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COVID-19 pandeemia sotsiaalmajanduslikud mõjud

ühiskonnas tõrjutute seas

Magistritöö

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Sissejuhatus

COVID-19 pandeemiaga on kaasnenud laiaulatuslikud ühiskondlikud mõjud. Pandeemia taustal on süvenenud ebavõrdsus ning paljuski sattusid tõrjutud ühiskonnarühmad varasemast veelgi haavatavamasse olukorda (Barron et al., 2022; Eurofound, 2023). Käesolevas magistritöös käsitlen COVID-19 pandeemia sotsiaalmajanduslikke mõjusid ühiskonnas tõrjutute seas. Täpsemalt on magistritöö eesmärk välja selgitada, kuidas COVID-19 pandeemia on mõjunud abiasutuste klientide sissetulekule ning toidu ja peavarju kättesaadavusele Euroopa riikides ning millised tegurid seda on mõjutanud.

Magistritöö koosneb kahest osast: teadusartiklile kirjutatud katustekstist ning teadusartiklist. Katustekst on kirjutatud teadusartiklile „*Socio-economic outcomes of COVID-19 on the marginalised: who have taken the hardest hit?*“ (Siimsen et al., 2023), mis on avaldatud ajakirjas *International Journal of Disaster Risk Reduction* (IJDRR). Tegemist on rahvusvaheliselt tunnustatud (mõjufaktor 4.842) eelretsenseeritava ajakirjaga. IJDRR on interdistsiplinaarse suunitlusega, avaldades teadusartikleid, mis keskenduvad nii looduslike, tehnoloogiliste, sotsiaalsete kui tahtlike kriiside mõjude vähendamisele.

Uuring, mille tulemuste põhjal teadusartikkel on kirjutatud, on BuildERS (*Building European Communities' Resilience and Social Capital, 2019–2022*) teadus- ja arendusprojekti osa. Projekti eesmärgiks oli suurendada ühiskondlikku kerksust ning toimetulekut hädaolukordadega ning võimestada neid, kellel on vähem võimalusi, kriisijuhtimisse rohkem panustama (Keränen et al., 2022). Artikkel on kirjutatud minu juhtimisel, koostöös teiste BuildERS projekti meeskonnaliikmetega.

Katustekstis avan põgusalt BuildERS projekti tausta, artikli teoreetilisi ja metodoloogilisi lähtekohti, olulisemaid järeldusi ning edasise uurimise võimalusi. Samuti olen siia lisanud ülevaate uurimisprotsessist ning enda rollist uurimismaterjali kogumisel, analüüsi lähtekohtade selgitamisel ning artikli kirjutamisel.

Sissejuhatus lõpetuseks soovin tänada Kati Orrut, kes on mind juhendanud kogu artikli kirjutamise protsessi vältel ning kõiki teisi kaasautoreid, kes on panustanud artikli valmimisse. Samuti tänan retsensent Oliver Nahkurit sisuka tagasiside eest tööle.

1. Teoreetiline taust ja probleemiseade

Artikkel on kirjutatud BuildERS projekti raames ning tugines paljuski projekti teoreetilisele raamistikule, mida on käsitletud alapeatükis 1.1. Töö kaks keskset teemat on sotsiaalselt tõrjutud rühmad ning sotsiaalmajanduslikud mõjud. Seetõttu olen alapeatükis 1.2 põgusalt selgitanud, kuidas neid artiklis käsitleti.

1.1 BuildERS projekt

BuildERS projekti viidi läbi aastatel 2019-2022 ning seda rahastati Euroopa Komisjoni programmist Horisont 2020. Projekti põhieesmärk oli Euroopa kogukondade kerksuse (ingl *resilience*) parandamine hädaolukordades läbi innovatsiooni ja koosloome. Kerksust käsitleti kui ühiskonna võimet äärmuslikele sündmustele vastu pidada ja neist taastuda ning oskust valmistuda ettearvamatuteks tulevikuhäireteks (Tierney, 2019; Orru et al., 2023). Eesmärgi saavutamiseks keskenduti kõige haavavamatele inimestele ja kogukondadele - eeskätt sooviti parandada nende võimet hädaolukordadele reageerida ning kriisiplaneerimisse panustada. BuildERSi raames uuriti erinevaid käsitlusi, strateegiaid, tehnoloogiaid ja töövahendeid haavatavuse mõõtmiseks ning vähendamiseks. Samuti uuriti, millised inimesed ning kogukonnad on Euroopa ühiskondades kõige haavatavamad, lähtudes eeldusest, et haavatavust mõjutavad peamiselt riskiteadlikkus, sotsiaalne kapital ning valmisolek potentsiaalseteks hädaolukordadeks.

BuildERS projekti eesmärkide, meetodite ning tulemuste kohta on põhjalikumalt kirjutatud näiteks järgnevas publikatsioonides: Keränen et al. (2022), Orru et al. (2021) Hansson et al. (2021), Torpan et al (2021) ja Nahkur et al. (2022).

1.2 Haavatavuse ja sotsiaalselt tõrjutud ühiskonnarühmade käsitlus

Üks viis haavatavust (ingl *vulnerability*) defineerida on käsitleda seda omaduste või asjaoludena, mis konkreetse kogukonna, indiviidi või süsteemi ohtudele vastuvõtlikumaks muudavad (UNISDR, 2015). Haavatavust on käesolevas artiklis käsitletud mitmemõõtmelise ja interseksionaalse nähtusenana – haavatavus ei tulene mitte ainult ühest ohutegurist, vaid selle vastastikusest suhtest ühiskonnaga, mis pole ohuolukordadega tegelemiseks piisavalt valmistunud (Kuran et al., 2020; Orru et al., 2021).

Artikli on sihtrühmana käsitleme sotsiaalselt tõrjutuid, kes võivad kriisiolukorras olla haavatavad. Sotsiaalselt tõrjutud (ingl *socially marginalised*) ühiskonnarühmade all mõistetakse neid, kes on väljaspool n-ö peavoolu ühiskonda ning kelle ligipääs majanduslikele, poliitilistele, kultuurilistele ja sotsiaalsetele ressurssidele ning võimupositsioonidele on

piiratud (Schiffer & Schatz, 2008). Sotsiaalne tõrjutus ohustab näiteks ühiskonnarühmasid nagu rahvusvähemused, immigrandid, kodutud, puudega inimesed, sõltuvushäiretega inimesed ning üksikud eakad (Ibid.). Artiklis on paralleelselt kasutatud mõistet „tõrjutud“ (ingl *marginalised*) ühiskonnarühmad ning katustekstis mõistet „ühiskondlikult tõrjutud“, mis on antud juhul sünonüümse tähendusega, viidates samuti sotsiaalselt tõrjutud ühiskonnarühmadele.

Artiklis on keskendunud COVID-19 sotsiaalmajanduslikele mõjudele sotsiaalselt tõrjutute, eeskätt kodutute ning abiasutuste klientide seas. Kui varasemates uuringutes on piiratud peamiselt tänaval elavate kodutute uurimisega (Screiter et al., 2017; Morris, 2020; Allaria et al., 2021), siis antud artiklis soovisime käsitleda ühiskondlikult tõrjutud rühmasid laiemalt. Seetõttu on uuringu sihtrühma kaasatud inimesed, kes elavad näiteks oma kodus või pikaajaliselt mõnes sotsiaalhoolekande asutuses. Uuritavate sihtrühma iseloomustab lisaks sotsiaalsele tõrjutusele ka väga kehv majanduslik olukord.

Artiklis selgitame, millised on COVID-19 sotsiaalmajanduslikud mõjud tõrjutud rühmadele. Sotsiaalmajanduslikud mõjud oleme Van der Geesti & Schindleri (2017) eeskujul defineerinud peamiste materiaalsel toimetulekul mõjutavate teguritena – sissetulek ning ligipääs peavarjule ja toidule. Reeglina ei mõjuta hädaolukorrad kõiki inimesi samamoodi – pahatihti kogevad negatiivseid tagajärgi marginaliseeritud inividid, kes on juba kriisile eelnevalt haavatavas olukorras. Seetõttu on oluline vaadata, millised juba kriisiolukorrale eelnenud tingimused ja tegurid sotsiaalmajanduslikku toimetulekut mõjutavad. Tuginedes kirjandusele (Bizzarri, 2012; Morris S. C., 2020; Onyango et al., 2020), oleme sotsiaalmajandusliku mõju tegurid tõrjutud klientidele defineerinud järgnevalt: sissetulek ja töövorm, kokkupuude COVID-19 viirusega, elukorraldus, tervises seisund, psühholoogiline kerksus ning sotsiaaldemograafilised näitajad (vanus, sugu, kuulumine vähemusrühma).

1.3 Probleemiseade

Artikli eesmärgiks oli vastata järgnevatele uurimisküsimustele:

- 1) Millised on olnud COVID-19 pandeemia sotsiaalmajanduslikud mõjud abiasutuste klientide ning kodutute jaoks?
- 2) Millised individuaalsed ja sotsio-struktuuraalsed tegurid seda mõjutanud on?

Tuginedes sotsiaalmajandusliku mõju tegureid käsitlevale kirjandusele ning uuringutele, püstitasime neli hüpoteesi:

- 1) Mida kõrgem oli kokkupuude COVID-19 viirusega, seda negatiivsem oli COVID-19 pandeemia sotsiaalmajanduslik mõju respondentide jaoks (Raifman et al., 2021; Aiyegbusi et al., 2021);
- 2) Võrreldes nendega, kes elavad enda kodus, avaldas COVID-19 pandeemia sotsiaalhoolekande asutustes ja tänaval või ajutisel pinnal elavatele respondentidele negatiivsemat sotsiaalmajanduslikku mõju (Bendixen, 2021);
- 3) Respondentidele, kellel on rohkem diagnoositud kroonilisi haigusi ja/või kes hindavad oma terviseseisundit halvemaks, on COVID-19 pandeemia avaldanud negatiivsemat sotsiaalmajanduslikku mõju (Sapkota et al., 2021; Hacker et al., 2021);
- 4) Respondentidele, kelle psühholoogilise kerksuse hinnang on madalam, on COVID-19 pandeemia avaldanud negatiivsemat mõju (Johnston et al., 2020; Levy & Cohen-Louck, 2021).

2. Metodoloogiline taust

Artikli metodoloogia tugineb Orru et al. (2021b) tööle. Artiklis on kombineeritud kvalitatiivseid ja kvantitatiivseid meetodeid. Andmeid koguti abiasutuste klientidelt ning töötajatelt peale COVID-19 pandeemia esimest lainet. Abiasutustena käsitlesime nii avaliku sektori kui valitsusväliseid organisatsioone, kes pakuvad erinevaid sotsiaalhoolekande ja -abi teenuseid, nagu supiköögid, päevakeskused, ajutised varjupaigad (kodututele või põgenikele) ja pikemaajalist majutusteenust pakuvad asutused (rehabilitatsiooni- ja resotsialiseerimiskeskused).

Kvantitatiivne analüüs on koostatud kaheksa Euroopa riigi (Eesti, Ungari, Norra, Portugal, Hispaania, Tšehhi, Belgia, Holland) küsitlusandmete põhjal. Küsitlusi viidi läbi abiasutuste klientide seas 2020. aasta teises ning 2021. aastal esimeses pooles. Seda tehti asutustes kohapeal, sest muude kanalite kaudu (nt veebiküsitlus, videosilla või telefoni vahendusel küsitamine) oleks sihtrühmani raske jõuda ning nendes usaldust tekitada.

Kvantitatiivsed andmed annavad ülevaate sellest, kuidas respondendid COVID-19 pandeemia sotsiaalmajanduslike mõjusid tajusid ning millised tegurid seda mõjutasid. Sotsiaalmajanduslike mõjusid on käsitletud kui sissetulekut ning toidu ja peavarju kättesaadavust. Analüüsima, millist mõju pandeemia respondentidele on avaldanud, kasutasime küsimust „Palun öelge, kuidas Te olete nõus järgmiste väidetega: Pandeemia mõjus halvasti minu sissetulekule, toidu ja peavarju kättesaadavusele jms“, millele sai vastuseid anda Likerti viie palli skaalal (0 – täiesti vastu; 5 – täiesti nõus).

Vastamaks teisele uurimisküsimusele ning testimaks seatud hüpoteese, on sõltumatute tunnustena kasutusele võetud inimese elukoht viimase aasta jooksul (oma kodu, asutus, tänav/ajutine varjupaik), psühholoogilise kerksuse skoor, kokkupuude COVID-19 viirusega (respondendi ja tema lähedaste nakatumine, riiklik tase), tervis (respondendi hinnang enda tervisele, diagnoositud haigused). Samuti vaadati sotsiaaldemograafilisi tegureid nagu sugu, vanus, sissetulekuallikas ning immigrandi staatus.

Võrdlemaks sotsiaalmajanduslike mõjude tunnuse väärtusi eri rühmade lõikes, kasutati dispersioonanalüüsi, et testida, kas erinevused sotsiaalmajandusliku mõju hinnangutes on olulised. Samuti kasutati sotsiaalse mõju tunnuse ja selle tegurite vahelise suhte välja selgitamiseks korrelatsioonanalüüsi.

Olulise osa andmeanalüüsist, moodustas lineaarne regressioonanalüüs, mida on kasutatud sotsiaalmajanduslike mõjude ja sõltumatute tegurite omavahelise sõltuvuse välja

selgitamiseks. Lineaarse regressioonianalüüsi eel vaadati sõltuva tunnuse jaotust kvantiil-kvantiil graafikul (ingl k Q-Q plot) ning viidi läbi Shapiro-Wilk ja Kolgorov-Smirnov testid, et tunnuse normaaljaotust kontrollida. Testi tulemused näitasid, et normaaljaotuse eeldus lineaarse regressiooniga jätkamiseks on täidetud.

Tuginedes hüpoteesile, et asutuses või tänaval/ajutises varjupaigas elavad respondendid kogevad rohkem negatiivseid sotsiaalmajanduslikke mõjusid võrreldes oma kodus elavatega, on lineaarses regressioonianalüüsis sõltumatu tunnusena kasutusel respondendi elukoht – kas respondent on viimase aasta jooksul peamiselt elanud oma kodus või mitte (asutuses või tänaval/ajutises varjupaigas). COVID-19 viirusega kokkupuute ja sotsiaalmajanduslike mõjude seose välja selgitamiseks, on sõltumatu tunnusena kasutatud respondendi riiki – kas respondent elab Tšehhis, Portugalis või Hispaanias või mitte. Nendes riikides oli nii otsese (on ise nakatunud) kui kaudse kokkupuute (tuttav või lähedane on nakatunud) tase kõige kõrgem, seega viitas seal elamine suuremale kokkupuutele COVID-19 viirusega. Uurimaks, kas halvem tervises seisund panustab ka negatiivsematesse sotsiaalmajanduslikkesse mõjudesse, on sõltumatu tunnusena kasutatud diagnoositud krooniliste füüsiliste haiguste tunnust. Viimase hüpoteesi kohaselt, on kõrgema individuaalse kerksusega respondendid kogunud vähem negatiivseid sotsiaalmajanduslikke mõjusid. Selle kontrollimiseks on kasutatud sõltumatu tunnusena individuaalse psühholoogilise skoori, mis on kombineeritud mitme Likerti viie palli skaalal esitatud väitega nõustumise põhjal.

Kvalitatiivsed andmed koosnesid 32 intervjuust ning viiest töötoast kümnes Euroopa riigis (Ungari, Eesti, Belgia, Norra, Holland, Portugal, Soome, Leedu, Tšehhi), mis viidi läbi abiasutuste töötajate seas. Intervjuude ja töötubade käigus andmete põhjal koostati riiklikud kokkuvõtted (*case studies*), mida hiljem analüüsiti temaatilise analüüsi meetodil. Kvalitatiivsete meetodite kvantitatiivsetega kombineerimise eeliseks on see, et kvalitatiivne analüüs aitas kvantitatiivse analüüsi käigus saadud tulemusi täiendada ning aidata neid paremini laiemasse konteksti seada. Intervjuude ning töötubade käigus said valdkonna töötajad jagada enda kogemusi klientidele teenuse osutamisel ning selgitada, millised olid nende hinnangul pandeemia sotsiaalmajanduslikud mõjud nende klientide jaoks. Tänu sellele oli võimalik jõuda nüanssideni, mida küsitluse tulemused kirjeldada ei suutnud.

Intervjuusid abiasutuste töötajatega viidi läbi 2020. aasta maist 2021. aasta juunini. Intervjuud olid poolstruktureeritud ning nende eesmärgiks oli välja selgitada, millised olid abiasutuste töötajate hinnangul COVID-19 pandeemia esimese laine mõjud nende klientidele ning millised

tegurid seda mõjutasid. Intervjuudele taustaks analüüsiti ka dokumente, mis puudutasid riiklikke ja munitsipaaltasandi meetmeid COVID-19 pandeemia leviku piiramiseks ning toetusmeetmeid sotsiaalmajanduslike mõjude leevendamiseks.

Töötubasid abiasutuste töötajatega viidi läbi 2021. aasta juunist septembrini ning need toimusid virtuaalselt, videosilla vahendusel. Töötubade eesmärgiks oli küsitluse ning intervjuude tulemuste valideerimine. Töötubades tutvustati intervjuude ja küsitluse esmaseid tulemusi ning paluti osalejatel nendest lähtuvalt enda kogemuste üle reflekteerida. Täpsemalt keskenduti sellele, millised olid abiasutuste kogemused teenuste pakkumisega COVID-19 pandeemia vältel, kes olid nende kliendid, milliseid raskusi nad kogesid ning millised tegurid seda mõjutasid.

2.1 Meetodi puudused

Küsitlusuuringu puudujäägiks on kindlasti valimi suurus – respondente on analüüsi kaasatud kaheksa riigi peale kokku vaid 273. Samuti pole valimi suurus riigiti proportsionaalne - näiteks Eestis oli vastanuid 61 ning Hollandis 17. Kuivõrd sotsiaalne kontekst, sotsiaalabiteenuse kättesaadavus ning meetmed pandeemia haldamiseks erinevad riigiti, siis võis tulemus seetõttu olla kallutatud riikide suunas, kust andmeid rohkem koguda õnnestus.

Tõrjutud ühiskonnarühmade, eriti kodutute kohta puuduvad ülevaatlilikud andmed ja uuringud, mille alusel sihtpopulatsiooni selgelt määratleda. Seetõttu ei saa antud juhul hinnata respondentide valimisse sattumise juhuslikkust ega valimi esinduslikkust. Kuna küsitlusi viidi läbi näost näkku, raskendasid sihtrühmale ligipääsemist ning respondentide kaasamist COVID-19 piirangud.

Riiklike valimite varieeruva suuruse ning küsitava esinduslikkuse tõttu pole võimalik tulemusi riikide võrdluses analüüsida. Meie analüüsi tulemused annavad pigem ülevaate COVID-19 pandeemia sotsiaalmajanduslikest mõjudest Euroopa riikides, millele tuginedes oleks edaspidi võimalik täpsemaid uurimusi teha.

Kuigi kvalitatiivseid andmeid ning nende analüüsi kasutasime kvantitatiivse osa puudujääkide tasandamiseks ning konteksti paremaks mõistmiseks, ei kattu mõlemas osas analüüsitud riigid täielikult. Näiteks ei õnnestunud Belgias abiasutuste töötajatega läbi viia ühtki intervjuud ning Hispaanias ühtki intervjuud ega töötuba. Samuti on kvalitatiivsesse analüüsi kaasatud riike, näiteks Leedu ja Soome, mis kvantitatiivsest analüüsist välja jäid. Kuna meie uuringu eesmärgiks ei olnud riiklike tulemusi omavahel võrrelda, siis ei takistanud see tulemuste põhjal

järeldusi tegemast, kuid võib tähendada, et mingid nüansid tulemuste konteksti paremaks mõistmiseks on jäänud tabamata.

2.2 Eetilised aspektid

Ühiskondlikku haavatavust ning hädaolukordade lahendamist käsitleva teadustegevuse käigus võivad tõstatada mitmed eetilised ja sotsiaalsed küsimused (Geale, 2012; Shuster, 2014). Kuna käesolev artikkel ning projekt laiemalt tegelevad tõrjutud ning haavatavate sihtrühmadega, on tulnud arvestada mitmete eetiliste kaalutlustega ning kindlaks teha, et uuringu eesmärk on esindada neid, kes jäävad tavaliselt tähelepanuta, tegemata neile kahju. Artikli kirjutamisel lähtusime BuildERS projekti eetilisest raamistikust (Keränen et al., 2022).

Järgimaks eetiliselt hea empiirilise uuringu standardeid, töötati välja teabelehed ja andmekaitseprotseduurid. Nii intervjuude, töötubade kui küsitluste läbiviimisel oli respondentidel enne osalemiseks nõusoleku andmist võimalik tutvuda uuringut puudutava teabega ning sellega, millistel eesmärkidel nende andmeid kogutakse ning kuidas säilitatakse. Küsitluste ja intervjuude läbiviimise eel üritati respondentiga luua võimalikult usalduslik kontakt ning veenduda respondendi vabas tahtes osaleda. Samuti rakendati ettevaatusabinõusid haavatavate osalejate kaasamisel, kellel on oht suure tõenäosusega uuesti sattuda trauma ohvriks.

Kõigis uurimistegevustes on lähtunud viiest eetilisest mõõtmest: a) õiglus ja osalemine, b) vastutus ja aruandekohustus, c) valikuvabadus ja autonoomia, d) usaldus ja läbipaistvus, e) kahju tegemise vältimine ja heatahtlikkus ning f) privaatsus ja andmekaitse. Projekti konsortsiumis oli kindel partner, kes teisi partnereid eetikaküsimustes nõustas ning probleemidele sobivaid lahendusi välja pakkus.

Samuti on tulnud artikli kirjutamisel silmas pidada, et kindlate tunnuste alusel inimesi tõrjutud ühiskonnarühma kuuluvana määratleda ei ole alati objektiivne ning tõstatab mitmeid eetilisi küsimusi. Nendes rühmadesse kuulumine ei ole iseenesestmõistetav ega ajas muutumatu – seda mõjutavad mitmed kokkulangevad asjaolud. Seetõttu oleme tõrjutud ühiskonnarühmade käsitlemisel lähtunud interseksionaalsuse ja mitmemõõtmelisuse põhimõttest ning nende määratlemisel toetunud varasemale kirjandusele.

2.3 Ülevaade töö käigust

Ankeetküsitlusi viidi läbi 2020. aasta teises pooles ning 2021. aasta esimeses pooles. Intervjuusid asutuste töötajatega viidi läbi 2020. aasta maist 2021. aasta juunini. Töötoad toimusid vahemikus juuni-september 2021. Küsitlusi ning töötubasid viisid läbi

projektimeeskonna liikmed ning need olid eelnevalt asutuste esindajatega kokku lepitud. Töötubade ja intervjuude jaoks olid osalejad eelnevalt välja selgitatud ning nendega sobiv aeg kokku lepitud. Eestis viidi läbi kaks töötuba, mille korraldamisel samuti abiks olin.

Küsitluste läbiviimine toimus küll asutuse esindajatega eelnevalt kokkulepitud ajal, kuid enamasti leiti konkreetsed inimesed, kes küsitlusele olid valmis vastama, alles kohapeal. Eestis viidi küsitlusi läbi 2020. aasta sügisel. Olin siis andmekogumisse kaasatud ning käisin küsitluste läbiviimisel abiks. Eestis kogutud küsitlusandmete põhjal kaitsesin 2021. aasta kevadel bakalaureusetöö „Püsiva elukohata ja toimetulekuraskustes inimeste ohutaju, infoallikad ja kaitsemeetmed COVID-19 pandeemiaga toimetulemiseks Tallinna sotsiaalabiteenuste klientide näitel”.

Artikli jaoks kirjanduse ülevaate koostamisega alustasin 2021. aasta sügisel. Artikli esmase versiooni esitasime retsenseerimiseks 2022. aasta juulis. Peale seda on artiklit vastavalt retsensentide ettepanekutele kolmel korral parandatud. Viimase versiooni artiklist esitasime ajakirjale 2023. aasta aprillis, peale mida võeti artikkel avaldamiseks vastu ning avaldati ScienceDirect keskkonnas 3. mail.

Artiklil on seitse autorit. Olen saanud hea kogemuse artikli koostamise juhtimisel oma juhendaja Kati Orru kõrval. Esiteks on olnud minu peamine roll töötada välja artikli kontseptsioon. Selleks koostasın kirjanduse ülevaate, defineerisin uurimiseesmärgi, -küsimused ja -hüpooteesid. Kvantitatiivse analüüsi koostamisse panustas Tor-Olav Naevestad Norra Transpordiökonomika Instituudist (TOI). Koos Tor-Olaviga kirjutasime lahti analüüsitulemused ning nende interpretatsiooni ning viimasena kirjutasın arutelu peatüki ja soovitusel. Minu ülesanne oli vormistada artikkel üheks tervikuks. Samuti sain väärtusliku kogemuse artikli ajakirjale esitamisel. Peale seda olen olnud vastutav retsensioonidele vastavate täienduste ning paranduste sisseviimise eest.

Kogu protsessi juures on mind suunanud ning juhendanud Kati Orru, kes oli ühtlasi Tartu Ülikooli poolne projektikoordinaator. Tartu Ülikoolist on artikli kirjutamise juures olnud veel kriisisotsioloogia doktorant Kristi Nero, kes andis nõu kvalitatiivse analüüsi koostamisel. Lisaks panustasid artikli materjalide kogumisse Alexandra Olson Päästearmeest ja Sunniva Frislid-Meyer TOI-st. Samuti kirjutasime koos Kati Orru ja Kristi Neroga uurimistöö tulemusi ja selle raames avaldatud artikleid kokkuvõtva artikli „Ühiskonnas tõrjutute kriisikogemused: õppetunnid koroonapandeemiast“ (Orru, Nero, & Siimsen, 2023), mis avaldati ajakirjas Sotsiaaltöö.

3. Olulisemad järeldused

Esimese uurimisküsimusega soovisime välja selgitada, millised olid COVID-19 pandeemia sotsiaalmajanduslikud mõjud. Küsitluses osalenud klientide seast 39% leidis, et pandeemia on negatiivselt mõjutanud nende sissetulekut ning peavarju ja toidu kättesaadavust, 47% vastanutest selle väitega aga ei nõustunud. 39% avatud küsimusele vastanutest märkis samuti, et alates pandeemia puhkemisest on nende jaoks suurim probleem olnud seotud sotsiaalmajanduslike mõjudega – välja toodi näiteks töökaotust ja töövõimaluste vähenemist, kehva majanduslikku seisuga, raskusi toidu või peavarju leidmisel. Ka kvalitatiivse analüüsi tulemustest selgus, et pandeemia avaldas abiasutuste klientidele negatiivset sotsiaalmajanduslikku mõju ning abiorganisatsioonid kogesid suuremat nõudlust toidu, peavarju ja teiste sotsiaalabiteenuste vastu.

Esimest hüpoteesi – mida suurem on kokkupuude COVID-19 viirusega, seda negatiivsemad on pandeemia sotsiaalmajanduslikud mõjud – kvantitatiivsed andmed ei kinnitanud. Samas ilmsel avatud vastusega küsimustest, et töö kaotamine, mis on seotud COVID-19 leviku tõkestamiseks seotud piirangutega, on üks peamisi sotsiaalmajanduslikke tagasilööke.

Vastupidiselt meie teisele seatud hüpoteesile, olid COVID-19 pandeemia sotsiaalmajanduslikud mõjud negatiivsemad nende klientide jaoks, kes elasid oma kodudes.

Ka halvemal tervisehinnangul ning rohkematel diagnoositud haigustel ei olnud tugevat seost negatiivsete sotsiaalmajanduslike mõjudega.

Neljas hüpotees leidis siiski kinnitust – mida suurem on respondendi individuaalne psühholoogiline kerksus, seda vähem kogevad nad negatiivseid sotsiaalmajanduslikke mõjusid.

Kokkuvõttes selgub analüüsitulemustest, et tegurid, mis negatiivsete sotsiaalmajanduslike mõjudega enim seostuvad, on noor vanus, immigrandi või asüülitaotleja staatus ja dokumentide puudumine. Psühholoogilise kerksuse kõrval oli sotsiaaltoetus põhilise sissetulekuallikana üks olulisemaid tegureid, mis abiorganisatsioonide kliente negatiivsete sotsiaalmajanduslike mõjude eest kaitses. Neid leide toetasid ka kvalitatiivse analüüsi tulemused.

Võib eeldada, et tänaval või varjupaikades elanud inimesed ei tajunud COVID-19 sotsiaalmajanduslikke mõjusid nii teravalt, sest nende elamistingimused ja toimetulek olid ebakindlad ka enne pandeemia puhkemist, samas kui näiteks oma kodus elavate respondentide toimetulek oli eelnevalt olnud kindlam. Samuti näib, et abiasutustes elamine kaitses inimesi

pandeemia negatiivsete tagajärgede eest ning tagas, et nende põhivajadused (nt peavari, toit) oleksid kaetud. Samuti aitasid stabiilsed sotsiaaltoetused või pension hakkama saada vanemaealistel ning krooniliste haiguste või puuetega inimestel, samas kui paljud nooremad abivajajad kaotasid oma (ajutise) sissetuleku.

3.1 Edasise uurimise perspektiivid

Ühiskondlikult tõrjutud rühmade kogemuste uurimine on oluline, sest nii saame paremini ette valmistada ühiskonna kui terviku paremaks toimetulekuks hädaolukordades ning vähendada potentsiaalseid haavatavusi. Edasised uuringud võiks aga kaasata suuremaid ning võimalusel sihtpopulatsiooni suhtes esinduslikke valimeid. Samuti võiks analüüsida tulemusi ning rakendatud meetmeid erinevate riikide võrdluses, mõistmaks, kuidas riiklik kontekst ja meetmed sotsiaalmajanduslikke mõjusid on kujundanud. Meetmete uurimine aitaks edaspidistes hädaolukordades ebaproportsionaalseid negatiivseid mõjusid tõrjutud ühiskonnarühmade seas vähendada. Mõistmaks, kui drastilised on erinevused sotsiaalmajanduslikes mõjudes tõrjutud rühmade seas, võiksid tuleviku uuringud kaasata ka teisi ühiskonnarühmasid – näiteks võiks uurida võrdlevalt vanemaealiste või erivajadusega inimeste hakkamasaamist kriisides.

Kokkuvõte

Artiklis uurisime COVID-19 pandeemia sotsiaalmajanduslikku mõju ühiskonnas tõrjutute seas Euroopa riikides ning millised tegurid seda mõjutasid. Selle analüüsimiseks, kasutasime nii abiorganisatsioonide klientide seas läbiviidud küsitluse kui ka abiorganisatsioonide töötajatega läbiviidud intervjuude ja töötubade andmeid.

Tulemustest selgus, et enam kui kolmandik abiorganisatsioonide klientidest tundis, et COVID-19 pandeemia sotsiaalmajanduslik mõju on olnud nende jaoks negatiivne. Neljast seatud hüpoteesist leidis kinnitust vaid üks – mida kõrgem on respondendi psühholoogiline kerksus, seda vähem koges ta negatiivseid sotsiaalmajanduslikke mõjusid. Pandeemia sotsiaalmajanduslikud mõjud olid negatiivsemad nende seas, kes elasid oma kodus, olid nooremad või kes olid immigrandi või asüülitaotleja staatuses. Sotsiaalmajanduslikud mõjud olid väiksemad näiteks vanemas eas vastanute ning nende seas, kelle peamiseks sissetulekuallikaks olid sotsiaaltoetused.

Artikli tulemused on olulised, sest aitavad paremini mõista, millised on olnud ühiskondlikult tõrjutute kogemused COVID-19 pandeemiaga ning kes on sotsiaalmajanduslikult enim pihta saanud. Tagamaks tõrjutute parem toimetulek ja vältimaks veelgi tõsisemate sotsiaalmajanduslike probleemide välja kujunemist, soovitame hädaolukordades leevendada kriteeriume, millele abivajajad teenustele ja toetustele ligipääsemiseks vastama peavad. Edasised uuringud võiksid kaasata suuremaid ning sihtpopulatsiooni suhtes esinduslikumaid valimeid ning võimaldada riikidevahelist võrdlust. Samuti võiks võrdlevalt uurida ka teisi ühiskondlikult tõrjutud rühmasid.

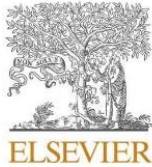
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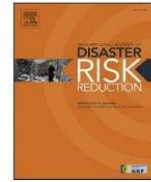
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Socio-economic outcomes of COVID-19 on the marginalised: Who have taken the hardest hit?

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ABSTRACT

This article aims to examine the socioeconomic outcomes of COVID-19 for socially marginalised people who are clients of social care organisations (e.g. people experiencing homelessness), and the factors influencing these outcomes. We tested the role of individual and socio-structural variables in determining socioeconomic outcomes based on a cross-sectional survey with 273 participants from eight European countries and 32 interviews and five workshops with managers and staff of social care organisations in ten European countries. 39% of the respondents agreed that the pandemic has had a negative effect on their income and access to shelter and food. The most common negative socio-economic outcome of the pandemic was loss of work (65% of respondents). According to multivariate regression analysis, variables such as being of a young age, being an immigrant/asylum seeker or residing in the country without documentation, living in your own home, and having (in)formal paid work as the main source of income are related to negative socio-economic outcomes following the COVID-19 pandemic. Factors such as individual psychological resilience and receiving social benefits as the main source of income tend to “protect” respondents from negative impacts. Qualitative results indicate that care organisations have been an important source of economic and psycho-social support, particularly significant in times of a huge surge in demand for services during the long-term crises of pandemic.

1. Introduction

Disasters can significantly exacerbate poverty and inequality [1]. The COVID-19 pandemic is no exception, as it has caused many marginalised groups to have suffered disproportionate hardships [2–4]. The pandemic has more acutely affected those in precarious or non-standard forms of employment: persons with disabilities and long-term care needs, families and children in vulnerable positions, the homeless, migrants, and ethnic minorities [5–7]. Social inequalities not only affect risk of infection and mortality rates, but also the ability to “purchase” safety by staying at home and implementing protective measures [8–10]. Furthermore, recent data indicate that deep-rooted socio-economic and labour market inequalities have been further exacerbated by the ongoing pandemic, with crisis-induced labour income losses being unevenly distributed across different sectors and workers [11,12].

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The pandemic has also had a negative impact on access to housing and essential facilities for socioeconomically marginalised groups as the threat of eviction and/or becoming homeless has increased [13]. For those with unstable housing (e.g. rough sleepers, sofa surfers, shelter clients), access to washing facilities, shelter, and food supplies was limited due to the shutdown of many public facilities, as well as increased risk of income loss [13,14]. Limited access to day centres and basic facilities and support services has caused extra hardships for the marginalised [15]. Socially marginalised individuals living at the margins of economic, cultural and social power [16] are thus in a precarious situation. Oftentimes, these hardships are not the result of a single factor, but rather multiple intersecting vulnerabilities and power structures that allow for inequalities to reproduce and exacerbate during crises [17].

Existing studies of marginalised groups (e.g. homeless people) tend to focus only on people living on the street [10,18,19]. However, to understand the variety of experiences among marginalised populations, we are addressing a wider spectrum of marginalised groups, including those living in their own home or in long-term care shelters.

The aim of our study is to examine the socio-economic outcomes (income, access to food, shelter, social care services, etc.) of the COVID-19 pandemic on a variety of marginalised groups. To fulfil this aim, we address the following research questions.

- 1) What are the socio-economic outcomes of COVID-19 for the homeless and clients of social care organisations?
- 2) Which individual and socio-structural factors influence these socio-economic outcomes?

Drawing from Ref. [20]; we define the socio-economic outcomes of the COVID-19 pandemic as impacts on respondents' income and access to food and shelter. We use cross-sectional survey data with 273 participants from eight European countries. Following the study methodology tailored by Ref. [21]; the groups included in the survey are clients of social care organisations (especially the Salvation Army), using services including soup kitchens, homeless shelters, and care facilities where people live for longer time periods. The survey of the clients is complemented with qualitative interviews with representatives of care organisations in order to provide contextualisation of mechanisms for material coping.

We study a broad spectrum of vulnerability, including those marginalised people 1) living in their own homes, 2) living in social care centres/facilities and 3) living on the street or in temporary arrangements. We mainly focus on the level of protection provided by living arrangements as a source of social marginalisation. In order to capture respondents' level of protection provided by living arrangements, we use the Framework for Understanding Homelessness on a Global Scale [22]. This framework allows for the classification of people without accommodation, people living in temporary or crisis accommodation, and people living in severely inadequate and/or insecure housing.

The knowledge gained from this study is important to map out the most acute socio-economic drawbacks that marginalised individuals have faced, as well as the factors contributing to them. Based on the study results, we discuss how to reduce negative socio-economic outcomes for vulnerable populations, as well as for care organisations, in order to improve their preparedness for future crises.

First, we review the existing literature on socio-economic outcomes of disasters on marginalised people and the factors influencing these impacts. We then describe our data and method in detail and present the results. We conclude by discussing the factors having the biggest influence on socio-economic outcomes, and the need for further research and policy responses.

2. Overview of existing literature on socio-economic outcomes of disasters and COVID-19

2.1. Socio-economic outcomes of disasters on socially marginalised people

Disasters do not affect all individuals evenly, and previous research indicates that marginalised groups, such as the homeless, people with psychiatric or substance abuse disorders, and minorities, end up paying a higher price when experiencing disasters due to pre-existing conditions that influence their vulnerability [1,23; Morris, 2020]. When studying the effects of a disaster on the marginalised or the vulnerable, it is also important to bear in mind the diverse and dynamic nature of these groups. As set forth in Ref. [24]; vulnerability is often considered a static characteristic of an individual. However, vulnerability should be viewed as the result of multiple interdependent and intersectional factors that can change over time (Ibid.).

Existing research shows that in the example of the UK, the changes and restrictions that COVID-19 has brought about have showcased inequalities in accessing decent employment as well as discrimination against marginalised groups, resulting in many of them experiencing a harsher impact on economic and work-related factors [5].

During the pandemic, due to the economic downturn in many countries, job security has decreased and many people have become unemployed; thus, care services have become even more in-demand [25,26]. Another challenge to the subsistence of marginalised individuals and households has been restricted access to social aid and services, as well as increased costs of essential commodities due to lockdowns (e.g., food, internet, energy) [27]. For the homeless, food aid, night shelters, day centres and washing facilities have been harder to access, as many facilities have had to close their doors during lockdowns [28]. Limited access to food supplies is especially problematic, being more prevalent amongst groups such as ethnic minorities and the newly unemployed [29,30]. All in all, the COVID-19 pandemic has resulted in various socio-economic losses for vulnerable groups, both in terms of income and access to necessary social aid and services.

2.2. Factors influencing the socio-economic outcomes of disasters

As mentioned, we focus on vulnerability from an intersectional approach, according to which vulnerability is a result of various interdependent factors that result in multiple dimensions of marginalisation, and is dependent on the actual exposure to a certain crisis [17,31]. According to Ref. [32]; negative socio-economic outcomes of the pandemic are determined by pre-existing conditions, such as lack of income security and social protection, inadequate housing conditions, precarious or informal employment and working

conditions, and poor social and human capital. Therefore, we must consider a variety of individual and socio-structural factors that influence the socio-economic outcomes of the pandemic. Some of the key factors contributing to the socio-economic outcomes of COVID-19 are described as follows.

2.2.1. Income and type of employment

Low-income households were already vulnerable prior to the COVID-19 pandemic, as they have a higher risk of experiencing various forms of social inclusion: educational disadvantage, poor health and access to health services, inadequate housing, and exclusion in the labour market (Nolan & Whelan, 2009 via [33]). These households are also more likely to struggle in coping with the COVID-19 pandemic [34]. This is because such populations are more likely to have temporary and precarious job contracts which are in turn more likely to be terminated by economic downturn during a crisis or provide restricted access to paid sick leaves [14]. Furthermore, these people could experience higher levels of distress and financial struggle due to exposure to the virus (e.g. due to medical costs and the inability to work while sick). This is especially prevalent amongst people who were just about coping, but had to turn to the care services for the first time due to the pandemic (Orru et al., 2021a). The economic consequences of the COVID-19 pandemic have more severely impacted low-paid employees who are also at an increased risk of exposure [35] (such as cashiers, public transport operators, and caretakers). This mostly includes people with lower levels of education and income [14].

2.2.2. Exposure to COVID-19

Socio-economic outcomes could be related to COVID-19 exposure due to prohibited economic engagement when sick [14,36]. The homeless and marginalised groups are often especially vulnerable when exposed to COVID-19 due to their living arrangements and type of employment. For example, people who have tested positive for COVID-19 or are self-isolating are often unable to attend work if they do not have the opportunity to work from home or are too ill to do so [37]. Contracting COVID-19 may also lead to long-term financial strain: due to persistent symptoms, many patients are unable to return to work or, in some cases, cope with day-to-day living, meaning they become reliant on government support and social services [38].

2.2.3. Living arrangements

Socio-economic outcomes could also be related to the living arrangements of the marginalised, as living conditions affect the chances of infection and the possibility to self-isolate as well as determining access to basic needs such as a warm room, showers, cooking facilities, etc. [35,39]. Denser living arrangements in social housing or shelters, for instance, as well as precarious frontline work (e.g. shop personnel and bus drivers) often means an increased risk of virus spread among these groups. Dense living arrangements often coincide with precarious frontline work for marginalised individuals. For example, in Denmark, numerous infection hotspots were recorded in social housing units where many of the inhabitants are also frontline workers [40]. Affected individuals bore considerable material loss, as avoiding contacts in crowded conditions is difficult, and they were not able to attend work upon contracting COVID-19. Staying away from work or even on sick leave (if insurance is available) results in a loss of income. Affected individuals mostly come from migrant and ethnic minority populations (Ibid.), which also shows that minority groups are facing larger socio-economic implications.

2.2.4. Poor health status

Poor health, including chronic disease, can often result in impoverishment and social problems such as exclusion and additional physical health problems on its own, but the COVID-19 pandemic has further exacerbated health-related socio-economic inequalities [41,42]. Certain populations - such as those of low socio-economic status or racial and ethnic minorities - bear a disproportionate burden of chronic diseases, COVID-19 infection, hospitalisation, and mortality rates (Ibid.). Poor health status is related to poor access to safe and affordable housing, healthy food, healthy working conditions, and healthcare (Ibid). For example, people with chronic conditions among poor and marginalised populations have faced difficulties in accessing healthcare and have suffered severe consequences, both socially and financially, caused by the pandemic [43]. The aforementioned inequalities can lead to poor health, which in turn could contribute to reduced income - often referred to as the health-poverty trap [44]. Not only is objectively-diagnosed disease related to employment and income status, but so is one's perceived health status [45]. People with poor health perceptions are less active and have less disposable income, whereas people participating in the labour market and with more disposable income perceive their health status as better (Ibid.).

2.2.5. Individual psychological resilience

Although little has been written on the direct impacts of individual resilience levels on socio-economic outcomes of the pandemic, some connections can be found. As expected, employment status is related to the prevalence of economic fears and mental distress, contributing to individual functioning [46,47]. Individual resilience can also be linked to work performance which could in turn have an effect on one's employment status [48]. [48] suggest that a higher level of resilience helps one to effectively respond and adapt to challenges and changes in the workplace. Additionally [49], argue that self-efficacy, which can be defined as self-confidence and belief in one's capability to deal with stressors (Bandura, 2006, 1997; Schwarzer & Warner, 2013 via Johnston et al., 2020), is strongly associated with a more resilient response to the pandemic.

2.2.6. Socio-demographic factors: age, gender and minority groups

To compare gendered socio-economic outcomes, women have faced more economic challenges, including loss of work [50,51]. The reasons behind women facing more work-related transitions and socio-economic losses may also be that globally, approximately 40% of female workers, compared to 36.6% of male workers, are occupied in sectors that have been hardest hit by the pandemic, such as retail, food service, and hospitality [52].

Age also plays a substantial role in the socio-economic outcomes of the COVID-19 pandemic. Crises are likely to place more financial strain on the elderly, as poverty rates and reliance on social benefits is typically relatively high in this population, even prior to the onset of a crisis [53,54]. Although the shift towards more digital tools has succeeded in minimising many of the negative impacts of the pandemic, the elderly, who historically have faced unequal access and ability to use technology, may struggle to access information and services provided online [55,56].

As for minority groups, they often hold higher levels of insecure employment, such as self-employment or contracts without minimum working hours [57]. People of different minorities are therefore more likely to face negative socio-economic outcomes from the COVID-19 crisis. For example, job losses reported amongst ethnic minority populations were 4% higher than the national average in the United States [58]. The effects of the pandemic are even more adverse for migrant communities, as they have unequal access to the labour market, stable housing, healthcare, and other essential services [59–61].

2.3. Hypotheses

Based on the aforementioned knowledge of the determinants of socio-economic outcomes, we have set up 4 hypotheses.

- 1) Respondents who report higher levels of exposure to COVID-19 also report more socio-economic losses related to the COVID-19 pandemic [37]; Aiyegbusi et al., 2021);
- 2) Compared to those living in their own home, respondents living in different types of facilities (e.g. homeless shelters or longer-term rehabilitation centres) can be expected to experience more negative socio-economic outcomes [40];
- 3) Respondents who report lower perceived health scores and/or more diagnosed chronic illnesses also report more socio-economic losses related to the COVID-19 pandemic (loss of income/shelter/food etc.) [41,42].
- 4) Respondents who report lower psychological resilience scores also report more socio-economic losses related to the COVID-19 pandemic [49]; Levy & Cohen-Louck, 2021).

3. Methods

The paper focuses on the experiences of socially marginalised groups during the first wave of the pandemic in eight European countries. In order to define socio-economic outcomes on the marginalised individuals and the factors influencing these, we carried out a quantitative survey amongst clients of care organisations, as well as 32 qualitative interviews and 5 workshops with representatives of care organisations.

3.1. Quantitative survey

3.1.1. Recruitment of respondents

Respondents were mainly recruited in the second half of 2020 and the first half of 2021, and were asked to rate their experiences of COVID-19 since March 2020. The current study was approved by the Norwegian Centre for Research Data, and similar institutions or research ethics committees in all the other countries participating in the study. The studied groups are clients of the Salvation Army or similar social care organisations, using services including soup kitchens, homeless shelters, and care facilities where people live for longer time periods. Thus, the included respondents range from people living in their own homes to people living on the street. Respondents were recruited when visiting their social care organisations. The interviews were mainly conducted face-to-face. The interviewers were given training focusing on ethics (e.g. recruitment and how to avoid harming respondents in any way, preventing exploitation of social hierarchies or dependencies inside the organisation) and practical survey issues by the IZEW (International Centre for Ethics in the Sciences and Humanities at the University of Tübingen in Germany) and the Salvation Army in Brussels. The social care organisation staff invited individuals to participate in the survey interview through general announcements and requests.

3.1.2. Survey themes

The following survey themes and their operationalisation were set forth in Ref. [21]. The independent variables here can be divided into individual (individual psychological resilience, psychological and physiological health) and socio-structural factors (living arrangements, income, exposure to COVID-19, and background variables).

3.1.2.1. Socio-economic outcomes of the pandemic. The focus of the paper, and our dependent variable, is the socio-economic outcomes of the pandemic. We define socio-economic outcomes as impacts on respondents' income and access to food and shelter as suggested by Ref. [20]. The question we use to measure socio-economic outcomes of the pandemic is: "The pandemic has had a negative effect on my income and access to shelter and food." The answers to this question were measured on a 5-point Likert scale with 1 being "totally disagree" and 5 "totally agree".

3.1.2.2. Background variables. The survey includes questions about sex, age, residence status (national citizen, asylum seeker, residing in the country without documentation, etc.), and whether respondents perceive that they represent a minority.

3.1.2.3. Exposure to COVID-19 (themselves, acquaintances). **Hypothesis 1.** relates to respondents' exposure to COVID-19. The survey measures exposure to COVID-19 in several ways. We asked respondents whether they have been infected themselves (the answers were recorded on a nominal yes/no scale), whether friends have been infected (respondents were asked to indicate the number of friends infected), and whether they have lost someone close to COVID-19 (the answers were recorded on a nominal yes/no scale). We also measure exposure to COVID-19 as societal exposure, measuring the country with the highest infection rate per inhabitant (i.e. Portugal).

3.1.2.4. Living arrangements. **Hypothesis 2.** relates to the influence of respondents' living arrangements. We mainly focus on the level of protection provided by living arrangements as a source of social marginalisation. We ask respondents: "Where have you been

living and sleeping most of the time over the past year?", and we offer three options: 1) My own home, 2) Centre/facility, 3) Street or temporary arrangement. The category "Street or temporary arrangement" is comprised of the options: Street or other open space; Car; With friends or relatives on a temporary basis; Hotel, motel, etc.; Trailer or tent; Abandoned houses; and Homeless hostel. Centre/facility is comprised of: Rehabilitation centre (people with drug or alcohol problems, resocialisation after prison); Facility for migrants; and Other care organisations providing long-term accommodation. We also ask the respondents about the number of years spent living without a home and years spent as a social care organisation client.

3.1.2.5. Psychological and physiological health. Hypothesis 3. relates to respondents' health. We apply [62] enumeration of the frequent physical and mental illnesses among individuals in precarious socio-economic situations. In the survey we asked: "Have you ever been told by a doctor that you have any of the following conditions?" We provided 15 options for respondents, comprised of different physiological and psychological diagnoses. The respondents could mark all conditions they had been diagnosed with. We made two variables of these. The variable "physiological diagnoses" concerns heart and lung conditions (i.e. risk group), while the variable "psychological diagnoses" include schizophrenia, depression and personality disorder. Finally, we also measured self-assessed health with the question: "In general, would you say your health is" (options ranged from 1: poor to 5: excellent).

3.1.2.6. Individual psychological resilience. Hypothesis 4. relates to respondents' individual psychological resilience. The survey includes five questions on individual resilience: "Please assess how often the following statements are true in your case. Provide answers that generally apply for the last year": I am able to adapt to change; I tend to bounce back after illness or hardship; I can stay focused under pressure; I think of myself as a strong person; I can handle unpleasant feelings. Options ranged from: "Not at all" (=1) to "Nearly all the time" (=5). We made a sum scale index based on the questions (min: 5, Max: 25).

3.1.2.7. Income (formal paid work, informal, benefits). We measure an individual's socio-economic security through a scale of economic engagement proposed by the [63] with the question "Are you engaged in any of the following economic activities like ... Formal paid work; Informal paid work; Voluntary paid work; Voluntary unpaid work; Exchange of services or goods with other people; Do not engage in work that could be paid for; I get social benefits; Other". The respondents could mark all relevant economic engagement opportunities for the past year.

3.1.3. Free text answers

The survey includes several free text follow-up questions, focusing on respondents' biggest problem (if any) during the pandemic: "Since the outbreak of the pandemic in March 2020, what has caused the biggest problem for you?" The purpose of this latter question was to let the respondents use their own words to describe this, independent of the focus and the pre-defined questions and answer options in the survey. This would also allow a comparison of the significance of psychological challenges (e.g. loneliness, concern about infection) versus economical/socio-economic challenges (e.g. loss of income). Analysing the free text answers, we used a thematic analysis to identify and describe the most prevalent themes.

3.1.4. Analyses

When comparing the mean scores of different groups, we use one-way Anova tests, which compare whether the mean scores are equal (the null hypothesis) or (significantly) different. We use Chi-square tests to compare groups' scores on particular variables if we, for instance, cannot compare means due to the variables' level of measurement. The Chi-square test tests whether the actual distribution of groups on a variable is statistically significantly different from a coincidental distribution, or an independent normally distributed sample. We also conduct bivariate correlation analyses (Pearson's correlation coefficient), which measures the strength of the association between two variables and the direction of the relationship. The values vary between 1 and -1. A value of 0 means no correlation. The interpretation of the Pearson's correlation values is disputable, although most researchers probably agree that a coefficient of <0.1 indicates a negligible and >0.9 a very strong relationship. We use hierarchical, linear regression analyses, where independent variables are included in successive steps to assess the conditions explaining variation in the respondents' answers to the variable measuring negative socio-economic outcomes of the pandemic: "The pandemic has had a negative effect on my income, access to shelter, food etc." The most basic independent variables (i.e. the demographic) are included first, e.g. age, sex, living arrangements. Then the other independent variables are included. The regression analyses enable us to examine the separate effects of the independent variables on the dependent variables, controlled for the other variables. Of course, we cannot draw conclusions regarding causality, as this is a cross-sectional and correlational study. We nevertheless use the term "predict" when we describe the regression analyses.

3.2. Qualitative data: interviews, workshops, and document analysis

In order to complement the views from the surveys, we conducted 32 semi-structured interviews from May 2020 to July 2021, and 5 workshops with staff of government services and NGOs (e.g. Salvation Army, Red Cross services) from June to September 2021 across 10 European countries - Germany, Italy, Hungary, The Netherlands, Norway, Portugal, Czech Republic, Finland, Lithuania, and Estonia. In the country studies, a purposive sampling strategy was followed to capture experiences by organisations providing different socio-economic support to clients staying at home and also homeless visitors (day centres), clients staying in shelters for temporary stay (overnight, refugees), or in longer-term residential services (rehabilitation and resocialisation centres). Key informants were determined based on their level of experience and involvement in dealing with pandemic-related influences on the care organisation. For more details see Orru et al.'s article "Approaches to 'vulnerability' in eight European disaster management systems" (2021c).

Having received written informed consent, the semi-structured interviews with participants focused on: 1) the socio-economic outcomes the first wave of the pandemic brought about for the clients of the care organisations; 2) the factors that shaped these impacts.

As background information for the interviews, we analysed documents including state and municipal level government regulations in response to the pandemic, e.g. publicly accessible policy documents and official guidelines. We looked for documents concerning restrictions and changes in the availability of financial support, as well as the care organisations' responses to these factors.

In order to validate the first results from the survey and interviews with care organisations representatives, the authors carried out 5 online workshops with the representatives of care organisations in Norway, Estonia, Hungary and Belgium from June to September 2021.

In these workshops, the study team members first introduced the findings from the survey interviews as well as individual interviews, and then asked for participants' reflections on the findings from the perspective of their organisation. More specifically: the care organisations' experiences with providing services amidst the pandemic; different types of clients; the kind of socio-economic struggles the clients were facing; and the factors contributing to these struggles. Good practices and opportunities for improvement were pointed out by the participants as relevant feedback to our preliminary conclusions and recommendations.

Our research team members, who also carried out the interviews and workshops, shared the task of undertaking preliminary analyses of interviews and documents, with those in languages other than English being read and summarised into case studies by native speakers. We then used qualitative thematic content analysis [64] on the country reports to identify major commonalities and differences in the ways in which organisations have responded. The purpose of the qualitative analyses was to help interpret the results of our quantitative analysis. Qualitative data also provided us with an insight into the different dimensions of socio-economic outcomes (income, access to food, shelter, etc.).

4. Results

4.1. Survey results

4.1.1. Characteristics of respondents

Altogether, we analysed answers provided by a total of 273 respondents across eight European countries (Table 1).

Regarding the living conditions of respondents, we use answers to the question: "Where have you been living and sleeping most of the time over the past year?" and combine the answer alternatives into three categories: 1) clients living in their own homes; 2) different types of residential centres and facilities; 3) in the streets or temporary arrangements (including night shelters) (Table 1). Of 259 identified living arrangements, 25% reported "Living in their own home". These are clients of soup kitchens, day centres or other care organisations living at home. The biggest share of respondents living at home was reported in Spain (60%), while in Hungary and Czech Republic no respondents reported this. "Centre/facility" (13%) refers to centres for alcohol and drug addiction, resocialisation after prison, facilities for migrants, and other care organisations providing long-term accommodation. While the share of people living in a centre/facility was relatively low across most sampled countries, 43% of respondents in Estonia reported living in such arrangements. "Living on the street or under temporary arrangement" refers to living on the streets, in open spaces, cars, abandoned houses, homeless shelters, refuges, or under other temporary arrangement (e.g. with friends or relatives). We also define homeless shelters as temporary, as they generally offer only over-night stay and lack stability. Finally, we see that 57% of respondents report that they live on the street or under temporary conditions. In Hungary, all respondents reported living on the street or under temporary conditions. The share of respondents reporting this living arrangement was the lowest in Spain (35%) and Estonia (36%). The duration of stays in a centre/facility may also be temporary, indicating that the main line of demarcation is between people living in their own homes and the two other groups, which we may refer to as different types and degrees of homelessness. Thus, although the distribution of living arrangements differs among countries, people living in their own homes make up considerable shares in three of the countries, while people living on the street make up considerable shares in all the studied countries.

We also see from Table 1 that there is a share of 30% who report that they are female in the sample, which adds up to 79 respondents. Comparing living arrangements, people living in their own homes had the highest share of female respondents, with 45% female, followed by living in a facility (36% female) and living on the street/temporary conditions (23% female).

Table 1

Respondents from the eight countries, including the share of female respondents, and mean scores for socio-economic impacts of COVID-19, individual psychological resilience, physiological and psychological diagnoses.

	Home	Facility/Centre	Street and temporary	Other	Total	Share of females
Estonia	15%	43%	36%	7%	61	25%
Hungary	0%	0%	100%	0%	32	48%
Norway	57%	14%	29%	0%	28	43%
Portugal	40%	6%	48%	6%	52	19%
Spain	60%	0%	35%	5%	20	55%
Czech Rep.	0%	5%	86%	8%	37	27%
Belgium	38%	0%	62%	0%	26	23%
Netherlands	6%	0%	76%	18%	17	6%
Total %	25%	13%	57%	5%	100%	30%
Total N	69	35	155	14	273	79
S.E. impacts	3.3	2.5	2.6	–	259	–
Ind. Resilience	20.8	21.6	19.1	–	259	–
Phys. Diagnosis	22%	49%	34%	–	259	–
Psych. Diagnosis	19%	20%	24%	–	259	–

Finally, comparing the mean scores for the variables measuring socio-economic impacts of COVID-19 and individual psychological resilience, we see statistically significant differences on the first variable ($p < 0.01$) and on individual resilience ($p < 0.01$), when we compare the mean scores for respondents living under different living conditions (i.e. for respondents living in their Home, in Facility/Centre, or on the Street or under temporary conditions).

Comparing respondents' physiological health, [Table 1](#) indicates that 22% of respondents living in their own homes reported "physiological diagnoses" (heart and lung conditions), compared to 49% of respondents living in facilities, and 34% of respondents living on the street or under temporary conditions ($p = 0.060$). Looking at the variable "psychological diagnoses", which include schizophrenia, depression and personality disorder, we see 19% of respondents living in their own homes reported such diagnoses, compared to 20% of respondents living in facilities, and 24% of respondents living on the street or under temporary conditions ($p = 0.774$).

[Table 2](#) shows respondents' age distribution.

[Table 2](#) indicates that 55% of respondents are between 40 and 60 years old. People living in a facility/centre are generally older, with 76% above 50 years old. Corresponding shares for street and temporary facilities and individuals staying at home are 53% and 49%. Thus, we see that respondents living in their own homes are generally younger.

We also asked respondents about their residence status: 74% reported that they are "national citizens" in the country in which they have been sampled; 13% reported that they are an "immigrant with residence permit"; 0,5% reported being an asylum seeker; 6% reported that they are "residing in the country without documentation"; and 5% did not answer this question. Comparing living arrangements, 31% of people living in their own homes were immigrant/asylum seeker/without documentation, while corresponding shares for centre/facility and living on the street were 23% and 16%.

In response to the question "Would you consider yourself part of a minority (e.g. cultural, ethnic, health/disability related, sexual orientation)?" a share of 18% answered yes (17% of those living in their own homes, 3% in Centre/facility, and 21% of those living on the street.)

4.1.2. Exposure to COVID-19 among respondents

The survey asks the respondents several questions about their experiences during the pandemic. We refer to this as their exposure to the pandemic: direct (whether they were infected themselves) and indirect (e.g. whether their friends were infected). A total of 22 of the 273 respondents (8%) answered that they have been infected. The average number of infected acquaintances was 3.9. A total of 20 respondents (7%) reported that they had lost someone close to them due to the COVID-19 pandemic. Finally, when it comes to direct and indirect exposure to COVID-19, respondents from Spain (20%), Portugal (14%) and the Czech Republic (16%) had the highest shares of respondents who had been infected themselves. Respondents in Spain and Portugal reported that between 10 and 13 acquaintances had been infected with COVID-19.

4.1.3. Socio-economic outcomes

We focus on one main measure of socio-economic outcomes in the study: "The pandemic has had a negative effect on my income, access to shelter, food etc." While 32% of the respondents strongly disagreed, 15% disagreed, 14% neither agreed nor disagreed, 19% agreed and 20% strongly agreed. Thus, we may conclude that 39% of the respondents agreed that the pandemic has had a negative effect on their income, access to shelter, food etc. When we compare shares for the different living arrangements, we see that people living in their own homes have the highest level of negative effects on their income, access to shelter and food, with 55% agreeing with the statement, compared with 29% among people living in centres/facilities and 35% agreeing among people living on the street or under temporary arrangements. A Chi-square test indicate that differences between the groups are not statistically significant ($p = 0.143$).

4.1.4. Regression analysis results

In [Table 3](#), we present linear regression analyses examining factors influencing the dependent variable: "The pandemic has had a negative effect on my income, access to shelter, food, etc." The independent variables are included, based on the hypotheses and bivariate correlation analyses (cf. [Appendix 1](#)). First, we include background variables like gender and age, as it is important to control for these. Then, we include living arrangements, which relates to Hypothesis 2. Bivariate analyses (cf. [Appendix 1](#)) do not indicate a correlation between living in a facility and socio-economic outcomes (cf. Hypothesis 2), but living in your own home was significantly correlated. Thus, this variable is included in the regression analyses. The individual resilience scale is also included in the analyses (cf. [Hypothesis 4](#)). We measure exposure (cf. [Hypothesis 1](#)) to COVID-19 based on three countries that we have included as a dichotomous variable (Portugal/Spain/Czech Republic vs the other countries). The reason for this is that these three countries had the highest level

Table 2
Respondents' age distribution in six categories.

	Home	Facility/Centre	Street and temporary	Total
18-29	4%	0%	6%	5%
30-39	18%	15%	13%	14%
40-49	28%	9%	29%	26%
50-59	28%	36%	27%	29%
60-69	12%	30%	23%	21%
70 or above	9%	9%	3%	5%
Total	100%	100%	100%	100%

Table 3
Linear regression analysis for socio-economic outcomes. Standardised beta coefficients.

Variables	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
Gender	-.079	-.071	-.035	-.038	-.039	-.051	-.045	-.024	-.024
Age		-.163***	-.156**	-.142**	-.139**	-.129**	-.130**	-.130**	-.133**
Living in your own home (Home = 2, Other = 1)			.173***	.184***	.180***	.143**	.146**	.118*	.119*
Individual resilience scale				-.125**	-.120*	-.099	-.121*	-.121*	-.121*
Exposure: Portugal/Spain/Czech Rep. (= 2, Other = 1)					.027	.077	.077	.101	.102
Immigrant/Asylum seeker (= 2, National citizen = 1)						.177***	.188***	.130*	.132*
Paid work main income (= 2, Other = 1)							.117*	.077	.075
Social benefits main income (= 2, Other = 1)								-.180***	-.179***
Physical health									.014
Adjusted R ²	.002	.025	.050	.062	.059	.084	.093	.115	.112

*p < 0.1, **p < 0.05, ***p < 0.01.

of respondents who had been infected themselves, and high levels of infected acquaintances of respondents. We also control for the variable “Immigrant/Asylum seeker vs National citizen”, as we found a relationship between this variable and socio-economic outcomes (cf. Appendix 1). The same applies to the variables measuring different types of income. Finally, we also include the variable physiological disease (cf. Hypothesis 3).

First, the table indicates that respondents report decreasing negative economic outcomes with increasing age. This indicates that younger respondents are more vulnerable to negative socio-economic outcomes of the pandemic.

Second, living in your own home is related to more negative socio-economic outcomes (than living in a facility or on the street). This could be due to the pandemic reducing economic activities more for people living in their own homes than for the two other groups.

Third, individual psychological resilience is related to lower negative socio-economic outcomes of the pandemic, indicating that people who see themselves as mentally strong during adversities report less negative socio-economic outcomes.

Fourth, the variable “Immigrant, asylum seeker without documentation” contributes positively and significantly, which means that these respondents are more likely to experience negative socio-economic outcomes related to the pandemic.

Fifth, having paid work as the main source of income contributes positively and significantly to negative socio-economic outcomes in Step 7, until social benefits as main income is included. Paid work refers to both formal and informal paid work. This indicates that this work has been lost for some of these respondents during the pandemic.

Sixth, mainly relying on social benefits contributes negatively and significantly to negative socio-economic outcomes, indicating that respondents relying on social benefits during the pandemic had a more secure source of income, which has not been affected by the pandemic in the same way as paid work has been.

The adjusted R² value indicates that the model for the general sample explains 11% in the dependent variable. This is relatively low, indicating that most of the variation in the dependent variable is unexplained.

Finally, we see that living in a country with a high COVID-19 infection level is not significantly related to negative socio-economic outcomes of the pandemic. We expected that this would contribute significantly as societal restrictions and the need to self-isolate would likely have an impact on economic activities, but this hypothesis was not supported by the data. Additional analyses also indicated that neither physical disease (e.g. heart and lung conditions) nor psychological diseases (e.g. depression, personality disorder, schizophrenia) were significantly related to negative socio-economic outcomes of the COVID-19 pandemic.

4.1.5. Free text answers

The survey includes an open free text question, focusing on respondents’ biggest problem (if any) during the pandemic: “Since the

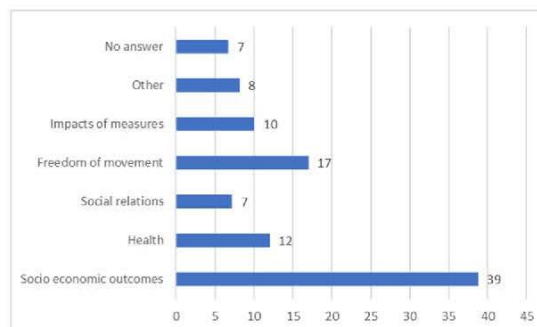


Fig. 1. The biggest causes for problems since the outbreak of the pandemic in March 2020. Result of thematic analysis of free text answers, based on 204 answers. Per cent.

outbreak of the pandemic in March 2020, what has caused the biggest problem for you?" 204 out of 273 respondents replied to this question, indicating that 75% of the respondents answered this.

After reading through the free text answers, we identified five main themes that we have included as categories: "Socio-economic outcomes", "Health", "Social relations", "Freedom of movement", and "Impact of measures". In addition, we have included two general categories, "other" and "no answer". The main categories have also been divided into subcategories. Fig. 1 shows the main results.

When respondents were asked about what had caused the biggest problem for them following the outbreak of the pandemic, 39% replied "some sort of socio-economic outcome," followed by "freedom of movement," "(physical/mental) health," and "impacts of measures". Typical freedom of movement replies were e.g. "I can't leave the house", "That I cannot go out and come back", and "Confinement". Typical health replies were e.g. "Psychological stress", "Fears of illness and what will happen", and "Fears of hospitalisation". Typical impact of measure replies were e.g.: "The closure of shops and activities", and "Wearing a mask". Typical social relations replies were e.g. separation from loved ones, such as parents and children.

The 68 answers related to socio-economic outcomes can be divided into four subcategories: "Economy" (22%), "Work" (65%), "Shelter" (9%), and "Food" (4%). Typical replies in the "Economy" category were e.g. "Lack of money and what this leads to", and "Coping with the family's financial situation". Typical replies in the "Work" category were e.g. "Unemployment", "Work; no traveling from or to work", and "Less or no work; couldn't do as much work as previously". Typical replies in the "Shelter" category were e.g. "Homeless", and "Looking for accommodation and work". Typical replies in the "Food" category were e.g. "Finding food and getting access to hygiene", and "Food, house and job".

4.2. Results of interviews and workshops with staff of social care organisations

The results of the qualitative interviews and workshops help us to better understand the socio-economic outcomes of the COVID-19 pandemic (Research question 1) and how they manifested among clients with different living arrangements (Hypothesis 2). We analysed data from 32 semi-structured interviews and 5 workshops with care organisations' representatives. The number of participants in the workshops varied between 2 and 9, with the exception of one workshop in Estonia where 32 representatives participated (cf. Appendix 3). The outstandingly high participation rate in the August 25, 2021 Estonian workshop was due to the organisation's own initiative to engage more of their employees across multiple branches in the workshop.

Based on the qualitative data, more in-depth descriptions of and explanations for the socio-economic outcomes could be established. The provision of many important support services has changed during the pandemic. Particularly during the first wave, organisations suspended the provision of hygiene facilities (toilets, showers, laundry), activities (newspapers, TV, Wi-Fi, books), and warm rooms (with the possibility to use a kitchen and make tea) as a response to government restrictions. Overall, many countries (Germany, Czech Republic, Estonia, Lithuania, Italy, and Hungary) faced a significant increase in demand for both food aid and accommodation. These changes have had varied impact on different types of clients of care organisations, and have hit the psychologically vulnerable clients especially hard.

4.2.1. Socio-economic outcomes for clients living in their own home

In most countries, homeless and other materially or psychologically fragile clients still staying at home lost their usual access to day centres and their services - psychological support and counselling from the staff, social interaction with other clients, and access to the internet and other entertainment as well as washing machines and showers. Households who were borderline coping before the pandemic - being able to take care of themselves and pay for accommodation, needing none or only some kind of support from social services - fell below the subsistence level, and became so-called "new clients" of soup kitchens. Often, these new clients faced the shame of asking for help and the helplessness of being in a foreign country (for more, see Ref. [28] article on different approaches to 'vulnerability' in eight European disaster management systems). Due to these "new clients" these organisations experienced a drastic surge in demand for food and clothes in particular. A representative of a food bank in Lithuania shared their experience: „People have lost jobs – the main source of income, some have even lost social support payments. For this reason, demand for food support has increased and there was a significant group of people who were forced to ask for it for the first time in their lives” (Interviewee 25, July 08, 2020).

Certain client groups served by organisations (migrants' day centre) were considered by the local government only after the second wave of the pandemic (Norwegian workshop, June 28, 2021). The pandemic aggravated the situation for some groups e.g. migrants, because they were unable to receive the same services (attendance and emergency support) due to their different legal status in the country (e.g. Norway).

4.2.2. Socio-economic outcomes for clients living in facilities

Clients of residential centres like rehabilitation or night shelters that reorganised to full provision felt the safest and best taken care of. Restrictions of movement concerned residents of rehabilitation and transitional housing centres, both outside and inside the facilities. However, basic material sustenance was granted for them and there was no change in their living conditions. In several cases, staff described how they helped residents to get their usual products (e.g. gathering orders and shopping for clients) and even provided cigarettes or some alcohol to individuals with severe addictions. On the downside, residential shelters stopped accepting new clients.

4.2.3. Socio-economic outcomes for homeless clients

Frustration appeared among the homeless because they lived the paradox of not being allowed to be on the street and having nowhere to stay, as they were often fined and removed by the police in Czech Republic and Hungary. This also occurred in Italy for the migrant groups living on the street. Due to new virus containment measures, there was a lack of space in shelters to which such clients could turn. A care centre representative in Budapest, Hungary, explained the space constraints: "At one point we had to recommend clients to stay on the street, forest or any outdoor areas since it was much safer there," (Interviewee 16, June 25, 2020).

The surge in demand for homeless shelters was solved by opening emergency shelters in some countries (Germany, The Netherlands, Czech Republic), while some homeless people had to stay on the streets in other countries due to overcrowded shelters or camps (Italy, Hungary). Due to the closing down of shops and restaurants and less activities on the street due to self-isolation, some homeless people lost their sources of income from begging and faced a temporary decrease of food sources from the leftovers of shops and restaurants. Due to the increasing numbers of individuals with economic problems, and the halt of existing sources for homeless people such as begging and food leftovers from restaurants, the need for food support doubled or even tripled in some cases. "They could not stay anywhere and their opportunities to make some money ... As well as meeting places, were no longer available," a care organisation representative from Cologne explained (Interviewee 11, June 08, 2020).

The clientele of day centres were denied access to the facilities when the centres had to close their doors, thus leaving many homeless people without the possibility of staying in a warm room, cook a meal, or use hygiene facilities (toilet, shower, washing machine). Interviewees also pointed out challenges in helping homeless people with clothes when they couldn't come to the premises of day centres.

5. Discussion and concluding remarks

5.1. Socio-economic outcomes and factors influencing them

Oftentimes, marginalised groups - such as the homeless, people with psychiatric or substance abuse disorders, and minorities - end up paying a higher price in the face of disasters due to pre-existing conditions that influence their vulnerability [1,23]; Morris, 2020). Existing research indicates that the COVID-19 pandemic has also led many marginalised groups to experience disproportionate hardships [2-4]. The socio-economic struggles faced by the marginalised are, for example, unemployment and job insecurity, as well as restricted access to shelter, food aid, washing facilities, and other essential services [26,28]. In this paper, we explored the socio-economic outcomes of COVID-19 for the marginalised by addressing a wider spectrum of marginalised groups, including those living in their own home or in long-term care shelters.

Our results show that 39% of the respondents agreed that the pandemic has had a negative effect on their income, access to shelter, food etc. When respondents were asked in a free text question about what has caused the biggest problem for them after the outbreak of the pandemic, the most prevalent answer was related to socio-economic outcomes (39% of the respondents). The most common socio-economic outcome was loss of work (65%). The results from our interviews corroborate that the pandemic brought about substantial socio-economic hardships due to loss of work or income and restricted access to services. Due to the pandemic restrictions, social care organisations had to cease or reorganise many of their services, limiting their clients' access to socio-economic support - for example, access to hygiene facilities and warm rooms during daytime was denied. This proved to be a particular problem for those relying on night shelter or day centre services or other sorts of socio-economic aid, as access to them was either cut short or rearranged to serve only a limited number of existing clients 24/7 to meet strict social distancing measures. Although residential facilities mostly continued to provide services to their usual extent, they did not accept new clients during periods when strict quarantine measures were effective.

Following on from this, we explored the factors influencing socio-economic outcomes. Our first hypothesis was that respondents who report higher levels of exposure to COVID-19 also report more socio-economic losses related to the COVID-19 pandemic [37]; Aiyegbusi et al., 2021). Many of the previous findings suggest that the higher the exposure to COVID-19 [37,38] the bigger the socio-economic losses. Moreover, it can be especially challenging for the marginalised, whose type of employment might not allow them to work from home, take paid sick leave, or self-isolate upon contracting COVID-19 [14,36]. Results from the multivariate regression analysis do not confirm this. Negative socio-economic outcomes were not significantly correlated with living in Portugal/Spain/Czech Republic, which are the countries with the highest level of COVID-19 infection. However, the free text results contradict this, which indicates that our measure of direct/indirect exposure to COVID-19 should take more aspects into consideration. As noted, when respondents were asked what had caused the biggest problem for them following the outbreak of the pandemic, the most prevalent answer was related to socio-economic outcomes, and especially loss of work. This is in accordance with the research of [37] and Aiyegbusi et al. (2021) who focus on the inability to work due to infection. Our (free text) results also indicate that restrictions on economic activity are the main cause for negative socio-economic outcomes of COVID-19.

Our second hypothesis was that, compared to those living in their own home, individuals living in different types of facilities (e.g. homeless shelters or longer-term rehabilitation centres) can be expected to bear more negative socio-economic outcomes [40]. Our results are contrary to this, as the living conditions leading to higher exposure also provide individuals with more security. Results from the multivariate regression analysis indicate that living in your own home contributes significantly to negative socio-economic outcomes, controlled for several key variables. Results indicate that the socio-economic outcomes were most severe for people living in their own homes, with 55% agreeing, compared to 29% in facilities/centres, and 35% among respondents living on the street and in temporary arrangements. This is further proven by our qualitative findings - the high risk of exposure in residential centres (many of which underwent COVID-19 outbreaks) did not have as big an economic effect on their existing clients as they continued to receive most services as before, except for joint activities and one-on-one counselling. In our results, it seems that this is related to the type of income that the different groups rely on.

Our multivariate regression analyses indicate that having (in)formal paid work as the main source of income is related to negative impacts from the COVID-19 pandemic. It seems that (in)formal paid work is more common among people living in their own homes, while social benefits are a more prevalent type of income among people living in facilities/centres. The former was more negatively affected by the pandemic. It could also be concluded from our interviews with social care organisations that clients of residential facilities were mostly granted their basic sustenance even during the pandemic. In accordance with this, the regression analyses

indicate that having social benefits as the main source of income “protects” respondents from negative socio-economic outcomes. Dense living arrangements often coincide with precarious frontline work in marginalised individuals (or people living in dense facilities) [40]. In our research, it seems that source of income was a more important explanatory mechanism behind poor socio-economic outcomes than physical living conditions.

Our third hypothesis was that respondents who report lower perceived health scores and/or more diagnosed chronic illnesses also report more socio-economic outcomes related to the COVID-19 pandemic [42]; Hacker et al., 2021). Singh et al. (2021) described in their article how the chronically ill amongst marginalised populations have struggled financially during the pandemic, which in turn could be explained by the health-poverty trap described in the article by Ref. [44]. Our finding, that individuals with lower health scores did not face as many negative socio-economic outcomes, however, contradicts this. Neither physical diseases (e.g. heart and lung conditions) nor psychological diseases (e.g. depression, personality disorder, and schizophrenia) were significantly related to negative socio-economic outcomes of the COVID-19 pandemic. Possible reasons for this could be that the respondents with the most severe physical illnesses by and large were clients in facilities/centres. These clients were generally older and had more physical health problems, yet they did not experience socio-economic loss due to the continuation of long-term services. It is also possible that the stringency of measures applied to contain the spreading of the virus contributed to the socio-economic outcomes more than actual exposure or infection rates of COVID-19 did.

According to our fourth hypothesis, respondents who report lower psychological resilience scores would also report more socio-economic losses related to the COVID-19 pandemic [49]; Levy & Cohen-Louck, 2021). Our results support this hypothesis, as we found individual psychological resilience to “protect” respondents from negative socio-economic outcomes. It was also mentioned in qualitative interviews, that many of the psychologically vulnerable clients were relying on different services provided by centres and were hit hard by the temporary cessation of these services.

Finally, our multivariate regression analyses also indicate that the following variables are related to negative socio-economic outcomes following from the COVID-19 pandemic: young age and being an immigrant/asylum seeker or residing in the country without documentation. The latter was also substantiated by our qualitative data – it was brought up by care organisation representatives that migrants and asylum seekers did not have equal access to social care services. Interpreting our results, we should also bear in mind the possibility that some of the observed relationships may be due to unmeasured third variables. We have, however, controlled for several key variables in the present study, e.g. living arrangements, physical and psychological health, individual resilience, type of income, age, exposure to COVID-19 (measured as the infection level in the respondent’s own country). The latter is also measured as the number of infected acquaintances and whether respondents have lost someone close to them due to COVID-19. The latter two variables were not significantly related to socio-economic impacts. This indicates that, in addition to the variables in the multivariate regression analysis, we have also examined potential bivariate relationship between the dependent variable and possible influencing variables.

Our results indicate that individuals working unofficially are hardest hit during crises that cause economic downturns. To protect marginalised individuals from unofficial forms of employment, recognition of the insecurities of unofficial jobs and more stringent control on the enforcement of employment tax law is needed. Both material and human resources need to be made available to address their socio-economic needs at the outset of crises like the pandemic. Eligibility criteria of access to services, allowances, and social benefits in extreme situations like disasters must be revisited, as these may put a devastating financial stress on groups like migrants, asylum seekers, and individuals without documentation. Furthermore, good collaboration and preparedness should be established between state and non-governmental social care and unemployment support to facilitate a swift response to sudden surges in demand for care and re-employment.

5.2. Limitations of the study and future research perspectives

The data used for this analysis was gathered across eight different European countries. It is important to note that the purpose of the analyses was not to make a comparison of the countries, but rather to provide a basis for understanding socio-economic outcomes for the marginalised and the factors influencing these. A methodological weakness of the quantitative data is the relatively small sample of respondents that could be collected amidst the pandemic. The study includes 273 respondents, but the number is low in several of the countries. Thus, we recommend that future studies examining these themes should include larger samples of socially marginalised people. Additionally, future studies should also include people that are not marginalised to establish robust conclusions, e.g. concerning the more or less severe impacts among socially marginalised groups. Data collection during the pandemic has, however, been challenging, especially when dealing with marginalised people facing difficulties due to the pandemic. Data collection was also postponed, in line with all other activities in society, when infection levels peaked. Another potential challenge related to the small sample is the issue of representativity. With the low number of respondents, it is reasonable to ask whether they are in fact representative of their different groups. Unfortunately, it is impossible to calculate response rates due to the method of survey distribution. The issue of representativeness of the sample is a challenge that we have tried to overcome with more qualitative interviews with the staff of care organisations to obtain more contextual understanding of the socio-economic challenges encountered by their clients.

Moreover, although it may be difficult to draw conclusions about the importance of the national context due to the low numbers in several countries, one of the main purposes of including the national variable is to control for the level of infection (and thus restrictions, impacts etc.) in the studied countries. Our current design allows for this, as we combine the three countries with the highest infection levels into one “countries with high infection level” variable, which includes two values: 1) All the other (5) countries in the sample and 2) Portugal, Spain and Czech Republic.

Another methodological weakness of the study is that the categories of socially marginalised people are unevenly distributed between the national samples. However, while previous studies of socially marginalised groups tend to focus only on people living on

the street [18], the unique contribution of the present study is to include a broader spectrum of socially marginalised people, ranging from people living in their own homes to people living on the street.

Therefore, further research into factors contributing to negative socio-economic outcomes and the ways they could be mitigated is needed. We also call for policy research and action to develop extensive measures for reducing the disproportionate negative effects on marginalised groups in the face of a crisis. It is important that future policies and studies take into consideration the broader spectrum of marginalised people, including hard-to-reach populations.

Finally, it is also important to note that future studies should make distinctions between the various socio-economic impacts that we focus on in the present study, i.e. income, access to shelter and food. Our combination of these into one question was based on [20] but it would increase the specificity of future studies to discern more clearly between the impacts of these concrete types of impacts, especially when different types of marginalised groups are compared. This is indicated by the free text answers, which to a large extent compensate for the general survey question, as these answers are more nuanced when it comes to impacts. More precise information about different types of impacts might also lead to more informed mitigation measures.

6. Conclusions

Our study indicates that the COVID-19 pandemic has brought about considerable socio-economic outcomes amongst marginalised groups. The most common socio-economic outcome that was mentioned was loss of work (65%). Multivariate regression analyses indicate that the following variables are related to negative socio-economic outcomes following from the COVID-19 pandemic: young age, being an immigrant/asylum seeker or residing in the country without documentation, living in your own home, and having (in) formal paid work as the main source of income. Clients living in their own homes suffered the most drastic financial losses and were also oftentimes first-time clients of care services. Individual psychological resilience and having social benefits as the main source of income can be considered as “protecting” respondents from negative material impacts.

It is important to consider the needs of these groups when planning future measures, and to be prepared to respond to a sudden surge in demand for care and re-employment as soon as it occurs. We recommend lowering the eligibility criteria to access services, allowances and social benefits in future crisis situations to ensure those in need are not being left unattended and to avoid a rapid increase in poverty, food insecurity, and homelessness rates, along with the extra costs these place on society. The socio-economic outcomes of crises for marginalised groups are a complex issue, and therefore further research is required to create a more thorough understanding of the broader spectrum of vulnerability and marginalised groups; the factors contributing to negative socio-economic outcomes; and more extensive policies to mitigate negative impacts.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

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Data availability

The data that has been used is confidential.

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Appendix

Appendix 1 shows bivariate correlation analyses (Pearson’s correlation coefficient) between key influencing variables and negative COVID-19 influence on income, shelter, food etc. The Pearson’s correlation coefficients in the table measure the strength of the association between two variables and the direction of the relationship. If the relationship is not statistically significant, we write n. s. For the other values, *** means statistically significant Pearson’s correlation at the 1% level (p=<0.01), ** means (p=<0.05), while * means (p=<0.1). As we see from Appendix 1, the statistically significant Pearson’s R values are low positive and low negative correlations.

Appendix 1

Bivariate correlation analyses testing hypotheses about relationships between key influencing variables and negative COVID-19 influence on income, shelter, food etc.

Background variables		COVID influence on income, shelter food
	Age	-.174***
	Sex (Male = 2)	n.s.
	Immigrant, asylum seeker, without documentation (=2)	.189***
	Consider yourself a minority (=2)	.127**

(continued on next page)

Appendix 1 (continued)

		COVID influence on income, shelter food
Exp.	Have been infected themselves (Yes = 2)	n.s.
	Portugal/Spain/Czech (=2, others = 1)	n.s.
Income	Formal paid work as main income (=2, other = 1)	n.s.
	Informal paid work as main income (=2, other = 1)	.123**
	Social benefits as main income (=2, other = 1)	-.241***
Living arrang.	Living on the street or temp. Arrangement (=2, other = 1)	-.119**
	Living in facility or centre (=2, other = 1)	n.s.
	Living in own home (=2, other = 1)	.197***
Psych. And phys. Health	Health assessment	n.s.
	Physical diseases („risk group“)	n.s.
	Psychological diseases	n.s.
	Individual resilience scale (3 items)	-.126**

Appendix 2

List of interviews

No	Place	Time	Institution/Organisation
1	Prague, Czech Republic	May 29, 2020	TSA, national director of social services
2	Prague, Czech Republic	June 24, 2020	TSA social services centre
3	Tallinn, Estonia	May 29, 2020	TSA alcohol rehabilitation centre
4	Tallinn, Estonia	June 08, 2020	TSA day centre
5	Tallinn, Estonia	June 16, 2020	Department of social welfare, one of Tallinn district governments
6	Tallinn, Estonia	June 17, 2020	Welfare Centre, night shelter and resocialisation unit
7	Tallinn, Estonia	June 30, 2020	Tallinn Social Work Centre, resocialisation accommodation,
8	Helsinki, Finland	June 09, 2020	TSA temporary housing for homeless
9	Helsinki, Finland	June 01, 2020	TSA social service centre, social counselling
10	Tampere, Finland	May 28, 2020	TSA day centre for economic and social support
11	Cologne, Germany	June 8, 2020	The Salvation Army (TSA), Territorial Social Program
12	Hamburg, Germany	June 19, 2020	TSA homeless shelter
13	Hamburg, Germany	June 26, 2020	German Red Cross facility
14	Hamburg, Germany	July 03, 2020	German Red Cross
15	Budapest Hungary	June 24, 2020	TSA, temporary shelter, rehabilitation hostel, day centre
16	Budapest, Hungary	June 25, 2020.	The Budapest Methodological Centre of Social Policy and Its Institutions (BMSZKI), homeless service provider
17	Budapest, Hungary	June 19, 2020	Hungarian Red Cross, Department of Disaster Management
18	Budapest, Hungary	July 01, 2020	The Hungarian Charity Service of the Order of Malta, Central Hungary
19	Rome, Italy	June 05, 2020	TSA homeless shelter
20	Rome, Italy	July 16, 2020	Day centre and reception services “Binario 95”
21	Bolzano, Italy	July 16, 2020	Day care centre “La Sosta der Halt”
22	Rome, Italy	July 23, 2020	24-h reception centres “Gardenie” and “Primavera”
23	Klaipėda, Lithuania	May 28, 2020	TSA day centre for homeless
24	Klaipėda, Lithuania	June 30, 2020	Social Workers Association
25	Vilnius, Lithuania	July 08, 2020	Food bank, collects and distributes food aid
26	Oslo, Norway	June 09, 2020	TSA housing facility for 20 homeless people with drug or alcohol addiction
27	Oslo, Norway	June 11, 2020	TSA day centre for active users of drugs or alcohol
28	Oslo, Norway	June 12, 2020	Substance abuse care
29	Colares, Portugal	March 31, 2021	TSA, residential centre for materially disadvantaged
30	Lisbon, Portugal	April 14, 2021	TSA, Centre for Homeless People
31	Lisbon, Portugal	April 14, 2021	TSA, Centre for Families and Needy People
32	Groningen, The Netherlands	July 13, 2020	TSA day centre for homeless

Appendix 3

List of workshops

Nr	Country	No. Of participants	Date
1	Belgium	2	September 30, 2021
2	Estonia	4	June 15, 2021
3	Estonia	32	August 25, 2021
4	Hungary	9	September 20, 2021
5	Norway	7	June 29, 2021

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