

Relationship between discrimination and memory in older adults in Central and Eastern Europe

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Background

- Discrimination and persecution studied in USA, especially the importance of experiencing discrimination by Black people
- Discrimination and political persecution also occurred in other regions and time periods
- Central and Eastern European (CEE) region largely understudied and history of persecution during WWI, WWII and Communist Era
 - Post-war displacements & property confiscation, Nazi & Soviet occupations, nationalization/collectivization of property
 - Many older adults and their parents affected (individual and inter-generational trauma)
 - Possible impact on SES and health but limited evidence to date

(Kesternich et al, 2014; Bohacek et al 2011; Caudill et al 2019)

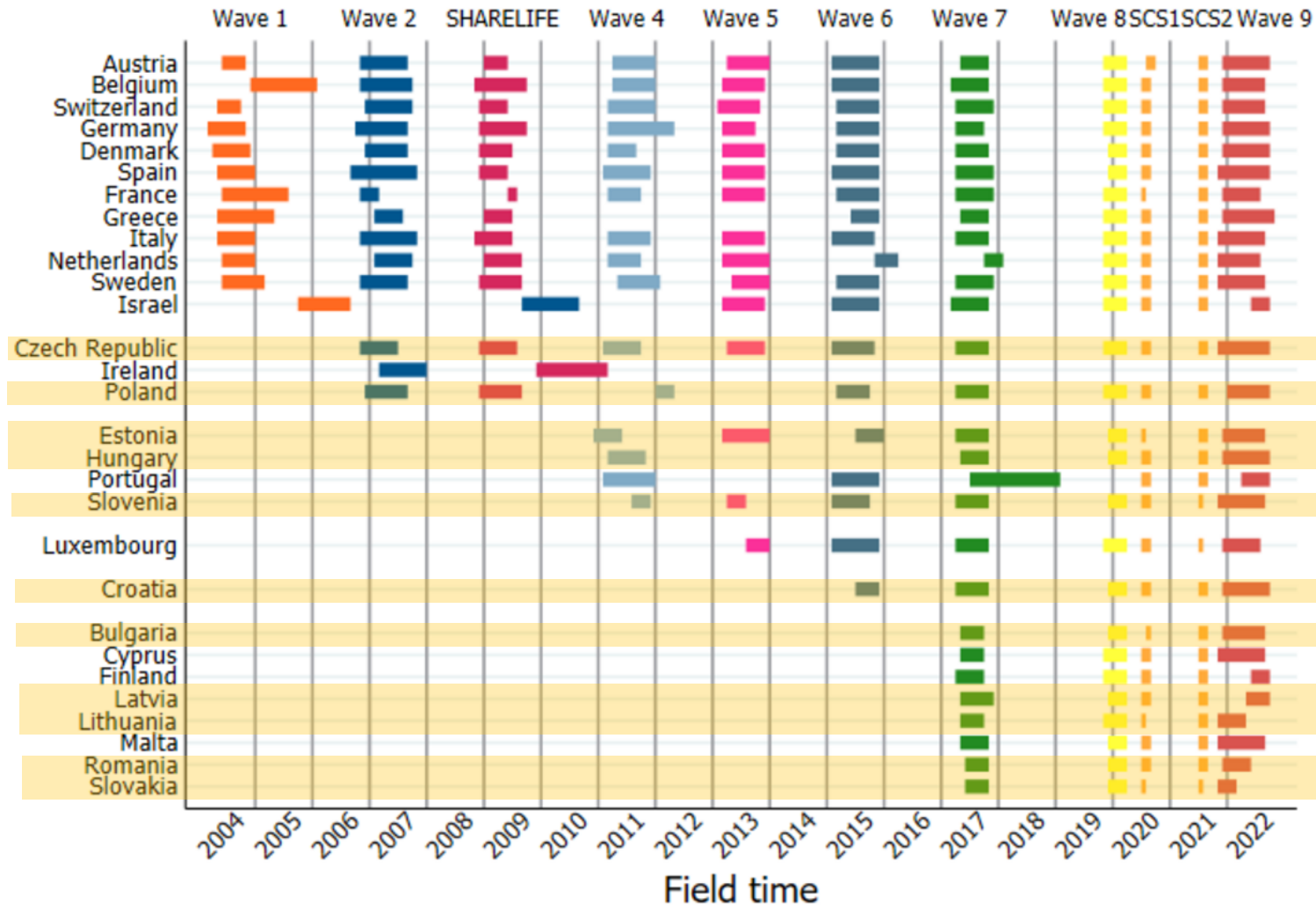
Aims of the study

What is the association of **parental experiences** of persecution and discrimination with children's cognitive health in old-age?

What is the association of **own experiences** of persecution, discrimination and dispossession with cognitive health in old-age?



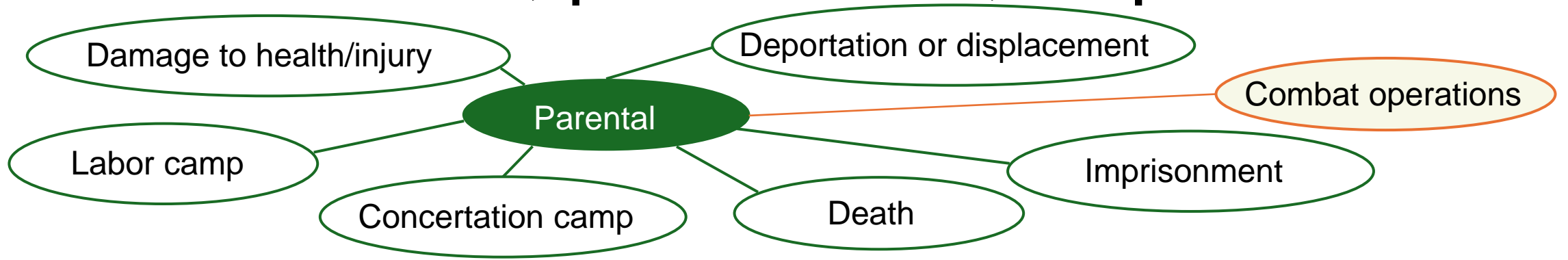
Data: SHARE/SHARELIFE



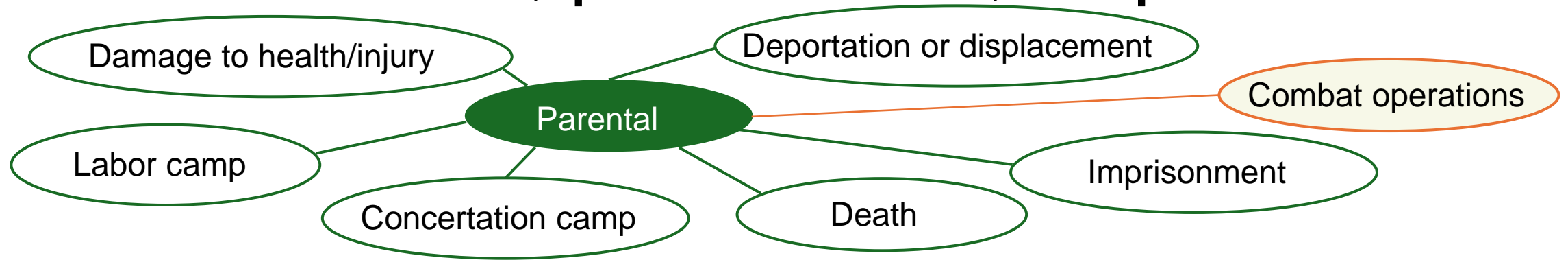
- Population-based
- Older adults
- CEE countries joined 2-7th wave
- Wave 3 & 7 life-course exposures
- Using 7th wave; 11 CEE countries
- n=31,612 respondents



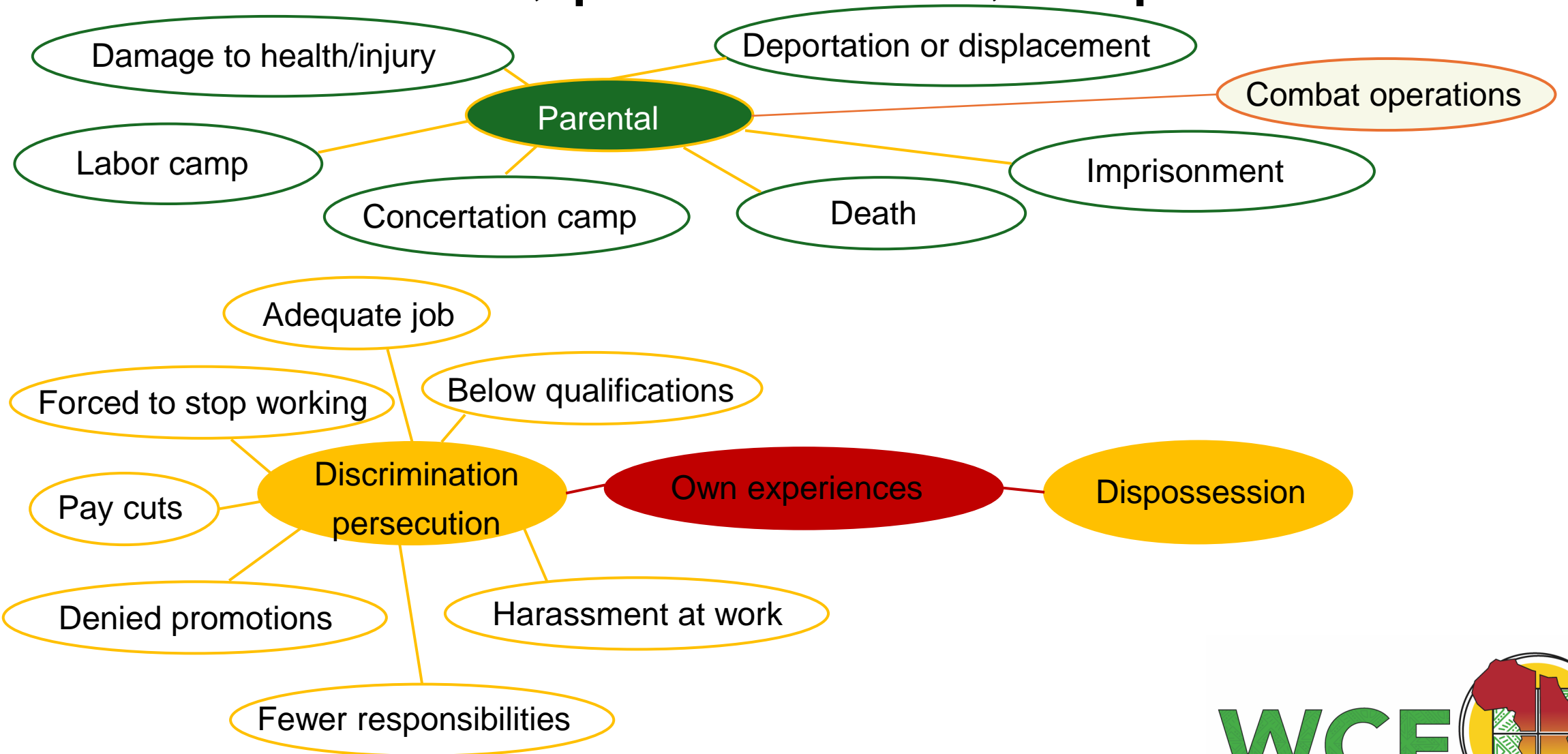
Discrimination, persecution, dispossession



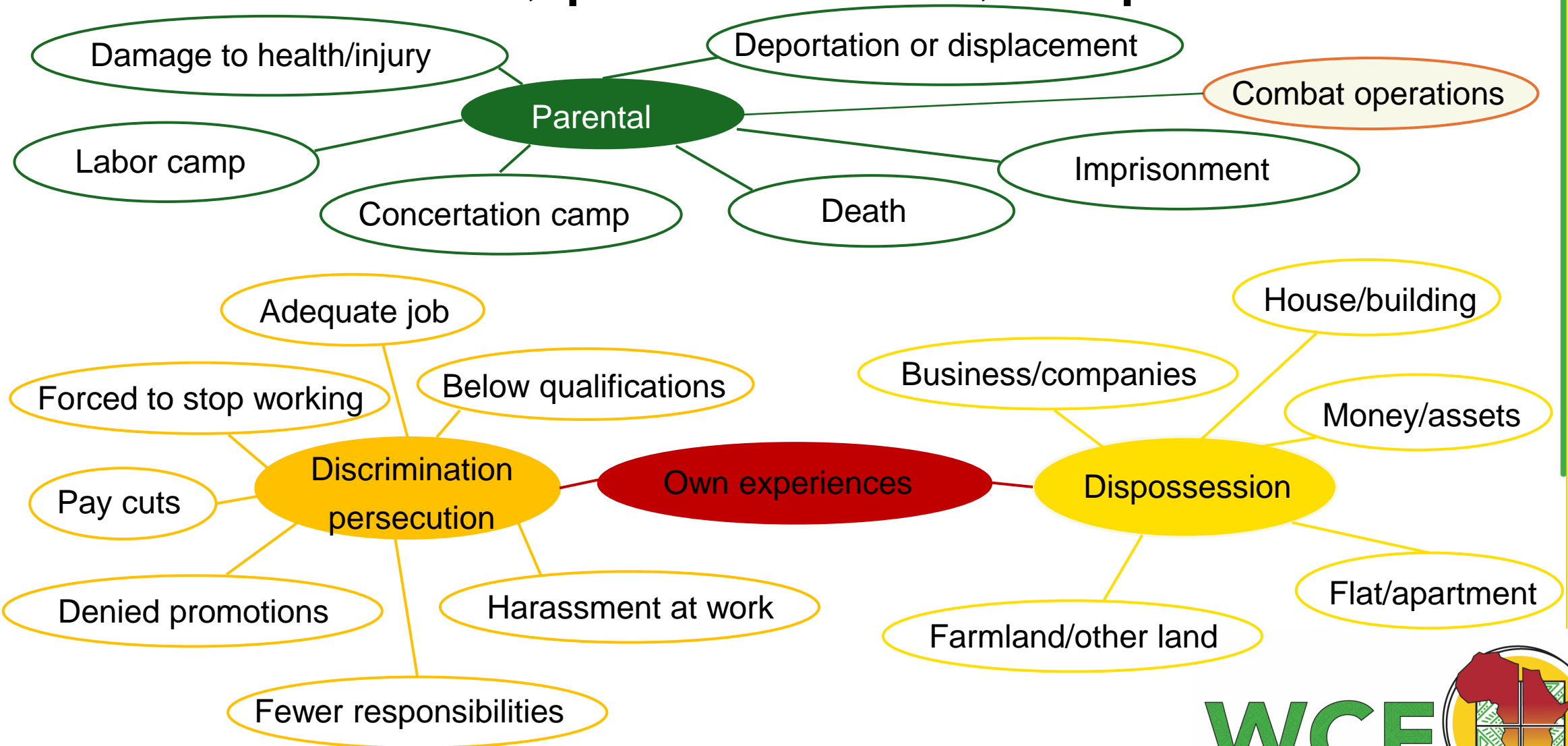
Discrimination, persecution, dispossession



Discrimination, persecution, dispossession



Discrimination, persecution, dispossession



Outcome: memory composite

Immediate recall (0-10)

Read list of 10 common words
Recall the words right after in any order
Measures short term memory
z-score



Delayed recall (0-10)

Break of 5 minutes (completing other parts of questionnaire)
Asked to recall same 10 words
Measures longer-term memory
z-score

Memory composite

Lower memory predictive of cognitive decline and dementia
Decline associated with ability to perform activities of daily living
Changes in memory associated with higher mortality

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Methods: covariates & analysis

- Linear regression models with country fixed effects on complete-case sample (n=21,985)
 - *Model 1*: age, sex, birth cohort groups (WWI, WWII, post-WWII), region (Central Europe, Baltics, Balkan)
 - *Model 2*: + Early life SES (self-reported number of books at home age 10, home crowding at age 10); early life cognitive skills (self-reported math & language at age 10)
 - *Model 3*: + educational attainment (years)
- Propensity score matching to balance covariates

Descriptive results parental exposure

Parental discrimination/persecution: 24% of sample had at least 1 parent exposed

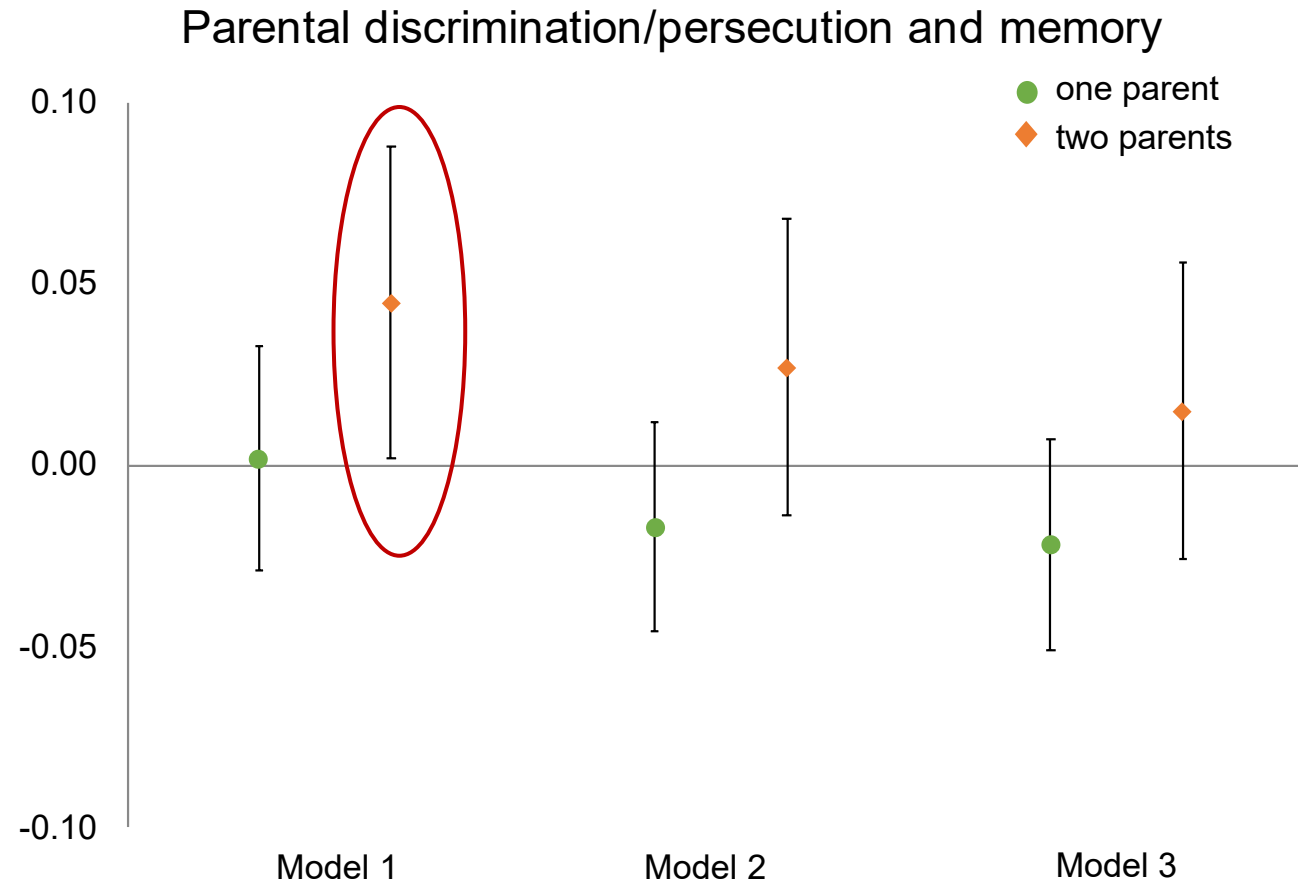
	No parent (n=16,744)	One parent (n=3,626)	Two parents (n=1,615)
Own experience of discrimination, n (%)	1,483 (9%)	824 (23%)	651 (40%)
Age, mean (SD)	65.5 (9.5)	68.7 (9.1)	69.7 (9.2)
Home crowding, mean (SD)	2.4 (1.5)	2.6 (1.8)	2.7 (1.7)

Parental combat: 12% of sample had at least 1 parent exposed

	No parent (n=19,380)	At least one parent (n=2,605)
Own experience of discrimination, n (%)	2,512 (13%)	446 (17,1%)
Age, mean (SD)	66.7 (9.5)	70.0 (8.5)
Home crowding, mean (SD)	2.4 (1.6)	2.7 (1.7)
Years of education, mean (SD)	11.3 (3.3)	10.8 (3.5)



Regression results parental exposures



Model 1: age, sex, birth cohort groups (WWI, WWII, post-WWII), region (Central Europe, Baltics, Balkan)

Model 2: + Early life SES (self-reported number of books at home age 10, home crowding at age 10); early life cognitive skills (self-reported math & language at age 10)

Model 3: + educational attainment (years)

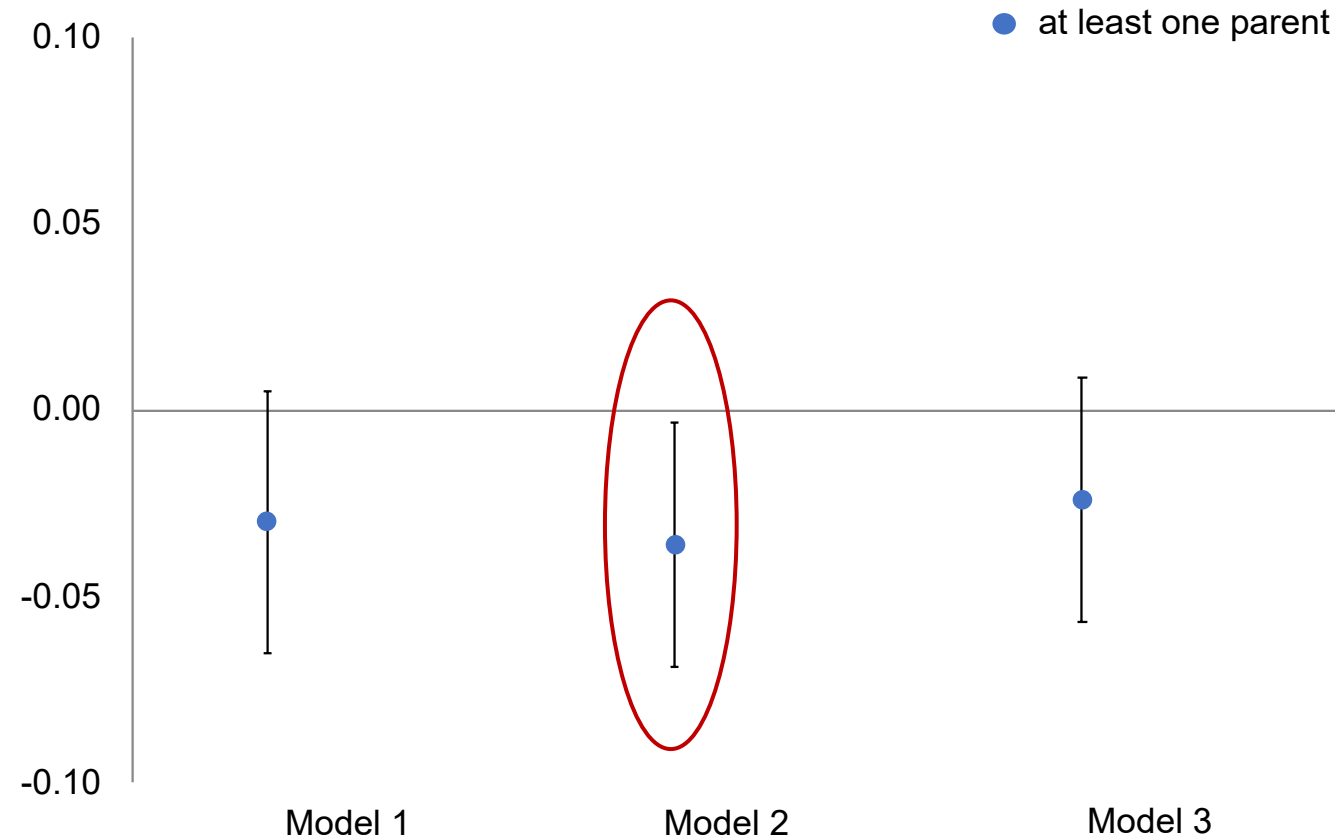
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Regression results parental combat

Parental combat participation and memory



Model 1: age, sex, birth cohort groups (WWI, WWII, post-WWII), region (Central Europe, Baltics, Balkan)

Model 2: + Early life SES (self-reported number of books at home age 10, home crowding at age 10); early life cognitive skills (self-reported math & language at age 10)

Model 3: + educational attainment (years)

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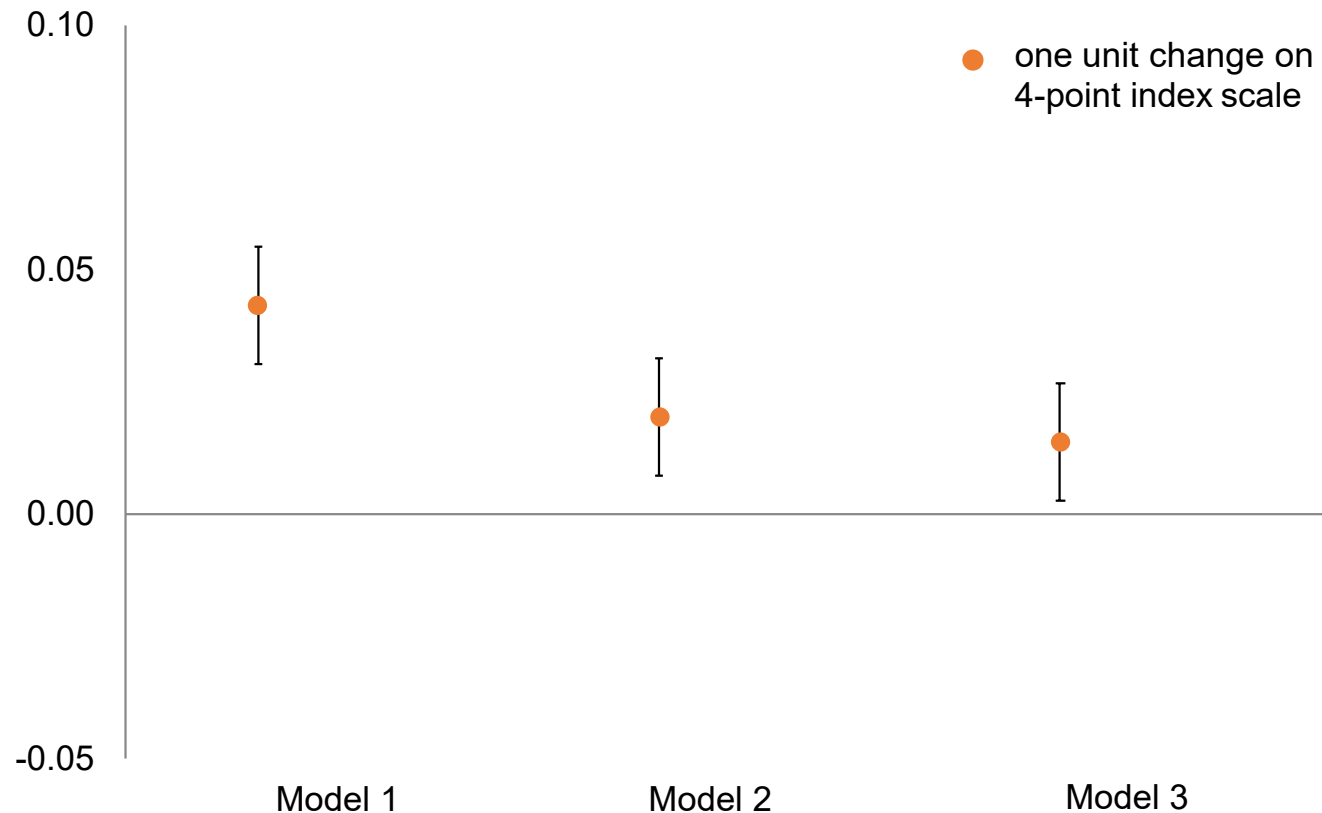
Descriptive results own exposure

Own discrimination/persecution: 13.5% had at least 1 experience

	No experience (n=19,027)	1+ experiences (n=2,958)
Age, mean (SD)	66.6 (9.3)	70.4 (9.9)
100+ books at home, n (%)	2,070 (10.9%)	615 (20.8%)
Better language skills, n (%)	2,239 (11.8%)	530 (17.9%)
Better math skills, , n (%)	2,089 (11.0%)	443 (15.0%)
Years of education, mean (SD)	11.2 (3.2)	11.8 (3.7)

Regression results own exposure

Own discrimination/persecution or dispossession and memory



Model 1: age, sex, birth cohort groups (WWI, WWII, post-WWII), region (Central Europe, Baltics, Balkan)

Model 2: + Early life SES (self-reported number of books at home age 10, home crowding at age 10); early life cognitive skills (self-reported math & language at age 10)

Model 3: + educational attainment (years)

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Conclusions & future directions

Strengths: examining own and parental exposure, dose-response

Weaknesses: cross-sectional, missing data, selection (emigration)

Findings: parental combat associated with **lower** memory
own discrimination associated with **higher** memory

Future directions

mediation via education/SES

additional health outcomes (SRH, physical health)

interactions cohort/region with exposures