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The effect of the financial crisis on physical health: Perceived impact matters

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Abstract

The impact of the financial crisis on health was investigated ($N = 312$). Intraindividual intercept, slope, and quadratic parameters capturing trends in income, subjective financial situation, and perceived stress across the period predicted physical health, controlling for baseline health. For those experiencing a decline in financial situation, a decrease in financial situation and an increase in perceived stress predicted poorer health; neither financial situation nor perceived stress predicted health in those not experiencing this decline. Although we cannot intervene in contextual factors like the financial crisis, health outcomes may be improved by targeting perceived impact and stress levels in those who feel affected.

Keywords

finances; financial crisis; health; income; stress

The Global Financial Crisis (GFC), which began in late 2007 and continued through 2008, was primarily brought on by the bursting of the real-estate “bubble,” as rates of mortgages in default rose in 2006 and resulted in plummeting home values nationwide (Jones et al., 2008). The economy has been recovering steadily since 2009, with home values gradually rising and indicators of unemployment slowly improving. Here, we utilize a longitudinal dataset that provides a unique opportunity to explore the impact of the GFC in a sample of adults in mid- and later life, as data collection spanned spring of 2007 through spring of 2013. We are particularly interested in how subjective experience of stress and financial situation (FS) during the period of the GFC predicted physical health.

Although the state of the global economy at a given point in time does not vary across individuals, the extent to which such external circumstances influence health and well-being depends on a variety of factors. Bronfenbrenner depicted this reality well in his *Bio-Ecological Model* (Bronfenbrenner, 1977; Bronfenbrenner and Ceci, 1994); within this framework, one’s experience is a function of the dynamic interaction between person and context. In Bronfenbrenner’s model, the recent economic recession is classified as part of

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the *macrosystem*, comprising the broad cultural, social, and economic conditions that set the stage for the more personal contextual factors; we expect the influence of this macro-level event on the individual—and specifically on the individual's physical health—to depend on the subjective or perceived experience of the person, the innermost level of Bronfenbrenner's model. The key person-level variables of interest here are perceived stress (PS) and subjective financial experience across the period of the GFC.

Economy and finances on health

Research shows consistent detrimental effects of economic downturns and financial strain on physical health. One study found that as rates of unemployment rose, physical health declined in a sample of middle-aged adults (Davalos and French, 2011); another identified employment security as a key factor in predicting physical health in a sample of employed adults, with those perceiving their employment to be less stable and secure reporting poorer self-rated health and more chronic disease diagnoses (Virtanen et al., 2002). A prospective study found that participants facing sustained economic hardship—defined by an income level well-below the federal poverty line—had significantly worse physical functioning a decade or more later compared to those not facing such hardship. These authors emphasized the directionality of this finding, stating that the results showed little support for the reverse effect, that reduced physical functioning led to economic hardship in this sample (Lynch et al., 1997). A more recent study conducted in India found a similar effect, where individuals living in lower-income neighborhoods—an indicator of sustained financial strain—were at higher risk for developing chronic health conditions than those living in higher-income neighborhoods (Kulkarni, 2013). Interestingly, some research suggests that objective indicators of physical health and mortality improve during periods of economic decline, perhaps due to healthier lifestyle behaviors (Gerdtham and Ruhm, 2006; Neumayer, 2004; Regidor et al., 2014). There is, however, some recent evidence to the contrary for the current cohort of older adults, as one study found that mortality in the elderly increased during periods of higher unemployment (McInerney and Mellor, 2012). In the context of economic concerns, extended *financial strain*, or perceptions that one's financial resources are not sufficient for one's needs, is most predictive of health problems in later life. Shorter periods of strain, although potentially damaging to health for a time, are less likely to have a long-term impact as long as the period of financial difficulty is followed by a time of lower stress (Kahn and Pearlin, 2006). The extended nature of the GFC accompanied by the unknown trajectory of recovery qualifies it as a potential source of chronic financial strain, making it likely to have impacted physical health in our sample. Because the degree to which objective economic conditions impact health in part depends on whether one considers him- or herself to be personally affected and experiences the accompanying strain in FS, we do not expect to observe these deleterious health effects across the board.

Stress on health

PS, or the level of stress felt by an individual, has demonstrated a strong and consistent link with physical health in the literature. Higher levels of felt stress are associated with poorer short- and long-term physical health outcomes, including increased rates of cardiovascular disease (Richardson et al., 2012), reduced immune function (Godbout and Glaser, 2006),

increased risk of chronic health conditions in general (Kulkarni, 2013), and even greater overall mortality risk (Nielsen et al., 2008). These associations are generally believed to be a function of the intermediary physiological stress response that tends to accompany psychological stress (Merz et al., 2002). Specifically, the literature on *allostatic load* has demonstrated that a persistent physiological stress response—brought on by chronically high levels of PS—results in “wear and tear” on the body, gradually undermining cardiovascular, metabolic, and immune functioning and greatly raising the risk for the development of diseases such as diabetes, hypertension, and heart disease (Juster et al., 2010). Because financial and economic concerns are one of the most frequently cited sources of PS (American Psychological Association, 2011), and because these types of concerns are not typically resolved quickly and thus represent a source of *chronic* stress, we expect the links between economic/financial factors and health discussed above are actually due to the presence of heightened stress that results from chronic financial concerns. This stress in turn wears down the physiological systems, eventually leading to worse overall health. Such an effect has been supported in the literature; for example, one study found that higher levels of psychosocial stress mediated the link between neighborhood poverty and allostatic load (Schulz et al., 2012). In the context of aging, recent work found that the impact of physical health on self-rated successful aging is partially explained by levels of PS (Moore et al., 2015), demonstrating the potency of the stress response on health and well-being in older adults.

The present study

Here, we use five waves of longitudinal data spanning the period of the GFC to examine how the recent economic recession impacted health in our sample; we specifically consider intraindividual changes in PS and subjective FS across the period as predictors of health at the end of the period, controlling for intraindividual changes in income and health measured at baseline. Specific hypotheses for the overall sample are that higher baseline levels of PS and greater increases in stress across the period will predict worse health in Wave 5; that lower baseline levels of subjective FS and more substantial declines in FS across the period will predict worse health in Wave 5; and that when both factors are considered, the impact of PS will mediate (at least partially explain) the effect of FS on health. We further hypothesize that when these effects are examined separately for those who experienced a decline in subjective FS versus those who experienced an improvement, the above set of hypotheses will only hold in the decline group; for those in the improvement group, we expect to see the positive change in FS confer health benefits at the end of the period, and expect these effects to be unaffected by levels of stress (which is still expected to negatively impact health in this group).

Method

Participants and procedure

Participants were 312 adults aged 40 to 80 at Wave 1 ($M = 53.3$), representing a subsample of the larger Notre Dame Health and Well-Being study (NDHWB; $N = 976$), which is an ongoing longitudinal study exploring stress and well-being in the context of aging. In order

to arrive at the most representative sample possible, NDHWB participants are recruited from a list obtained from a social research firm, based on the annual Survey of Residential Households and census data. The primary component of the NDHWB is a yearly questionnaire packet, which participants fill out each year and return via mail in exchange for a US\$20 gift card; here we use five waves of surveys spanning spring 2007 through spring 2013,¹ in an attempt to capture patterns during the GFC. All participants gave informed consent to participate, and all procedures were approved by the University of Notre Dame Institutional Review Board.

In order to be included in the present analysis, participants had to have data on health at both Wave 1 and Wave 5; those who had data at both time points ($N = 314$) tended to be older (2-year mean difference; $p = .008$), have a lower income ($p = .006$), and have slightly less education ($p = .01$) than those who did not. Two individuals did not report income, and were omitted from the analysis. Of the final 312-person sample, all participants had at least three waves of data; 90 percent of participants ($N = 281$) had data at all five time points, 6.5 percent ($N = 20$) had data at four time points, and 3.5 percent ($N = 11$) had data at three time points. The sample was 63 percent female, primarily Caucasian (85.5%; the next largest racial group was African Americans at 11.5%), and relatively well-educated (54% had some form of post-high school education, and only 3% did not graduate high-school). Participants were most likely to be married (50%), with divorced or separated (27%) next most common; 13 percent were widowed, and the remaining 10 percent reported being single. There was considerable diversity in income at Wave 1, with 5 percent earning <US\$7.5k per year, 16 percent earning US\$7.5k–US\$14.9k annually, 11 percent bringing in US\$15k–US\$24.9k per year, 23 percent earning US\$25k–US\$39.9k each year, 32 percent making US\$40k–US\$74.9k annually, and 13 percent making >US\$75k per year.

Measures

Income—In order to account for more objective information about FS in the analytic models, information about income was used as a control. At each wave, each participant reported his or her annual income as falling within one of seven income categories: <US\$7.5k, US\$7.5k–US\$14.9k, US\$15k – US\$24.9k, US\$25k – US\$39.9k, US\$40k – US\$74.9k, US\$75k – US\$99.9k, and US\$100k. These categories were coded from 1 to 7, and treated as a continuous variable, with higher scores indicating greater income for a given year. Income change would be indicated when a participant's selected income category was different from one year to the next.

Chronic physical health symptoms—In Waves 1–4, Chronic Health was measured using a somatic health complaints checklist drawn from the Somatic Health subscale of the Measurement of Physical Health assessment (Belloc et al., 1971); participants check whether they have experienced any of 11 symptom conditions (e.g. stomach pains, chest pain) in the past 12 months. Due to the limitations of this measure in terms of scope and amount of information provided, we switched in Wave 5 to the Pennebaker Inventory of

¹Note the extended period (6 rather than 4 years) represents a staggered data collection, in which participants who started later in the study also ended later.

Limbic Languidness (PILL) to assess chronic physical health symptoms (Pennebaker, 1982). The PILL assesses the frequency at which 54 different physical symptoms occur (e.g. stiff joints, tightness in chest, nausea), rated on a scale from 1 (*never or almost never experience the symptom*) to 6 (*experience the symptom daily*). Scores range from 54 to 324, with higher scores indicating worse health.

Subjective Financial Situation—Subjective FS was measured using four items drawn from the Midlife Development in the United States (MIDUS) study (Brim et al., 2007), with wording and response format slightly altered for ease of administration in the NDHWB questionnaire. Three items, including *How would you rate your current financial situation*, were rated on a scale from 0 to 10, with higher ratings indicating a more optimal situation; one item (*In general, which of the statements below describe the current financial situation of you and your family?*) had response options indicating whether the participant thought the family had more than enough, just enough, or not enough money to meet its needs. All four items positively correlate with one another, and the mean reliability coefficient across waves for these four items as a scale was .71 (range = .70–.72). These four items were standardized ($M = 0$, standard deviation (SD) = 1) and summed to form a single score; higher scores indicate a better FS.

Perceived Stress—The Perceived Stress Scale assessed PS each year (Cohen et al., 1983). This measure assesses the overall level of stress a person feels they have experienced within the last month; 14 items such as *How often have you been upset because of something that happened unexpectedly?* and *How often have you dealt successfully with irritating life hassles?* are rated on a 4-point scale (1 = Never, 4 = Always). Possible scores range from 14 to 56, with higher scores indicating more PS (7 items are reverse-scored). A 20-percent missing data rule was applied to the scale, so that in the scale calculation, individuals missing 3 or fewer items had those missing values replaced by the his/her mean on the answered items; those missing more than 3 items were counted as missing. The Cronbach's alpha across the five waves ranged from .86 to .89 ($M_{\alpha} = .874$).

Results

Means, SDs, and correlations for the full sample are shown in Table 1; note that *t*-tests were used to test for significant group differences in these means, with the only differences being for the intercept and slope of FS ($p < .0001$), as would be expected based on the group split described below.

In order to assess the impact of changes in PS and FS across the period of the financial crisis on health at the end of the period, we first calculated intraindividual parameters to capture initial levels (intercept), linear change across the period (slope), and quadratic change across the period (quadratic curve) for both PS and FS. This was done in a single model, so that the three parameters together fully capture a given person's pattern of stress or FS; for this reason, these three parameters are always entered into the analytic models as a group, rather than individually. We used this same procedure to calculate these intraindividual intercept, slope, and quadratic curve parameters for income across the period, as the best available control for the effects of each individual's objective FS. Once the model sequence was run

on the full sample as a baseline, the sample was split based on whether people had an overall positive (>0) or negative (<0) linear trend in FS across the period. Note that the intraindividual slope parameter used for this group split differs from that used as a predictor in the analyses; here, each person's linear slope was calculated omitting the quadratic term in order to ensure meaningful slope values. All models predict health in Wave 5 and include a term controlling for health at baseline. Sample size was uniform across estimated models (Full Sample = 312, Negative Slope group = 154, Positive Slope group = 157), as data were complete. Preliminary models investigated the direct effects and moderating effects of each of the demographic variables (age, gender, marital status, race, education); because no significant demographic differences emerged, these terms were not included in the final models. The results of all models are shown in Table 2.

The initial model included the four covariate terms: baseline health, and individual intercept, slope, and quadratic curve estimates for income. In the full sample and in both groups, more health symptoms measured at the outset of data collection significantly predicted more health symptoms measured at the end of data collection ($p < .0001$). None of the income parameters significantly predicted health in Wave 5 in the full sample or in the Negative Slope group, but the quadratic income term (*Income Quad*) was significant in the Positive Slope group, with those experiencing a more positive quadratic trend in income having worse health ($p = .02$).

The stress model adds the three intraindividual time predictors for stress (*Stress Intercept*, *Stress Slope*, *Stress Quad*), allowing us to test the extent to which a person's pattern of PS across the period predicts health at the end of the period, controlling for baseline health. In the full sample and the Negative Slope group, all three stress terms are significant in the positive direction, so that having (a) higher stress at the outset, (b) having a greater increase in stress across the period, and (c) having a more positive quadratic curve in stress across the period predicted worse health. Only the Stress Intercept term was significant in the Positive Slope group.

The finance model assesses the impact of FS across the period on health by adding the three intraindividual predictors for FS to the model (*Finance Intercept*, *Finance Slope*, *Finance Quad*). All three terms predicted health in the Negative Slope group, so that having a worse FS at the outset, having a greater decrease in FS across the period, and having a more negative quadratic curve in FS predicted worse health. In contrast, none were predictive in the Positive Slope group. In the full sample, only the Finance Intercept effect was significant.

The combined model includes both the intraindividual terms for PS and the intraindividual terms for FS. In the full sample, the stress effects maintain significance, but the Finance Intercept, which was significant before, is no longer significant. The combined model in the Positive Slope group shows that when all six intraindividual terms are included in the model, the intercept term for PS maintains significance. The combined model is most informative in the Negative Slope group, as both individual models (Stress Model and Finance Model) revealed effects of a relatively comparable nature, as indicated by the Model R^2 values. The results show that when all six terms are included in the model, the stress change parameters

(*Stress Slope*, *Stress Quad*) maintain significance, whereas the *Stress Intercept* term becomes non-significant; a similar pattern is seen for the finance terms, with the finance intercept no longer indicating significance, but the two finance change effects (*Finance Slope* and *Finance Quad*) retaining their significant impact.

Discussion

The results partially supported the hypotheses. First, in the overall sample, higher initial levels of PS, lower initial levels of perceived FS, and increases in PS predicted worse health at the end of the study period; declines in perceived FS, however, did not. When both stress and finance influences were considered together, the effects of PS fully accounted for the impact of initial subjective FS on health. Considering the group differences, the hypothesized pattern of results was largely found for those who experienced a linear decline in subjective FS across the period, with both PS and FS parameters having significant effects separately; however, the expected mediating effect was weaker than expected, with both factors maintaining significant effects in the combined model and suggesting a more additive relationship between the two. For those not experiencing the negative impact of the financial crisis—those who did not have a negative linear change in subjective FS across the period—the health benefits hypothesis was not supported, as neither PS nor FS terms predicted health. So, it appears that a change in subjective FS only impacts health if it is negative—and presumably stress-inducing—in nature.

The findings linking poorer initial FS and declines in FS with poorer health outcomes align with previous work in the area showing that indicators of economic hardship and financial strain predict poorer health (Davalos and French, 2011; Kahn and Pearlin, 2006; Lynch et al., 1997; Virtanen et al., 2002). The association between higher levels (or greater increase) in PS and poorer health also supports previous research, in which perceptions of stress are strong predictors of physical health (Godbout and Glaser, 2006; Nielsen et al., 2008; Richardson et al., 2012), likely reflecting the mediating physiological processes highlighted by research on allostatic load (Juster et al., 2010; Merz et al., 2002). Because of the consistent stress–health link in the literature, it is unexpected that the stress parameters failed to predict health for those in the Positive Slope group; it may be that being in this non-decline group during a time of general recession serves as a counteracting or protective factor against the typical effects of stress on health.

The unique contribution of the present study to this existing body of work lies in the group analysis, in which we compare these effects for those who experience a decline in FS across a period of economic recession with those who do not. When we look at this more specific level of analysis, we can see that the impact of changes in FS on health only manifest for those feeling the effects of the economic recession; that is, a greater decline in FS across the recession period predicts worse health, but greater improvement in FS across the period does not predict better health. This suggests that it is the stress that accompanies this financial strain—and its wear and tear on the body’s physiological systems—that is the primary offender leading to adverse health outcomes. The fact that changes in PS and subjective FS predict health independently in this decline group, however, indicates that strain resulting

from perceived financial decline has negative health effects over and above those resulting from PS assessed more generally.

That all of the “action” in our analyses occurs within the context of those who perceive themselves to be experiencing a decline in FS during the recession period brings us back to the emphasis on *perceived impact* of these macro-level contextual events on our own circumstances and functioning. It especially highlights perceived impact as an important point of intervention in the aim of alleviating the negative health effects that so often accompany periods of economic hardship. The nature of macro-level events means that we cannot intervene at the source; although it would be ideal to halt the process at the outset (economic recession → financial strain/PS → health), it is simply not possible in the majority of cases. So, as professionals, we identify aspects of the individual’s perceptions of or approaches to dealing with these external events and target these for modification and intervention. For example, in considering ways in which individuals cope with stressful life circumstances, such modification can be done either at the level of *appraisal* (how we perceive and “size up” a potentially threatening situation) or at the level of *coping* (how we engage the resources at our disposal to dissipate the psychological and physiological distress resulting from a threatening or challenging situation; Lazarus and Folkman, 1984).

Applying this to the present findings, one option for alleviating perceived impact of the economic recession and the resulting stress at the level of appraisal would be to have individuals objectively evaluate their budget, with particular attention paid to how much it has actually changed within the last year (or since the onset of the recession). By encouraging a more objective assessment of actual current financial status, and by making people aware of how sensational media stories may influence their assumptions (Soraka, 2006), some of the stress resulting from a threatening appraisal of the situation could be dissipated, and the long-term health effects reduced. It is likely, however, that the personal impact of a macro-level economic event is very real; in this case, altering one’s appraisal is unlikely to be effective. Rather, the most effective point of intervention aimed at reducing the likelihood of negative health outcomes would be at the level of coping. For example, studies have found meditation to effectively reduce the negative impact of psychosocial stress, such as that resulting from financial strain, on cardiovascular disease outcomes (Walton et al., 2005); faith (Pargament, 1997) and social support (DeLongis and Holtzman, 2005) resources are also effective stress-reducers when the source of the stress (e.g. the economy or financial difficulties) cannot be directly addressed.

Although the present study contributes to the existing literature in a number of ways, there are limitations that should be acknowledged. First, the NDHWB was not designed for the specific purpose of testing these hypotheses, and other measures might be more useful in evaluating these relationships. For example, the health measurement was changed in Wave 5 from the Measurement of Physical Health checklist (Belloc et al., 1971) to the PILL (Pennebaker, 1982), which may influence the precision of the analyses. Because it is impossible to predict the timing and specifics of these types of macro-level events, and because the measure change is not confounded with the results, we feel that the data and analyses used here reflect a valuable window into the experience of the GFC in midlife and older adults. A second limitation is that the measures used to assess the key variables are

subjective in nature, which means that some of the observed effects could be due to shared method variance. Although an attempt is made to control for more objective FS information by including the intraindividual income parameters in the model, the income information available is less precise than is ideal. Third, we discuss group differences that emerged from the analyses, but these differences were not put to an explicit empirical test due to the complexity of the models; we argue, however, that this is less problematic when the comparisons being made are between significant and non-significant effects, as is done here.

Overall, the findings highlight that a given macro-level contextual event can and does impact individuals differently, with key factors being how these individuals perceive themselves to be affected, and the stress that can result from feeling the force of these events. Although it is not always possible to address the event itself, it is important to recognize that some of the deleterious effects of such events on health and well-being could be mitigated by intervening at the levels of perceived impact or stress management.

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Table 1Means, SDs, and correlations of key variables in full sample ($N=312$).

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1 Income Intercept	4.007	<i>1.60</i>	–										
2 Income Slope	–0.035	<i>0.68</i>	–.29	–									
3 Income Quad	0.003	<i>0.16</i>	.10	–.90	–								
4 Stress Intercept	31.182	<i>5.92</i>	–.22	–.01	.05	–							
5 Stress Slope	–0.482	<i>3.32</i>	.07	–.04	.01	–.41	–						
6 Stress Quad	0.078	<i>0.77</i>	–.07	.04	–.03	.30	–.94	–					
7 Finance Intercept	–0.111	<i>2.90</i>	.44	–.01	–.05	–.39	.11	–.10	–				
8 Finance Slope	–0.014	<i>1.90</i>	–.07	.08	–.05	–.02	–.21	.22	–.40	–			
9 Finance Quad	–0.003	<i>0.46</i>	.05	–.08	.07	.01	.20	–.22	.28	–.95	–		
10 Health at Wave 1 ^a	2.860	<i>1.85</i>	–.27	.04	–.04	<i>.14</i>	.08	–.09	–.18	.03	–.03	–	
11 Health at Wave 5 ^a	130.69	<i>34.78</i>	–.23	.02	.02	.22	.05	–.03	–.24	–.01	.01	.49	–
12 Age at Wave 1	59.854	<i>9.27</i>	–.17	.07	–.03	–.20	.09	–.08	.23	–.14	<i>.15</i>	<i>.13</i>	–.01

SD: standard deviation.^aHealth at Wave 1 measured by Somatic Health checklist; Health at Wave 5 measured by the Pennebaker Inventory of Limbic Languidness (PILL).*p* .05 in italics; .001 in bold italics; *p* .0001 in bold.

Table 2Results of model sequence in the full sample ($N = 312$) and by group.

	Covariate model	Stress model	Finance model	Combined model
Full sample				
Baseline Health	8.70 *** (0.97)	8.20 *** (0.96)	8.50 *** (0.96)	8.21 *** (0.96)
Income Intercept	-2.06 (1.28)	-1.07 (1.27)	-0.05 (1.42)	-0.23 (1.40)
Income Slope	4.42 (6.77)	6.30 (6.62)	8.55 (6.84)	7.74 (6.77)
Income Quad	26.15 (27.3)	30.65 (26.7)	37.34 (27.3)	34.13 (27.1)
Stress Intercept		1.35 *** (0.33)		1.12 ** (0.38)
Stress Slope		5.29 *** (1.63)		4.93 ** (1.72)
Stress Quad		18.73 ** (6.71)		17.85 * (7.02)
Finance Intercept			-2.45 ** (0.77)	-1.18 (0.87)
Finance Slope			-5.31 (3.23)	-0.72 (3.46)
Finance Quad			-14.61 (12.6)	0.61 (13.3)
Model R^2	0.252	0.298	0.277	0.303
Negative Slope group ($N=154$)				
Baseline Health	9.00 *** (1.27)	8.48 *** (1.24)	8.88 *** (1.23)	8.58 *** (1.23)
Income Intercept	-1.73 (1.89)	-0.53 (1.85)	1.22 (2.02)	1.11 (1.98)
Income Slope	-3.58 (9.18)	-0.62 (8.85)	2.35 (9.04)	2.69 (8.89)
Income Quad	-24.88 (38.0)	-19.51 (36.5)	-10.22 (36.9)	-10.98 (36.2)
Stress Intercept		1.29 ** (0.45)		0.76 (0.51)
Stress Slope		8.21 *** (2.26)		6.79 ** (2.30)
Stress Quad		32.95 *** (9.68)		27.43 ** (9.74)
Finance Intercept			-2.81 ** (1.04)	-1.94 (1.15)
Finance Slope			-18.58 ** (6.23)	-14.20 * (6.40)
Finance Quad			-74.07 ** (24.9)	-58.43 * (25.2)
Model R^2	0.287	0.360	0.355	0.393
Positive Slope group ($N=157$)				
Baseline Health	8.38 *** (1.53)	7.99 *** (1.52)	8.08 *** (1.51)	7.88 *** (1.51)
Income Intercept	-2.31 (1.75)	-1.38 (1.76)	-0.64 (2.00)	-0.83 (1.99)
Income Slope	16.57 (10.7)	15.79 (10.6)	19.32 (10.8)	16.55 (10.8)
Income Quad	94.94 * (41.6)	88.61 * (41.2)	102.29 * (41.9)	90.84 * (41.9)
Stress Intercept		1.41 ** (0.50)		1.37 * (0.58)
Stress Slope		3.61 (2.46)		3.89 (2.59)
Stress Quad		10.60 (9.74)		12.84 (10.1)
Finance Intercept			-1.56 (1.14)	-0.02 (1.30)
Finance Slope			4.25 (6.81)	8.97 (7.07)
Finance Quad			27.21 (26.4)	42.08 (26.9)
Model R^2	0.248	0.286	0.279	0.306

Standard errors for each parameter estimate are shown in parentheses. Intercept parameter not shown in table.

*
 p .05;

**
 p .01;

 p .001.

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