Vanemaealiste lähivõrgustikud ja igapäevategevuste piirangud: Eesti põlis- ja välispäritolurahvastiku võrdlus

Associations between Personal Networks and Disabilities among Older Estonians

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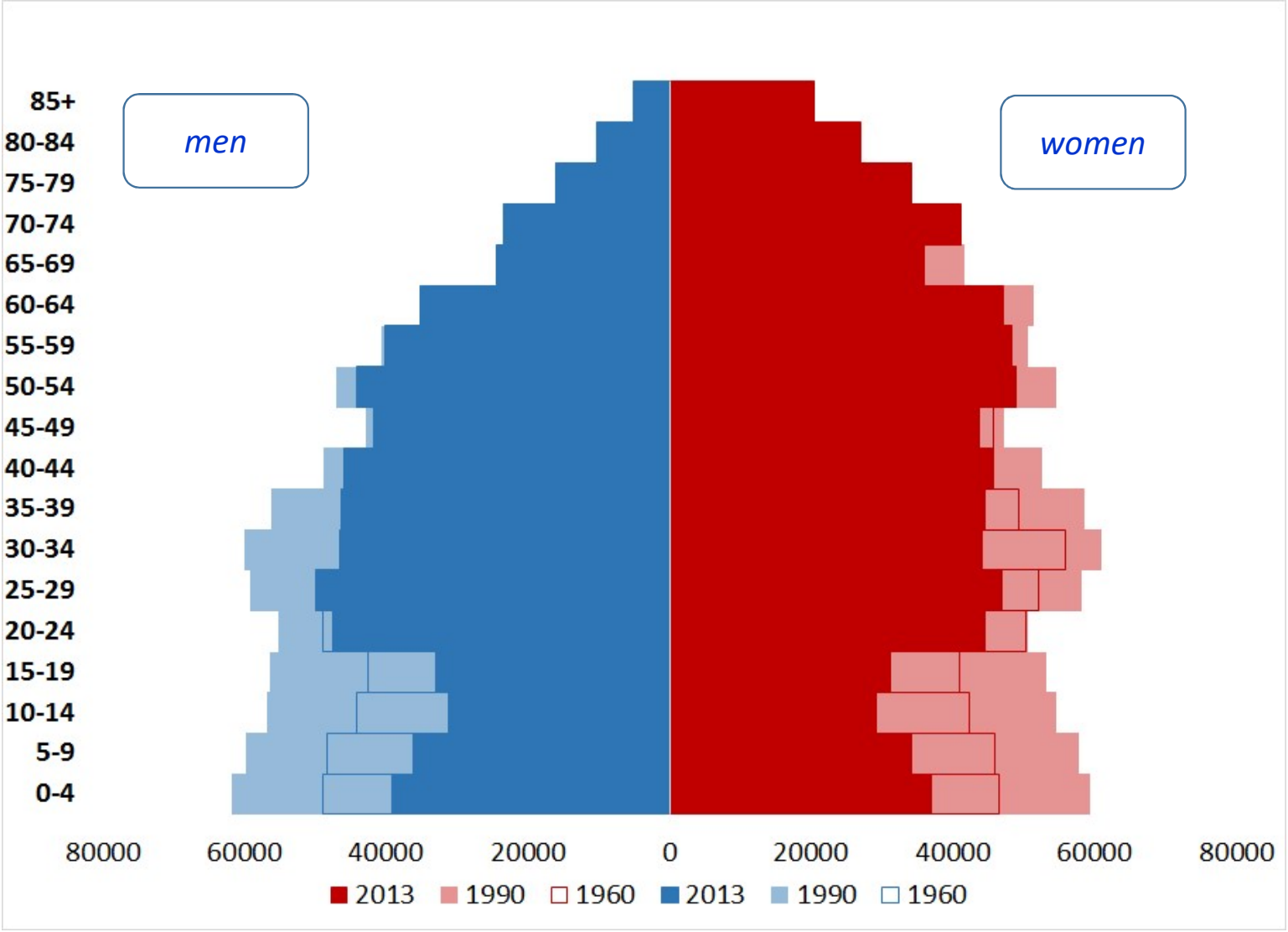
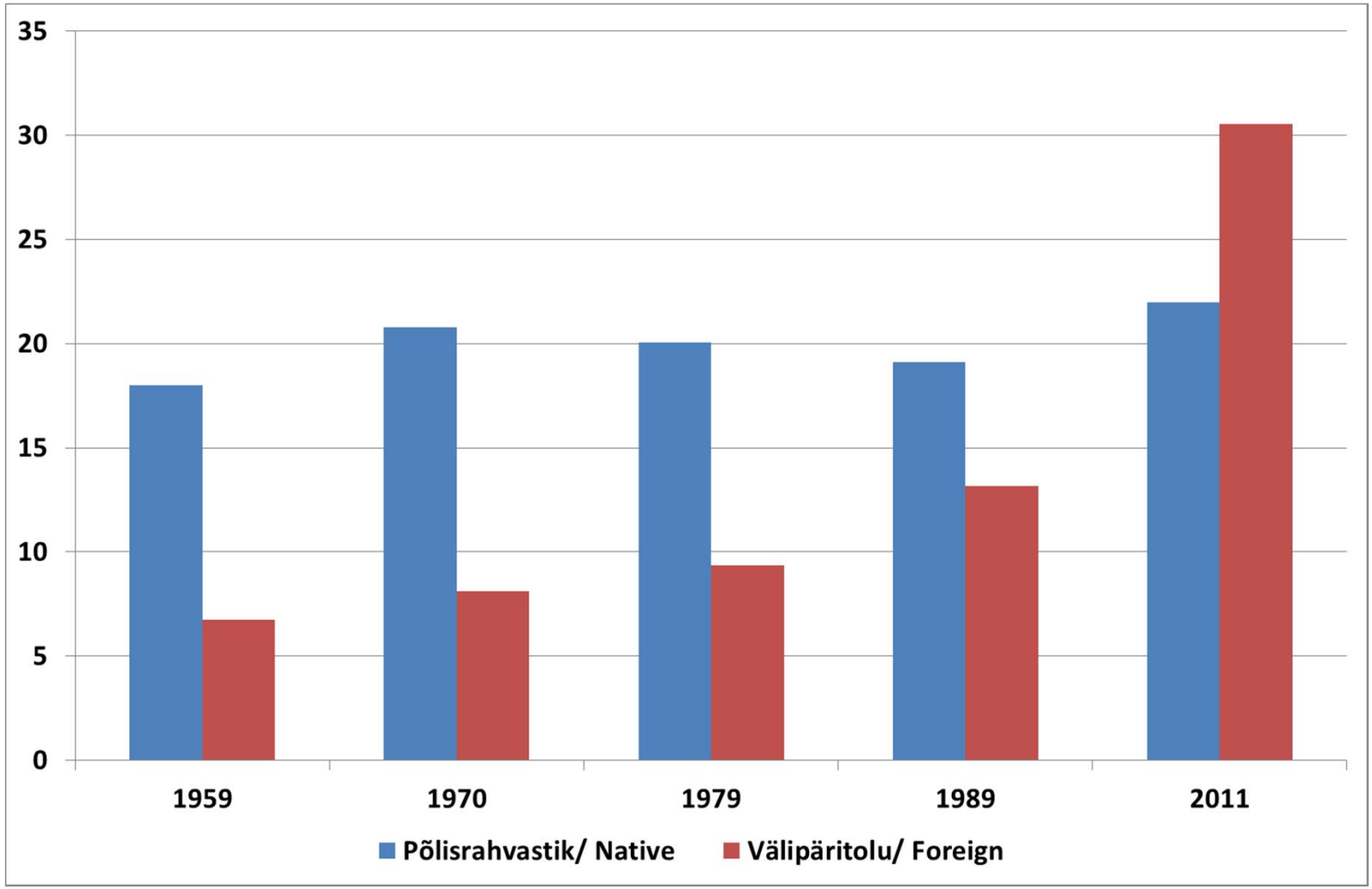
Eesti Demograafia Assotsiatsiooni koosolek, 17.12.2015

Estonia is ageing

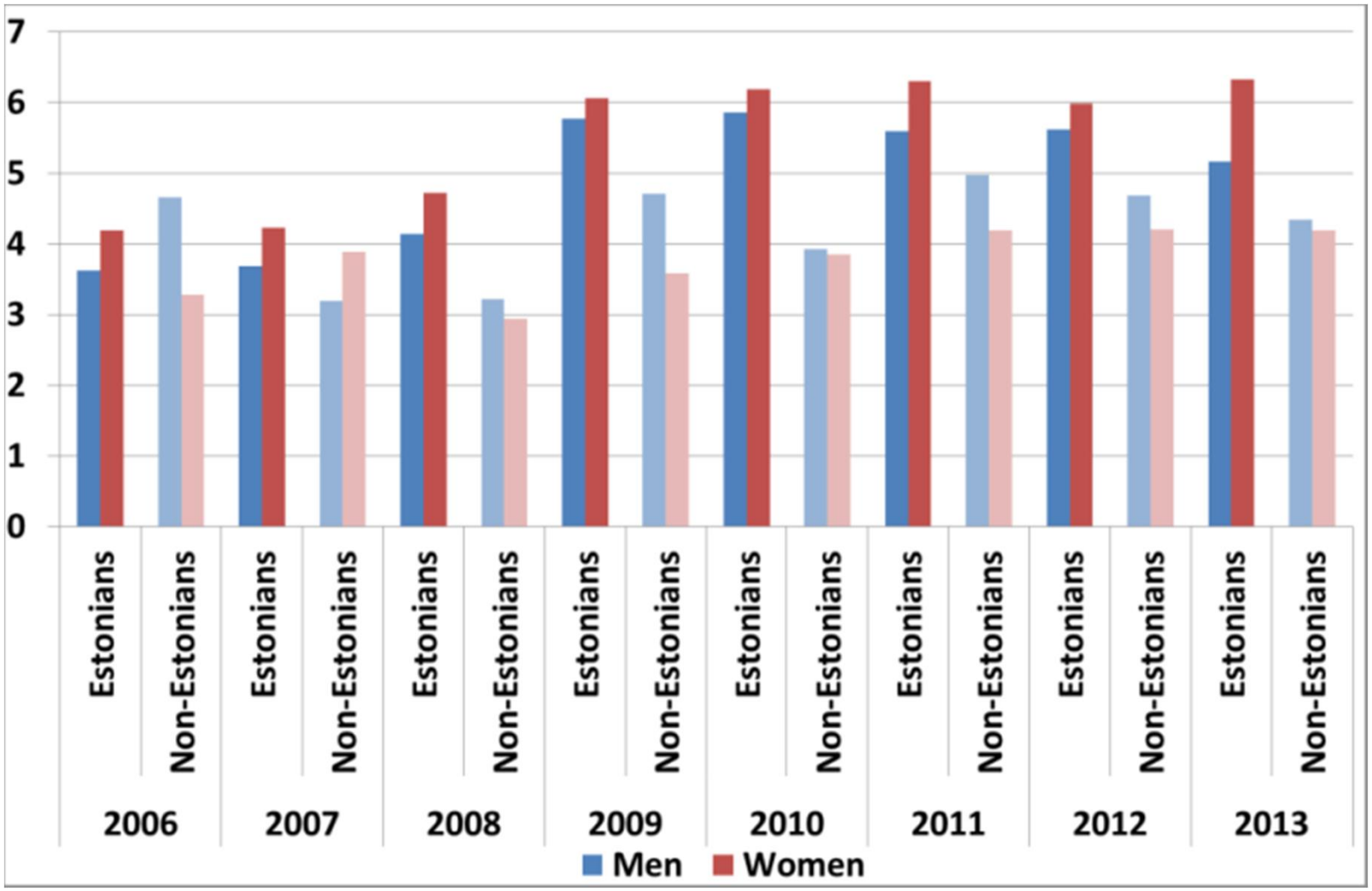


Proportion of 60+ population among native and foreign population groups (%)



Source: Katus, Puur, Põldma, Sakkeus. (1999) Rahvastikuvananemine Eestis. Tln: EKDK, Rahvaloendus 2011

Number of healthy life years by ethnicity



Source: Eurostat 2013

Theoretical Background - transitions

Framework	By origin	By networks
(Second) Demographic Transition • Below-replacement fertility • Increasing life expectancy at older age • Diversifying family forms (Lesthaeghe & van de Kaa 1986, Lesthaeghe 2010, Van de Kaa & Lesthaeghe 2006)	• Later onset of demographic transition, fertility postponement and diversification of partnerships (Katus et al 2005, Rahnu 2016)	• Community-based networks → expressive and affective networks (Lesthaeghe & Neels 2002)
Health Transition • Infectious diseases → man-made diseases • Cardiovascular revolution in Western Europe 1960-70s, in Estonia 1990s (Vallin & Meslé 2005, Caselli 1995, Vallin 2005)	• Lower life expectancy, higher cardiovascular diseases and higher disability prevalence among foreign origin population (Sakkeus & Karelson 2012)	?
Mobility Transition • People move because of skill and knowledge mismatch (Zelinsky 1971)	• Structural differences in occupational, sectorial activities and human capital background by origin (Puur & Sakkeus 1999)	• Networks as information source (job market, moving decisions)?

Theoretical Background - networks

Framework
Diffusion, Learning and Impact • SDT, health, mobility – ideational and behavioural innovation, information spread • Social learning and social impact (Lesthaeghe & Neels 2002, Montgomery & Casterline 1996)
The Strength of Ties in Egocentric Networks • Weak ties bridge small groups with each other, integrate individuals into society, provide new information • Strong ties breed local cohesion (Granovetter 1973)

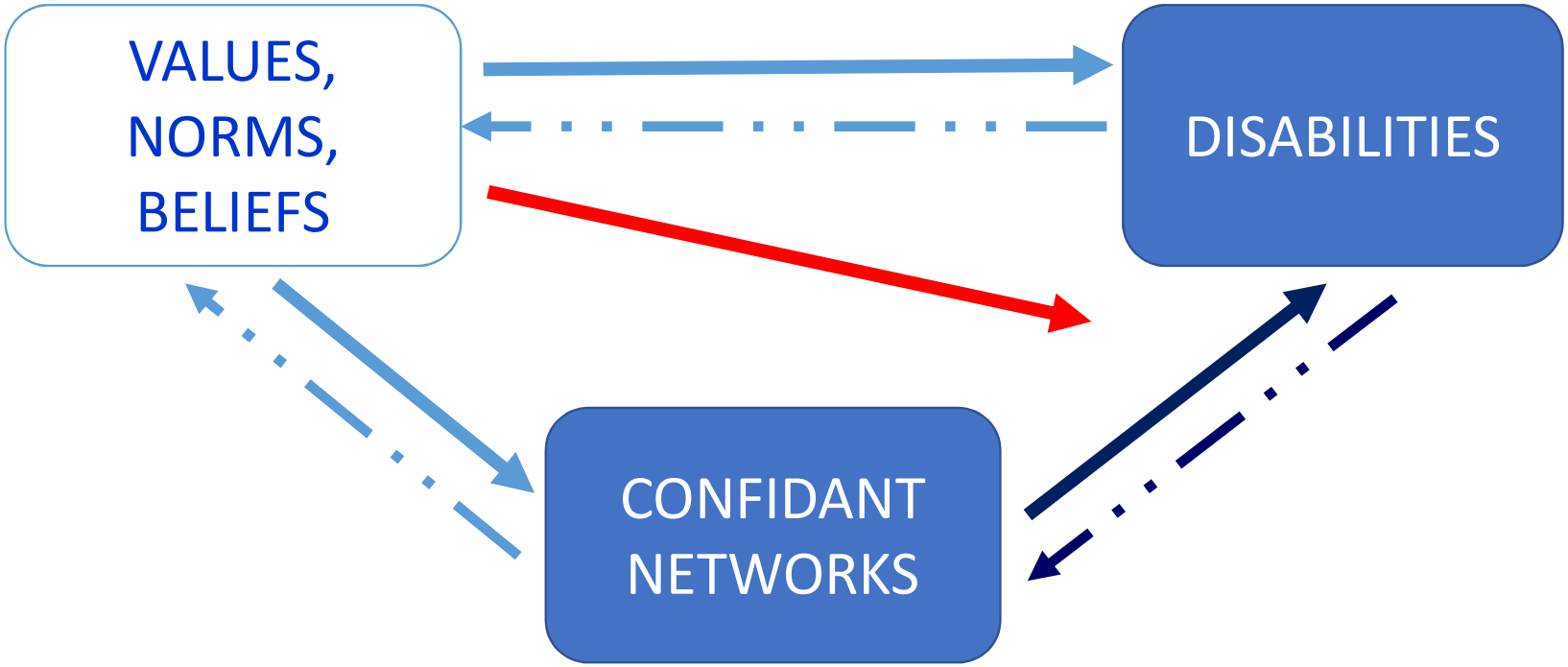
Theoretical Background – networks and health

Framework
Strength of ties • With increasing disabilities strong ties remain, but weak ties drop out of networks • Small networks sometimes mean more communication; but illness may reduce network size (Cornwell 2009)
Social networks and health • People we interact with define our roles in a society, in a community or within a family and give meaning to life (Berkman 2007, Berkman et al. 2000)
Confidant networks • Emotionally close people; people that matter • Positive association between network size and satisfaction with relationships (Stoeckel & Litwin 2013)

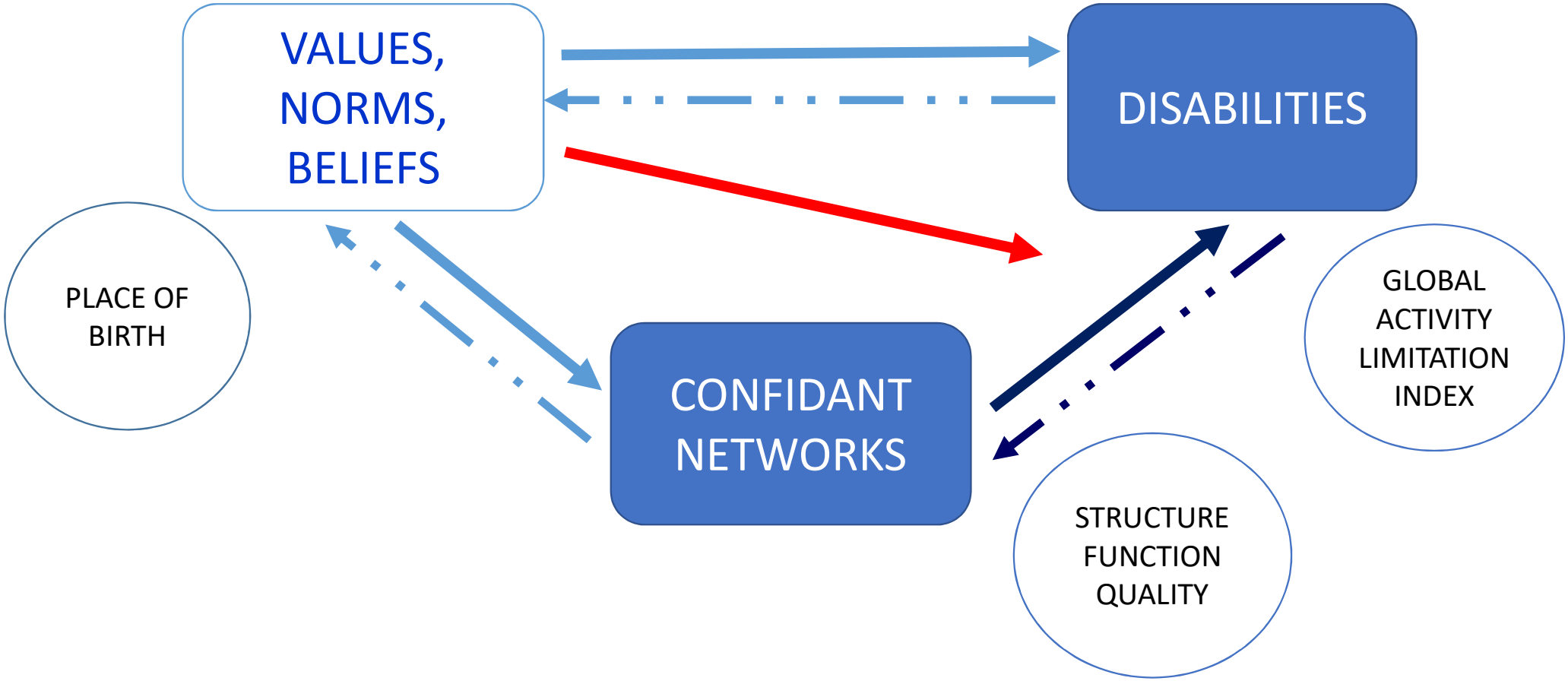
Research Objective

Analyse differences in associations between confidant networks and disability outcomes by origin among older (50+) Estonians.

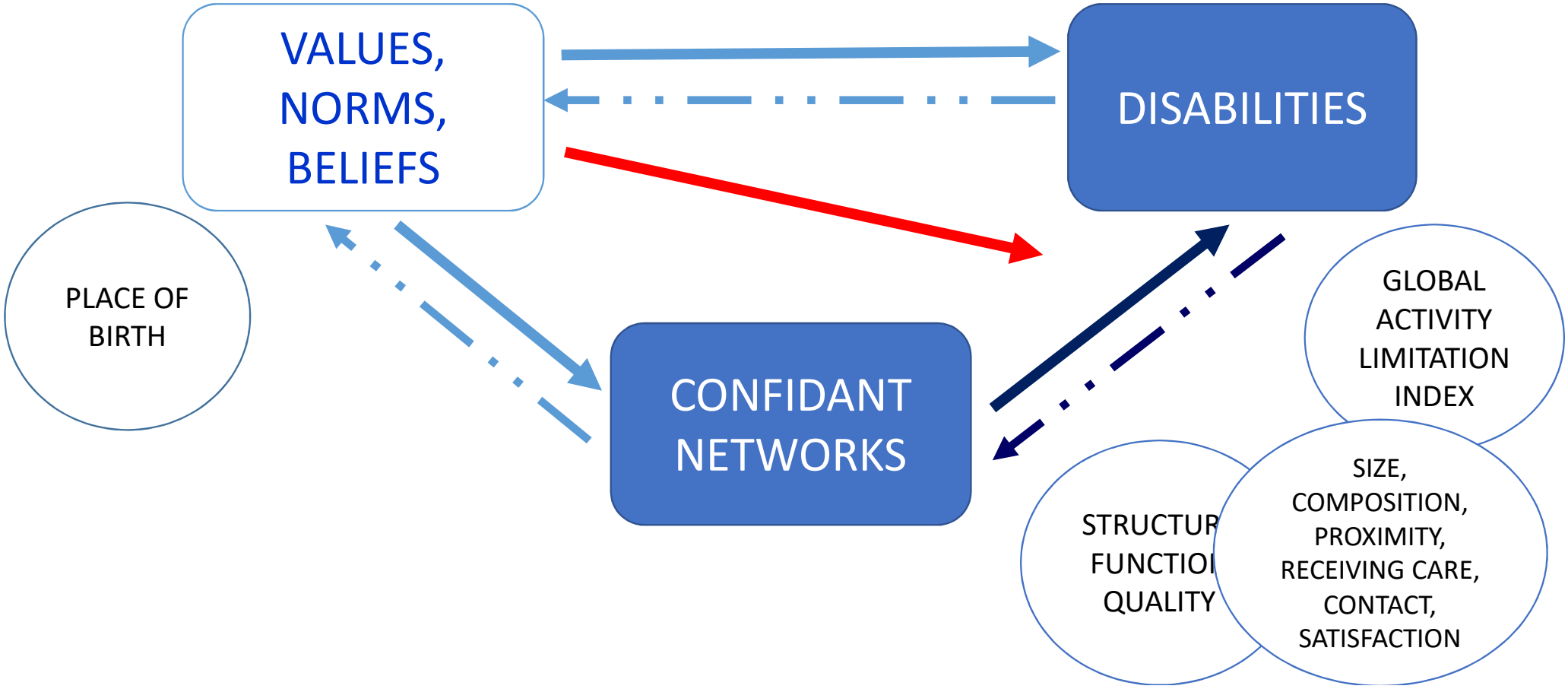
Conceptual Framework



Conceptual Framework



Conceptual Framework



SHARE Data Wave 4, rel 1

- Fieldwork 2010 – 2011
- Social Network Module – name generator method

- Stratified random sample
- Aged 50 +
- Men and women

- Study: one partner in the household
- Foreign-origin N=1219; Native N=3402
- Apply individual weights

I Descriptive results

Descriptive Results

		Foreign-origin	%	Native	%
Age	50-64	519	42,6	1442	42,4
	65-74	393	32,2	1113	32,7
	75+	307	25,2	847	24,9
Gender	Male	428	35,1	1260	37,0
	Female	791	64,9	2142	63,0
Education level	None-Basic education	371	30,4	1119	32,9
	(Post) secondary	609	50,0	1552	45,6
	Tertiary	239	19,6	731	21,5
Employment status	(Self) employed	766	62,8	1886	55,4
	Retired	313	25,7	117	34,0
	Homemaker, ill, other	133	10,9	341	10,0
Partnership status	Partner in the household	519	42,6	1421	41,8
	No partner	700	57,4	1981	58,2
Everyday activity limitations	Severely limited	331	27,2	817	24,0
	Less severely limited	487	40,0	1142	33,6
	Not limited	401	32,9	1443	42,4
Long-term illnesses	Have any long-term illness	939	77,0	2503	73,6
	No long-term illness	279	22,9	898	26,4
Receiving help	Has not received help	927	76,0	2506	73,7
	Has received help	292	24,0	896	26,3

Descriptive results (2)

		Foreign-origin	%	Native	%
Size of network	0	59	4,8	146	4,3
	1	318	26,1	1083	31,8
	2+	842	69,1	2173	63,9
Family members	0	190	15,6	412	12,1
	1	399	32,7	1290	37,9
	2+	630	51,7	1698	49,9
Children in network	0	504	41,3	1587	46,6
	1	438	35,9	1103	32,4
	2+	277	22,7	710	20,9
Spouse in network	Yes	677	55,5	1831	53,8
	No	542	44,5	1570	46
Friends in network	Yes	825	67,7	2568	75,5
	No	394	32,3	832	24,5
Contact frequency	Daily - Several times a week	87	7,1	229	6,7
	Every two weeks - Once a month	338	27,7	1011	29,7
	Less than once a month - Never	755	61,9	2085	61,3
Satisfaction with networks	Low satisfaction (0-7)	177	14,5	495	14,6
	High satisfaction (8-10)	1005	82,4	2832	83,2

II Total population regression results

Multinomial Logistic Regression Analysis

DEPENDENT	Global Activity Limitation Index	Severely limited; limited, but less severely; not limited
DEMOGRAPHIC	Age	50 – 64, 65 – 74, 75+
	Gender	Men, women
	Education level	(Pre –) primary, secondary, tertiary
	Partnership status	Living together with a partner or not
	Origin	Place of birth (foreign, native)
NETWORK	Average proximity of members	Same household < 1km, 1 -24 km, 25 – 500 +km
	Size	0, 1, 2+
	Composition	Family, children, spouse, friends in network
	Contact frequency	None - < 1 month, 1 – 2 times a month, several times a week – daily
	Satisfaction with relationships	Low (0 – 7) , High (8 – 10)
HEALTH	Long – term illness	Yes or no
	Receiving practical or personal care	Yes or no

Regression results – severely limited (total population)

		Exp(Coef)	P	S.E.
Severely limited	**Female** (ref: Male)	1,134	0,000	0,0127
	Age (ref: 75+)			
	50-64	0,532	0,000	0,0203
	65-74	0,446	0,000	0,0153
	Education (ref: Tertiary)			
	None- Basic	1,408	0,000	0,0169
	(Post) secondary	1,311	0,000	0,0157
	Employment (ref: Homemaker, ill, other)			
	(Self) employed	0,763	0,000	0,0215
	Retired	0,175	0,000	0,0190
	Partnership (ref: No partner)	1,054	0,000	0,0127
	Migrant (ref: Native)	1,502	0,000	0,0126
	Long-term illness(ref: No illness)	27,574	0,000	0,0204
	Has received help (ref: has not receieved)	0,200	0,000	0,0129
	Proximity (ref: 25-500+km)			
	Same household- 1 km	1,838	0,000	0,0213
	1-24 km	1,351	0,000	0,0231
	Size of network (2+)			
	0	2,734	0,000	0,0313
	1	1,494	0,000	0,0124
R squared		0,235		

Regression results – severely limited (total population)

		Exp(Coef)	P	S.E.	R-squared
Family members in network (ref: 2+)	0	2,108	0,000	0,0174	0,236
	1	1,367	0,000	0,0121	
Children in network (ref: 2+)	0	1,808	0,000	0,0147	0,236
	1	1,200	0,000	0,0153	
Spouse in network (ref: have spouse)	No spouse	1,116	0,000	0,0211	0,233
Friends in network (ref: have friends)	No friends	1,209	0,000	0,0126	0,233
Average contact (ref: Less than once a month - Never)	Daily - Several times a week	1,635	0,000	0,0251	0,233
	Every two weeks - Once a month	0,769	0,000	0,0123	
Satisfaction with relationships (ref: High satisfaction)	Low satisfaction	1,784	0,000	0,0152	0,232

Regression results – less severely limited (total)

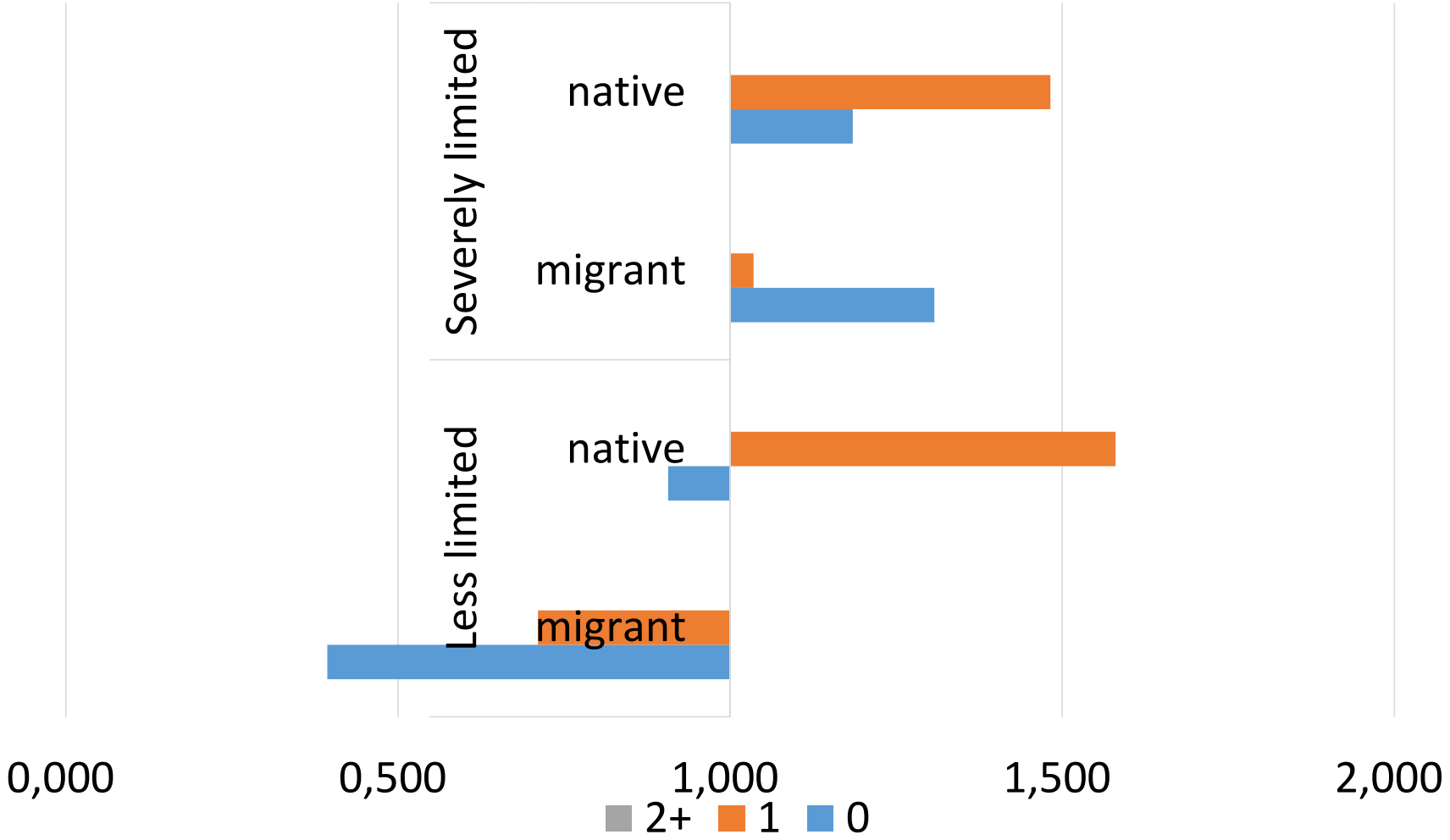
		Exp(Coef)	P	S.E.
Less severely limited	**Female** (ref: Male)	1,112	0,000	0,0105
	Age (ref: 75+)			
	50-64	0,687	0,000	0,0176
	65-74	0,750	0,000	0,0141
	Education (ref: Tertiary)			
	None- Basic	0,958	0,002	0,0137
	(Post) secondary	1,048	0,000	0,0118
	Employment (ref: Homemaker, ill, other)			
	(Self) employed	0,874	0,000	0,0189
	Retired	0,518	0,000	0,0156
	Partnership (ref: No partner)	1,128	0,000	0,0106
	Migrant (ref: Native)	1,559	0,000	0,0107
	Long-term illness (ref: No illness)	13,487	0,000	0,0121
	Has received help (ref: has not receieved)	0,570	0,000	0,0122
	Proximity (ref: 25-500+km)			
	Same household- 1 km	1,712	0,000	0,0182
	1-24 km	1,544	0,000	0,0195
	Size of network (2+)			
	0	1,283	0,000	0,0285
	1	1,060	0,000	0,0106
R squared		0,235		

Regression results – less severely limited (total)

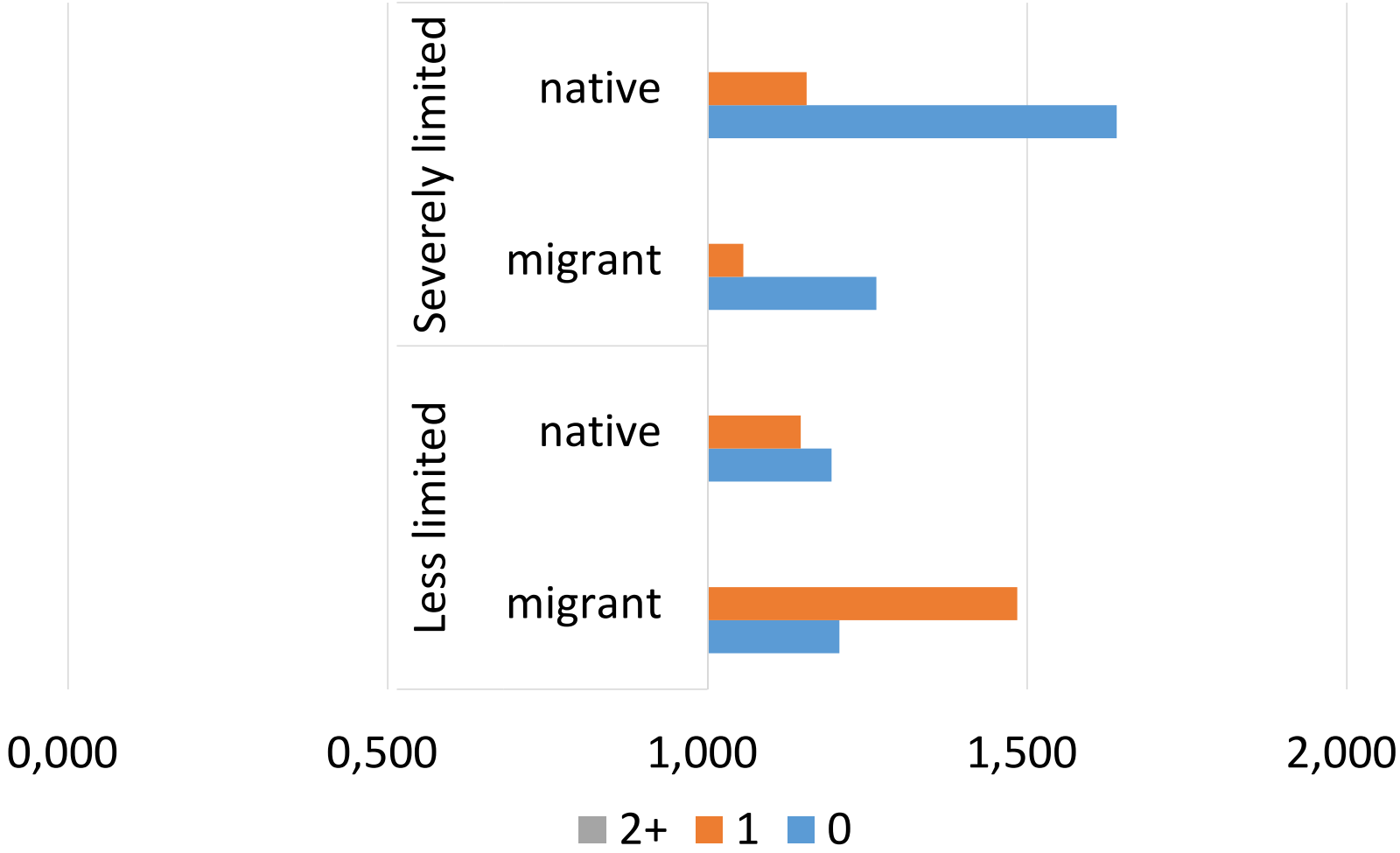
		Exp(Coef)	P	S.E.	R-squared
Family members in network (ref: 2+)	0	1,237	0,000	0,0153	0,236
	1	0,995	0,590	0,0101	
Children in network (ref: 2+)	0	1,248	0,000	0,0123	0,236
	1	1,274	0,000	0,0125	
Spouse in network (ref: have spouse)	No spouse	1,244	0,000	0,0174	0,233
Friends in network (ref: have friends)	No friends	1,234	0,000	0,0105	0,233
Average contact (ref: Less than once a month - Never)	Daily - Several times a week	1,318	0,000	0,0226	0,232
	Every two weeks - Once a month	0,813	0,000	0,0103	
Satisfaction with relationships (ref: High satisfaction)	Low satisfaction	1,494	0,000	0,0133	0,232

III Interactions by origin and network

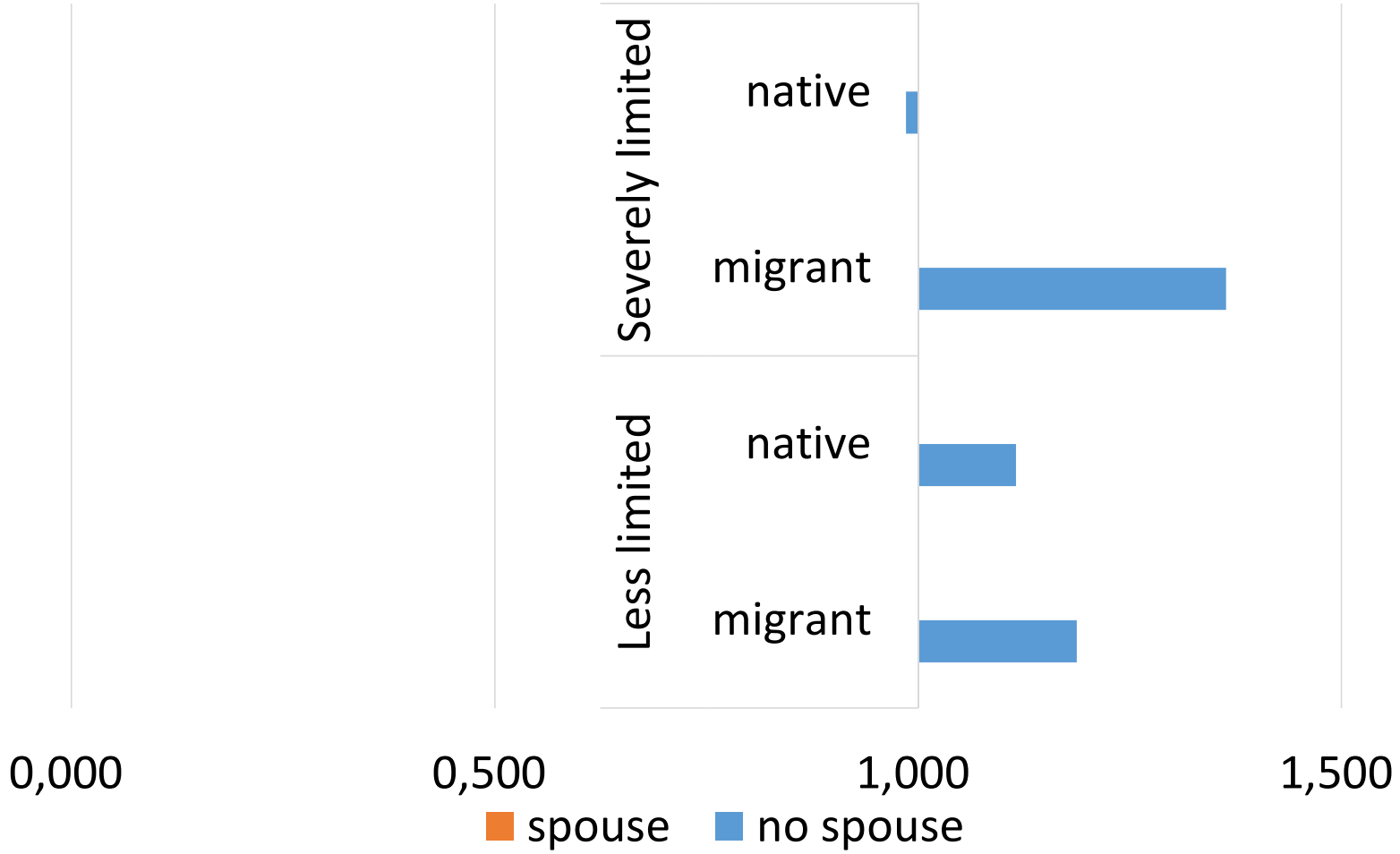
Relative odds of being disabled, by size (reference: not limited, abundant networks)



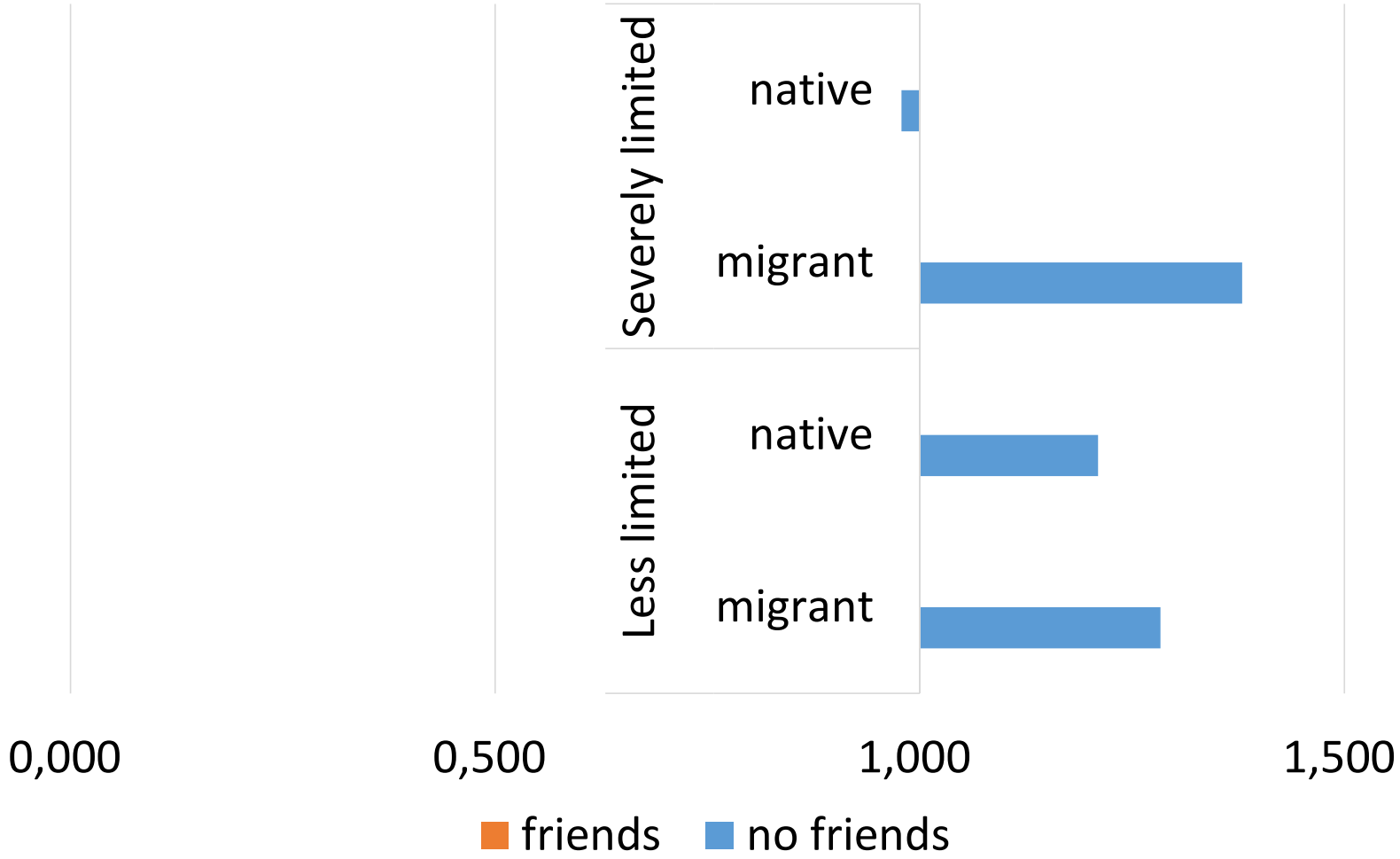
Relative odds of being disabled, by children (reference: abundant networks)



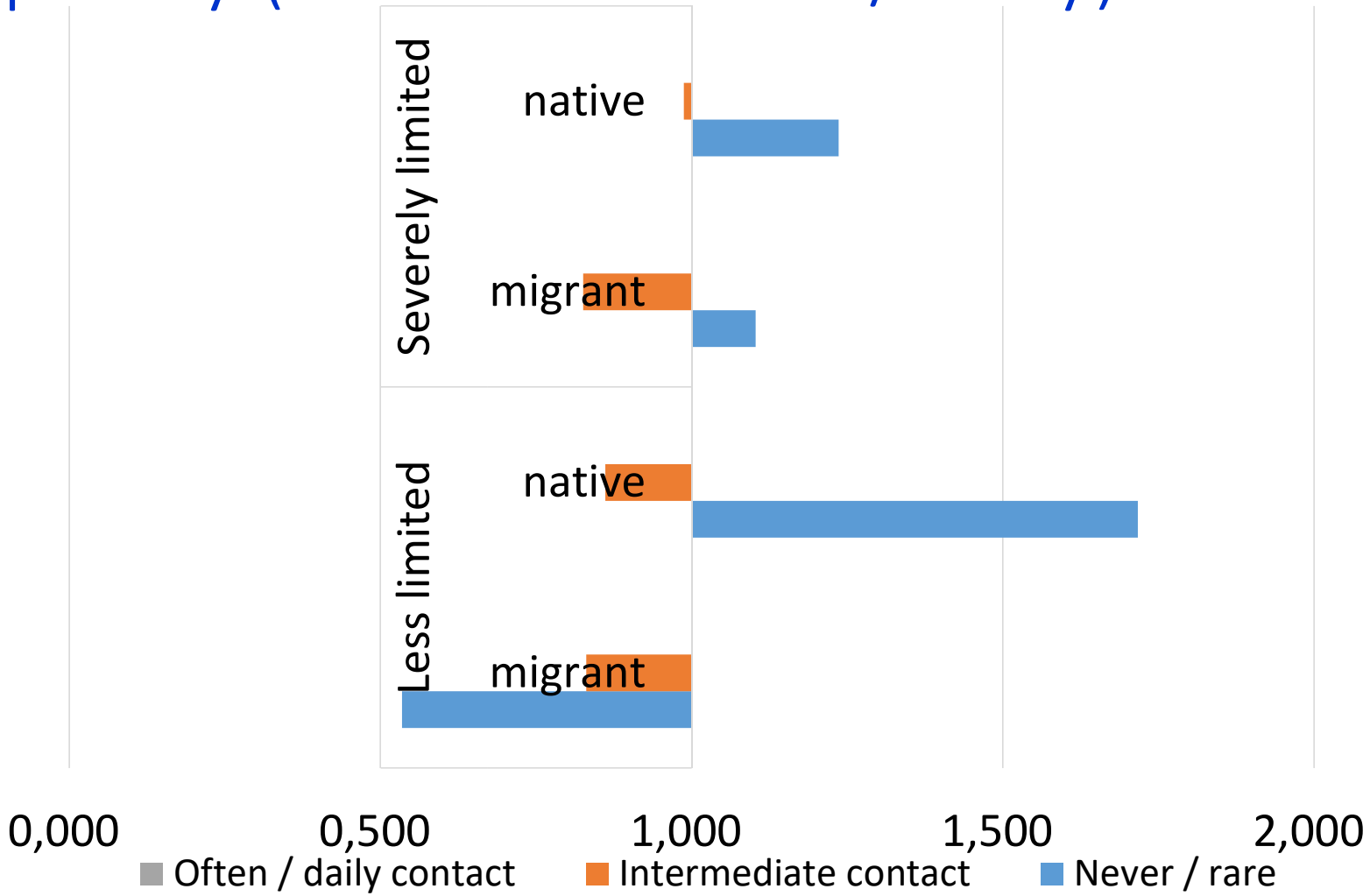
Relative odds of being disabled, by spouse (reference: spouse in network)



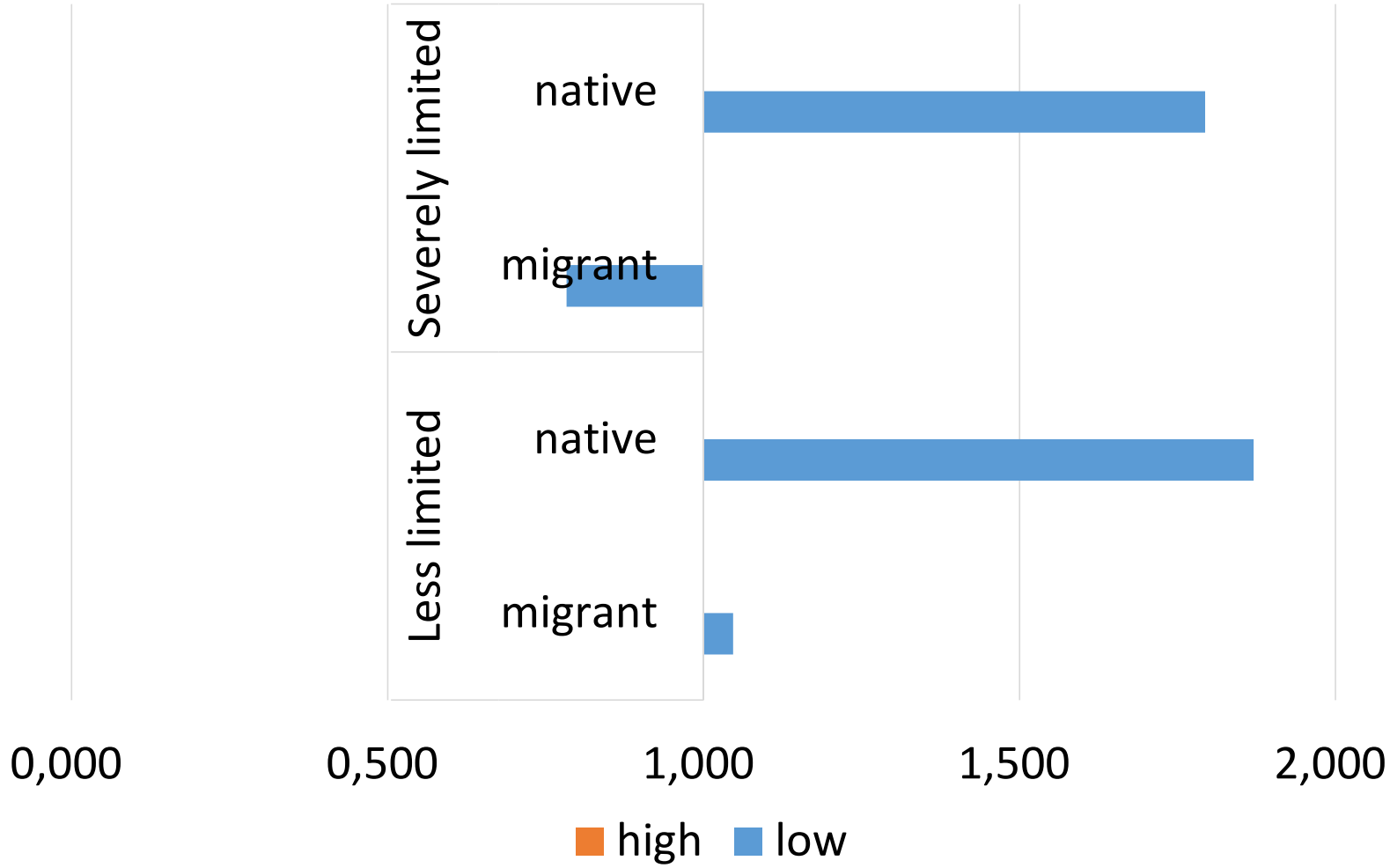
Relative odds of being disabled, by friends (reference: friends in network)



Relative odds of being disabled, by contact frequency (reference: often/ daily)



Relative odds of being disabled, by satisfaction with relations (reference: high satisfaction)



Conclusions

- Severely limited older people have small or no networks, including no family ties, children or spouse
- Less severely limited older people have at least 1 member; among foreign-origin have 2+ members
- Foreign-origin people with no confidants that are severely limited is the most *vulnerable group*
- Among natives there is no difference in evaluation of severe limitations depending on whether there is a *spouse* or *friends* in the network, for foreign-origin there are differences
- *J-shaped pattern of contact frequency* emerges among severely limited and less severely limited people, except for less severely limited foreign origin population
- There emerge differences between native and foreign origin groups by satisfaction with relationships, especially among the severely limited

Conclusions

- Strength of ties
  - Natives have one (strong?) tie in case of severe and less severe limitations
  - Strong tie (child) remains in case of less severely limited foreign origin population → confirmed by contact frequency for this group
  - Foreign origin with no confidants and severely limited → most vulnerable
- J-shaped contact patterns
  - Both severely limited natives and foreign-origin as well as less severely limited natives – those with no contact or frequent contact are more limited
- Severely limited natives have diverse confidant networks (spouse, friends)
- Diverging satisfaction with relationships
  - Having strong ties in times of health limitations plays a role for higher satisfaction among foreign origin?

Thank you!