

Fostering positive mental health outcomes in preterm born children: pathways to resilience

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OBJECTIVES

Children born preterm (<37w gestation) are at increased risk of mental health problems and their mental health outcomes have not improved in the past decades.

1. To determine the degree of mental health resilience in preterm born children
2. To identify modifiable factors at individual, parent-child, family, peer group, and neighbourhood levels associated with resilience
3. To explore differential effects of factors based on sex and contextual adversity

METHODS

Samples

Bavarian Longitudinal Study (BLS)



- Birth year: 1985-1986 (Germany)
- 574 preterm born children (<37w gestation)
- Mental health at 8 years

Millennium Cohort Study (MCS)

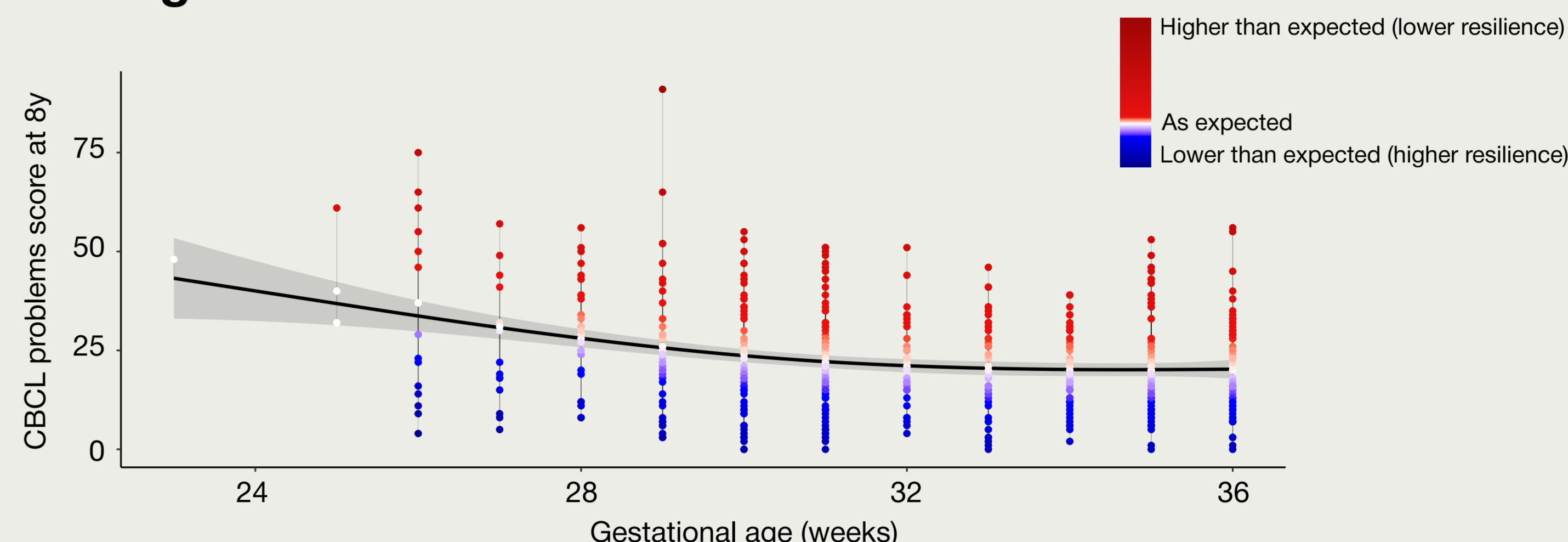


- Birth year: 2000-2002 (UK)
- 985 preterm born children (<37w gestation)
- Mental health at 7 years

Variables

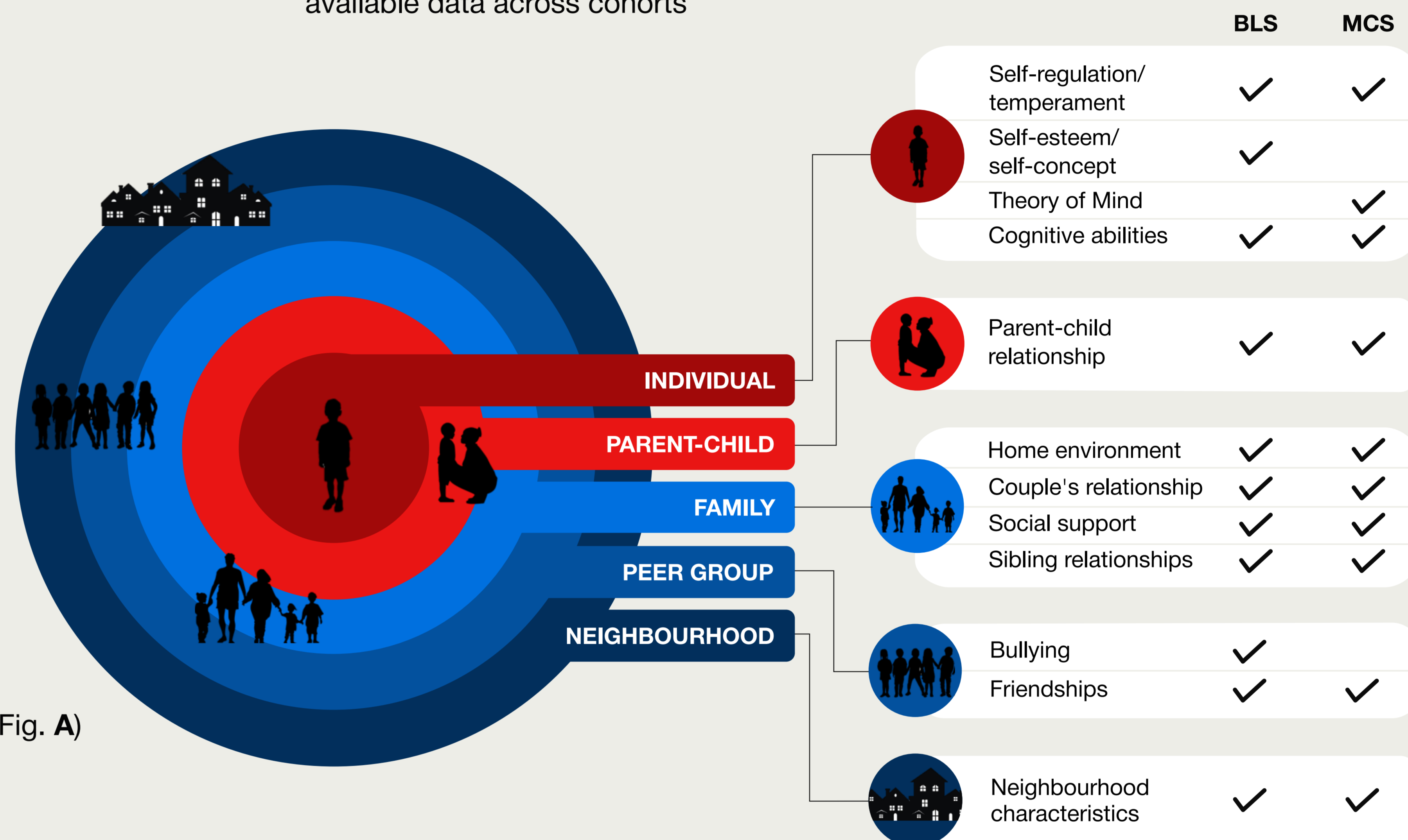
- Resilience: residuals of relation between GA and mental health (Fig. A)
- Modifiable multisystem factors (Fig. B)
- Moderation and mediation effects: sex, contextual adversity

A. Degree of mental health resilience



B. Multisystem protective, promotive, and risk factors

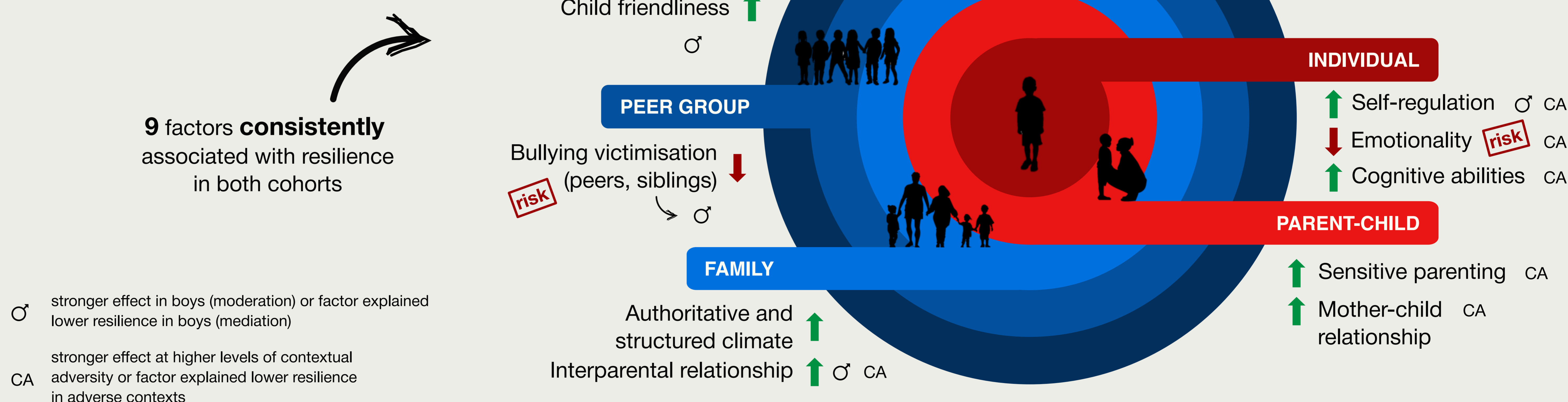
available data across cohorts



RESULTS

- 9 factors across multisystem levels were consistently (in both cohorts) associated with resilience
- Only regulatory abilities had an independent effect
- Collectively, factors explained 28-41% of the variance in resilience
- Lower levels of promotive factors in boys and adverse contexts, which were associated with lower resilience

Promoting mental health resilience
in preterm born children



IMPLICATIONS

- The findings could inform a layered intervention/prevention approach
- Layer 1: for all preterm born children, targeting *promotive* factors
 - Layer 2: for specific risk groups, targeting *protective, mitigating, and exacerbating* factors
 - Identification of difficulties in relevant factors could guide personalised support
 - Multiple systems involved: follow-up of the family instead of individual child

CONCLUSION

- Modifiable protective, promotive, and risk factors across multiple systems explain a substantial portion of variation in mental health resilience
- High potential for improving mental health outcomes after preterm birth
- Regulatory abilities, interparental relationship, and bullying seem particularly promising targets for intervention/prevention
- Specific needs of vulnerable groups need to be addressed