

# Challenges & Potential Contributions of Research on the Intergenerational Transmission of Health Inequality

Kim Shuey & Andrea Willson  
*University of Western Ontario*



**Western**  
Centre for Population,  
Aging and Health

Funded by a grant from the  
Canadian Institutes of Health Research

# Modeling life course health & childhood circumstances

- Reliance on aggregate trajectories
- Overlooks contribution of intra-individual variability (Kelley-Moore & Lin 2011)
- Implies a normative process and an aging effect



# Using a Disaggregated Approach

- Problematizes heterogeneity within a population/cohort
- Tries to understand the effects of individual differences in timing/change
- Person-centered; focuses on individual patterns of stability and change



# Research Questions

1. Can distinct patterns of childhood economic hardship and trajectories of health risk be identified in the data?
  - Health risk trajectories
  - Childhood economic hardship



# Research Questions

1. Can distinct patterns of childhood economic hardship and trajectories of health risk be identified in the data?
2. Are patterns of stability and change in childhood economic hardship associate with trajectories of health risk in adulthood?



# Methods

- Repeated-measures Latent Class Analysis (RMLCA) (SAS Proc Mixed, Collins & Lanza, 2010)
  - Identifies distinct patterns of change over time
  - Does not assume that individual change follows a functional form with regard to time



# Data

- U.S. Panel Study of Income Dynamics (PSID), 1968-2009
- Multi-generational design
- Allows for use of prospective data on childhood
- Newborn to 8 in 1968; 42-49 in 2009
- N=1,426



# Childhood Economic Hardship

- Family economic hardship status (125% of official U.S. poverty threshold)
- 1968-1977

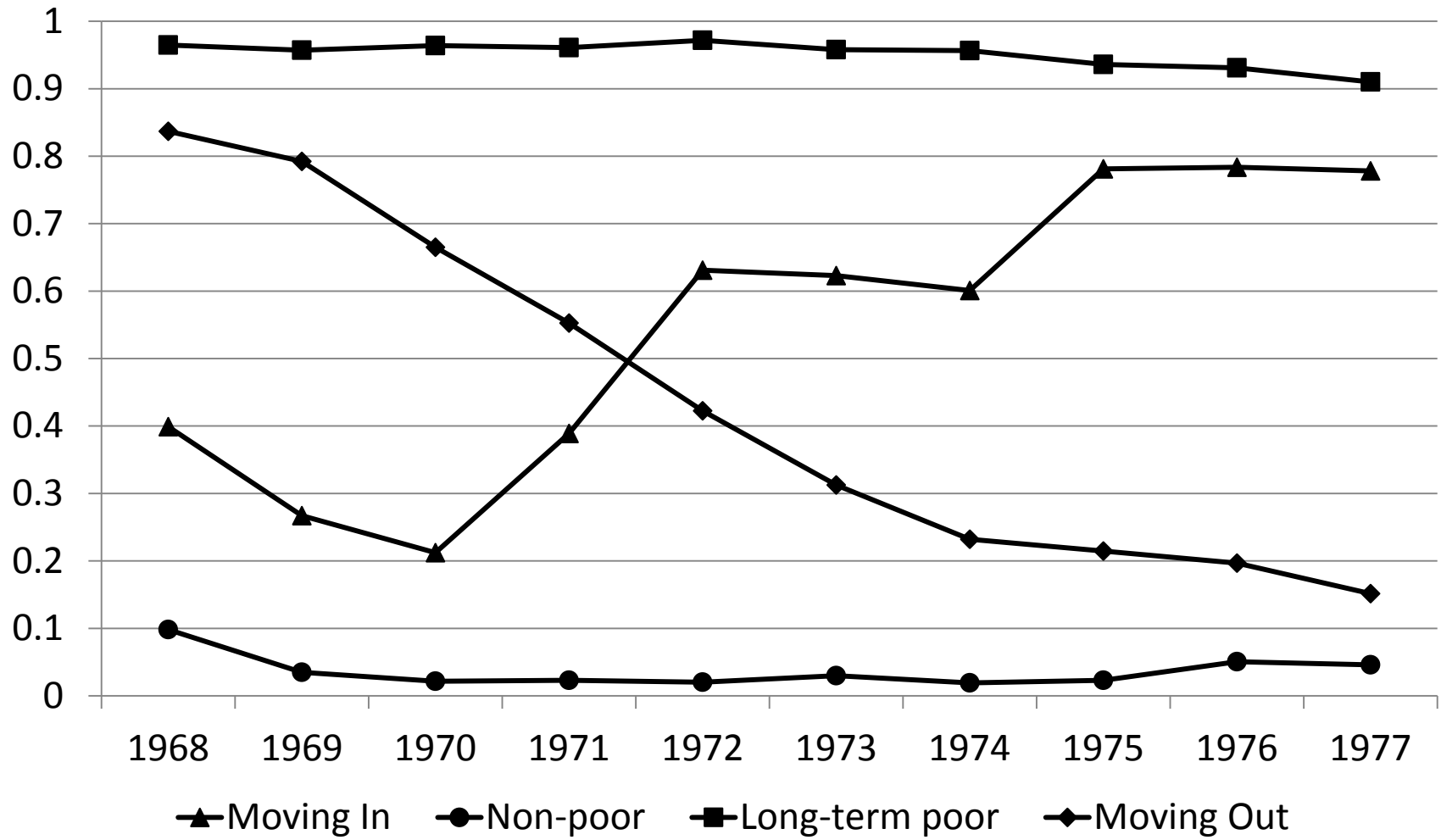


Western

Centre for Population,  
Aging and Health



# RMLCA of Childhood Poverty Exposure

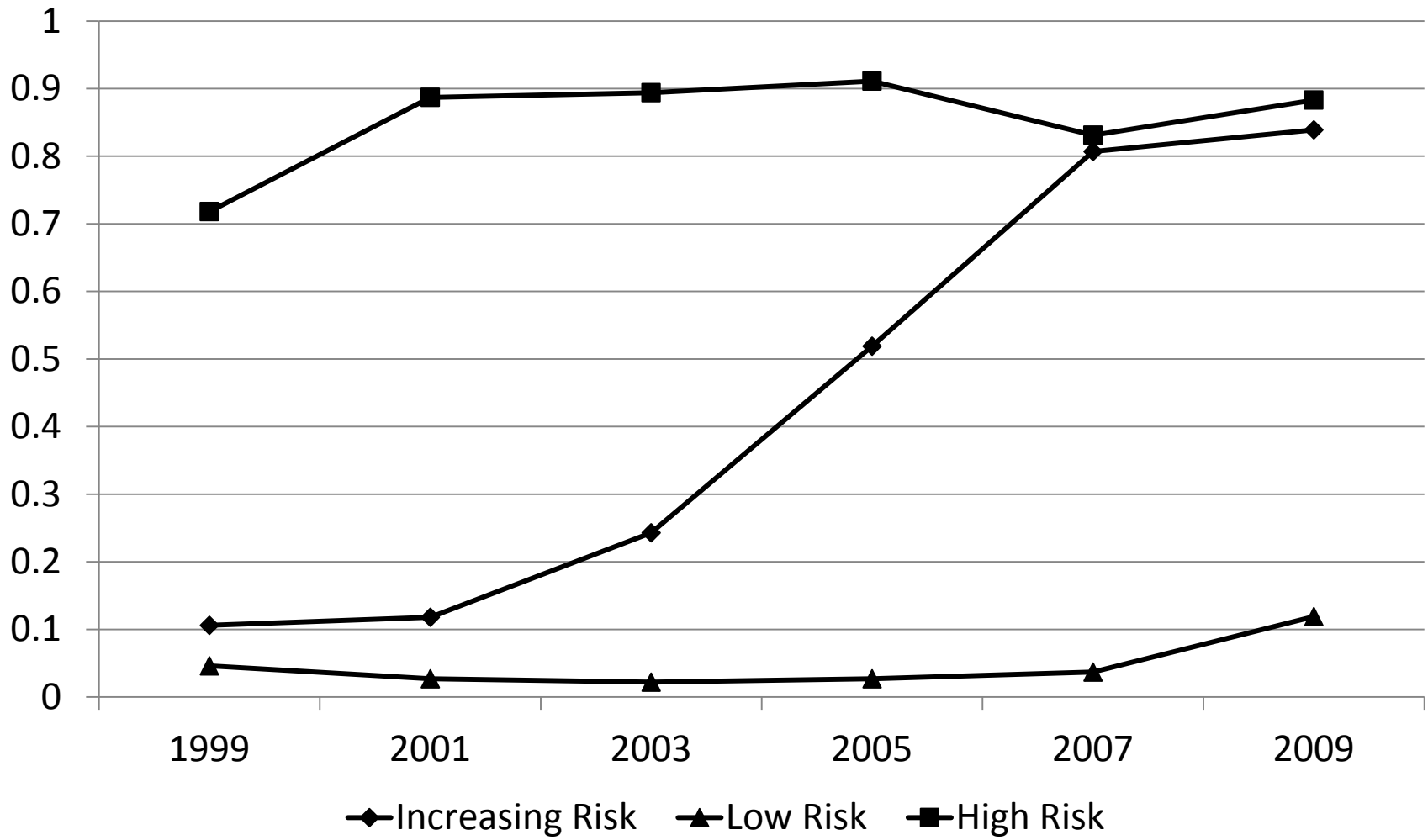


# Health Risk Trajectories

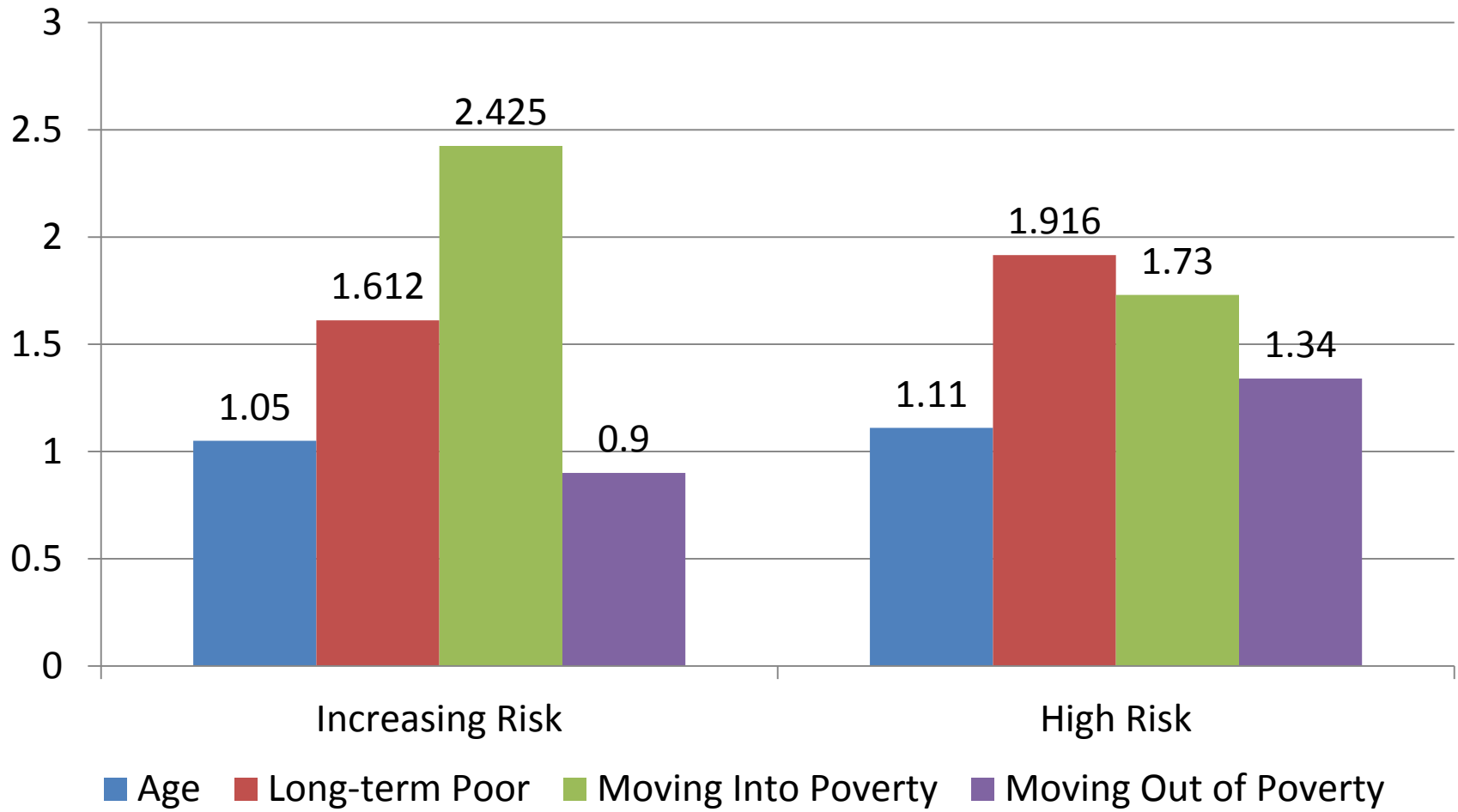
- Presence of any of five conditions: heart disease, high blood pressure, diabetes, arthritis, cancer (1999-2009)



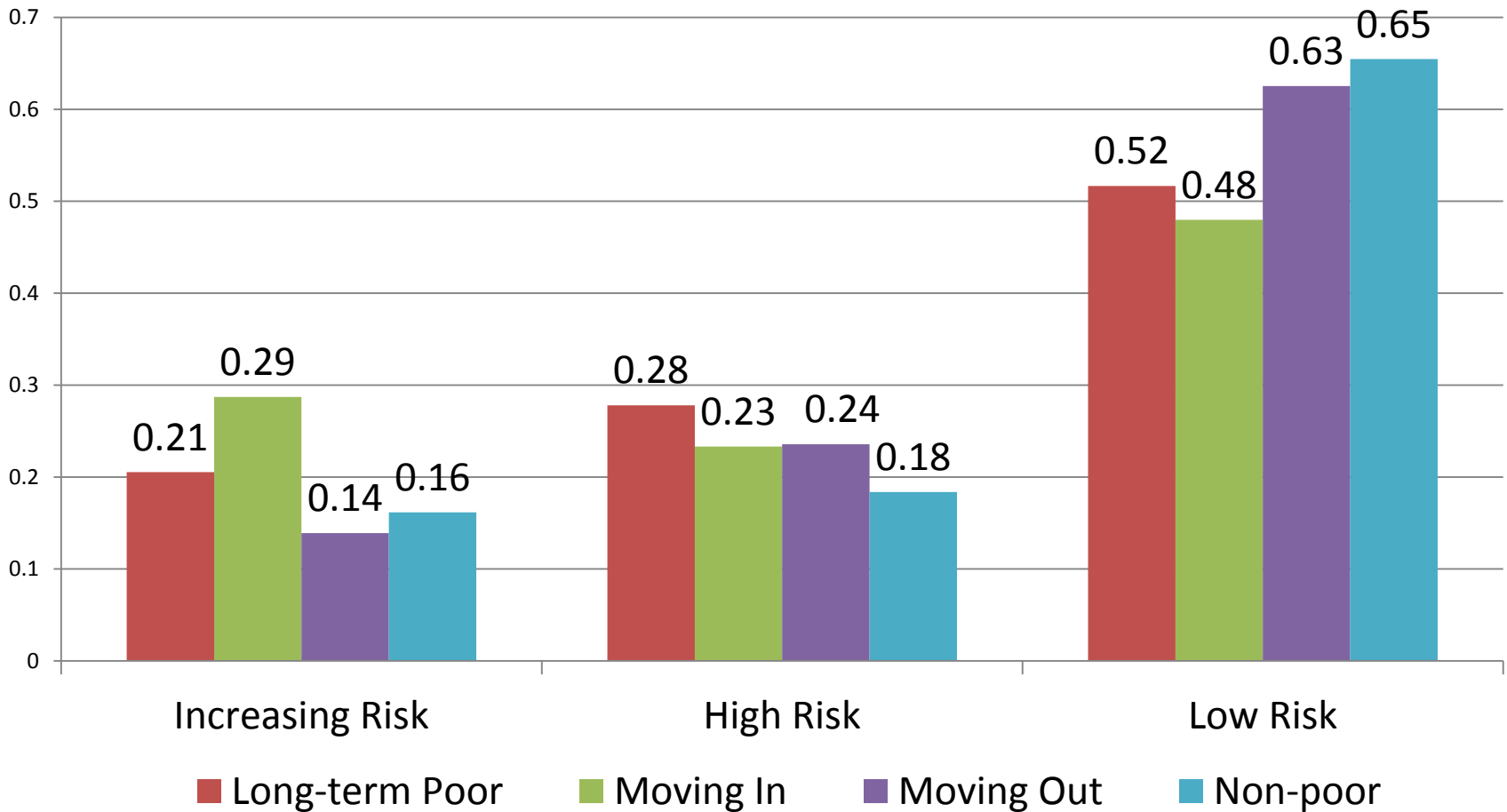
# RMLCA of Health Risk Trajectories



# Childhood Economic Hardship Classes as Predictors of Health Risk Trajectory Latent Class (Odds Ratios)



# Predicted Probabilities of Health Risk Trajectory by Childhood Poverty Exposure Class



# Discussion

- Challenges
  - Examines only conditions in early life – potential for “time 1 encapsulation problem”
  - Unobserved heterogeneity due to sample attrition



# Discussion

Potential contributions of this approach for life course research on social mobility

- Individual life course as a trajectory comprised of stability and change that generates heterogeneous pathways of advantage and disadvantage



Western

Centre for Population,  
Aging and Health