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# Remote work na iya ceton commute. Amma tana iya cire ƙananan social contacts da aiki ke bayarwa.

*Wani Science study na workers 588,322 a Amurka ya kiyasta cewa occupations da suka zama much more remote bayan pandemic sun kuma zama more solitary, tare da larger increases a mental distress, musamman ga people living alone. Wannan ba blanket case against remote work ko umarnin komawa office ba ne. Gargadi ne cewa flexibility tana da hidden design variable: social contact.*

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Written by Cinzia Vaglio · Cross-checked by Laura Nesso · Edited by Michele Renda · Figures by Nova Vela · AI-assisted, human-reviewed

Paper: *Home alone: Remote work, isolation, and mental health*, Natalia Emanuel, Emma Harrington and Amanda Pallais, Science 392, eaec7671 (2026) · DOI: 10.1126/science.aec7671

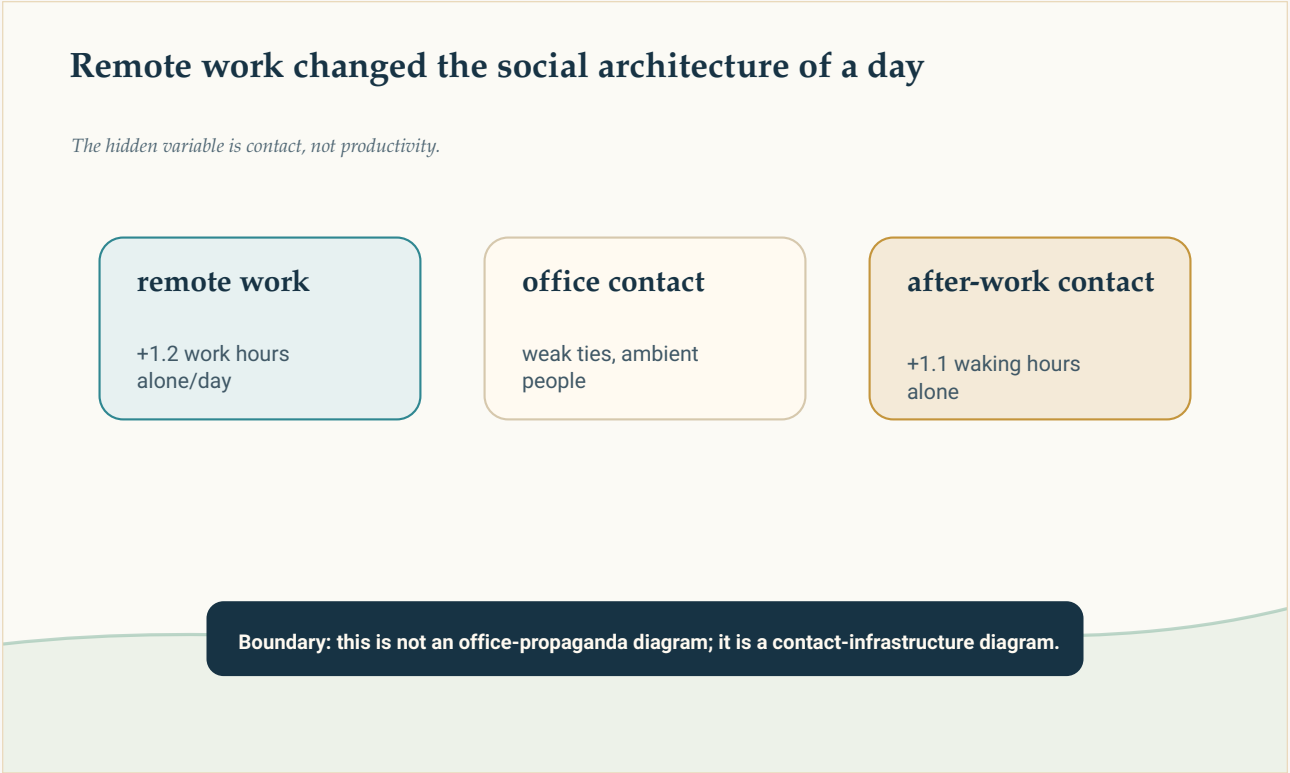
# Ba commute kaɗai remote work ta cire ba

Muhawarar remote work da aka saba da ita tana kan productivity, flexibility da commute. Shin mutane za su iya yin aiki iri ɗaya daga gida? Suna so? Za su musanya wani ɓangaren albashi da damar? Ya kamata kamfanoni su tilasta komawa office?

Waɗannan tambayoyi na gaske ne, amma suna barin wata variable mai shiru: **hulɗar zamantakewa ta yau da kullum**. Office ba wurin samar da aiki kawai ba ne. Ga mutane da yawa shi ne inda suke samun ƙananan, low-stakes human interactions: wucewa kusa da wani, cin abinci a kusa da mutane, tambayar abu, jin tattaunawa, zama a ɗaki da ba babu kowa ba.

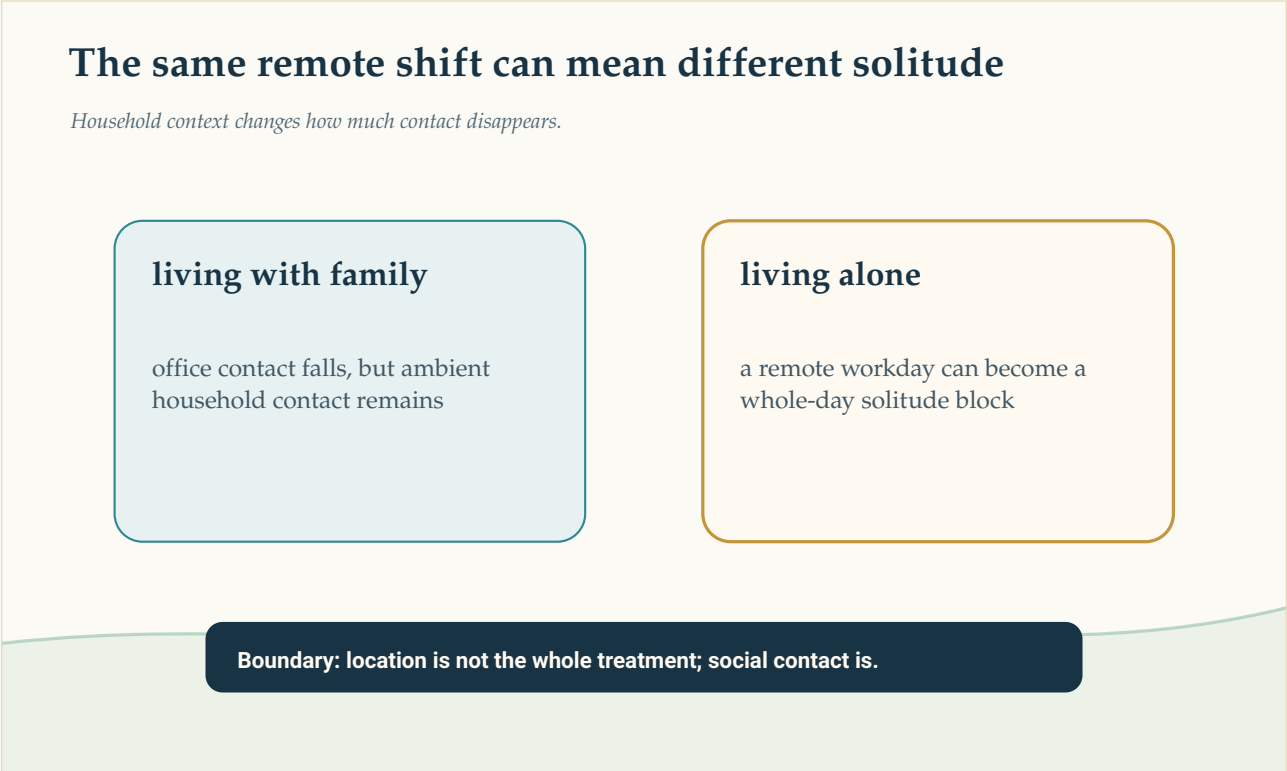
A wata sabuwar takarda a Science, Natalia Emanuel, Emma Harrington da Amanda Pallais sun kiyasta abin da ya faru lokacin da remote work ta ci gaba bayan pandemic. Sakamakonsu ba cewa remote work tana da illa ga kowa ba ne. Shi ne cewa jobs da za su iya komawa remote sun zama **masu ƙarin kaɗaici sosai**, kuma mental distress ya ƙaru fiye da a waɗannan jobs, musamman ga mutanen da suke zaune su kaɗai.

Wannan ikirari ya bambanta da “remote work tana haifar da depression.” Ya fi ƙunci kuma ya fi amfani: wurin aiki yana canza **social architecture** na rana.




Ranar aiki da aka raba zuwa remote, office da after-work contact, tare da hidden variable kasancewa social contact maimakon productivity: +1.2 ƙarin work hours a kaɗaice da +1.1 ƙarin waking hours a kaɗaice a kowace rana, effects sun fi ƙarfi ga mutanen da suke zaune su kaɗai.

Original diagram — The Clean Paper CC BY 4.0




Remote shift ɗaya yana sauka daban bisa household. Zama da iyali yana barin wani ambient contact; zama kai kaɗai na iya mayar da remote workday zuwa whole-day solitude. Location ba shi ne magani gaba ɗaya ba; social contact ne.

Original diagram — The Clean Paper CC BY 4.0

# Abin da binciken ya yi

Marubutan ba kawai sun kwatanta mutanen da suka zaɓi remote work da waɗanda suka je office ba. Wannan comparison zai yi confounded sosai. Mutane suna sorting kansu zuwa jobs, firms da arrangements saboda dalilai da yawa.

Maimakon haka, sun kwatanta workers a occupations da ake iya yi daga gida da workers a occupations da yawanci ke buƙatar physical presence. Software engineering da marketing misalai ne na remotable occupations; nursing, food preparation da machine operation ba haka ba. Classification ta fito daga Dingel–Neiman index na occupational remotability.

Design ɗin **difference-in-differences** ne. Marubutan sun tambaya ko isolation da mental health sun canza fiye bayan pandemic ga mutane a remotable jobs fiye da nonremotable jobs. Sun yi amfani da nationally representative US surveys guda biyar daga 2011 zuwa 2024, kuma suka cire 2020 da 2021 — lokacin mafi tsanani na pandemic — daga babban before-after comparison.

Sample ɗin babba ne: **workers 588,322** a combined bayanai sources. sakamako sun haɗa time-use diaries, Kessler K-6 psychological distress scores, depression, mental-health-care use da prescription medication use.

Key point shi ne magani ba preference na mutum ga remote work ba ne. Exposure ne ga occupation da working

arrangements ɗinsa suka canza sosai bayan pandemic.

## Abin da ya canza

Remote work ta ƙaru sosai a remotable jobs. Zuwa 2024, workers a remotable occupations sun yi 31.1% na workdays fully remote, idan aka kwatanta da 8.9% a nonremotable occupations. Differential postpandemic rise ya kasance 17.9 percentage points.

Tare da wannan shift, workers a remotable jobs sun yi **1.2 ƙarin work hours su kaɗai a kowace workday** relative to nonremotable workers. Takardar ta kira wannan 58.0% increase. Idan aka rescale canjin bisa differential rise na remote work, implied estimate shi ne 6.6 additional hours working alone a remote days.

Canjin bai tsaya ga work tasks ba. Overall waking time alone ya ƙaru da **1.1 hours per workday** ga workers a remotable jobs relative to nonremotable jobs. Takardar ta kuma ruwaito ƙarin whole days a kaɗaice da ƙarancin after-work social activities.

Wannan ɓangaren yana da sauƙin understate. Commute na iya zama mara daɗi. Office na iya distraction. Amma cire office yana kuma cire automatic source na weak social ties. Ga mutanen da ke samun enough contact a wasu wurare, watakila ba matsala ba. Ga waɗanda suke zaune su kaɗai, zai iya zama babba.

## Zama kai kaɗai yana ƙara effect

Strongest effects sun bayyana ga workers living alone.

Takardar ta ruwaito increase a extreme forms of solitude ya fi taruwa a wannan group. Workers living alone a remotable occupations sun samu much larger increases a spending entire days alone da days ba tare da ambient social contact ko daga public places kamar gym, store ko restaurant ba.

Wannan yana da intuitive sense. Idan kana zaune da partner, children ko sauran family, remote work na iya cire colleagues amma ya bar household interaction. Idan kana zaune kai kaɗai, remote workday na iya zama whole day babu wani mutum physically present.

Saboda haka “remote versus office” ya yi blunt. Arrangement ɗaya na iya samun social consequences daban bisa household structure, neighbourhood, commute, personality, health, caregiving obligations da ko office days suna coordinated da sauran mutane.

## Mental health ma ta motsa

Mental-health measures sun motsa a direction ɗaya da isolation measures.

Ga workers a remotable jobs, mental distress ya ƙaru kusan **0.1 standard deviations** relative to nonremotable

workers. A Panel bincike of Income Dynamics, K-6 distress score ya ƙaru 0.3 units daga prepandemic mean 3.0. Increase ɗin ya kusan ninki biyu ga workers living alone.

Pattern ba survey question ɗaya kawai ba ne. Takardar ta ruwaito similar shifts a depression, mental health care use da prescription medication use. Workers a remotable jobs sun zama 4.6 percentage points more likely su ga mental-health professional, daga prepandemic mean 7.9%. Depression/anxiety prescriptions sun ƙaru 1.8 percentage points daga mean 10.9%; duk mental-health prescriptions sun ƙaru 1.9 points daga 11.6% mean.

Placebo checks suna da muhimmanci. Workers ɗin nan ba su nuna corresponding increases a non-mental-health care ko non-mental-health prescriptions ba. Wannan ya sa ya fi wuya a bayyana sakamako a matsayin general increase a healthcare use.

Marubutan sun kiyasta rise na remote work yana bayyana roughly one na uku na overall increase a isolation da mental distress a bincike period. Ya isa ya zama muhimmi, amma ba dukan labari ba.

# Abin da wannan bai tabbatar ba

- Ba ya tabbatar remote work tana da illa ga kowa.
- Ba ya tabbatar particular person ya samu distress saboda shi kansa ya zaɓi work from home.
- Ba ya nuna office work automatically healthier ne.
- Ba ya raba fully remote da hybrid work.
- Ba ya gano kowane subgroup da zai amfana daga remote work.
- Ba ya auna loneliness da full validated loneliness ko social-network scale; isolation measures sun fito daga available survey bayanai.
- Ba ya kawar da duk mai yiwuwa pandemic-era confounds. Design yana ɗauka cewa bayan cire 2020–2021, remotable da nonremotable occupations za su bi comparable trends idan ba shift ɗin ba.
- Ba ya cewa productivity, disability access, caregiving flexibility ko commuting time ba su da muhimmanci.

Wannan na ƙarshe muhimmi ne. Remote work na iya zama valuable. Takardar kanta ta lura workers da yawa sun fi son remote ko hybrid arrangements, kuma wasu research suna samun benefits ga satisfaction, retention da work-life balance. Social cost ba total verdict ba ne.

# Yaya ƙarfin shaidar yake?

Ƙarfin takardar shi ne ba ta dogara da convenience survey ɗaya ba. Ta haɗa time-use bayanai, mental-health scales, healthcare use da prescription measures a nationally representative US datasets da yawa. Occupation-level design ma yana rage matsalar comparing self-selected remote workers kawai.

Sun yi robustness da placebo checks. Effects sun fi ƙarfi ga people living alone, exactly inda isolation mechanism zai yi hasashen larger effects. Effects ba su bayyana a non-mental-health care ba. Marubutan sun kuma gwada ko generative-AI exposure zai iya bayyana mental-health pattern; sakamako sun load on remotability, ba AI exposure ba.

Weak point ba dataset size ba ne; **interpretation** ne. “Remotable occupation after pandemic” ba daidai yake da “wannan individual yana work from home kwanaki biyar a mako” ba. Estimates suna haɗa hybrid arrangements, workplace spillovers, occupation-level changes da unmeasured shocks da suka bugi remotable work daban.

Saboda haka clean reading: akwai serious shaida cewa postpandemic rise na remote work ya ƙara isolation kuma yana associated da worse mental-health measures, musamman ga workers living alone. Ba mai sauƙi individual prescription ba ne.

# Abin da design ya kamata ya koya

Practical conclusion ba “kowa ya koma office” ba ne. Shi ne “kar a tsara remote work kamar location ce kawai variable.”

Idan hybrid work yana nufin kowa ya zo office a days daban, office har yanzu na iya zama socially empty. Idan remote work meetings ne kawai ba informal contact, rana na iya zama efficient kuma isolating a lokaci guda. Idan worker yana zaune shi kaɗai, fully remote week na iya cire guaranteed ambient social exposure ɗinsa kaɗai.

Marubutan sun nuna interventions kamar coordinating in-office days ga hybrid workers da ƙarfafa informal interaction, ciki har da online. Wannan ba nostalgia ga cubicles ba ne. Recognition ne cewa social contact **infrastructure** ce.

Tambayar mafi kyau ba “remote ko office?” ba ce. Ita ce: waɗanne sassa na human contact tsohon arrangement ya bayar accidentally, kuma ta yaya sabon arrangement zai samar da su deliberately?

# Taƙaitaccen bayani

Emanuel, Harrington da Pallais sun kiyasta cewa postpandemic rise na remote work ya sa workdays sun fi kaɗaici kuma ya zo tare da worse mental-health measures, musamman ga people living alone. Workers a remotable occupations sun yi kusan 1.2 ƙarin work hours alone a rana da 1.1 ƙarin waking hours alone overall relative to nonremotable workers. Mental distress, mental-health-care use da mental-health prescriptions sun ƙaru fiye a waɗannan jobs, yayin non-mental-health care bai yi haka ba. Wannan ba blanket case against remote work ba ne. Design warning ne: flexibility na iya ceton lokaci amma ta cire social contact, kuma mutanen da suka fi exposure ga wannan loss na iya zama waɗanda gidajensu tuni babu kowa.

## Majiyoyi

Emanuel, Harrington and Pallais, Home alone: Remote work, isolation, and mental health, Science 392, eaec7671 (2026)
https://doi.org/10.1126/science.aec7671