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(Trans)local social capital and its role in enhancing adaptation to coastal hazards: Evidence from urban coastal communities in Indonesia

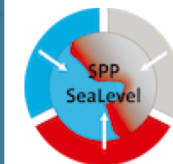
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Institute of Geography | University of Cologne | Konstantin Gisevius | 12.06.23

DFG Deutsche
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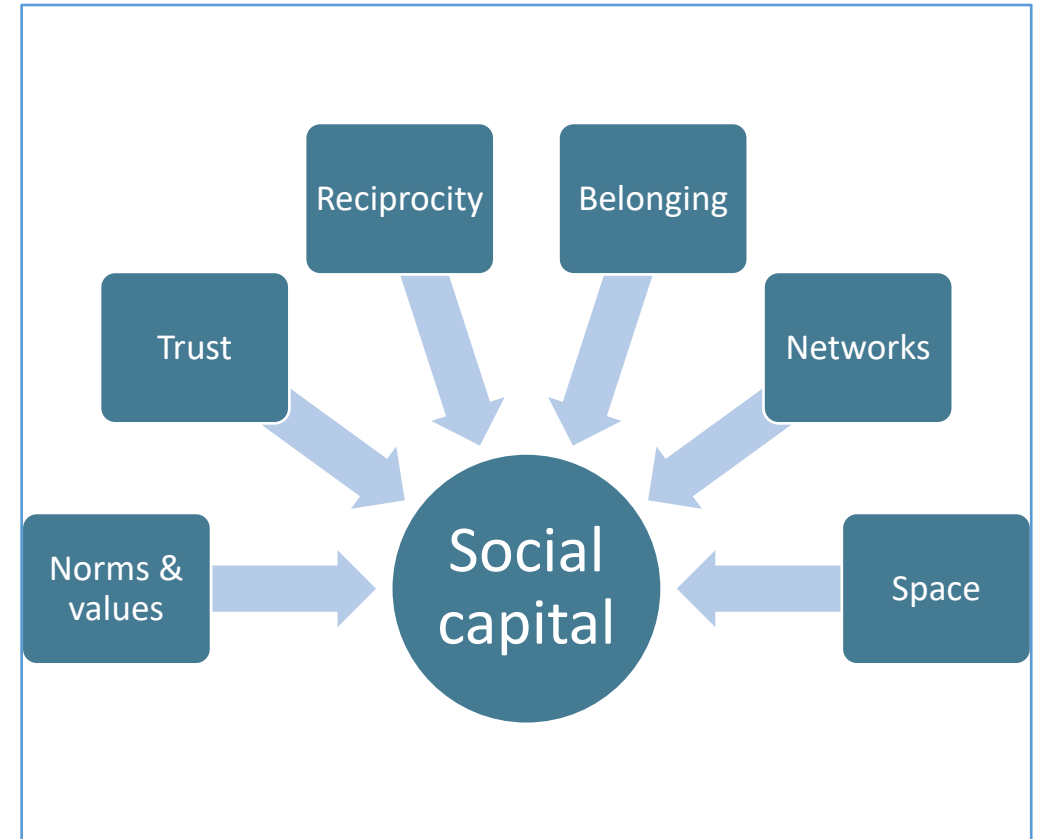


SPP 1889

**REGIONAL SEA LEVEL
CHANGE AND SOCIETY**

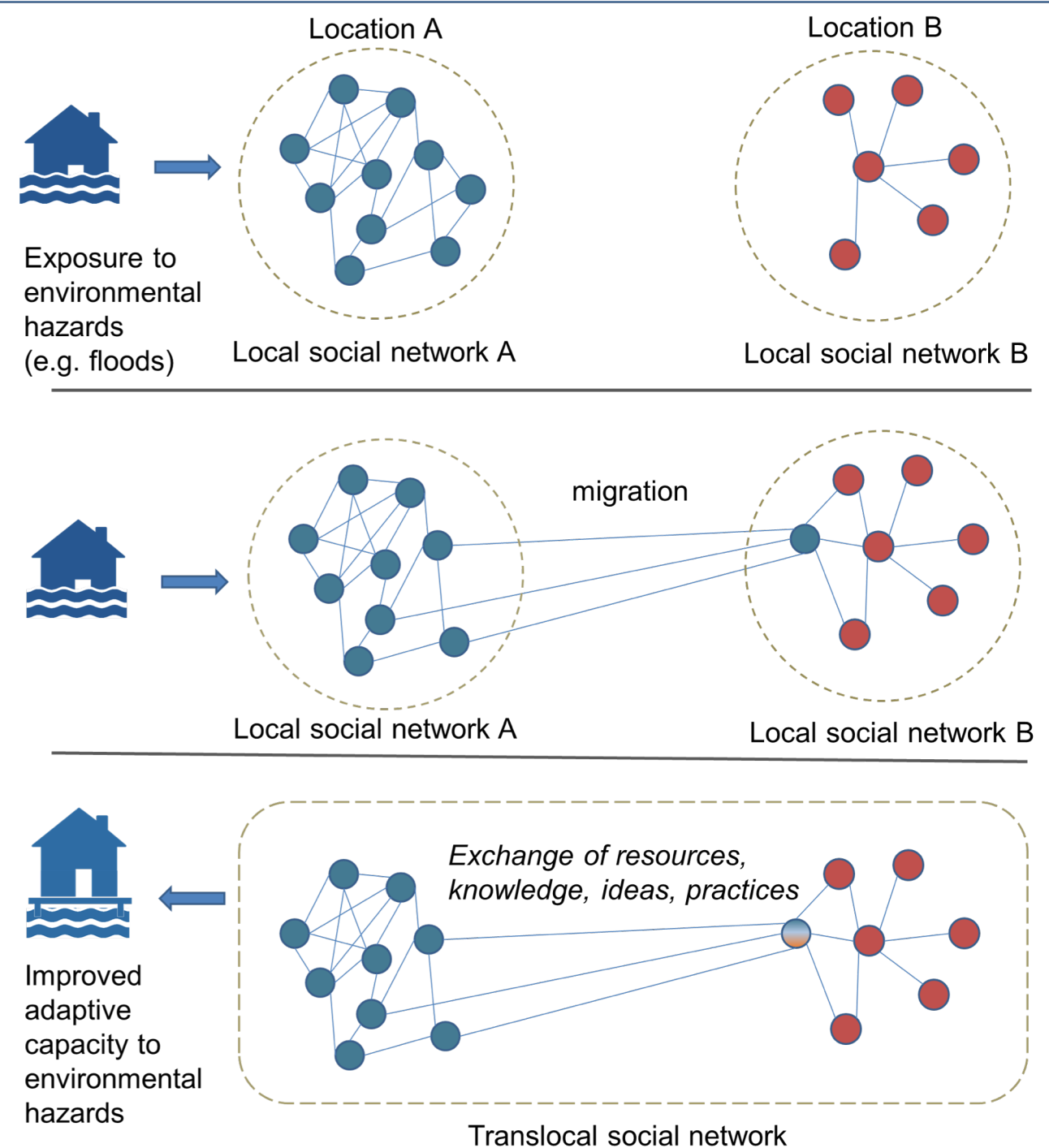
Social networks and responses to natural hazards and environmental change

- Climate change and sea level rise: significant challenges to urban coastal communities globally, especially in the Global South
- Importance of household and community-level adaptation
 - Limited state resources and/or governmental action
- Central role of social capital in reducing vulnerability and enhancing resilience
 - Offset limitations in financial and human capital



(Trans)local social networks and adaptive capacity

- Translocally connected households and communities are able to access resources and opportunities not available locally
 - Especially important when local capacities are overwhelmed
- Importance of translocal social capital often remains overlooked by existing research
 - Need for a more comprehensive understanding of (trans)local social capital in the context of coastal adaptation



Research agenda

Research gap:

- Knowledge about formation, implementation and effectiveness of (trans)local support remains limited

Study objective:

- Investigate the impact of (trans)local social capital on coastal adaptation of flood-prone households in Padang and Denpasar, Indonesia

Research questions:

1. How does flood-related support differ between local and translocal social capital?
2. What factors influence the effectiveness of (trans)local support in improving long-term responses to flooding?

Study focus: Flood-affected coastal communities in Padang and Denpasar



Padang, West Sumatra

- Islam
- Matriachal
- Family networks
- Migratory tradition (Merantau)
- Coastal & rain flooding



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Denpasar, Bali

- Hinduism
- Patriachal
- Community belonging & family ties
- Strong immigration
- Coastal & river flooding



Methods: Data collection and analysis



Pre-survey
Selection of study
areas
Flood-affected urban
villages
(N = 11)

June 2022



Quantitative
household survey
(N = 620) and
network analysis
(N = 1169)

October 2022

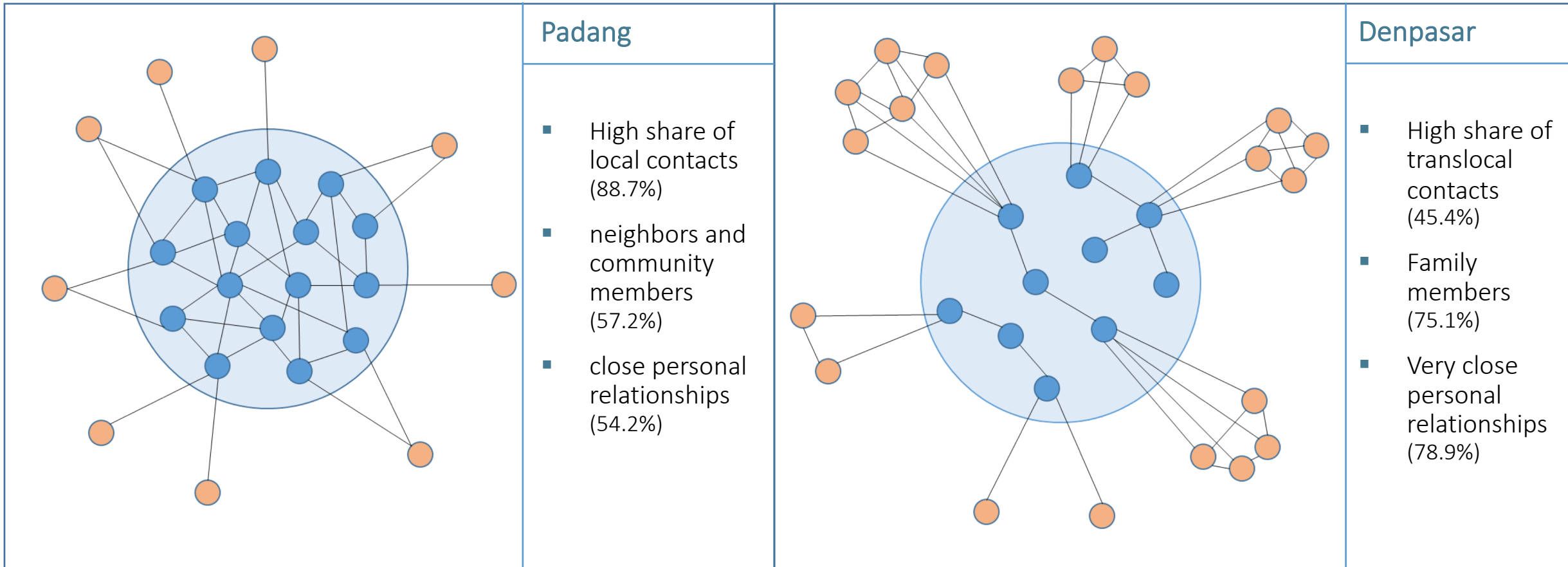


Statistical analysis of
(trans)local support
Descriptive, bivariate
and multivariate
regression analysis

November 2022 –
ongoing

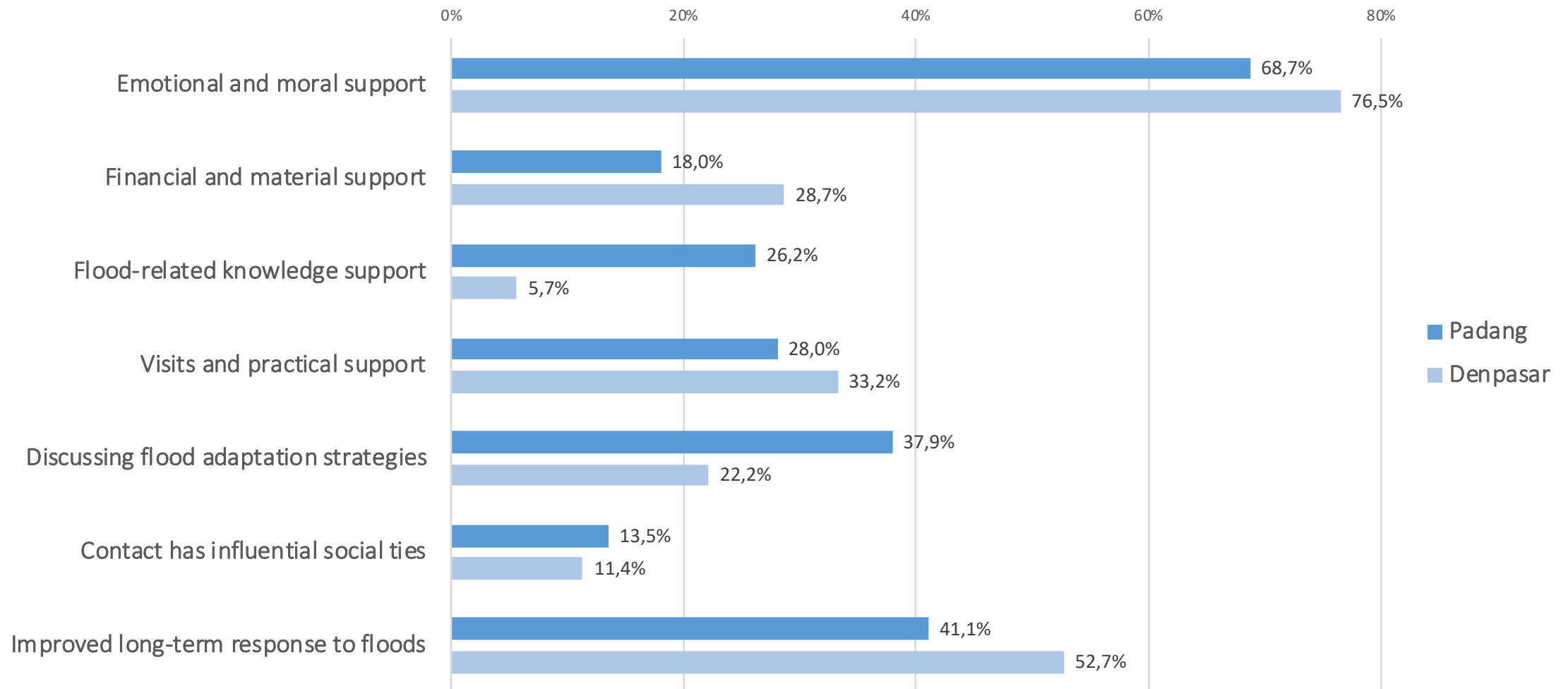


Results: Characteristics of social networks in study areas

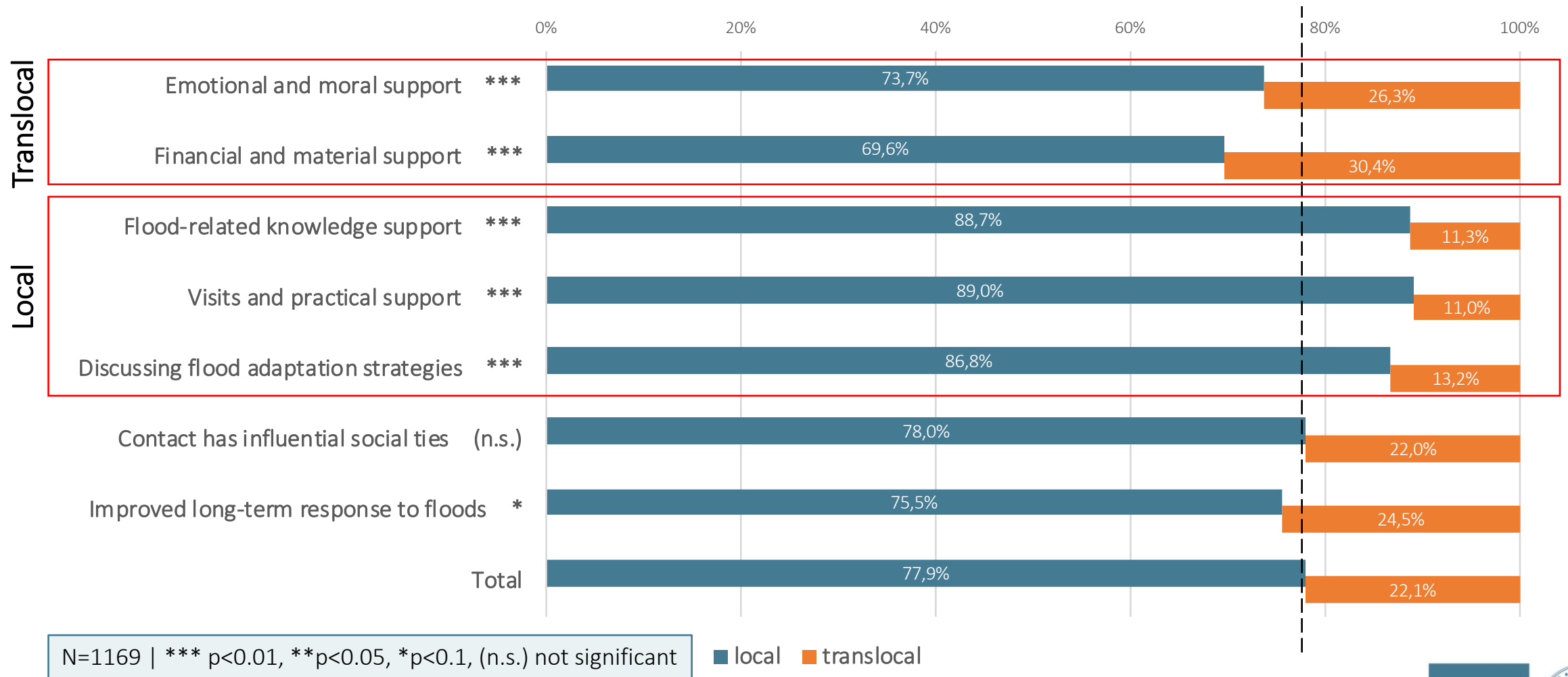


● Local contacts ● Translocal contacts

Descriptive results: Support received from (trans)local contacts

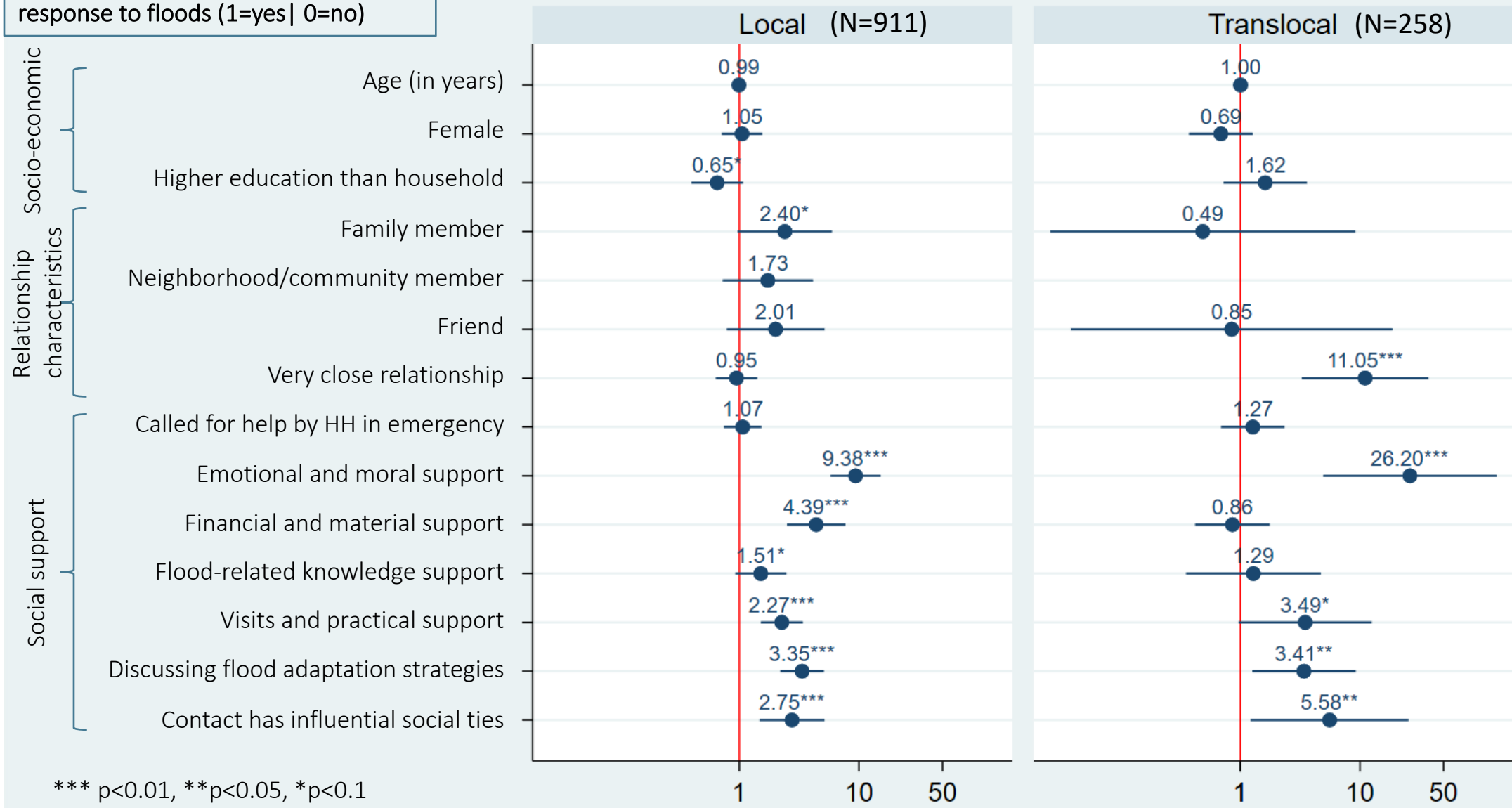


Bivariate results: Support provided by (trans)local contacts



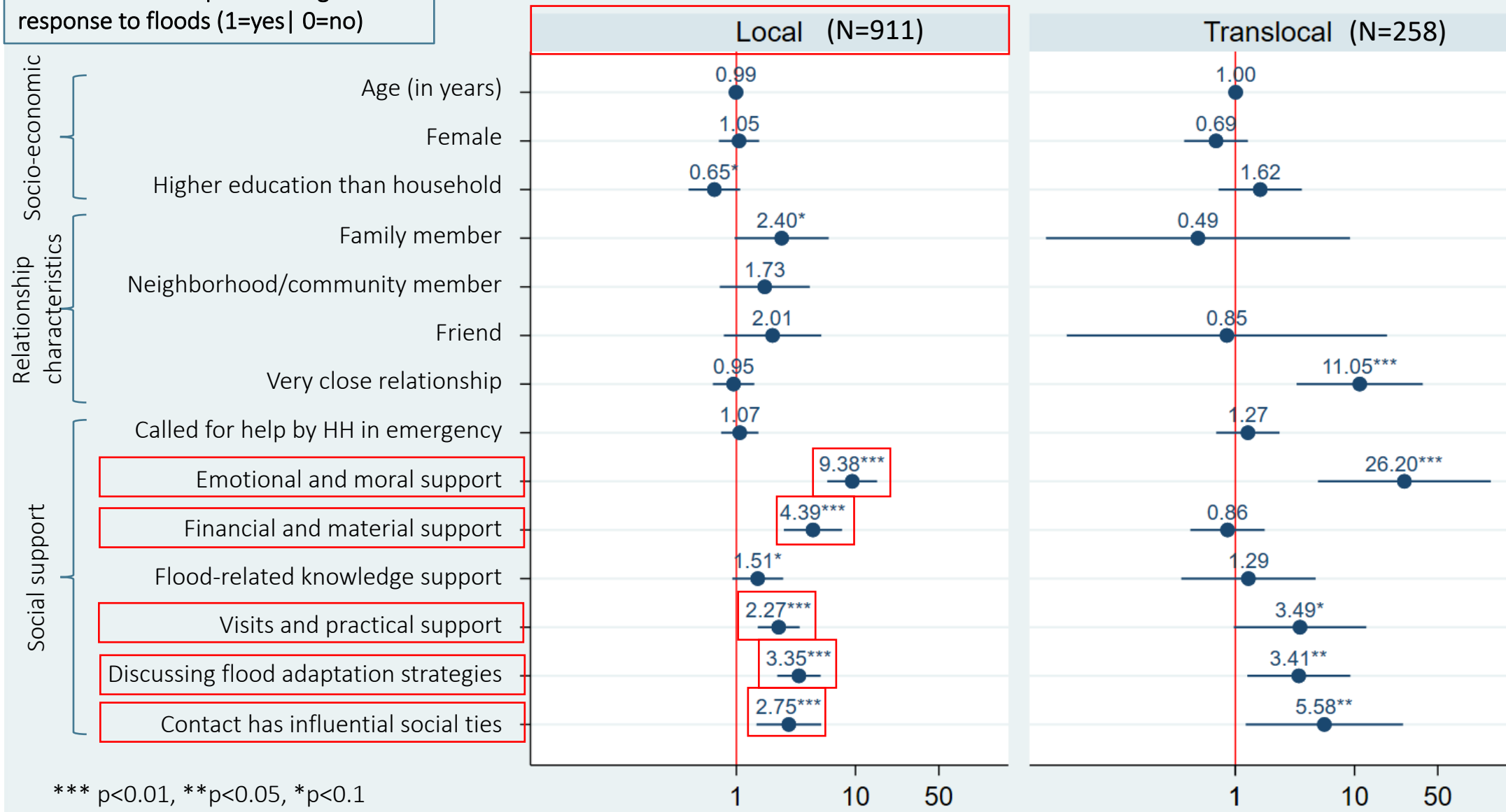
Multivariate results: Logistic regression models | Odds ratio

IV: Contact has improved long-term response to floods (1=yes | 0=no)



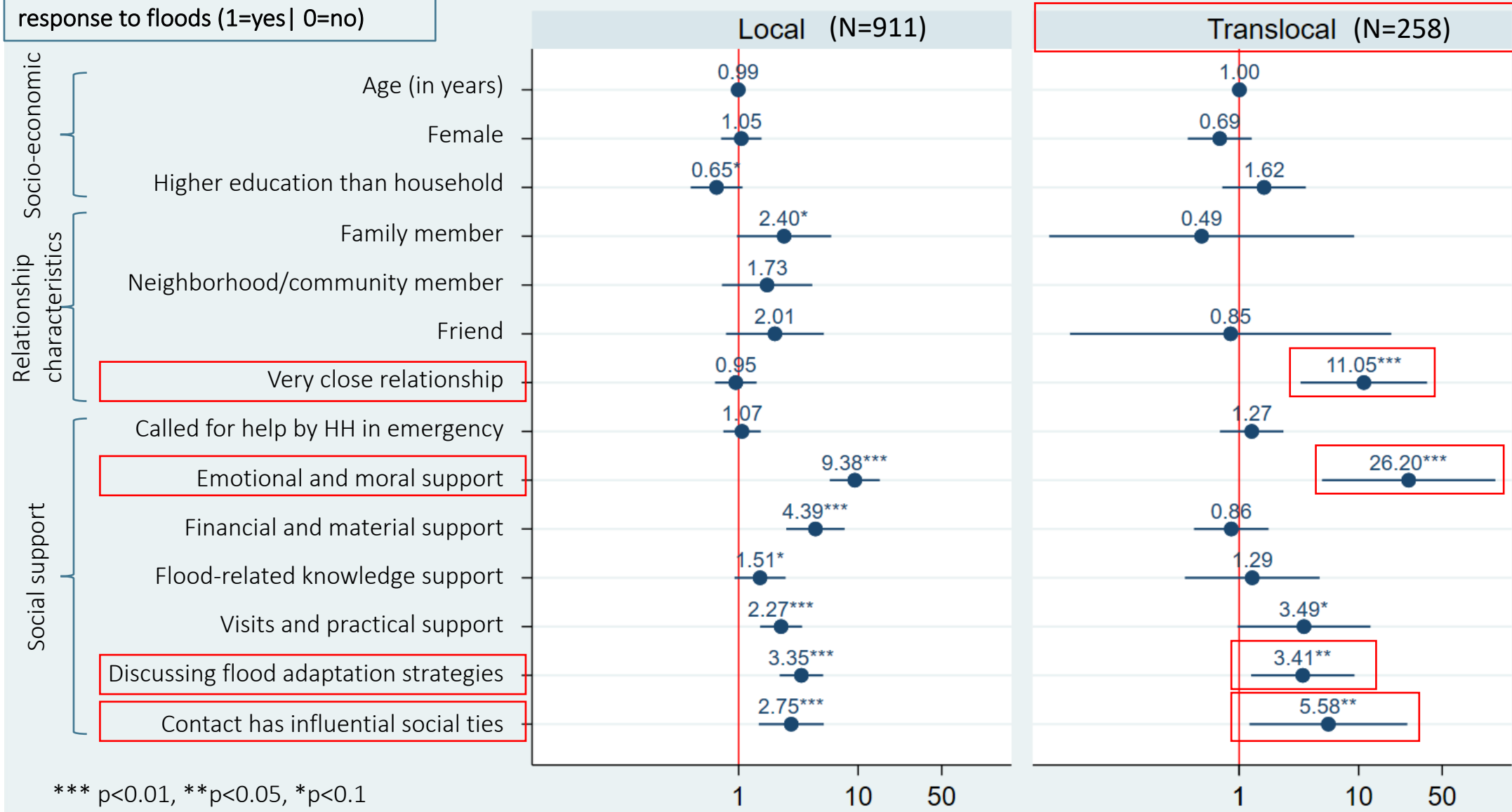
Multivariate results: Logistic regression models | Odds ratio

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Multivariate results: Logistic regression models | Odds ratio

IV: Contact has improved long-term response to floods (1=yes | 0=no)



Discussion and conclusions

- How does the role of (trans)local social capital in enhancing long-term responses to coastal flooding contribute to our understanding of local adaptation?
- Importance of (trans)local bonding social capital in enhancing long-term responses to coastal flooding
 - Role of (trans)local social capital in providing different types of support
 - Complementary nature of local and translocal social capital in addressing coastal flooding challenges
 - Long-term benefits of combining local and translocal social capital for increased resilience
- Spatial distance as a determinant of support in social networks
 - Differences in support provided by local and translocal contacts based on spatial distance
 - Influence of close personal relationships on the effectiveness of support
 - Relevance of spatial distance in shaping the nature and quality of social capital in adaptation processes

Discussion and conclusions

- Implications for research on local adaptation: necessity of a translocal perspective
 - Understanding the interplay between local and translocal social capital in adaptation strategies
 - Acknowledging the role of family, household, and community ties that transcend spatial boundaries
 - Integrating translocal social capital into local adaptation policies and practices
 - Inclusion of migrant households and their translocal networks in adaptation planning

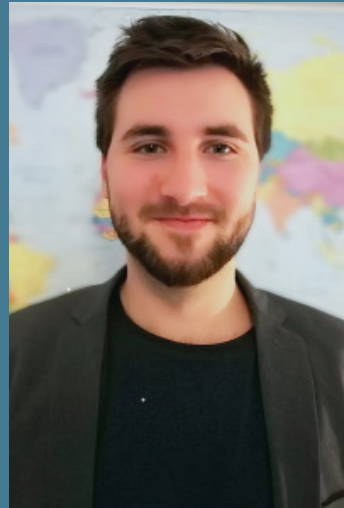
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