EXAMINING MEASURES OF FAMILY AND HOUSEHOLD SEP IN NZ

A PHD RESEARCH PROPOSAL BY NATALIA BOVEN

SUPERVISED BY: DR NICHOLA SHACKLETON, DR BARRY MILNE, PROFESSOR THOMAS LUMLEY

SOCIOECONOMIC POSITION (SEP)

- A multidimensional construct which aims to measure access to social and material resources.
- Related to a range of health and social outcomes.
- Common control variable potential for residual confounding if poorly measured.

FAMILY AND HOUSEHOLD LEVEL MEASURES OF SEP

- Many individual outcomes likely affected by SEP of family members and others you live with.
- Previous research shows partner SEP affects individual health outcomes.
- Little research into the effect of other family or household members.

FAMILY AND HOUSEHOLD LEVEL MEASURES OF SEP

- Conventional approach: assign SEP of male spouse/parent to all family members.
- Dominance approach: assign SEP of spouse/parent with higher SEP to all family members.
- Joint/combined approaches: incorporate SEP from both spouses/parents.
- Sex-role approach: assign SEP of same sex parent to child(ren).

FAMILY AND HOUSEHOLD LEVEL MEASURES OF SEP

Example family	Conventional	Dominant	Joint/combined	Sex-role
Hinemoa (GP), John (plumber), kids Lucy & Tane	Plumber NZSEI = 40	GP NZSEI = 90	Multiple possibilities	Lucy = 90, Tane = 40 (or different weightings)
Sarah (receptionist), kids Liam & Emma	Receptionist NZSEI = 36	Receptionist NZSEI = 36	Receptionist NZSEI = 36	Emma = 36, Liam = not determinable
Sally (teacher), Kristy (accountant), kid Charlie	Not determinable	Accountant NZSEI = 73	Multiple possibilities	Not determinable

FAMILY AND HOUSEHOLD LEVEL SEP — BEYOND NUCLEAR FAMILIES

Different methods endorse particular understandings of families.



PROJECT AIMS

- Examine different methods of combining socioeconomic position for couples, parental units and households using a range of health and social outcomes.
 - For the New Zealand usually-resident population
 - For different age groups/cohorts
 - For different genders
 - For different ethnic groups (Level I)
 - For same and opposite sex couples (where sample sizes permit).

PROPOSED METHODOLOGY

- 2013 Census as base population, link other data sets from the Integrated Data Infrastructure (IDI).
- Socioeconomic measure New Zealand Socioeconomic Index (NZSEI-13).
- Sensitivity checks with other SEP measures.
- Best measure of couple/parental/household SEP should explain the most variation in the outcome/fit the data best.

PROPOSED METHODOLOGY — OUTCOMES

Data set	Adult or child?	Outcomes
Chronic conditions (MoH)	Adult	Diabetes, TBI, AMI, stroke, cancer
Birth records (DIA)	Child	Birth weight, gestational age
B4 school check (MoH)	Child	BMI, dental health
School records (MoE)	Child	Expected percentile score at NCEA Level I

PROPOSED METHODOLOGY — KEY LIMITATIONS

- Limitations of NZSEI.
 - Imputed NZSEI scores (education and age).
 - Sensitivity checks with income, education and housing tenure.
- Reverse causality.
 - SEP bias in diagnosis.
 - Weakening of SEP gradients for older age groups.

ACKNOWLEDGEMENTS

- Thank you to Statistics New Zealand for providing access to the data and for providing support.
- Thank you to my wonderful supervisors for all their support and guidance.
- Thank you to the Public Policy Institute for providing access to their data lab.
- Thank you all for listening.

SELECTED REFERENCES

- Beller, E. (2009). Research into the twenty-first century: Why mothers matter. American Sociological Review, 74(4), 507-528. https://doi.org/10.1177/000312240907400401
- Brown, D. C., Hummer, R. A., & Hayward, M. D. (2014). The importance of spousal education for the self-rated health of married adults in the United States. *Population* Research and Policy Review, 33(1), 127–151. <u>https://doi.org/10.1007/s1113-013-9305-6</u>
- Davis, P., McLeod, K., Ransom, M., Ongley, P., Pearce, N., & Howden-Chapman, P. (1999). The New Zealand Socioeconomic Index: Developing and validating an occupationally-derived indicator of socio-economic status. Australian and New Zealand Journal of Public Health, 23(1), 27–33. https://doi.org/10.1111/j.1467-842X.1999.tb01201.x
- Erikson, R. (1984). Social class of men, women and families. Sociology, 18(4), 500–514.
- Fahy, K. M., Lee, A., & Milne, B. J. (2017). New Zealand Socio-economic Index 2013. Wellington.
- Kalmijn, M. (1994). Mother's occupational status and children's schooling. American Journal of Sociology, 59(2), 257-275. https://doi.org/10.2307/2096230
- Korupp, S. E., Ganzeboom, H. B. G., & Van der Lippe, T. V. (2002). Do mothers matter? A comparison of models of the influence of mothers' and fathers' educational and occupational status on children's educational attainment. Quality and Quantity, 36(1), 17–42. <u>https://doi.org/10.1023/A:1014393223522</u>

SELECTED REFERENCES

- Krieger, N., Chen, J. T., & Selby, J. V. (1999). Comparing individual-based and household-based measures of social class to assess class inequalities in women's health: A methodological study of 684 US women. *Journal of Epidemiology and Community Health*, 53(10), 612–623. <u>https://doi.org/10.1136/jech.53.10.612</u>
- Monden, C. W. S., De Graaf, N. D., & Kraaykamp, G. (2003). How important are parents and partners for smoking cessation in adulthood? An event history analysis. Preventive Medicine, 36(2), 197–203. https://doi.org/10.1016/S0091-7435(02)00026-9
- Monden, C. W. S., Van Lenthe, F., De Graaf, N. D., & Kraaykamp, G. (2003). Partner's and own education: Does who you live with matter for self-assessed health, smoking and excessive alcohol consumption? Social Science and Medicine, 57(10), 1901–1912. <u>https://doi.org/10.1016/S0277-9536(03)00055-8</u>
- Takagi, D., Kondo, N., Takada, M., & Hashimoto, H. (2014). Differences in spousal influence on smoking cessation by gender and education among Japanese couples. BMC Public Health, 14(1), 1–7. https://doi.org/10.1186/1471-2458-14-1184
- Vanthomme, K., Vandenheede, H., Hagedoorn, P., & Gadeyne, S. (2016). Socioeconomic disparities in lung cancer mortality in Belgian men and women (2001-2011): Does it matter who you live with? BMC Public Health, 16(1). <u>https://doi.org/10.1186/s12889-016-3139-1</u>
- Vuong, Q. H. (1989). Likelihood Ratio Tests for Model Selection and Non-Nested Hypotheses. Econometrica, 57(2), 307–333.
- All Images: Icons made by Freepik from <u>www.flaticon.com</u>.