children who were raised on farms are at a cognitive disadvantage in later life. Both Ferraro and Sauerteig and Homan and Kong generate indices of total childhood misfortune. Ferraro and Sauerteig conclude that childhood misfortune affects obesity by way of adult health behavior, specifically, physical activity. Homan and Kong find that childhood misfortune affects subjective and functional health by way of the psychological mechanism of purpose in life. Together, these five papers begin to identify the ways in which experiences in childhood and adolescence have long-lasting consequences for a variety of health outcomes in later life.

## COLLEGE COMPLETION AS A PROTECTIVE FACTOR FOR LATER-LIFE COGNITION: ISSUES OF SELECTION

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Additional years of education is considered a modifiable protective factor against Alzheimer's disease and related dementias. However, some empirical studies have suggested that linkages between educational attainment and later life cognition are largely a function of differential selection into higher education. Our study uses data from the Wisconsin Longitudinal Study, as one of the longest-running cohort studies in the U.S., to further probe how differential selection into higher education might influence associations between college completion and later life cognition. Using adjusted inverse probability weighting and with particular attention to adolescent IQ, we find evidence that college completion is associated with better language for both men and women at age 65, as well as with better memory for men. Examining heterogeneous treatment effects, we further find that associations between college completion and later life cognition are strongest for men who were least likely as adolescents to attend college.

#### GEO-LIFE COURSE DETERMINANTS OF EDUCATIONAL DISPARITIES IN U.S. ADULT HEALTH Blakelee Kemp,¹ Blakelee R. Kemp,¹ Jennifer K. Montez¹,

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Educational attainment is one of the strongest social determinants of adult health. However, recent studies show that it is a stronger determinant in some areas of the country than others. This study investigates geographic and life course contexts that may explain the pattern. We merge data on adults aged 50+ in the Health and Retirement Study (1998-2014) with contextual data on their state(s) of birth and residence. We examine: (1) how the education-health association varies across regions, and (2) how childhood (e.g., poverty, compulsory schooling) and adulthood experiences (e.g., smoking, minimum wage) explain the variation. Findings reveal that the education-health association varies across regions and is more pronounced for outcomes further along in the disablement process. Poor childhood health, adult behaviors, and states' economic policies partly explain why the association varies across regions. The findings underscore the importance of geographic and life course contexts for understanding educational disparities in health.

## GROWING UP ON A FARM AND COGNITIVE FUNCTIONING IN LATER LIFE

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There is growing interest in rural disadvantage and the implications for health and well-being in later life. We examine the relationship between living in rural areas in childhood and cognitive outcomes later in life using the Wisconsin Longitudinal Study. The WLS has prospective childhood measures of geographic status, adolescent IQ, and detailed measures of socioeconomic status, combined with later life measures of health and cognitive functioning. We find a robust relationship between rurality and lower levels of cognitive functioning, but it is explained by growing up on a farm.

#### REDUCING THE IMPACT OF CHILDHOOD MISFORTUNE: THE ROLE OF ADULT PHYSICAL ACTIVITY ON LATER OBESITY

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This study investigates the effects of childhood misfortune and adult physical activity on later-life body mass index (BMI) and waist circumference. We use ordinary least squares regression to examine the impact of childhood misfortune (30 indicators), and adult physical activity (frequency and intensity) on waist circumference and BMI (kg/m²) using data from the Health and Retirement Study (N=5,732). Results emphasize that experiencing childhood misfortune is associated with a larger waist circumference and BMI in later life, while adjusting for social status and lifestyle variables. Adjusting for adult physical activity decreases the effect of childhood misfortune on waist circumference, suggesting mediation. The analysis reveals that the effects of childhood misfortune on BMI and abdominal adiposity are remediable. Although childhood misfortune is associated with larger waist circumference and BMI in later life, regular physical activity reduces the risk on both indicators of obesity.

# LONGITUDINAL HEALTH CONSEQUENCES OF CHILDHOOD ADVERSITY: THE MEDIATING ROLE OF PURPOSE IN LIFE

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Adverse childhood experiences have long-term detrimental effects on physical health. Although biological, behavioral, and social factors have been explored as intermediate mechanisms, little research has explored psychosocial factors as potential mediators. This study examined whether purpose in life longitudinally mediates the relationship between childhood adversity and two measures of adult health (self-rated health and functional limitations). Data were obtained from 3,871 participants in the Midlife in the United States (MIDUS) study. We tested a cross-lagged mediation model from childhood adversity to adult health via purpose in life, controlling for baseline measures of health and purpose in life. Good model fit was achieved indicating that childhood adversity is associated with poorer adult health through direct and mediated paths. Childhood adversity may restrict young people's