

The Impact of Social Networks, Social Support and Social Connectedness in Mental Disorders and their Associated Burden

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THE ASSOCIATION OF RELATIONSHIP QUALITY AND SOCIAL NETWORKS WITH DEPRESSION, ANXIETY, AND SUICIDAL IDEATION AMONG OLDER MARRIED ADULTS: FINDINGS FROM A CROSS-SECTIONAL ANALYSIS OF THE IRISH

Background: Social relationships predict mental health outcomes. Limited data exists on this association among older adults, especially for relationship quality in partnerships. This study aimed to examine the associations of positive and negative partner interactions and social network integration with depression, anxiety and suicidal ideation.

Methodology: Nationally-representative, cross-sectional data of the Irish Longitudinal Study on Ageing (TILDA) was analyzed. The sample consisted of 4988 community dwelling adults aged ≥ 50 years in spouse/partner relationships. Information on socio-demographics and social relationships were assessed using standard questions. Validated scales for depression and anxiety, and a single-item question for suicidal ideation were used to assess mental health outcomes. Multivariable logistic regression was used to assess the association between social relationships and depression, anxiety, and suicidal ideation.

Results: After adjusting for confounders, negative partner interactions were significantly associated with increased likelihood of depression, anxiety, and suicidal ideation, while positive partner interactions were significantly and inversely related to anxiety and suicidal ideation. Higher levels of social integration were significantly associated with lower odds for depression.

Conclusion: By assessing the available social network of older adults, as well as the areas in their social relationships, it may be possible for practitioners and policy makers to maximize the benefits of network integration and minimize the potentially harmful aspects of social relationships, thereby improving overall mental health and emotional well-being.

Association of positive and negative partner interactions and social network (independent variables) with depression, anxiety, or suicidal ideation (dependent variables) among older adults in marital/partner relationships estimated by multivariable logistic regression

	Depression			Anxiety			Suicidal ideation		
	OR	95%CI	p	OR	95%CI	p-value	OR	95%CI	p
Positive partner interactions*	0.98	0.94-1.01	0.213	0.95	0.91-0.99	0.011	0.91	0.83-0.997	0.044
Negative partner interactions*	1.14	1.09-1.19	<0.001	1.23	1.18-1.29	<0.001	1.14	1.02-1.28	0.021
Social network index									
- Most isolated	1			1			1		
- Moderately isolated	0.45	0.20-1.01	0.053	1.25	0.61-2.56	0.545	1.08	0.21-5.41	0.929
- Moderately integrated	0.39	0.18-0.86	0.019	1.40	0.67-2.91	0.367	1.02	0.20-5.09	0.985
- Most integrated	0.34	0.15-0.75	0.008	1.41	0.67-2.96	0.360	0.78	0.15-4.06	0.766

OR: odds ratio; CI: confidence interval. The multivariate analysis adjusted for age, gender, education, financial strain, residence (urban vs. rural), number of chronic medical condition, stressful life events, and problem drinking.
*The scales for positive and negative partner interactions ranged from 0 to 10, with higher scores corresponding to higher levels of positive or negative partner interactions, respectively. Odds ratio represents the change for each additional point.

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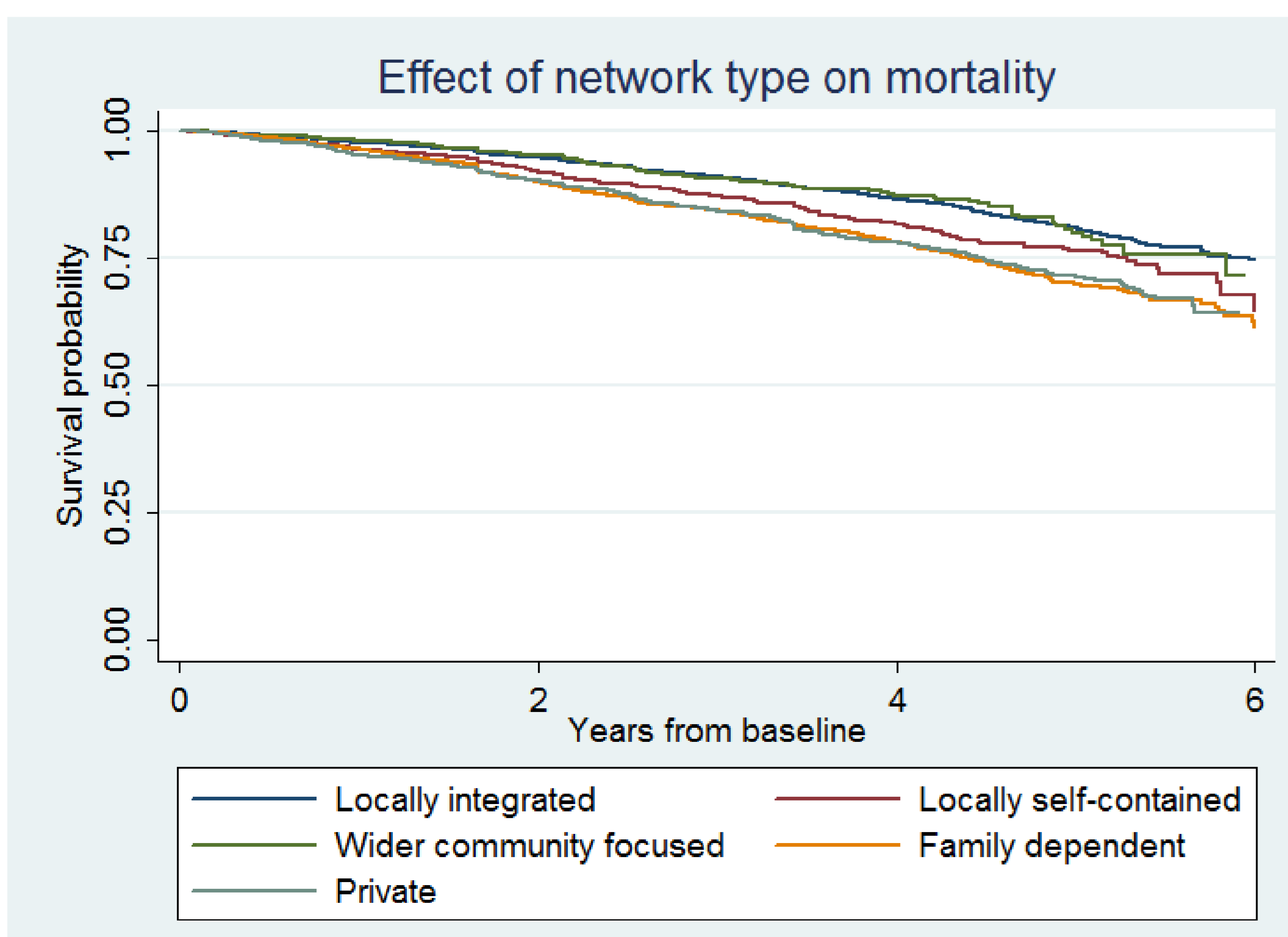
SOCIAL NETWORK TYPOLOGIES AND MORTALITY RISK AMONG OLDER PEOPLE IN LOW AND MIDDLE-INCOME COUNTRIES: A 10/66 DEMENTIA RESEARCH GROUP POPULATION-BASED STUDY

Background: Global social network measures have been shown to be related to several health outcomes. However, little is known about the effects of social network type on the risk for mortality among older people in low and middle-income countries. This study aims to examine the association of baseline social network type and risk of dying in late life.

Methodology: Data for this study came from the first and second waves of the 10/66 Dementia Research Group population-based study. Comprehensive surveys were conducted (2001-2014) of 14,034 residents aged 65 years and above in geographically defined catchment areas in eight low- and middle-income countries. The countries included were Cuba, Dominican Republic, Peru, Venezuela, Mexico, Puerto Rico, China, and India. Information on mortality and date of death or last interview alive was obtained from the follow-up survey. All other variables used for the analysis was obtained from the baseline survey. Country-wise Cox proportional hazard models were constructed to estimate the mortality risk as a function of network type. The units of analysis were years. Univariate and multivariate analyses were conducted. The multivariate analysis adjusted for age, gender, marital status, education, number of assets, receipt of pension, disability, number of medical conditions, and depression. A pooled estimate of the effects of network type on mortality was calculated by taking the estimates of each country and combining them into a fixed-effects meta-analysis.

Results: In the unadjusted analyses, the pooled estimate showed that the locally self-contained network type, family dependent, and private type significantly were associated with increased risk of mortality as compared to the locally integrated network type. However, in the adjusted analysis, only the family dependent and private type remained significant.

Conclusion: Survival time is reduced considerably by restricted social networks, particularly in terms of the family dependent network type and the private network type. Geriatric practitioners should address older adults' social networks in their assessments of clients. Public health interventions in low and middle-income countries may benefit from focusing on network type in order to reduce risk of mortality.



Country-wise unadjusted and adjusted hazard ratios and pooled estimates of the effect of social network type (contrasted to the locally integrated type) on all-cause-mortality among older adults in low- and middle-income countries*

	Locally self-contained		I ² =	Wider community focused		I ² =	Family dependent		I ² =	Private		I ² =
	HR	95%CI		HR	95%CI		HR	95%CI		HR	95%CI	
Unadjusted model												
Pooled estimate (all countries)	1.15	0.96-1.35	64.3%	NA***	NA***		1.67	1.50-1.83	62.4%	1.23	1.05-1.40	82.8%
Pooled estimate (Latin-America only)**	1.56	1.27-1.84	0.0%	1.01	0.79-1.24	43.6%	1.64	1.46-1.83	72.6%	2.30	1.90-2.70	0.0%
Adjusted model****												
Pooled estimate (all countries)	1.08	0.89-1.27	18.7%	NA***	NA***		1.19	1.05-1.32	0.0%	1.19	1.003-1.39	52.9%
Pooled estimate ((Latin-America only)**	1.16	0.93-1.39	28.5%	0.94	0.73-1.15	42.8%	1.19	1.04-1.33	0.0%	1.49	1.20-1.78	2.2%

Results in bold are statistically significant ($p < 0.05$). Heterogeneity tests were performed with Higgin's I².
* Each network type is contrasted to the locally integrated type. The locally integrated support network includes close relationships with local family, friends and neighbors. The family dependent support network is focused on close family ties, few neighbors and peripheral friends. The local self-contained support network typically has arms-length relationships or infrequent contact with at least one relative but the primary reliance is on neighbors. The wider community-focused support network is typified by an absence of nearby relatives but active relationships with distant relatives, usually children, and a high salience of friends. The private restricted support network is associated with an absence of local kin, few nearby friends and low levels of community contacts or involvement.
**Pooled estimates were obtained by meta-analysis with fixed effects.
***Estimates could not be obtained because there were no deaths in this category for China.
**** The multivariate analysis adjusted for age, gender, marital status, education, number of assets, receipt of pension, disability, number of medical conditions, depression.

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