Changes in Neighborhood-Level Concentrated Disadvantage and Social Networks among Older Americans

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Introduction

Among older persons undergoing health declines and social role losses, such as through retirement and widowhood, having many close social ties characterized by frequent interactions and provision of instrumental and emotional support is protective of cognitive, physical, and mental health (Rook, 2009).

Scholars have shown how social networks change through life course transitions, including events common in later life such as retirement (Cornwell & Laumann, 2011), widowhood (Cornwell, Laumann, & Schumm, 2008), residential relocation (Walters & Bartlett, 2009), and health declines (Cornwell, 2009).

Loss of valued social relationships causes emotional suffering (Steger & Kashdan, 2009). For older adults especially, new strong social ties facilitate desirable levels of physical, social, and mental activity (Tan et al., 2009), promote social embeddedness (Kemp, Ball, Hollingsworth, & Perkins, 2012), and increase the scope of the social support, resources, and information one can access (Cornwell & Laumann, 2015).

Older persons, however, face unique challenges in acquiring new close social ties. Functional limitations (Jindai, Nielson, Vorderstrasse, & Quiñones, 2016), widowhood and retirement (Cornwell et al., 2008), and fewer network ties serving as 'bridges' to new groups of people (Rook, 2009) all pose obstacles preventing older persons from forging new relationships. Furthermore, strengthening earlier weaker relationships is incongruent with older persons' preferences for interactions with familiar and close social contacts (Rook, 2009).

Among causes of social network dynamics, socio-spatial circumstances have received little attention. Even less research has examined communities in a dynamic context.

I help fill this research gap through a systematic, nation-wide investigation of how changing neighborhood-level concentrated disadvantage through the Great Recession of 2007-2009 affected social network turnover among older Americans. Given the challenges older persons face in developing new close social ties, any further obstacles posed by increasing neighborhood-level concentrated disadvantage might be especially detrimental to their social networks.

Theoretical Perspectives

According to the social disorganization theory, unfavorable economic circumstances cause declines in the neighborhood institutions and informal social networks that control community members' behavior while enhancing their ability to collectively act in their common interests and solve their shared problems (Ansari, 2013).

The increased criminal and delinquent behavior thus caused leads residents to remain within their homes, to limit their socializing to their strongest network ties, and to avoid engagement in community groups and activities (Aneshensel, 2009). It also creates generalized distrust of both neighborhood residents and non-residents (Ross, Mirowsky, & Pribesh, 2001).

Whether due to retirement, reduced functionality, or other life course developments, older persons show heightened spatial confinement (Glass & Balfour, 2003). Furthermore, for older persons who have lost important social roles, such as through retirement or widowhood, neighborhood involvements serve as substitutes (Cornwell et al., 2008). Older persons might thus be more dependent upon their immediate environments for remaining socially active and engaged (Lawton & Nahemow, 1973).

Context

I investigate the effects of neighborhood changes through the Great Recession of 2007-2009, which was the most extensive global economic shock since the 1930s' Great Depression (Meltzer, Steven, & Langley, 2013).

Through this recession, American neighborhoods underwent an average of a 4 percentage point rise in unemployment rates, a 1 percentage point increase in rates of abandoned homes, and a 2 percentage point rise in poverty rates (Owens & Sampson, 2013).

To scholarship showing how increasing neighborhood disadvantage through this recession is linked with depression (Cagney, Browning, Iveniuk, & English, 2014), stress, residential crowding, homeless, and physical illness (Burgard & Kalousova, 2015), I add investigation of social network dynamics.

Research Questions and Hypotheses

I ask whether and how changing neighborhood conditions through the Great Recession of 2007-2009 affected the size of and turnover within older residents' networks of close confidants.

I hypothesize that rising neighborhood-level concentrated disadvantage was associated with smaller close social networks, lower likelihoods of acquiring new close social ties, and higher probabilities of losing earlier close social ties.

Methods

I employ the National Social Life, Health, and Aging Project (NSHAP) as my source of individual-level variables. At wave 1 (2005-2006), 3,005 respondents from 57 to 85 years of age were interviewed. Wave 2 interviews took place in 2010 and 2011. As the peak of the Great Recession occurred between these first two waves, this dataset is effective for the present study.

Since my interest is in the effects of neighborhood changes, I study respondents who did not change neighborhoods between the two first waves. My analytical sample thus includes 1,788 respondents.

I use census tracts as approximations to neighborhoods. My analytical sample includes 387 census tracts. I linked respondents with characteristics of their census tracts through protected geodata obtained from the National Opinion Research Center via special contractual arrangements.

Dependent Variables

My outcomes denote size of and turnover within social networks. At each wave, survey respondents listed up to seven close discussion partners, who formed their close social networks.

For every wave 2 network member, respondents reported if they named this person during wave 1, allowing for a count of new close social ties acquired. For every wave 1 network member, respondents stated if this person was included at wave 2, allowing for a count of earlier close social ties lost. These two variables are my measures of social network turnover.

Independent Variable

I employ the index of census tract-level concentrated disadvantage developed by Sampson, Raudenbush, and Earls (1997), based on percentages of: 1) the population below the poverty line

2) households on public assistance

3) female-headed households

4) individuals unemployed

5) individuals less than 18 years of age

6) individuals who are non-white

- My central independent variable is change in this measure over the first two waves.

Control Variables

I include the following census tract-level control variables at wave 1: population density, location within a metropolitan statistical area, residential instability, as well as wave 1 concentrated disadvantage.

I include the following respondent-level control variables at wave 1: gender, age, race/ethnicity, highest level of education, total household assets, years of residence in one's local area, paid work status, marital/relationship circumstances, self-rated physical health, functional health problems, depressive symptoms, average frequency of contact with close network members, average emotional closeness with close network members, proportion of close network composed of family members, and frequency of attendance at religious services.
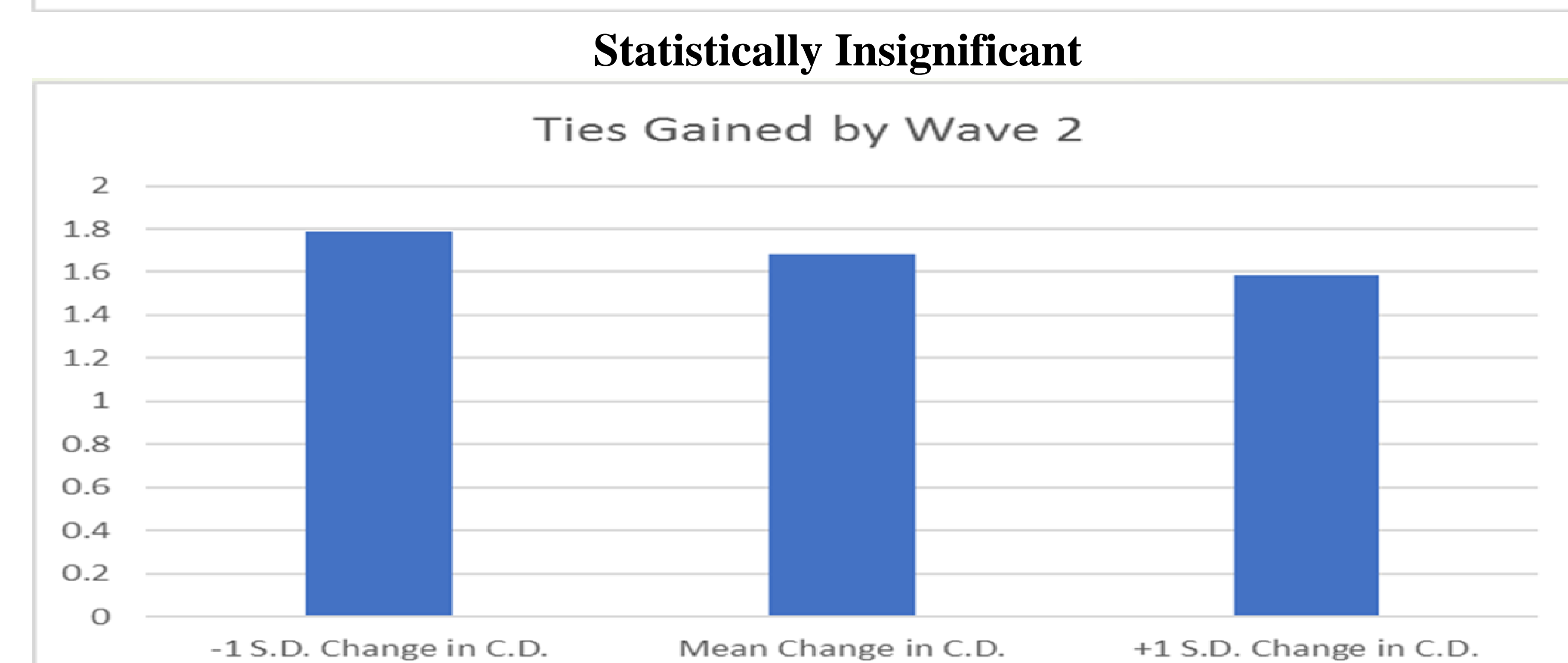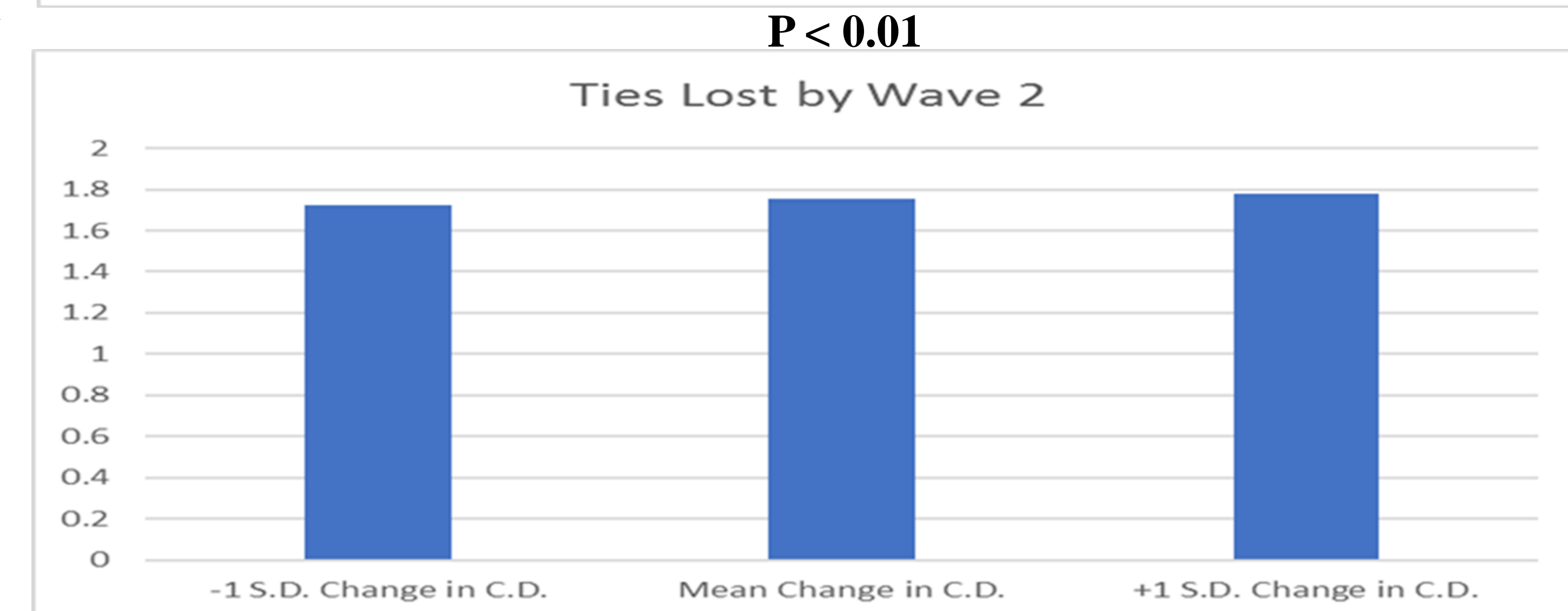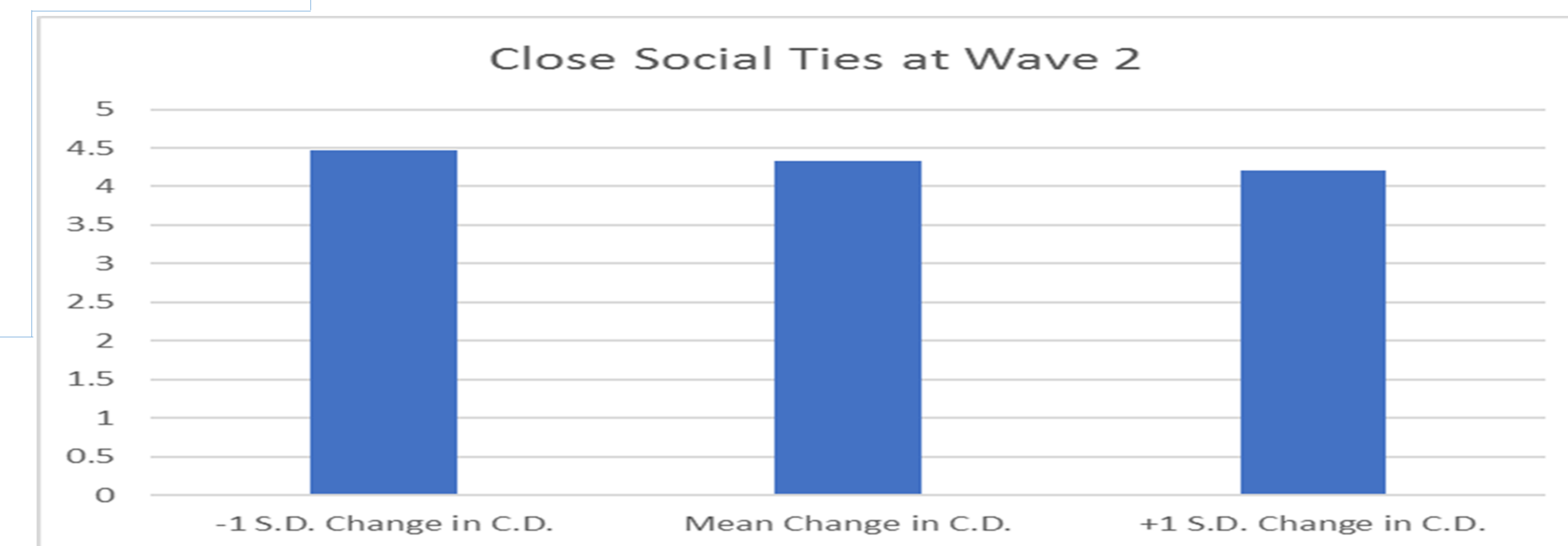
Analysis

My first model regresses wave 2 close social network size upon wave 1 close social network size (a set of dummy variable categories), both wave 1 and change in census tract-level concentrated disadvantage, and all control variables.

My second and third models repeat this first analysis with earlier close social ties lost and new close social ties developed as the dependent variables, respectively.

Because all dependent variables are count measures with little indication of overdispersion, I employ Poisson regressions.

Results[a]

Close Social Ties at Wave 2

$P < 0.01$

Ties Lost by Wave 2

Statistically Insignificant

Ties Gained by Wave 2

$P < 0.01$

[a] Developed through Stata's 'margins' command, with all covariates held at their means.
S.D. = standard deviation
C.D. = concentrated disadvantage

Discussion

I found that rising neighborhood-level concentrated disadvantage is associated with smaller networks of close confidants among older residents, largely due to fewer new close social ties acquired. Faced with involuntary close social network losses due to deaths of family members and friends, retirement, and residential relocations, older persons who do not develop new close social ties risk inadequate social support, isolation, and loneliness (Rook, 2009).

I did not find that rising neighborhood-level concentrated disadvantage leads to significantly greater loss of close social network ties. When experiencing more disadvantaged community conditions, older residents might make concerted efforts to safeguard their current supportive close social ties, while losing the energy and motivation to develop new close social ties.

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