



PennState

Center for Healthy Aging

Rethinking Adult Development Through the Lens of Daily Stress

David M. Almeida

RAD Conference | Clark University, October 18-19, 2018



Cadence of Adult Development

- Marked by Transitions into and out of Major Social Roles (Moen, 1992, Neugarten, 1972)
 - Education
 - Employment
 - Marriage
 - Parenthood
 - Grandparenthood
 - Caregiving
- Played out via Developmental Tasks (Havighurst, 1972)
 - Rearing Children
 - Establishing/Maintaining Economic Standard of Living
 - Engaging in Civic Responsibility
 - Adjusting to Aging parents
 - Adjusting to decreasing physical strength and health

Daily Stress Paradigm: Measuring the Rhythms of the Mundane

- Challenges and frustrations of daily life (disagreements, malfunctions, time pressures)
- Intensive assessment: “Daily Diaries”
- Advantages:
 1. Assess naturally occurring tangible events: “capture life as it is lived”
 2. Minimize memory bias
 3. Evaluate daily exposures
 4. Calculate stressor reactivity (Within-person slopes)

Stressor Exposure Daily Inventory of Stressful Events (DISE)

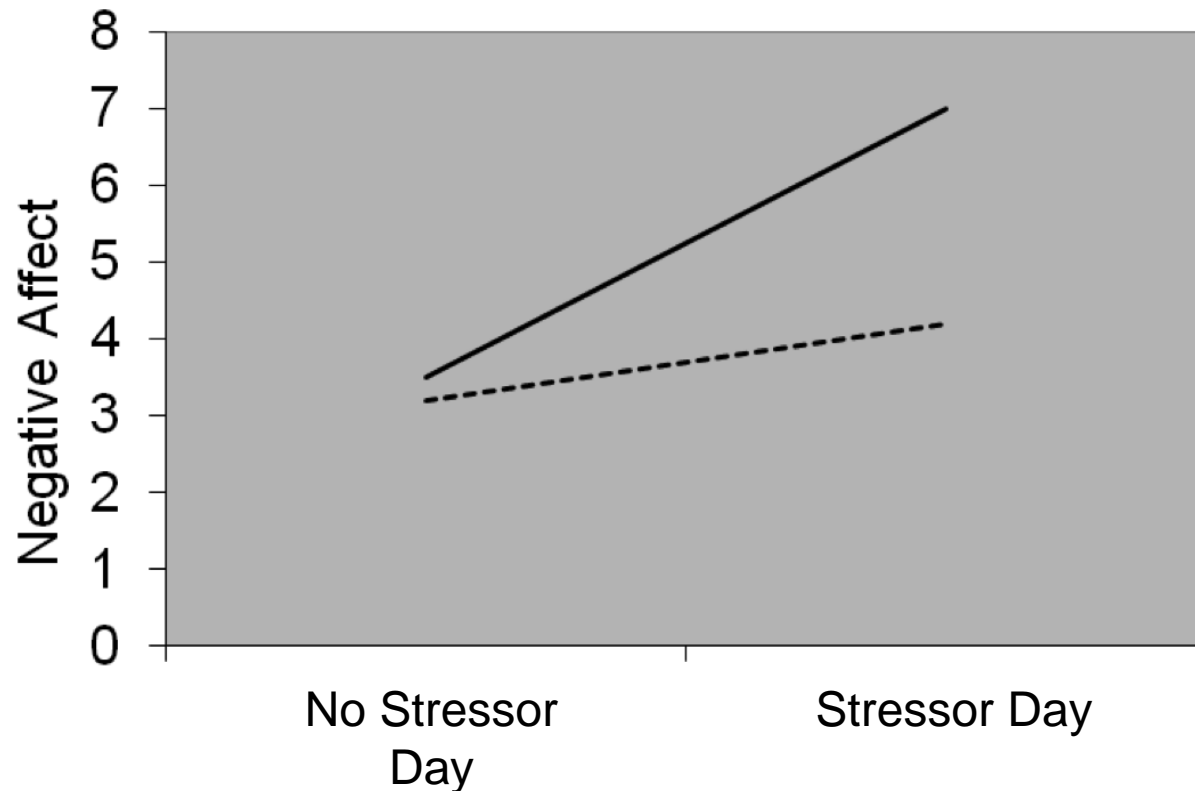
In the past 24 hours...

- Did you have an argument or disagreement?
- Did anything happen at work that people would consider stressful?
- Did anything happen at home that people would consider stressful?
- Did anything happen to a close friend or relative that was stressful for you?
- Did anything else happen to you that people would consider stressful?

Almeida, D. M., Wethington, E., & Kessler, R. C. (2002). The Daily Inventory of Stressful Experiences (DISE): An interview-based approach for measuring daily stressors. *Assessment, 9*, 41-55

Daily Stressor Affective Reactivity

Within-person Slopes between Stressor and Affect



Greater Stressor Reactivity Predicts:

- Mortality (Mroczek et al., 2016)
- Chronic Health Conditions (Piazza, 2013)
- Psychological Problems (Charles et al, 2013)
- Inflammation (Sin et al., 2017)
- Functional Health Problems (Leger et al., 2018)
- Decreased Financial Worth (Koffer et al., 2018)

Day-to-Day Stress of Adult Development

- What is the landscape of daily stress across adulthood?
 - Exposure
 - Type
 - Severity
 - Reactivity
- Does this differ by age?
 - Is there a “vulnerable” age group?
- Has daily stress gotten worse (1995 vs 2012)?
 - Demographic pressures
 - Economic Uncertainty
- Has daily stress gotten worse for certain people?
 - Age differences
 - Socioeconomic differences
 - Dieses of Distress

National Study of Daily Experiences (NSDE)



- Telephone Diary Study Across Eight Consecutive Evenings
- National samples of participants from the daily diary project of MIDUS
- Two samples of same aged adults (1996 & 2012)
- ($N_{\text{people}} = 2,765$, $N_{\text{days}} = 17,427$)
- Mean Age = 46 (SD = 12, Range = 25 – 75)

Description of NSDE Samples (1995 & 2012)

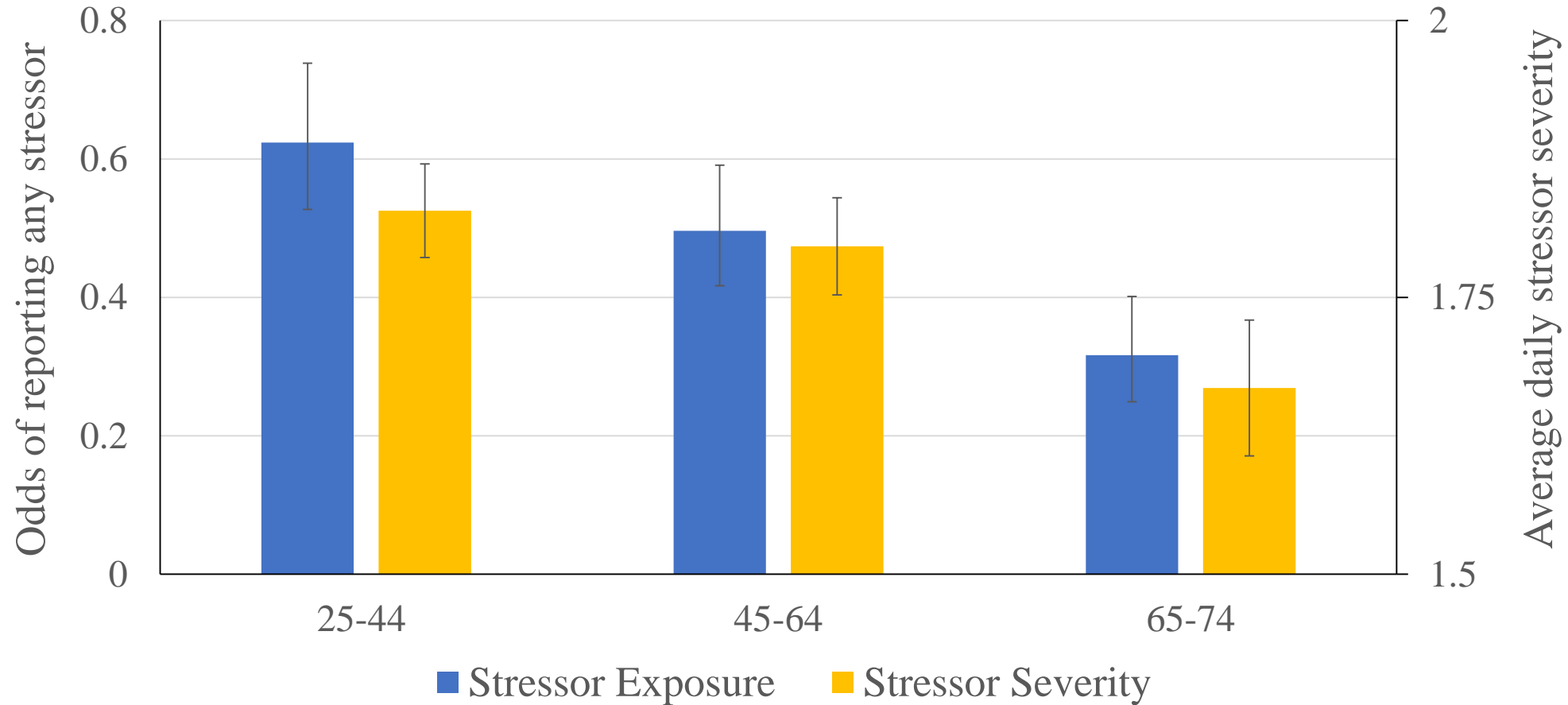


Characteristic	1995	2012
Age (Years [SD])	46.21 (12.87)	47.91 (12.67)
Female (%)	53.6	55.6
Some college or more (%)	63.2	79.5
Currently married or married at some point (%)	89.0	84.7
White (%)	91.2	84.7
Neuroticism (Mean [SD])	2.22 (0.67)	2.15 (0.69)
Currently working for pay	64.2	62.6

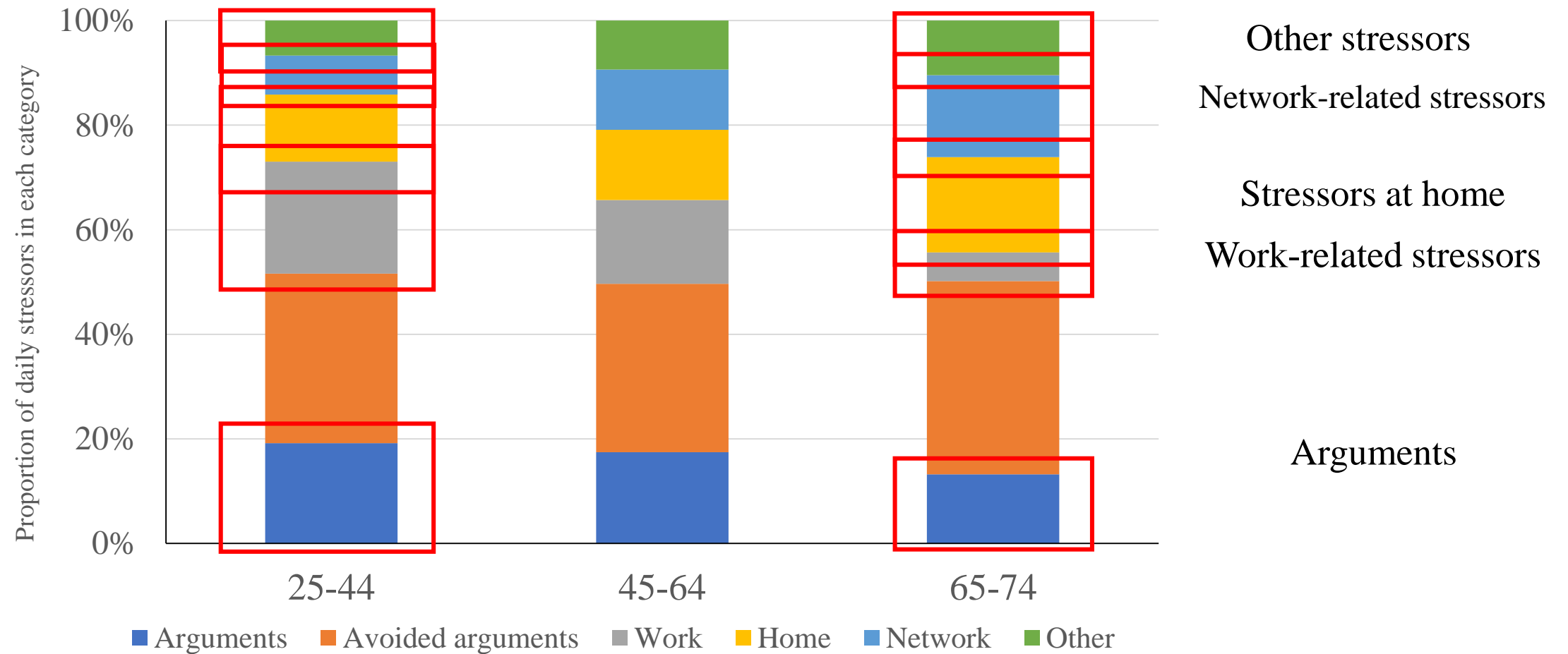
Landscape of Daily Stress

- Stressor exposure and severity by age
 - How often do adults experience stressors and how stressful are they?
- Proportion of each stressor type by age
 - What are the types of stressors adults experience?
- Reactivity by age
 - Are younger or older adults more reactive to daily stress?

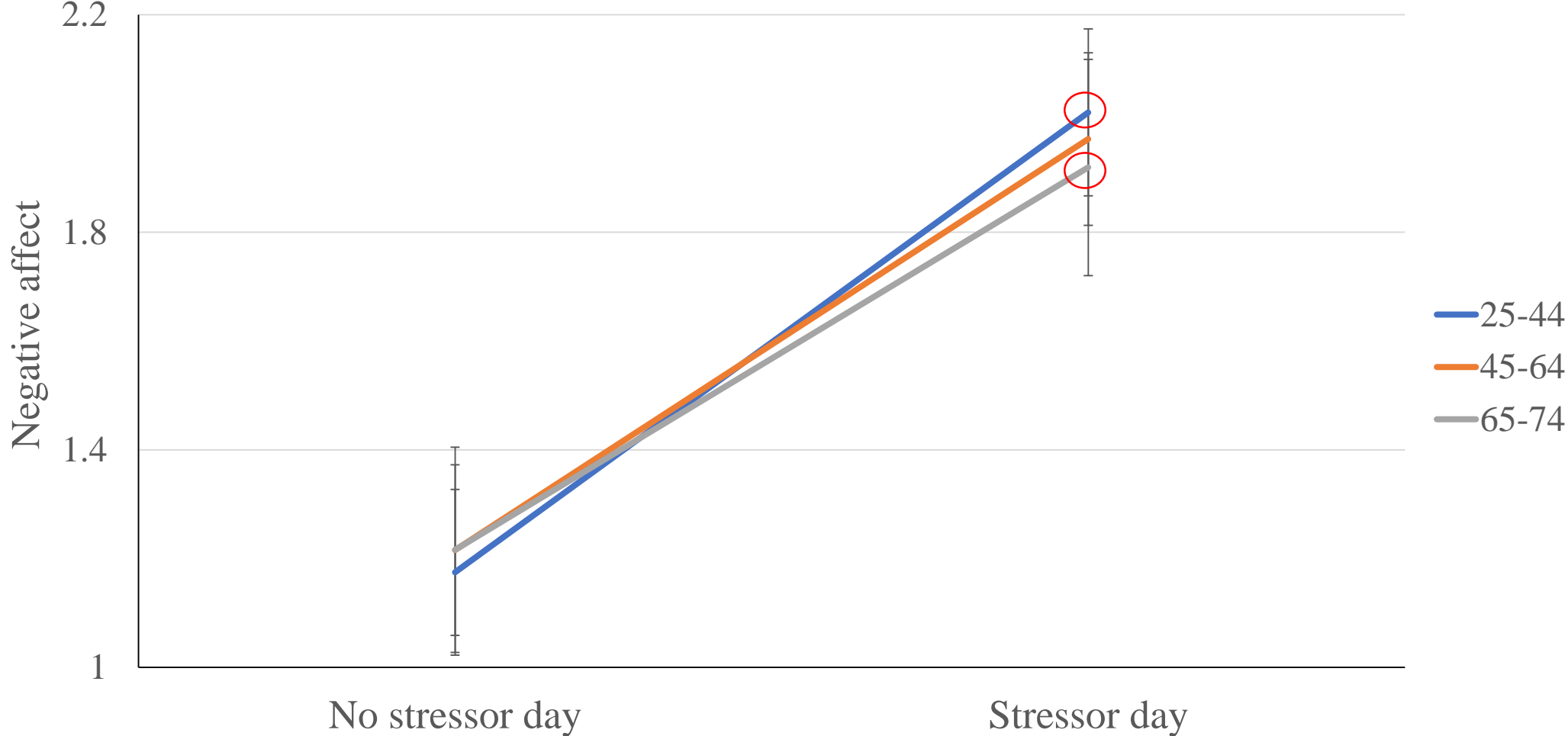
Daily Stressor Exposure and Severity by Age



Type of Daily Stressors by Age



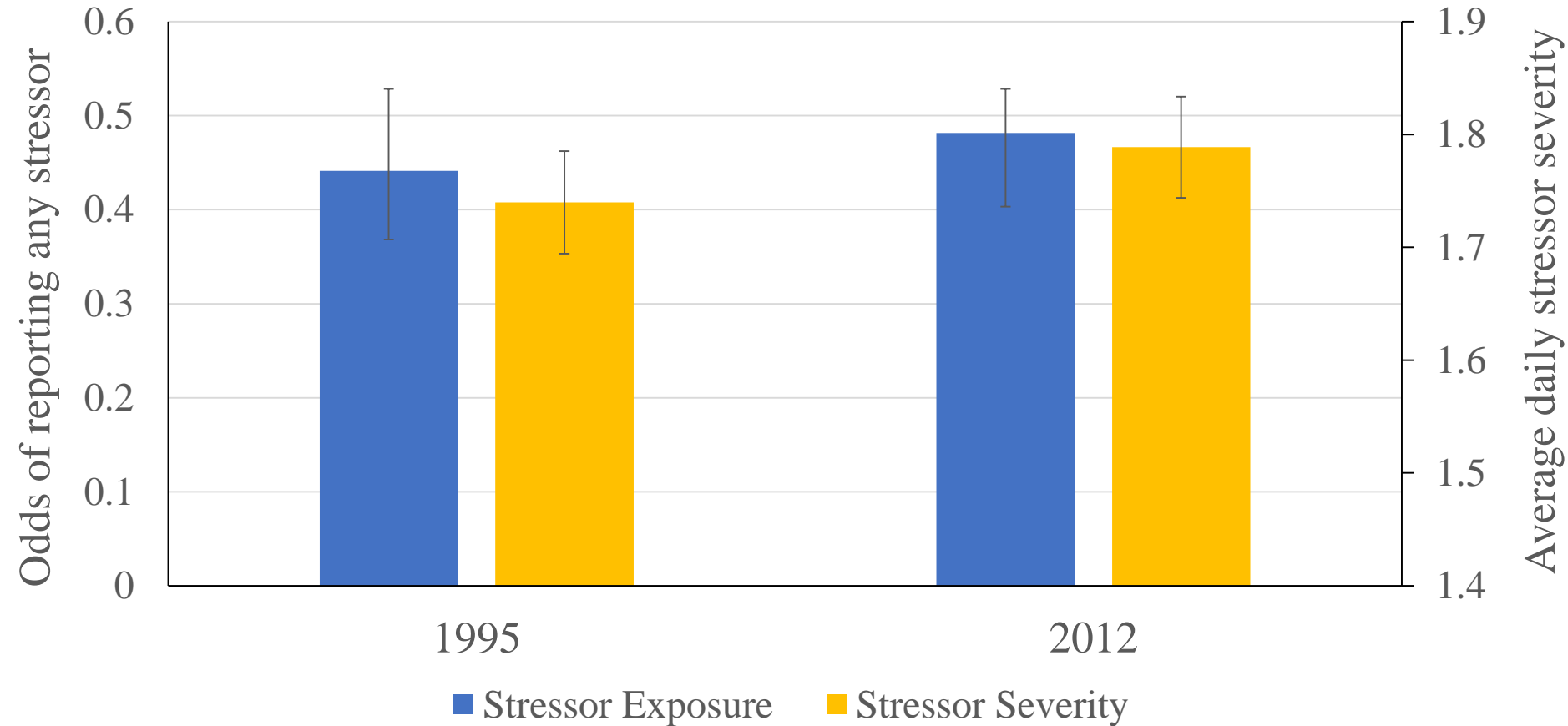
Daily Stressor Reactivity by Age



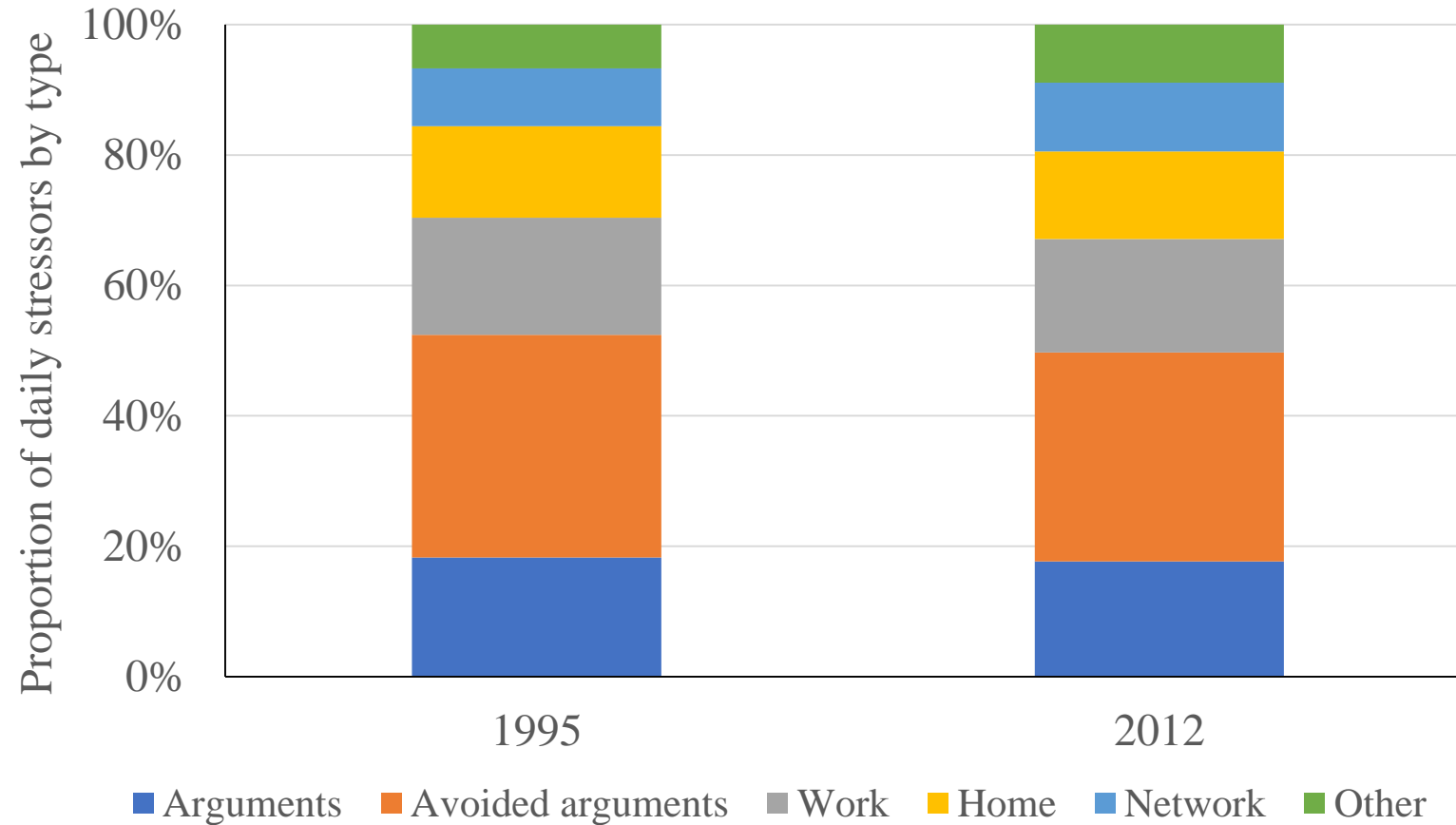
Is Daily Stress Getting Worse from 1995 to 2012?

- Stressor exposure and severity by period
- Proportion of each stressor type by period
- Reactivity by period

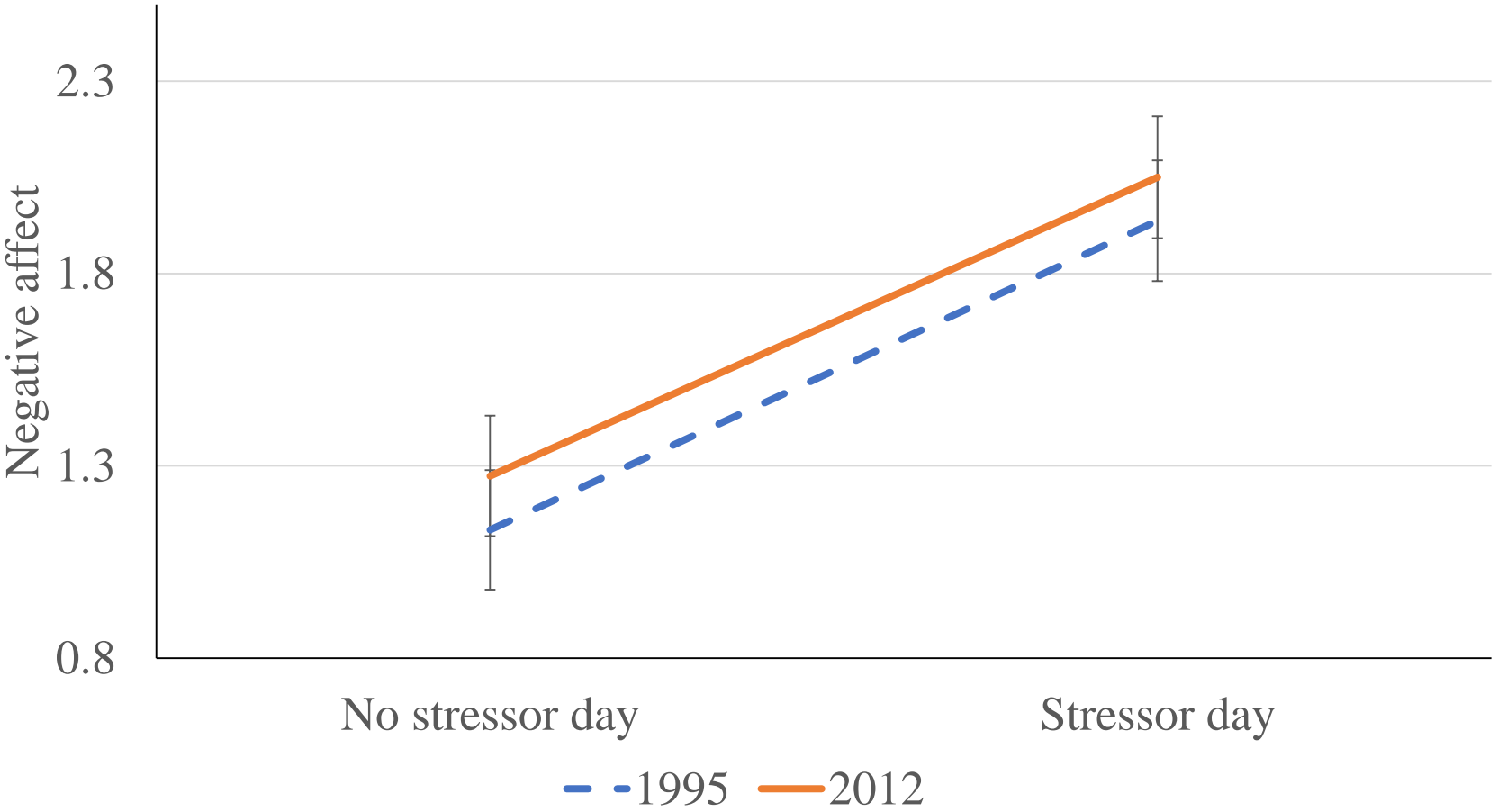
Daily Stressor Exposure and Severity by Period



Type of Daily Stressors by Period



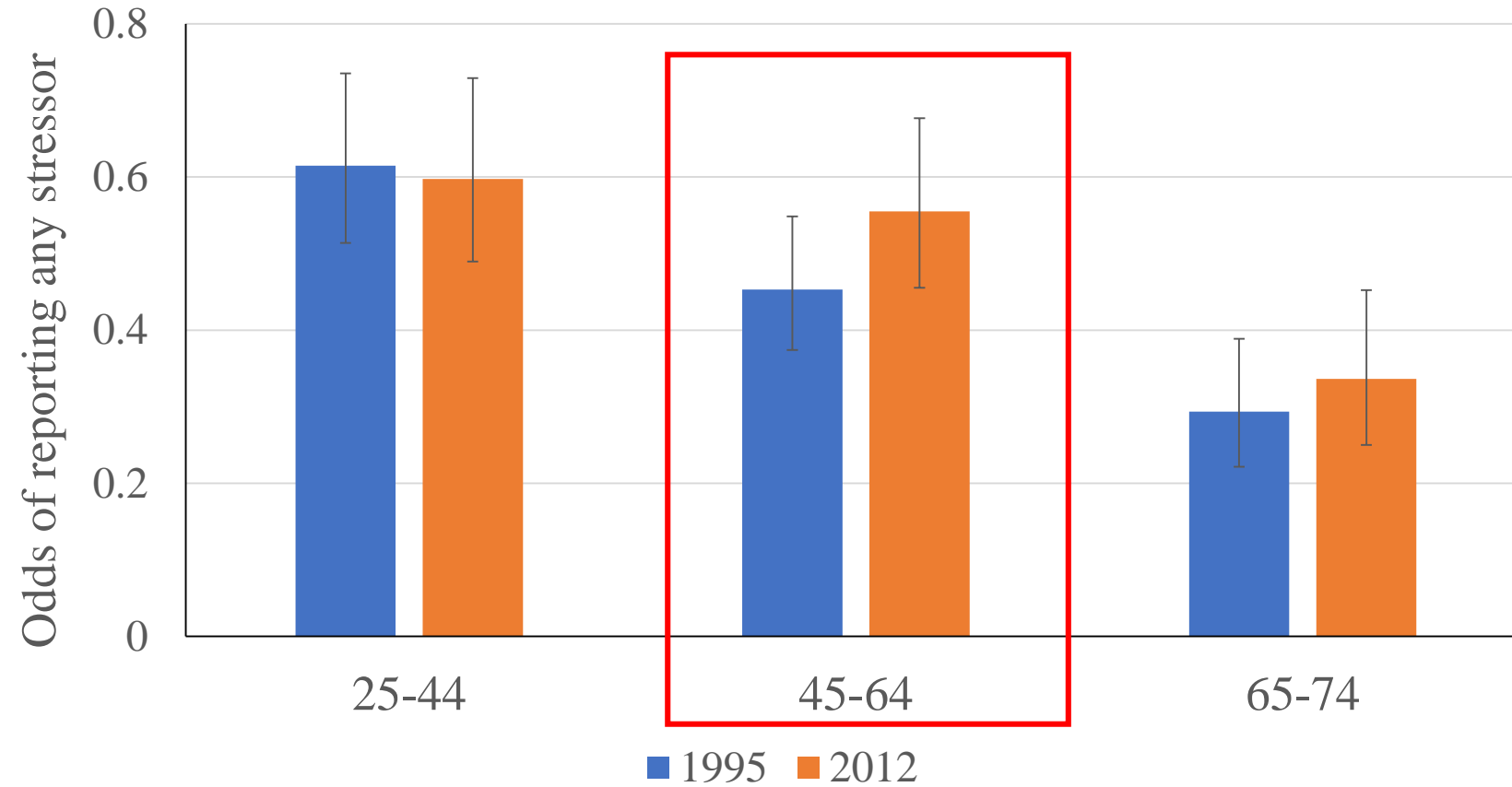
Daily Stressor Reactivity by Period



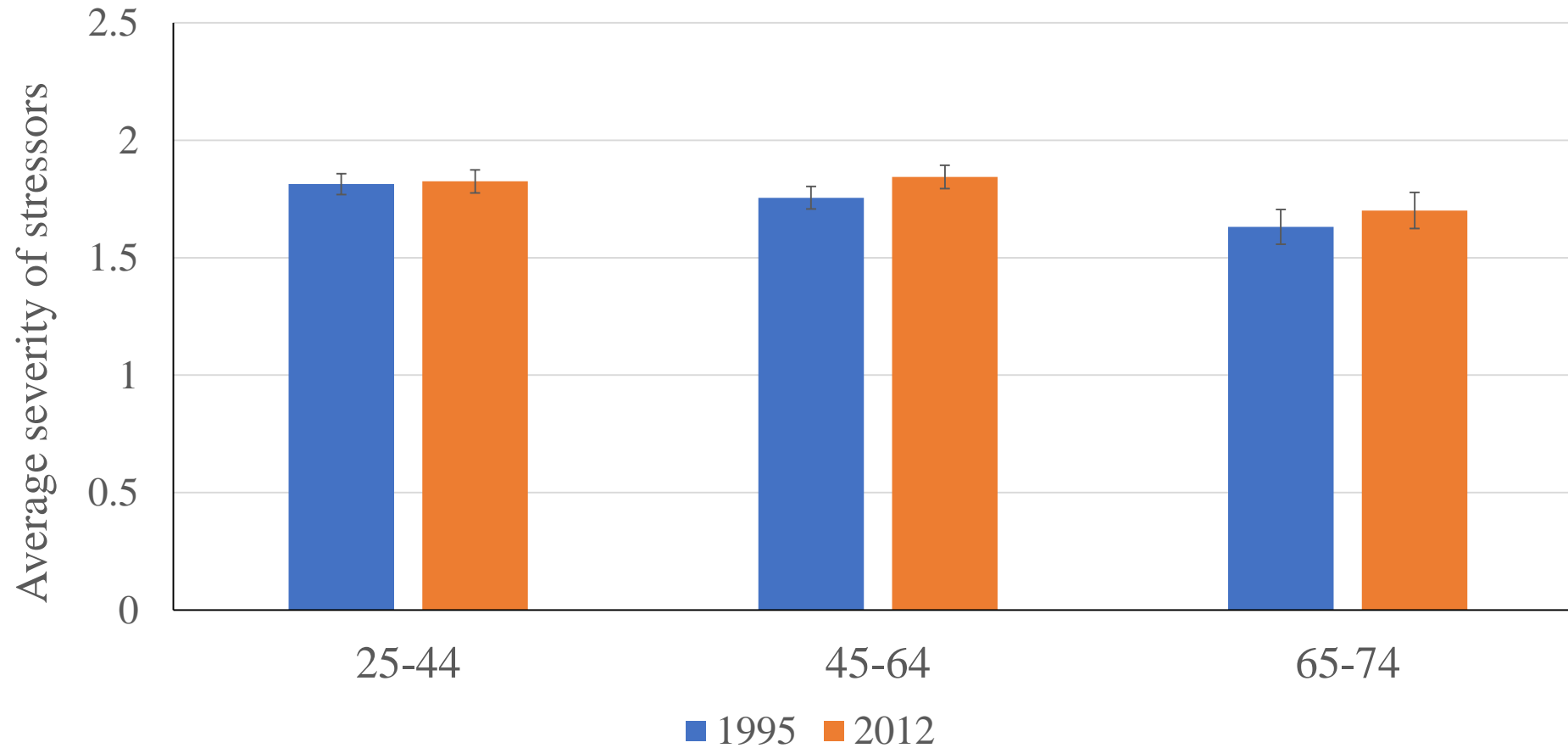
Is Daily Stress Getting Worse for Certain Adults?

- Stressor exposure by period by age
- Proportion of each stressor type by period and age
- Stressor severity by period by age
- Reactivity by period by age

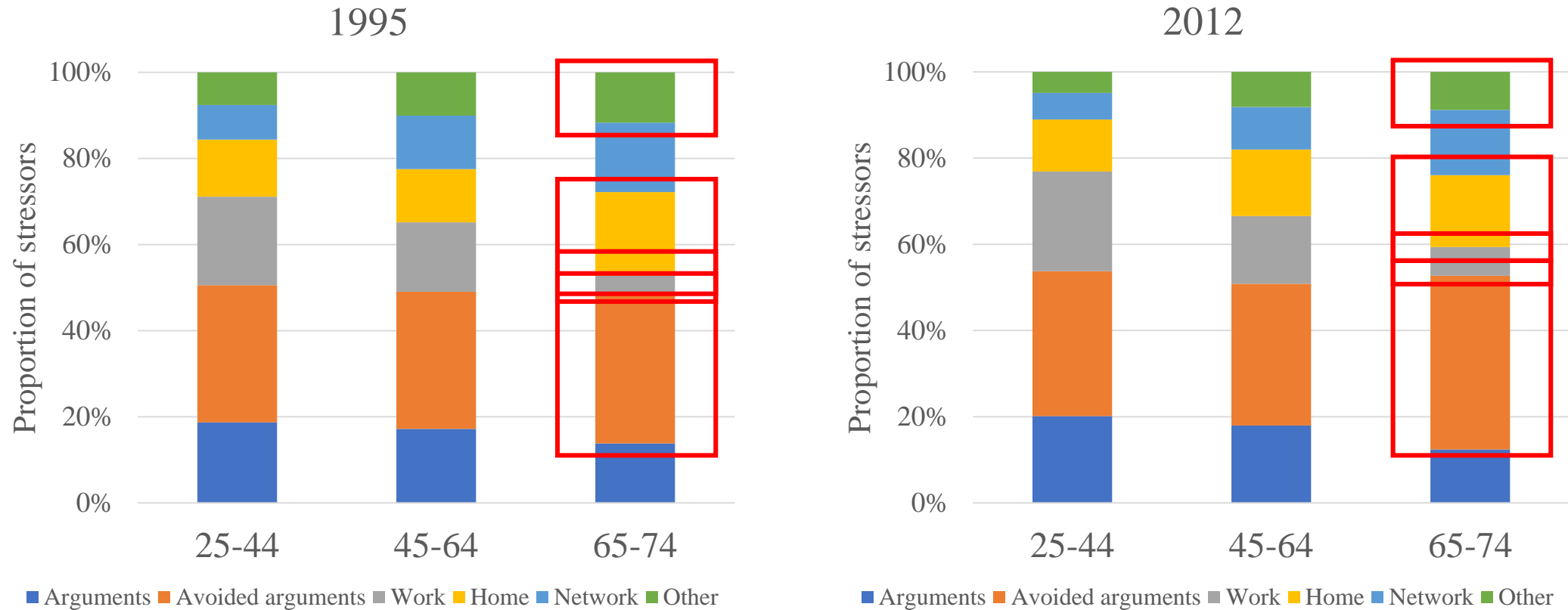
Daily Stressor Exposure by Age and Period



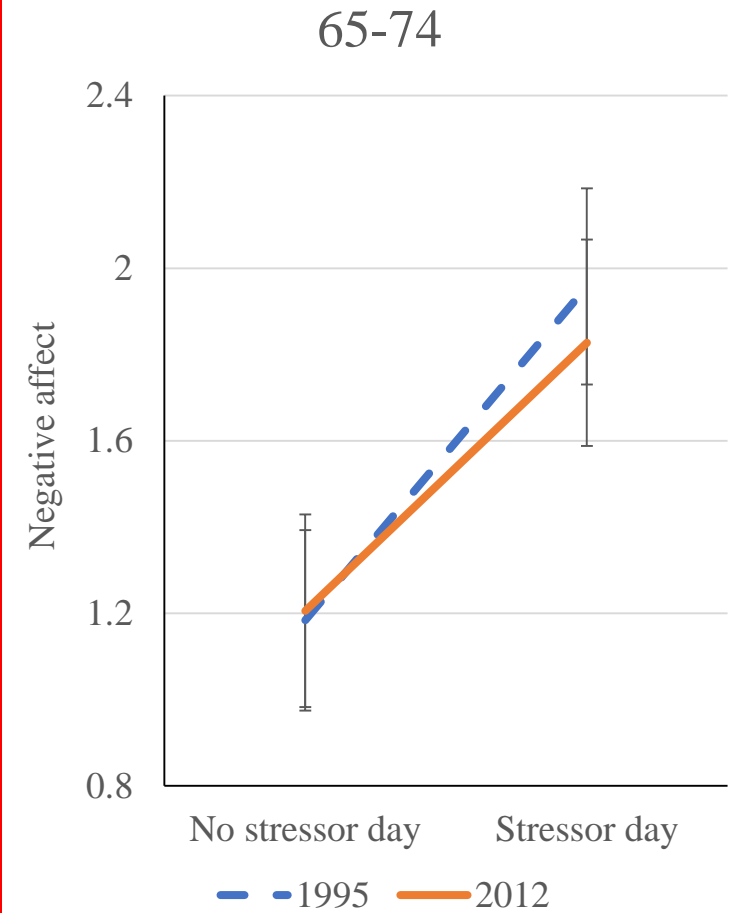
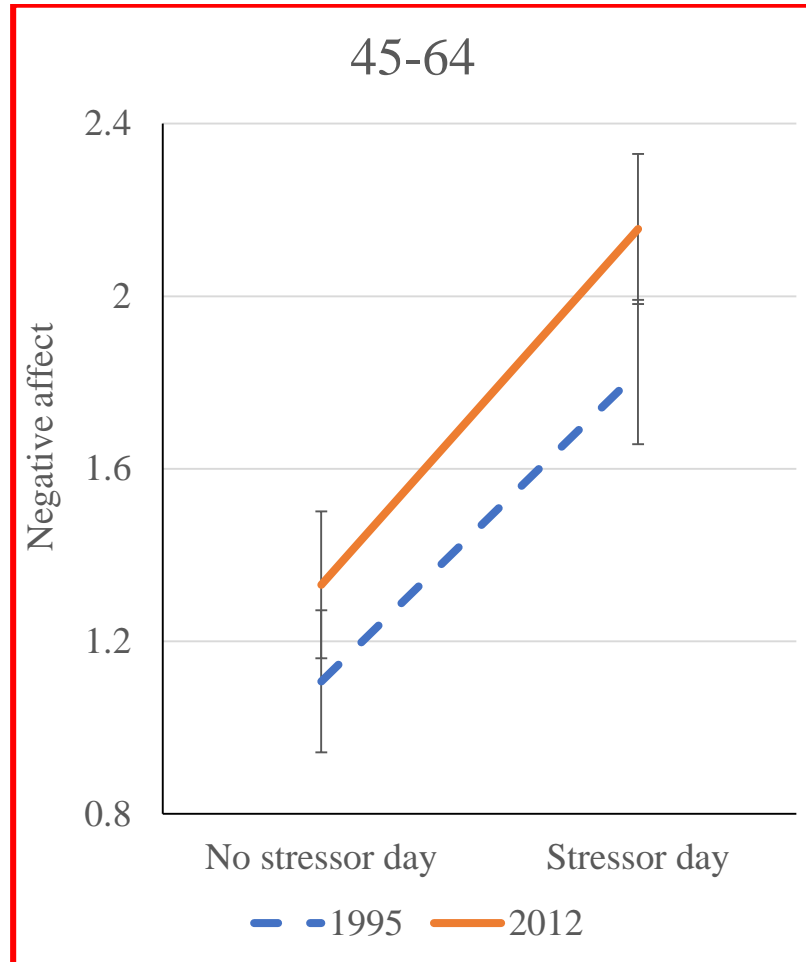
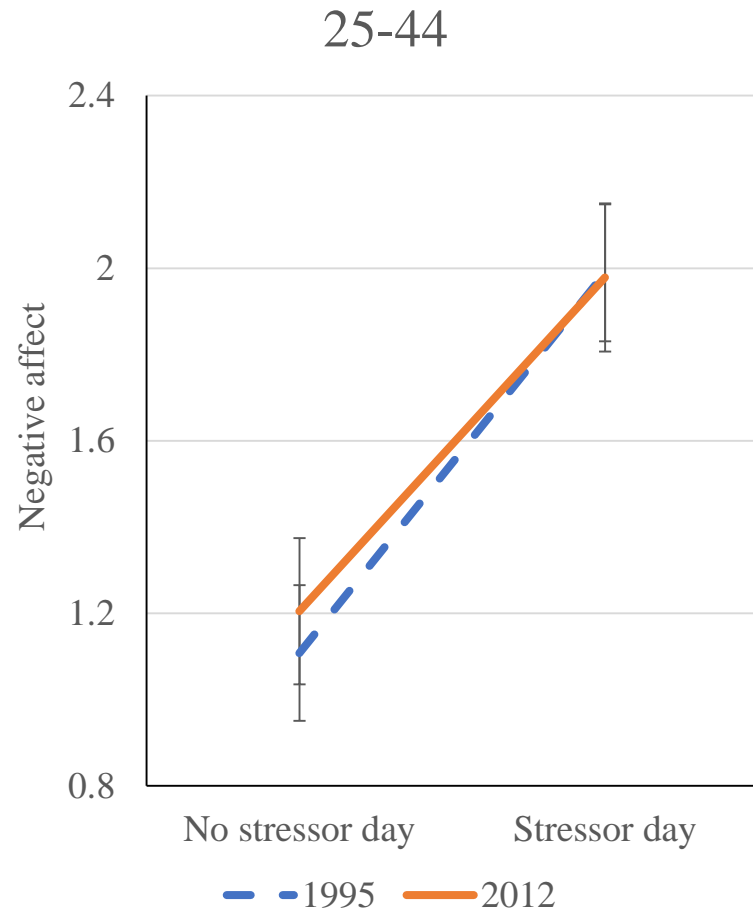
Daily Stressor Severity by Age and Period



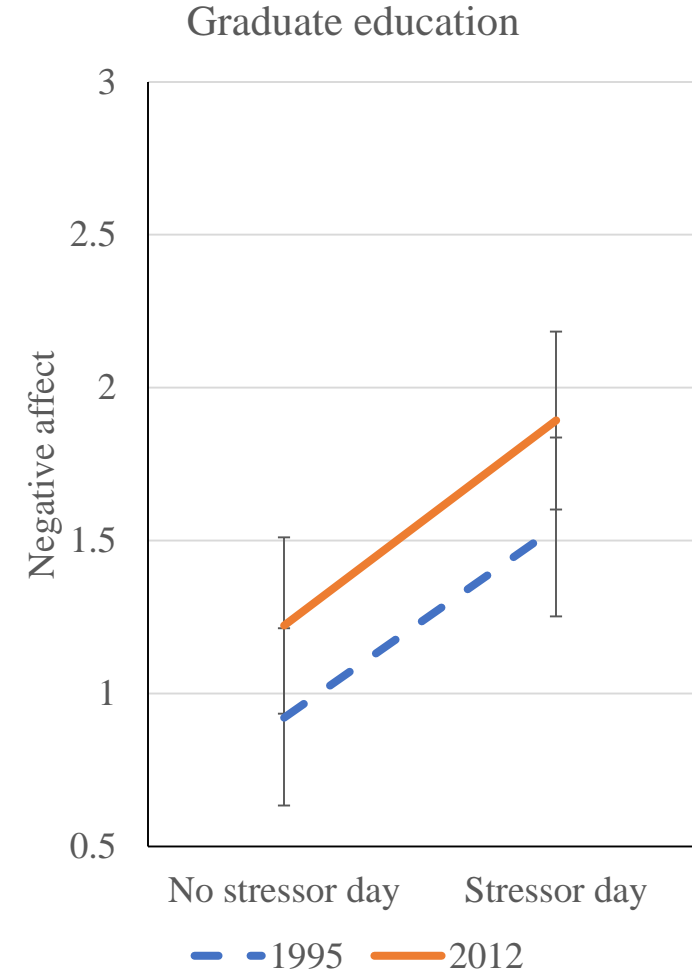
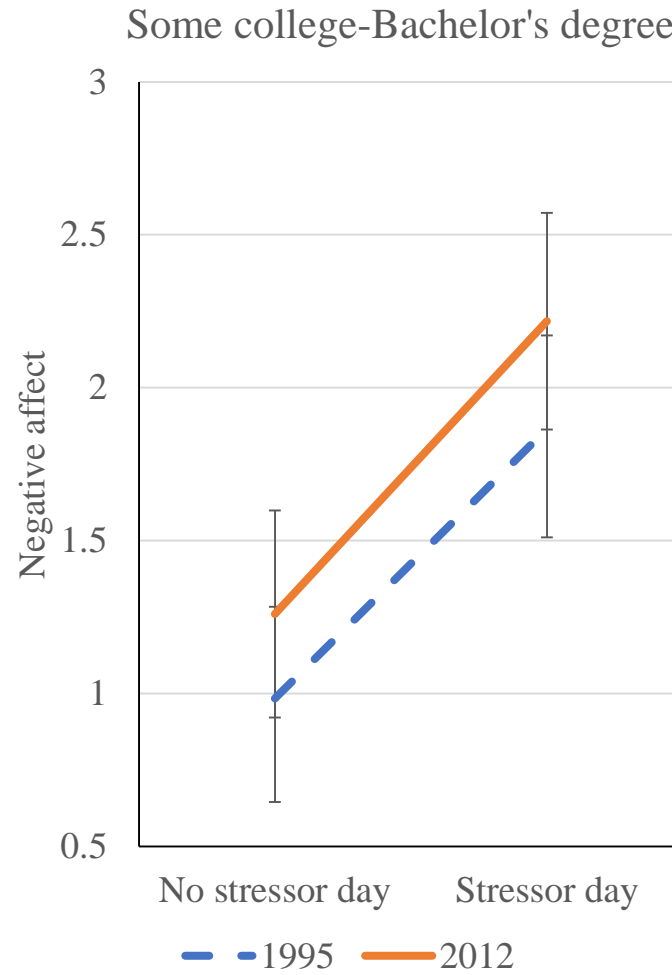
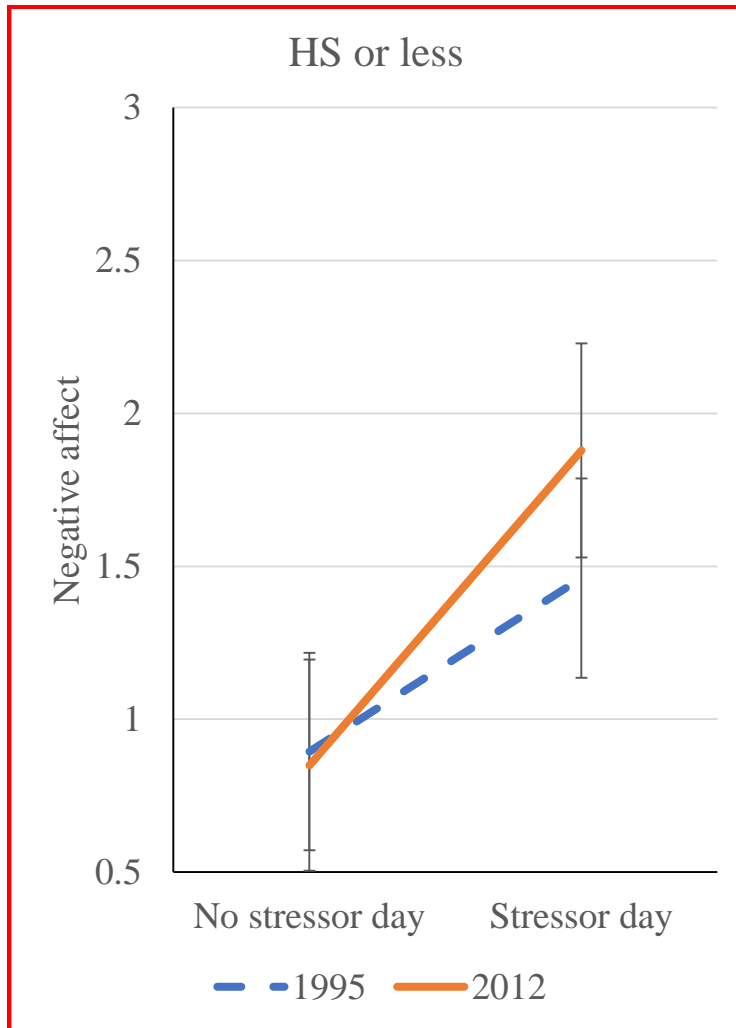
Type of Daily Stressors by Age and Period



Daily Stressor Reactivity by Age and Period



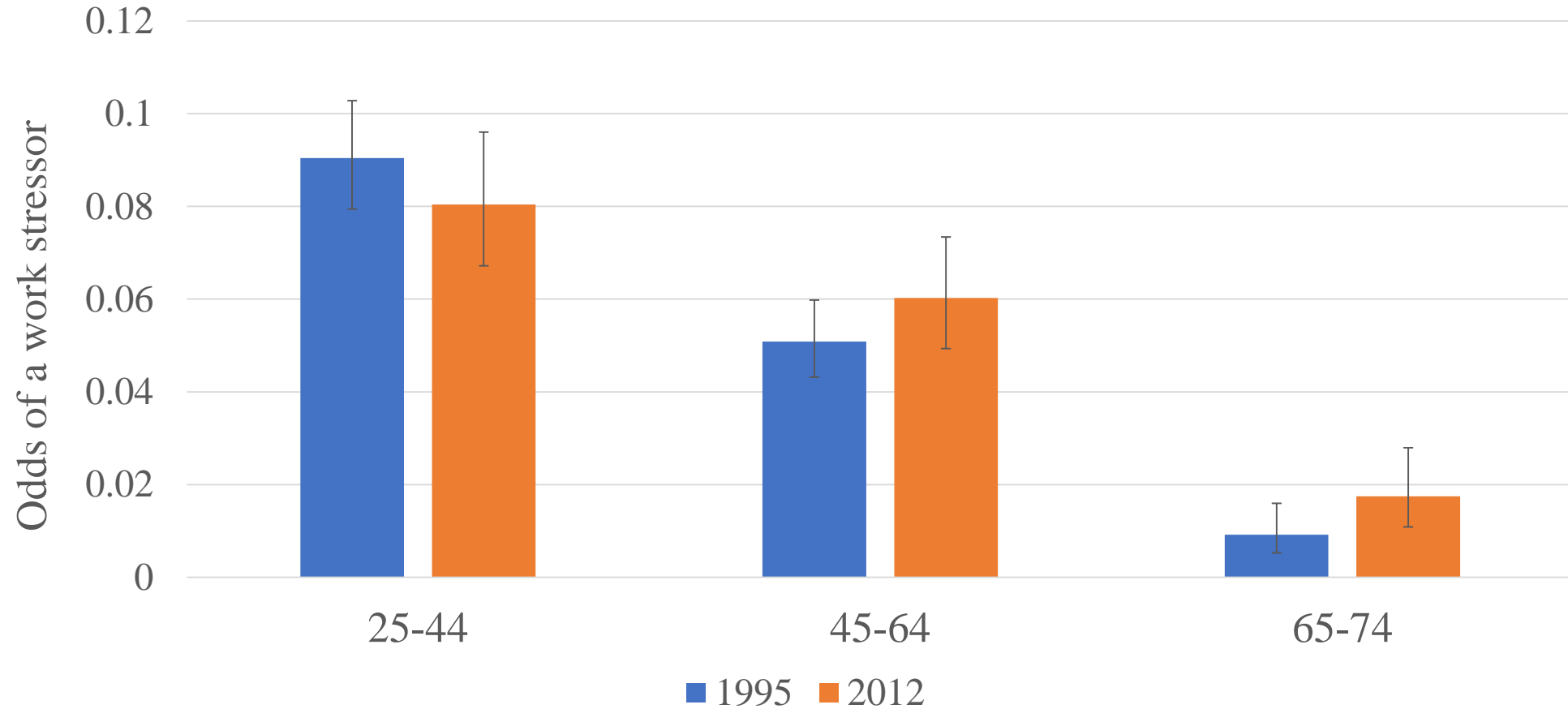
Daily Stressor Reactivity by Education and Period



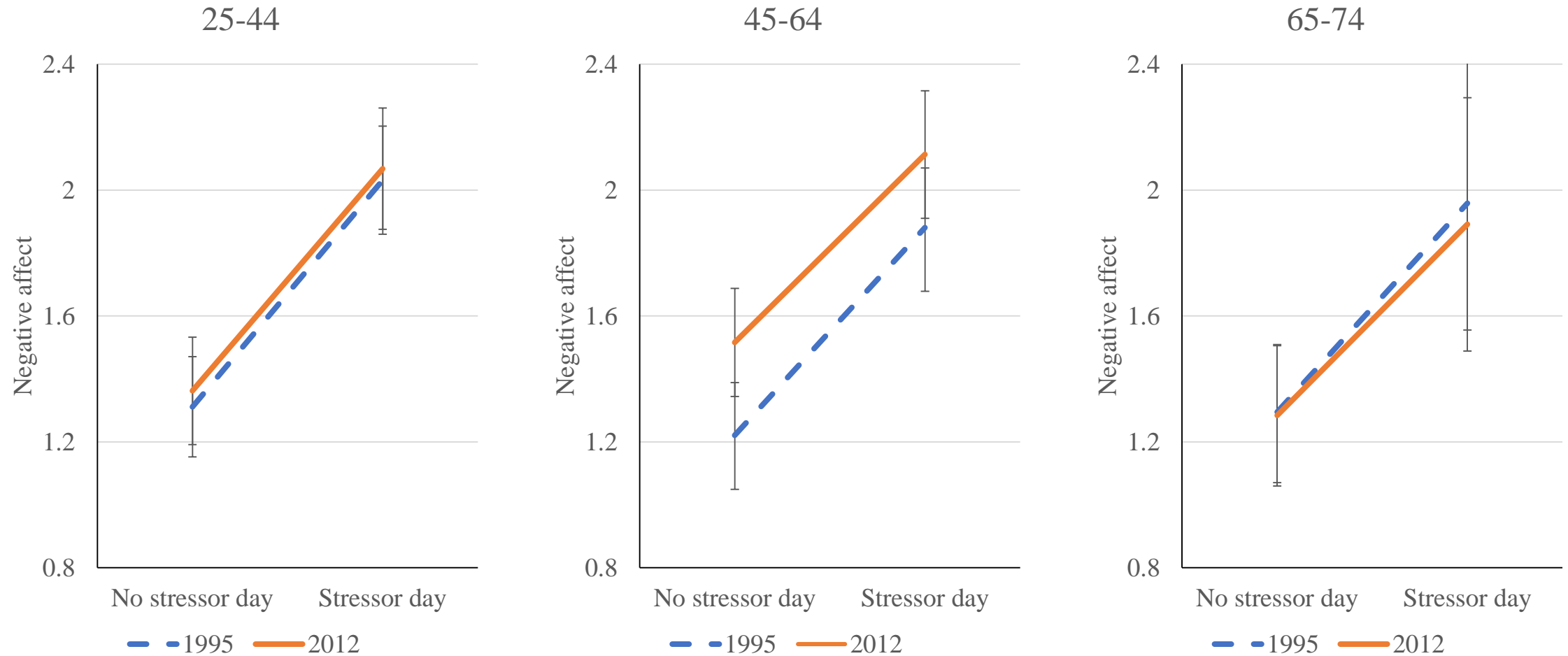
Work Stress

- Work stress by period for midlife
- Exposure and reactivity
- Stressor exposure and severity by education levels
- Education differences in work stressors by period
- Education differences in work stressor reactivity by period and cohort

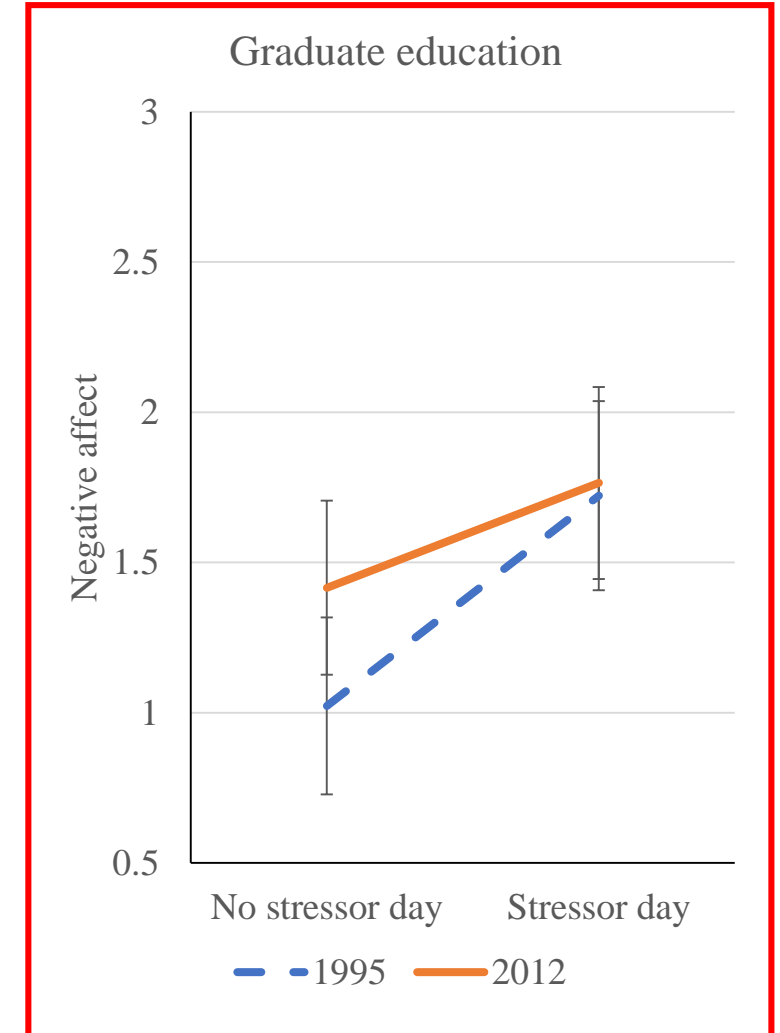
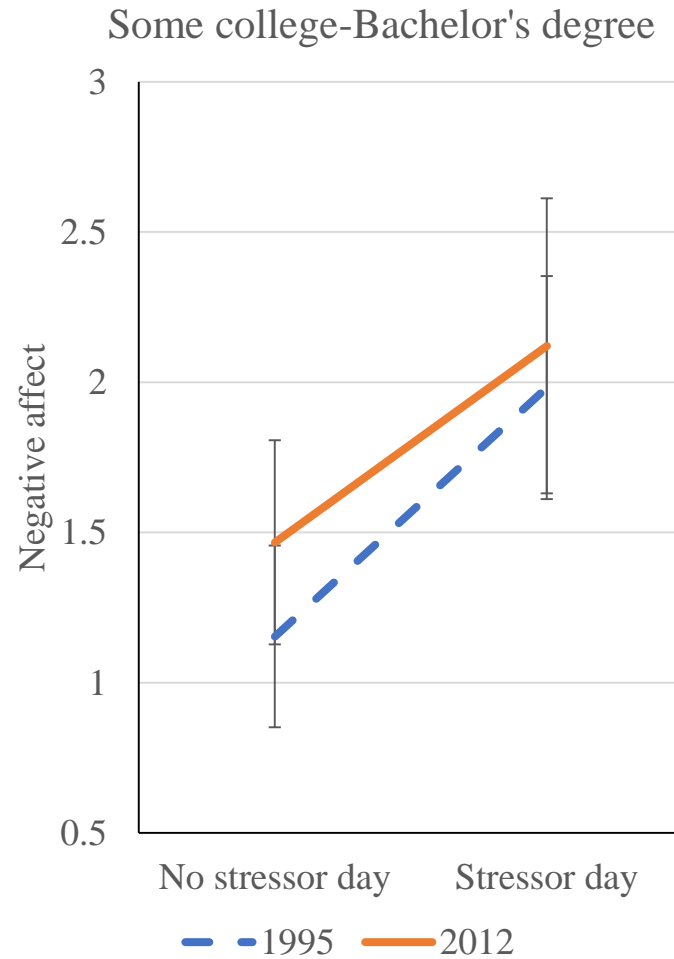
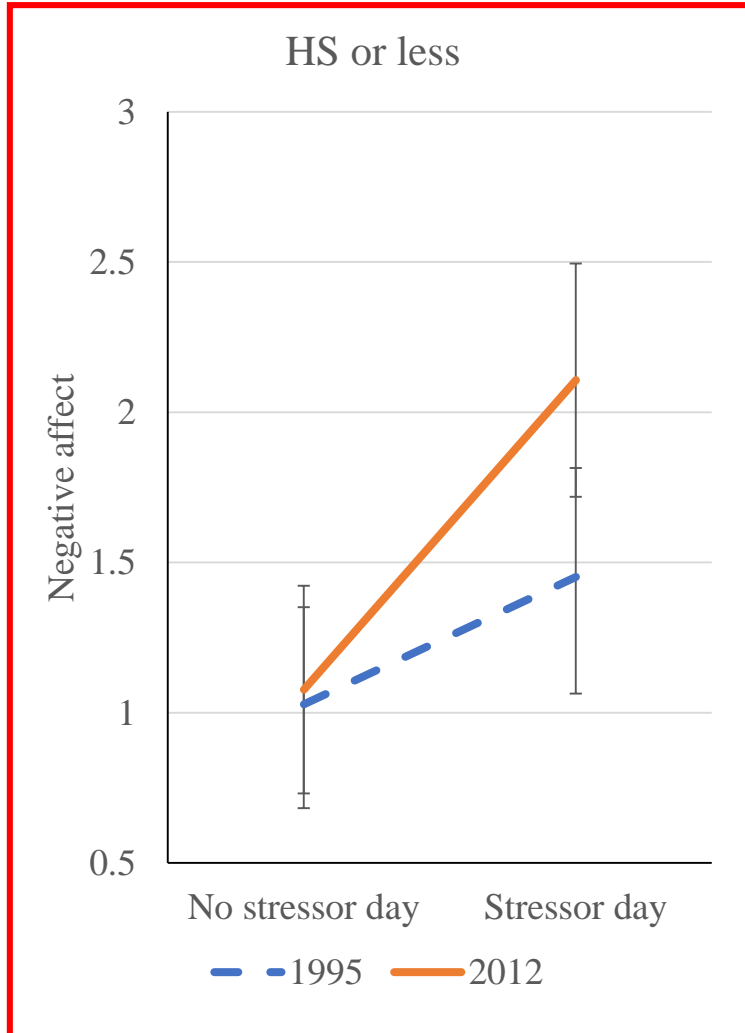
Work-Related Stressors by Age and Period



Reactivity to work stress across period and cohort



Reactivity to work stress across period and education



Summary: Landscape of daily stress across adulthood

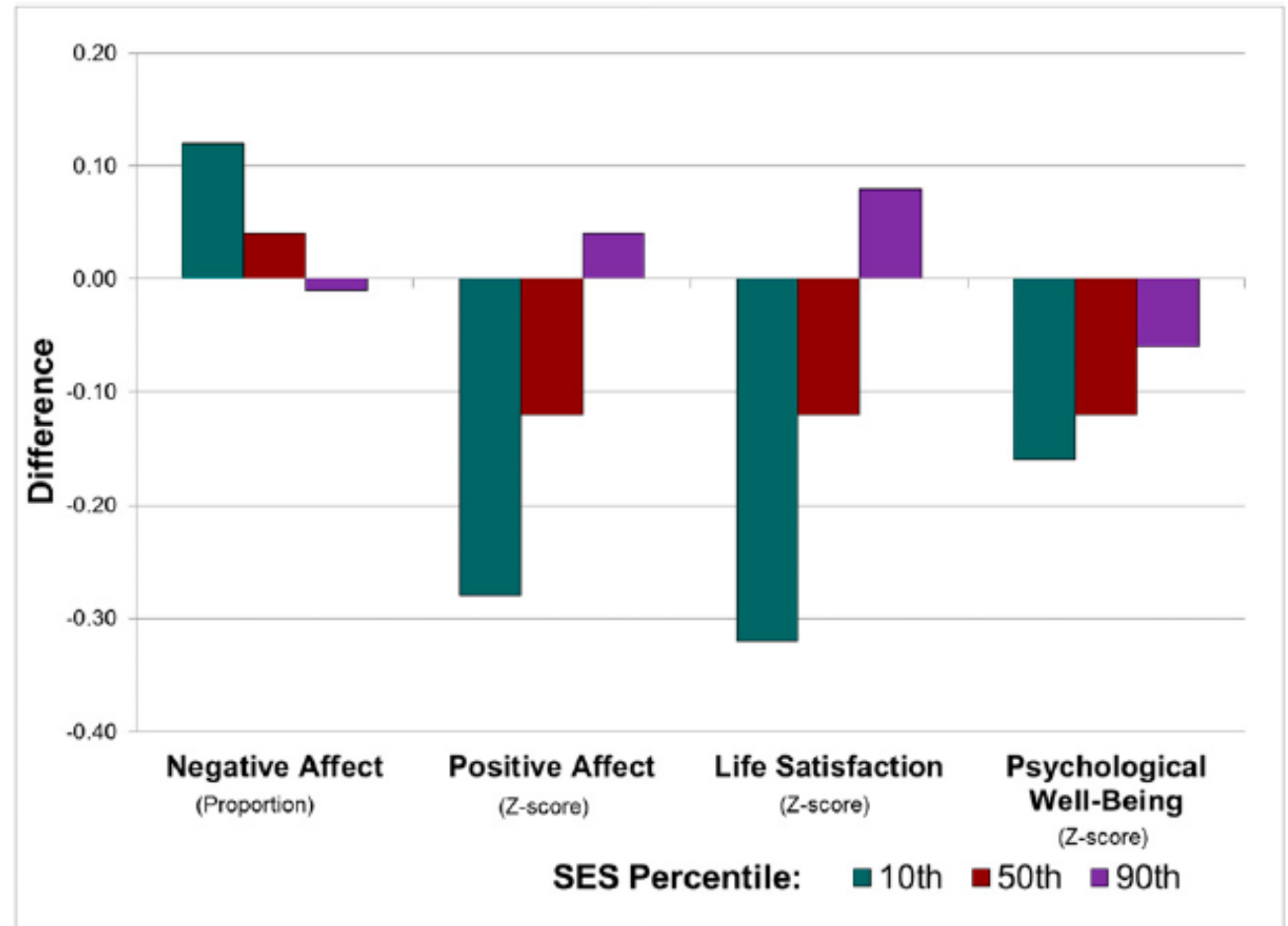
- On average Adults in the U.S report Stressors on 40% of days
- Majority of stressors are interpersonal in nature
- Heterogeneity in daily stressful experiences
- Younger adults experience more stress
 - 2X exposure compared to older adults;
 - greater reactivity
- Older adults experience a greater proportion of home and network stressors

Summary: Is daily stress getting worse?

- On average stressor exposure increased from 1995 and 2012
- On average severity, type and reactivity did not differ
- Heterogeneity in these period differences
- Midlife adults' daily life is becoming more stressful compared to earlier decades
 - Contemporary midlife adults are exposed to more stress and are more reactive to stressors
- Midlife and older adults' stressors are more likely to be work related

Summary: Is daily stress getting worse for less educated?

- Less educated individuals are more reactive to daily stressors than in the past
- Work Stressors are becoming more upsetting for less educated individuals



Goldman, N., Glei, D. A., & Weinstein, M. (2018). Declining mental health among disadvantaged Americans. *Proceedings of the National Academy of Sciences*. Advance online publication.

Take away messages

- Daily life of adulthood may be changing
- Move toward more intensive assessment of adult development
 - From decades to years to days
- Heterogeneity of daily stressors
 - Age
 - SES
 - Gender
 - Social Roles
- Consideration of other Daily Experiences
 - Positive events
 - Productivity