Article

Childhood family wealth and mental health in a national cohort of young adults

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ABSTRACT

Purpose: Mental health is critical to young adult health, as the onset of 75% of psychiatric disorders occurs by age 24 and psychiatric disorders early in life predict later behavioral health problems. Wealth may serve as a buffer against economic stressors. Family wealth may be particularly relevant for young adults by providing them with economic resources as they make educational decisions and move towards financial and social independence.
Methods: We used prospectively collected data from 2060 young adults aged 18–27 in 2005–2011 from the Panel Study of Income Dynamics, a national cohort of US families. We examined associations between nonspecific psychological distress (measured with the K-6 scale) and childhood average household wealth during ages 0–18 years (net worth in 2010 dollars).
Results: In demographics-adjusted generalized estimating equation models, higher childhood wealth percentile was related to a lower prevalence of serious psychological distress: compared to lowest-quartile wealth, prevalence ratio (PR)=0.52 (0.32–0.85) for 3rd quartile and PR=0.41 (0.24–0.68) for 4th quartile. The associations were attenuated slightly by adjustment for parent education and more so by adjustment for childhood household income percentile.
Conclusions: Understanding the lifelong processes through which distinct aspects of socioeconomic status affect mental health can help us identify high-risk populations and take steps to minimize future disparities in mental illness.

Introduction

During young adulthood physical, cognitive, and emotional maturation combine with a transition in social roles to set the stage for life as an adult (Sawyer et al., 2012). Although the majority of adolescents and young adults are able to cope successfully with these transitions, others experience significant mood disruptions that result in disorder (Cicchetti & Rogosch, 2002). Psychiatric disorders confer a substantial public health burden on young people (Patel, Flisher, Hetrick, & McGorry, 2007). The onset of three-fourths of psychiatric disorders occurs by the age of 24, and psychiatric disorders account for up to 30% of the disability-adjusted-life-years (DALYs) lost in adolescents and young adults (Kieling et al., 2011). In a nationally representative survey of over 10,000 adolescents and their caregivers, over 14% of US

adolescents met criteria for a mood disorder, one third met criteria for an anxiety disorder, and over 11% met criteria for a substance abuse disorder (Merikangas et al., 2010). There are strong associations between adolescent mental health and indicators of well-being including educational achievement, substance use, violence and sexual health (Patel et al., 2007). Additionally, psychiatric disorders in youth predict mental illness during adulthood (Costello, Foley, & Angold, 2006; Kessler et al., 2005).

Childhood socioeconomic status (SES) has been repeatedly identified as a risk factor for adolescent and young adult mental health (Pascoe et al., 2016). Low SES during childhood may increase children and adolescents' exposure and vulnerability to stressors including daily hassles, traumatic events, violence and family conflict (Melchior, Moffitt, Milne, Poulton, & Caspi, 2007; Pearlin, 1989). It may also

increase young people's vulnerability to these stressors through pathways including dysregulation of the biological immune and stress-response systems, poorer nutrition, and a higher burden of chronic physical problems such as asthma and obesity (Pascoe et al., 2016; Pearlin, 1989). However, associations of SES and mental health have varied depending on the measure of SES, suggesting that different components of SES may influence mental health differently. For example, there is less evidence that childhood income influences adult mental health compared to parental education and occupation (Gilman, Kawachi, Fitzmaurice, & Buka, 2002; Poulton et al., 2002), suggesting that other aspects of parents' finances may be influential on young adult mental health.

Family wealth may be one such important predictor of mental health during adolescence and young adulthood. Unlike income, which represents only monetary flow into a household, wealth represents both assets and debts accumulated over time (Keister & Moller, 2000). It may therefore serve as a better indicator of long-term financial circumstances than income, and also may be more sensitive to the broader economic context, age, job and health status (Keister and Moller, 2000). Many families earn enough income to remain above the Federal poverty level but may have large amounts of debt and few assets with which to buffer their family from economic stressors (Carter, Blakely, Collings, Imlach Gunasekara, & Richardson, 2009; Keister & Moller, 2000). Although measures of wealth are typically correlated with other SES measures, such as income, this correlation is far from perfect (Keister & Moller, 2000). Research on the effects of wealth on health is still evolving, and wealth remains understudied compared to other measures of SES. Wealth is an independent predictor of adult physical and mental health outcomes including mortality (Hajat, Kaufman, Rose, Siddiqi, & Thomas, 2010), stroke (Avendano & Glymour, 2008), metabolic syndrome (Perel et al., 2006), psychological distress (Carter et al., 2009), and mental health and life satisfaction (Headey & Wooden, 2004). No studies have yet addressed whether parental wealth is associated with mental health in young adults.

Family wealth is a promising predictor of young adult mental health compared to family income for several reasons. First, wealth may better capture socioeconomic inequality than income because disparities in wealth among American families are much greater than disparities in income (Allegreto, 2011). In 2012, families at or below the 90th percentile of the US wealth distribution earned about 70% of total national income but owned only about 30% of total national wealth (Saez & Zucman, 2016). Second, wealth may be less prone to health selection bias (i.e., reverse causation) than income because it is less immediately sensitive to short-term changes in earning capacity (Carter et al., 2009). Third, while associations of childhood income with mental health often diminish or disappear over time (Stansfeld, Clark, Rodgers, Caldwell, & Power, 2011), associations of childhood wealth and mental health may persist because wealth tends to be more stable and therefore represents a more consistent financial resource (Ostrove & Feldman, 1999). Finally, income and wealth are likely to represent different aspects of social status and social stratification. Although income is critical to purchasing power, wealth is an additional indicator of social and political power and prestige that creates opportunities for the future (Keister and Moller, 2000; Oliver & Shapiro, 2001). Family wealth may be particularly relevant for young adults' mental health by providing them with both an economic resource and a source of social status on which they can draw as they make educational decisions and move towards financial and social independence.

More immediate factors may also be important mediators through which family wealth may influence young adult mental health. One possible mechanism is by facilitating higher educational attainment, which is strongly related to mental health in young adults (Adams,

Knopf, & Park, 2014). Indeed, some studies have found that current SES fully accounted for associations between childhood SES and mental health during adolescence and adulthood (Headey & Wooden, 2004; Melchior et al., 2007; Poulton et al., 2002). Young adults' financial circumstances may also mediate influence from family wealth on mental health. Young adults from wealthier families, for example, may have less debt than their peers from less wealthy families. Additionally, wealthy parents may contribute financially to help pay for their children's cost of living.

Using data from the Panel Study of Income Dynamics (PSID), we examined whether greater family wealth during childhood is related to better mental health among 18–27-year-old participants in the supplemental Transition into Adulthood Study (TAS) of the PSID. We hypothesized that higher average family wealth during childhood, measured by household net worth, is associated with less psychological distress in young adulthood. We also hypothesized that associations of childhood average household wealth with psychological distress would persist after adjustment for other measures of family socioeconomic status (income and parent education). In a secondary exploratory analysis, we tested young adults' own education as a potential mediator and moderator. We hypothesized that associations of family wealth and psychological distress would be attenuated by (i.e., potentially mediated by) young adults' own education. Finally, we hypothesized that associations between family wealth and better mental health would be largest among young adults with low education. Among these young adults, who are less able to draw on socioeconomic resources of their own, family wealth may be a particularly important resource.

Methods

Study population

The analysis sample included participants in the Transition into Adulthood Study (TAS), a supplemental study to the PSID. The PSID is a longitudinal study of a national sample of U.S. families started in 1968 (Institute for Social Research, 2016). In 1997 the Child Development Supplement (CDS), a supplemental cohort study of 3563 children living in PSID families, was started. All PSID families with a child aged 0–12 years in 1997 were eligible to participate, with up to two children included per family. Black and low-income families were oversampled in the PSID, and these sample characteristics are reflected in the CDS sample (Brown, Duncan, & Stafford, 1996; Duffy & Sastry, 2012).

The TAS, which began in 2005, includes young people aged 18–28 who "aged out" of the CDS because they turned 18 or left high school (Institute for Social Research, 2008). Data are collected biennially, and newly eligible former CDS participants are incorporated into the sample at every wave. We pooled data from the 2005, 2007, 2009, and 2011 TAS study waves, resulting in a sample of 5321 observations corresponding to 2155 individual participants. After exclusion of observations with missing information for any analysis variables, the final analytic sample included $N=4915$ observations (2060 individuals) for primary analyses and $N=4858$ observations for secondary analyses investigating participant education as a mediator or moderator. The full analytic sample included 532 sibling pairs (i.e., 52% of the sample had a sibling in the sample).

Measures

The mental health outcome measure was the K-6 nonspecific psychological distress scale (range 0–24) (Kessler et al., 2002). The scale has been validated as a screening tool for clinically significant mental distress across different age groups (Kessler et al., 2003; Prochaska, Sung, Max, Shi, & Ong, 2012) and higher scores are