnoli P, Molino M, Molinaro D, Giancaspro ML, Manuti A, Ghislieri C. Workaholism and Technostress During the COVID-19 Emergency: The Crucial Role of the Leaders on Remote Working. Front Psychol. 2020;11:620310.	Primary	Cross survey	Covid	NS	Work home interference Remote working

Nash M, Churchill B. Caring during COVID-19: A gendered analysis of Australian university responses to managing remote working and caring responsibilities. Gender, Work and Organization. 2020;27(5):833-46.	Primary	Cross survey	Covid	Gender impact	Remote working