

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/343610250>

Life Course Ladders: Effects of Childhood and Adulthood Subjective Social Status on Health during COVID-19

Preprint · August 2020

DOI: 10.13140/RG.2.2.32071.32161

CITATIONS

0

READS

110

3 authors, including:



Laura Upenieks
Baylor University

33 PUBLICATIONS 74 CITATIONS

SEE PROFILE



Scott Schieman
University of Toronto

126 PUBLICATIONS 4,919 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Gender, Work-Family and Time [View project](#)



The Canadian Work, Stress, and Health Study (CAN-WSH) [View project](#)

***** WORK PAPER CURRENTLY UNDER REVIEW**

**Life Course Ladders:
Effects of Childhood and Adulthood Subjective Social Status on Health during COVID-19**

LAURA UPENIEKS¹, PhD
Baylor University
Department of Sociology

SCOTT SCHIEMAN, PhD
University of Toronto
Department of Sociology

RACHEL MEIORIN, M.A.
University of Toronto
Department of Sociology

Declarations

Funding: Funding is from the University of Toronto COVID-19 Action Initiative 2020 and Tri-Council Bridge funding supports this research (Scott Schieman, PI).

Conflicts of interest/Competing interests: not applicable.

**Life Course Ladders:
Effects of Childhood and Adulthood Subjective Social Status on Health during COVID-19**

Abstract

An emerging body of work has started to document population health consequences of the radical social and economic transformations that took place during the COVID-19 pandemic. The current study considers subjective social status (SSS) at two life course phases (childhood and adulthood) and assesses how they relate to changes in physical health during the pandemic. SSS is an important correlate of health above and beyond objective socioeconomic status, but existing work has mostly relied on SSS measurements during adulthood. Using two waves of data from the Canadian Quality of Work and Economic Life Study (C-QWELS) that follow respondents between the onset of lockdown measures in March and May of 2020, we take a life course view of subjective social status to assess how childhood SSS and adulthood SSS combine in synergistic ways to influence self-rated physical health (N=1,886). Results from multinomial logistic regression models suggest that lower childhood SSS was associated with a higher chance of being in consistently poor health, which was explained by adulthood SSS. Lower adulthood SSS was associated with a greater likelihood of being in consistently poor health and reporting declining health. A lower cumulative SSS between adulthood and childhood also predicted poor health, while perceived upward mobility over time was associated with good health. We interpret our results from a life course perspective and offer directions for future research.

Keywords: health, subjective social status, COVID-19, accumulation, pathway, mobility

Life Course Ladders: Effects of Childhood and Adulthood Subjective Social Status on Health during COVID-19

1. Introduction and Background

In response to the COVID-19 pandemic, countries worldwide implemented strict lockdown measures to curb the transmission of the virus. These measures lead to a slower spread of infection, but consequences to the health of the general public are almost inevitable (Douglas et al., 2020; Galea, Merchant, & Lurie 2020). The most common threats to health during this time are the loss of income or employment, residual consequences of economic shutdowns (Hanspal et al., 2020). Moreover, requiring people to remain at home and avoid social gatherings also risks serious social and psychological harm (Galea et al., 2020).

A core tenet of the stress process model in the sociological tradition is that stressors do not affect the health of members of the population equally (Pearlin, 1989). According to this model, groups that occupy the lower rungs of the societal ladder have fewer resources at their disposal to cope with stressors, a relationship which is exacerbated during these uncertain times (Pearlin & Bierman, 2013). However, one's social position is not only a reflection of the here-and-now reality. Indeed, it encompasses processes of accumulation that occur over time, set in motion during the early stages of life (e.g., childhood). Ferraro and Morton (2018, pg.270) define life course accumulation as "a process of amassing one or more objects [a phenomenon that is relatively stable and *may be perceived or measured*], whether desirable or undesirable, within or across domains of interests" (emphasis ours). Recent scholarship has advanced the view that any health risks associated with the COVID-19 pandemic depend on prior life course exposure, including "accumulated socioeconomic drawbacks" (Settersten et al., 2020, pg.6).

In the current study, we consider a measure of social position, subjective social status (SSS), at two life course phases (childhood and adulthood). We assess how these measures relate to changes in physical health during the COVID-19 pandemic. Subjective measures of social status capture how individuals *perceive* their social position relative to others, and where they think they belong on the societal ladder (Marmot, 2004; Wilkinson & Pickett, 2007). Impressions of one's own social standing may take on greater importance in the face of pandemic-related adversity, as hardships accumulate and disruptions to normal routines afford people more time to contemplate their social status relative to others.

Subjective social status is a robust correlate of mental and physical health beyond objective measures of socioeconomic status (Präg, Mills, & Wittek, 2016). However, most studies assess subjective status at a single point in time, and the majority of the research on subjective social status and health is cross-sectional in nature. One's current perceptions of their relative standing in society, however, fails to directly capture where a person saw themselves starting out from, and whether high or low perceptions of position have endured through time or shifted upward or downward. Thus, adulthood SSS and any accompanying associations with health may be a function of, or combine in unique ways, with childhood SSS.

Using two waves of data as part of the *Canadian Quality of Work and Economic Life Study* (C-QWELS) that track key variables of interest between the onset of COVID-19 lockdown measures in March and May of 2020, we take a life course view of subjective social status, modelling its impact from retrospective childhood measures of SSS to one's current assessment of their social standing in adulthood. Relying on four recognized life course models of health—sensitive period, accumulation, pathway, and mobility (Pudrovska & Anikputa, 2014)—we

assess how childhood SSS and adulthood SSS combine in synergistic ways to get “under the skin” as the pandemic progressed.

1.1. Measuring Subjective Status over the Life Course

A scientific consensus is emerging that finds SSS to hold strong associations with health above and beyond traditional measures of socioeconomic status (Cundiff & Matthews, 2017; Demakakos et al., 2008; Nobles et al., 2013; Singh-Manoux et al., 2005). Perceptions of one’s place in socioeconomic hierarchies may evoke strong physiological stress responses (Rahal et al., 2020b). Feeling inferior to other also has psychological consequences, above and beyond absolute levels of material deprivation (Marmot, 2004).

Less is known, however, about the origins of SSS, and how perceptions of social position build or change over the life course. The way that SSS is measured at each life course phase will have important implications for its utility in predicting health at the population level. The additional explanatory power of subjective socioeconomic status over objective indicators of socioeconomic status may be picking up on early life characteristics, such as schooling quality, or wealth in one’s extended family (Schnittker & McLeod, 2005).

An appraisal of relative social position may be greatly influenced by the time horizons study participants are primed to consider. According to the cognitive averaging principle, one’s present SSS is an average of beliefs about one’s past, current, and future social position (Andersson, 2018; Nobles et al., 2013; Singh-Manoux et al., 2005). In other words, SSS is not only an indicator of one’s present position and resources, but also one’s perceived resource trajectory, though the relative salience of each time point for health is not made clear in prior work.

While current SSS in adulthood has been measured extensively, we have a limited understanding of how respondents retrospectively assess their childhood social status. Some scholars suggest that SSS epitomizes lifetime achievements and socioeconomic status relative to one's starting point early in the life course (Demakakos et al., 2008). This idea of adaptive expectations reflects the possibility of self-comparison, where one's current social position is evaluated according to past status. For instance, having been previously incarcerated, and the socioeconomic consequences that follow, tended to be associated with lower present day SSS among former inmates (Schnittker & Bacak, 2013). Understanding how one assigns subjective SSS thus appears to be based on social comparisons simultaneously to one's past self and others in present society (Jin & Tam, 2015). This requires careful consideration of the potential challenges in measuring childhood SSS.

1.2 Measuring Early Life SSS

Prior research provides a foundation for an exploration of the synergistic effects of SSS from early life to adulthood and their potential consequences for health. SSS is often measured prospectively in adulthood but not childhood, leaving scholars to rely on retrospective measures to gauge the latter. Indeed, a few studies have measured childhood SSS retrospectively. For instance, Kingston (2012) find that childhood SSS indirectly influences prenatal stress among expecting mothers through its effect on adult SSS and recalled childhood stress. There are also a few studies that use a measure of childhood socioeconomic position that includes retrospective measures of SSS. These indicators combine objective measures of SES (recalled parent's education, father's occupation), and subjective measures (e.g., recalled financial ranking of one's

family compared to others) to assess later-life health outcomes, and are associated with better health (Ferraro et al., 2016; Singh-Manoux et al., 2005).

Beyond these studies of retrospective SSS, only a few studies have looked at measures of SSS at multiple points in time, but these suffer from having relatively short lag times between measurements, ranging from 7-14 days (Giatti et al., 2012) to two months (Goodman et al., 2001), and at its largest, six months or more between observation points (Goodman et al., 2007; Operario et al., 2004; Thompson et al., 2014). Overall, these studies show that SSS measured at time lags of six months or more have associations with self-rated health that exist net of demographic characteristics and objective socioeconomic status (Goodman et al., 2007; Operario et al., 2004; Thompson et al., 2014). These studies, however, are limited for three reasons. First, they rely on data from a single period of the life course for assessing SSS. Second, because of a reliance on single measurements of SSS, existing work does not consider that the effects of SSS at various life course stages may accumulate to impact health. Third, past studies have not taken into account that SSS may *change* between periods of the life course. In general, research with multiple points of SSS measurement have tended to concentrate exclusively on either adolescent (Goodman et al., 2007) and adult samples (Jin & Tam, 2015; Operario et al., 2004; Thompson et al., 2014), limiting a broader life course consideration.

A last step before considering the life course processes through which SSS may affect health is to consider the potential for recall bias in retrospective measures of childhood SSS. Prior research has addressed this concern. For instance, von Fintel and Posel (2016) analyzed reports of recalled childhood socioeconomic position from the same sample of adults, collected two years apart. They found that recall of childhood SSS was fairly consistent (63% agreeance), a measure similar to retrospective recall of a more objective measure, parental education (72%

agreeance). Using data from the nationally representative MIDUS sample in the United States, Ward (2011) also reported 60% concordance between childhood SSS among twins raised in the same household. Other work by Hardt et al. (2010) suggests that the relationship between perceived financial hardship during childhood and adult distress does not significantly differ when assessed retrospectively versus prospectively. Finally, it is also important to note that there are negligible differences in recall of childhood SSS across demographic characteristics. Recall does not vary by gender, race/ethnicity, or age (von Fintel & Posel, 2016; Ward, 2011). All told, this body of work suggests that recalled measures of SSS should be valid indicators of perceptions of social position in early life.

1.3. Subjective Social Status and Health: Integrating the Life Course Perspective

Reflections about one's social standing in society may be quite fluid, as individuals assess their current predicaments continually in light of past events and looking ahead to the future (Jin & Tam, 2015). We investigate four life course models regarding the manner in which early life SSS might combine with adulthood SSS to influence self-rated health during the COVID-19 pandemic: (1) early life sensitivity, (2) accumulation, (3) pathways from early life SSS to adulthood SSS, and (4) social mobility (Pudrovska & Anikputa, 2014).

The early life sensitivity model (also commonly referred to as the critical period model) posits the periods of childhood and adolescence as "sensitive" periods for cognitive and biological development that help prepare the individual for future environments they might encounter (Miller, Chen, & Parker, 2011). At a cognitive level, early life concerns about one status may foster distrust and heightened vigilance that prepare the individual to deal with expected threats (Miller et al., 2011). According to the sensitive period model, negative

exposures during childhood may result in scarring that increases the risk of health problems later in the life course (Ben-Shlomo & Kuh, 2002). To highlight two notable studies supporting this model, Ferraro and colleagues (2016) found that lower childhood SES predicted a higher number of chronic health conditions at baseline, and was also associated with a greater likelihood of developing new conditions over time. Williams and colleagues (2019) also found that a low childhood social status lowered the odds of remaining disease free among U.S. older adults.

Some previous research has shown that childhood SSS may evoke an enhanced stress response, and be damaging for health, at least in the short term. Lower SSS in young adulthood activates a stronger physiological response to stress: it predicts blunted HPA axis responses to stress, as well as higher resting heart rates, even once objective social status was accounted for (Adler et al., 2000; Habersaat et al., 2018). Moreover, in experimental studies, undergraduate students that were assigned to positions with low social power reported higher negative affect at the end of the study following stress (Cundiff et al., 2016; Mendelsson et al., 2008). While informative, these studies assessed health outcomes during the relatively early stages of the life course; thus, whether childhood SSS has longer-term direct effects on health into adulthood has yet to be determined.

The second life course model of health, the accumulation model, predicts that the greatest risks to health come when people are exposed to persistent or cumulative stress over the life course (Yang et al., 2017). This model is supported by studies which show that cumulative measures of SES are stronger predictors of health risk than SES measured at any one single point in the life course (Grunewald et al., 2012). In one of the few studies to assess both childhood and adulthood SSS, Kingston et al. (2012) report a fairly weak correlation between these two measures ($r = 0.19$), with both rankings of SSS hovering around 6.5 out of 10. While Kingston

and colleagues do not offer reasons why this correlation is weak, individuals' points of reference may change as they enter the workforce and build lives of their own. What seemed like a lot (or a little) in childhood may take on different meaning when individuals are exposed to a diverse array of people from different social positions (Eibner & Evans, 2005). Moreover, the relatively weak correlation between recalled SSS does not preclude the possibility that childhood and adult SSS may combine additively or interact to predict poor health. Recent evidence has emerged to suggest that the chronic toll of low SSS among workers may portend worse health, net of objective SES (Brosschot, Verkuil, & Thayer, 2018).

The third life course model, the pathway model, posits that though childhood conditions may impact health, circumstances in adulthood bear the stronger association with health (Gruenewald et al., 2012; Pearlin et al., 2005; Pudrovska & Anikputa, 2014). While studies frequently emphasize the importance of childhood socioeconomic conditions, some scholars indicate the limits of this sensitivity period model by documenting that such effects are mediated through adult circumstances (Pudvroska & Anikputa, 2014). Adult SSS is expected to influence health regardless of childhood SSS and may act as a mediator of the association between childhood SSS and health.

The process of relative deprivation may work through a pathway model because it results from negative social comparisons. For instance, those recalling a poor childhood SSS may have also perceived a lack of opportunity for advancement in adulthood through education, or the procurement of wealth or social prestige relative to other members of society that are the objects of comparison. This could facilitate a self-fulfilling prophecy: to the extent that a low childhood SSS leads people to lower their aspirations for achievement, this may cause perceptions of adulthood SSS to be lower precisely because of a lack of achievement.

The fourth life course model, social mobility, provides insight into how changes in SSS between early life and adulthood shape health (Harris & Schorpp, 2018). The social mobility model posits that perceived upward mobility between childhood and adulthood may offset the effect of a low early life SSS. Key to this model suggests that moving from a low SSS perception in childhood to a high SSS one in adulthood, or vice versa, may impact health. The perception that life is improving may spur individuals feel more optimistic about their situation (Schafer, Ferraro, & Mustillo, 2011) and is associated with higher feelings of personal control (Hitlin & Johnson, 2015). Together, these resources may potentially correlate with better stress coping mechanisms and taking stronger initiatives to protect health. However, perceptions of downward mobility may initiate the opposite process, where individuals begin to feel pessimistic that things will get better, and refrain from investing in effort to improve their social standing. Findings from a cross-sectional national sample of Chinese adults finds that only perceived downward mobility in SSS from adolescence to present is a predictor of self-rated physical health (Jin & Tam, 2015). These authors propose that the effects of downward mobility may linger while the effects of upward mobility may dissipate, but this claim has yet to be tested with longitudinal data.

2. Data and Methods

2.1. Sample

We analyze data from a longitudinal national survey of Canadian workers that was collected as part of the *Canadian Quality of Work and Economic Life Study (C-QWELS)*. This project was intended to examine social conditions and well-being among Canadians who were currently employed. We use data collected in 2020 from March 17th to March 23rd (N = 2,528 working Canadians) (hereafter, Time 1), and from May 17th to May 24th (N = 1,886) (Time 2).

An attempt was made to contact all participants in the Time 1 survey at follow-up. Altogether, the response rate for the initial sample was 43%, and there was a 75% retention rate between the March and May waves of data collection.

All study participants were drawn from the Angus Reid Forum (ARF), a built and managed panel of Canadians that have agreed to participate in research. Panel participants were recruited through a variety of online and offline channels, extensively profiled, and measured to ensure accurate representation of the diversity across Canada's adult population (<http://angusreid.org>). Sample selection for these surveys began with creating a balanced sample matrix of the Canadian population. A randomized sample of ARF members were then selected to match this matrix to ensure a representative sample. All results are weighted according to the most current gender, age, education, and region Census data to ensure broad representation of working Canadians.

2.2. Dependent Variable: Change in Self-Rated Health

Self-rated health was measured identically at Time 1 and Time 2 with a well-validated measure of self-rated health (Idler & Benyamini, 1997). Respondents were asked, "Overall, how would you describe your current state of health?" Responses were coded where 1 = "Poor" or "Very Poor," 2 = "Fair," 3 = "Good," 4 = "Very good," and 5 = "Excellent." Since we were interested in changes in self-rated health between March and May (from the onset of lockdown measures to the height of the pandemic in Canada), we coded each measure of self-rated health into a binary variable, where 0 = *poor, very poor, or fair health*, and 1 = *good, very good, or excellent health*. This decision was made because we were interested in how childhood and adulthood SSS may be associated with larger changes in health during this period of crisis.

Using these binary classifications of health at each wave, we then created a four-category variable capturing changes in self-rated health. Our reference category was those in good, very good, or excellent self-rated health at Time 1 and Time 2, combined with those who improved their health over the course of the sample, as the latter group had too few participants to include as a separate category. Together, this group comprised 78% of the sample. We contrasted these individuals with those who had consistently poor health between Time 1 and Time 2 (e.g., scores of 0 at both time points) (7% of the sample), and with those who had worse health at Time 2 relative to Time 1 (15% of the sample).

2.3 Focal Independent Variables

Subjective Social Status: SSS was measured in childhood and adulthood with the commonly used MacArthur Scale of Subjective Social Status (Adler et al. 2000). Respondents were presented with a ladder and asked to rank themselves in terms of their standing in society. As a measure of *adulthood SSS*, respondents were asked, “Think of this ladder as representing where people stand in our society. At the top of the ladder (10) are the people who are best off—those who have the most money, most education, and best jobs. At the bottom of the ladder (1) are the people who are the worse off—who have the least money, least education, and the worst jobs or no jobs. The higher up you are on this ladder, the closer you are to the people at the very top, and the lower you are, the closer you are to the people at the very bottom. Where would you place yourself at the present time?” (response options range from 1 to 10). After completing this question respondents were then asked, “And if you think about the family that you grew up in, where did they fit in?” They were shown the same 10-rung ladder and asked to assess their *childhood SSS*. On both measures of SSS, higher values indicate greater self-assessed social

status. This measure has a high degree of convergent and discriminant validity (Andersson, 2018; Operario et al., 2004).

The life course accumulation model and the mobility model both propose a complex interplay between childhood and adulthood SSS. To assess accumulation, we created a measure of *cumulative SSS*, which is the sum of one's self-placement on the ladder at childhood and adulthood (range = 2 - 20). To measure *perceptions of social mobility*, we consider whether individuals perceived a higher, lower, or the same subjective social status in adulthood as in childhood. Following a procedure established by Jin and Tam (2015), we created a four-category variable coded as follows: 0 = stable low SSS between childhood and adulthood (less than or equal to 5 at both time points, reference category) 1 = stable high SSS (greater than 5 at childhood and adulthood), 2 = decreasing SSS (adulthood SSS is lower than childhood SSS), and 3 = increasing SSS (adulthood SSS is higher than childhood SSS).

2.4 Study Covariates

To ensure that the association between various configurations of subjective social status and health are not conflated with objective measures of socioeconomic status, we adjust for the following four measures, all measured at Time 1 (March). *Education* is measured with the following question: "What is the highest level of education that you yourself completed?" We compare those with a university undergraduate degree or higher to those with less than a university undergraduate degree. As a measure of *occupation*, we contrast individuals in higher administrative, professional, and technical occupations to all others (e.g., sales, service, clerical, skilled labor/production). Analyses also measure *household income*, comparing individuals in the under \$25,000 category to individuals in each of the following other categories: \$25,000-\$49,999, \$50,000-\$99,999, \$100,000-\$149,999, \$150,000-\$199,999, and \$200,000 or more.

Finally, given that job loss was a more prevalent occurrence at the onset of the pandemic as lockdown measures came into effect, we include a binary variable of whether the respondents, all employed at Time 1 of the survey, *experienced a job loss* in the months before the Time 2 survey was fielded (0 = No, 1 = Yes).

Demographic Variables: All analyses adjust for gender (female = 1), age (in years), visible minority status (0 = No, 1 = Yes), marital status, where single respondents were compared to married, previously married, cohabiting individuals, and the number of children younger than 18 residing in the household. Table 1 reports the sample characteristics.

2.5. Plan of Analysis

Given our three categories of changes in self-rated health from Time 1 to Time 2, we use multinomial logistic regression to conduct our analysis. This method is preferred because it allows for multiple comparisons between groups within the same model. We consider consistently good health as the reference category since we are especially interested in the change from consistently good health to stably poor or decreasing health during the pandemic. Table 2 shows relative risk ratios (RRRs), which show the change associated with each predictor in the probability of being in either the ‘consistently poor health’ or the ‘decreasing health’ categories, respectively, relative to the reference group of ‘consistently good health.’

Multiple imputation with chained equations was used to deal with missing data in all regression analyses ($m = 20$). Less than 10% of the data was missing on study variables prior to imputation, but we performed the imputation routine to preserve statistical power ($N = 1,886$). Results were also consistent using the listwise deletion method of addressing missing data.

3. Results

3.1 Sample Characteristics

To preface our regression results, we highlight some key sample characteristics. Since our sample was comprised entirely of working Canadians at Time 1, it is not surprising that almost 50% of them had a college degree. However, 9% of respondents reported having lost their job or being laid off as a result of the COVID-19 pandemic between the March and May data collection. The average childhood SSS of respondents in our sample was 5.53 (SD = 1.88), and the average adulthood SSS score was 5.76 (SD = 1.65). Tests of mean differences comparing childhood and adulthood SSS were not statistically significant. Still, despite similar average perceptions of social status at both time points, there was a fair amount of change in SSS between childhood and adulthood. While 25% of the sample and 35% of the sample displayed consistently high or low SSS (above the center-point, 5, of the ladder), respectively, 16% of the sample reported lower adulthood perceptions of SSS than childhood, and nearly one-quarter of the sample (24%) reported higher perceptions of SSS in adulthood. Childhood and adulthood SSS were modestly correlated at $r = 0.29$.

[Table 1 about here]

3.2 Multinomial Logistic Regression Results Predicting Change in Self-Rated Health

Table 2 presents results from a series of six multinomial logistic regression models, with relative risk ratios reported. To aid interpretation and provide effect sizes, we also reference average marginal effects by showing the predicted probability of being in a category of health across levels of SSS, where applicable.

Model 1 of Table 2 presents a baseline model with demographic indicators and whether the respondent lost their job between Time 1 and Time 2. Thus, this first model does not include either childhood or adulthood SSS.

[Table 2 about here]

Results from Model 1 suggest that relative to those in consistently good health, being older (RRR = 1.03, $p < .001$) and being a visible minority (RRR = 1.67, $p < .05$) were associated with higher odds of having consistently poor health. Model 1 also shows that those who lost or were laid off from their job between Time 1 and Time 2 had a much higher likelihood of reporting decreasing health relative to consistently good health (RRR = 2.81, $p < .001$).

Results presented in Model 2 begin to address our main research questions. Model 2 serves as a test of the sensitive period model of the life course by assessing the direct association between childhood SSS and change in self-rated health. Findings shown here suggest that relative to those with consistently good self-rated health, a higher childhood SSS predicts a lower likelihood of having consistently poor health between Time 1 and Time 2 (RRR = 0.85, $p < .001$). A higher childhood SSS was not associated with higher or lower odds of reporting decreasing health, however. Figure 1 shows the predicted probabilities of being in consistently poor health at three levels of childhood SSS, holding all other variables at their respective means: low (a score of 2), moderate (a score of 5, roughly the sample mean), and high (a score of 8). These estimates are derived using the *mimrgns* command in Stata 14, with 95% confidence intervals shown. Those with a low childhood SSS are 2.5 times more likely to fall into the consistently poor health category (10%) during the pandemic, compared to only 4% for those with high childhood SSS. High childhood SSS is also associated with a lower likelihood of being in consistently poor health relative to those with moderate (mean) levels of SSS (7%).

[Figure 1 about here]

Model 3 considers childhood and adulthood SSS simultaneously. The introduction of adulthood SSS reduces the association between childhood SSS and consistently poor health to non-significance. This suggests that while important on its own, current (adulthood) SSS may matter more for health, providing support for the life course pathway model. People with a higher adulthood SSS reported both lower odds of being in poor self-rated health (RRR = 0.72, $p < .001$) than those with a lower SSS. What is more, those with a higher SSS in adulthood also report lower odds of experiencing a decline in self-rated health between Time 1 and Time 2 (RRR = 0.78, $p < .001$) relative to those with a lower adulthood SSS. This finding is noteworthy because it illustrates that net of job loss and a host of demographic controls, a higher adulthood SSS may be a protective resource against health declines after the onset of the COVID-19 pandemic, while low SSS may be detrimental to health.

Figure 2 displays predicted probabilities of being in consistently poor health, and Figure 3 shows the risk of being in the decreasing health category across levels of adulthood SSS. We use the same cut-offs denoting low, moderate, and high as we used for childhood SSS in Figure 1. A low adulthood SSS was associated with a 15% chance of being in consistently poor health between Time 1 and Time 2, which is five times higher than the chances of someone of high adulthood SSS (3%), and more than twice as high as individuals with moderate SSS (7%). We observe a similar pattern when examining the probability of sorting into the decreasing health category over time. Individuals with a low adulthood SSS have a 10% probability of being in this category, over three times higher than those with high adulthood SSS (3%).

[Figure 2 about here]

[Figure 3 about here]

Models 4 and 5 of Table 2 provide a test of the life course accumulation model through two different operationalizations of accumulation. In Model 4, we used a cumulative of SSS, which was a sum of an individual's reported childhood and adulthood SSS. This represents an additive specification of life course accumulation (Ferraro & Morton, 2018). In this model, we see that a higher cumulative SSS is associated with a lower risk of having consistently poor health ($RRR = 0.83, p < .001$). Cumulative SSS did not, however, did not significantly predict a higher or lower risk of having declining health between Time 1 and Time 2. Figure 4 again displays predicted probabilities of being in consistently poor health across low, moderate, and high cumulative SSS: a low cumulative SSS was associated with an 11% chance of being in consistently poor health, representing nearly four times greater risk than with a high cumulative SSS had (3%).

[Figure 4 about here]

In Model 5, we model life course accumulation as a multiplicative term (Childhood SSS x Adulthood SSS), which tests whether the effect of SSS at one point in the life course are contingent on SSS scores at the time point. For both comparisons in our model, we do not observe a significant interaction term, $RRR = 1.00, p = .98$ for consistently poor health relative to consistently good health and $RRR = 1.02, p = .51$ for decreasing health relative to consistently poor health.

The final model shown in Table 2, Model 6, offers a test of the life course mobility model. Model 6 tests whether the effects of SSS on health are subject to whether SSS increases, decreases, or remains stable between childhood and adulthood. Results shown in Model 6 provide some support for the propositions of the mobility model. Relative to those with stable low SSS between childhood and adulthood, those with stable high SSS had a lower risk for being

in consistently poor health ($RRR = 0.29, p < .001$). Moreover, individuals that reported a perceived increase in social status between childhood and adulthood were also at a lower risk of being in consistently poor health.

Figure 5 shows predicted probabilities of being in consistently poor health across SSS transitions between childhood and adulthood. It is not surprising that individuals with a stable high SSS had the least risk of reporting consistently poor health (3%), and that those with a stable low SSS had the highest risk (11%). However, individuals whose perception of social status increased over time report lower risk of being in consistently poor health (5%) than those of stable low SSS, which is also statistically indistinguishable from the stable high SSS group. Finally, social mobility in SSS was not significantly associated with declines in health between Time 1 and Time 2.

[Figure 5 about here]

4. Discussion

The aim of the present study was to consider how perceived social inequalities over the life course get “under the skin” during a period of rapid social change and widespread stress. Drawing from two waves of a national survey of Canadian workers studied at the beginning of the COVID-19 lockdown period (March 2020) and followed-up two months later (May 2020) and guided by four models of life course health, we traced how self-rated health was a function of childhood SSS, adulthood SSS, and the synergistic effects between them.

Our first key finding was that childhood SSS was associated with a higher chance of being in consistently poor health between time points, but its effect on health was diminished once adulthood SSS was considered. This result is inconsistent with the early life sensitivity model, which proposes that childhood conditions should carry a direct effect on health after

accounting for adulthood circumstances (Miller et al., 2011). This result was not entirely unexpected. During this current period of hardship and uncertainty associated with the pandemic—when the social lives of individuals were launched into a state of flux—one’s current appraisal of their social standing may carry more weight for health than SSS assessments of a time in one’s life course that unfolded at least several decades ago.

Nevertheless, the effect of childhood SSS on health through adulthood SSS provides support for the life course pathway model (Pudrovska & Anikputa, 2014). Despite a non-significant direct effect in the current analysis, childhood remains a pivotal life course stage for understanding health inequalities, when status differences begin to emerge (Rahal et al., 2020a). Early perceptions of disadvantage may increase the likelihood of exposure to other disadvantage, which appear to be the engines driving changes in health. Past research on SSS corroborates our finding. Kingston and colleagues (2012), for instance, found that childhood SSS was indirectly associated with prenatal stress in expectant mothers through its effect on adult SSS.

In addition to explaining the effects of childhood SSS on health, a second central finding was that adulthood SSS was the only measure of SSS considered that held associations with being in consistently poor health, and also predicted a greater likelihood of people reporting *declining health* during the pandemic. The effect sizes for adulthood SSS were quite large; indeed, those with a lower adulthood SSS were five times more likely to have consistently poor health during this period of the COVID-19 pandemic, and over three times as likely to have declining health between March and May 2020 than those with higher adulthood SSS. We see this as strong evidence for the role of adult SSS predicting health, because both of these associations held net of income, education, occupational status, and job loss during the pandemic.

What may explain this strong association between low adulthood SSS and self-rated health? First, physiological stress responses as a result of lower SSS could underlie its overall effect on health (Habersaat et al., 2018). Feeling undervalued in society, or one's immediate community, may lead those with lower SSS to become preoccupied with stressors. Indeed, lower SSS individuals may perceive ambiguous stimuli as frightening (Chen, Langer, Raphaleson, & Matthews, 2004). Perceiving stress or threat can more frequently activate the psychological and physiological stress response (Rahal et al., 2020b), thereby widening the gap in health outcomes between people of low and high SSS. These responses evoked by a low SSS may have been heightened during the early stages of the COVID-19 global pandemic, as anxieties grew about not only contracting the virus, but also regarding financial futures and employment prospects.

A second and more speculative interpretation for the extensive impact of adulthood SSS across the full spectrum of health relates to perceptions of social support, which are likely to be exceptionally important for health during the time of the pandemic. One prior study found that lower subjective social status was associated with lower perceived social support among young pregnant women (Reitzel et al., 2007). A lack of social support can increase vulnerability to health problems. The feeling that one does not measure up to others may stifle opportunities to seek social support, perhaps out of a desire to not appear vulnerable to perceived higher status others, or because of worry that one might not be able to reciprocate any support received. The turbulent times at the start of the pandemic may have already weakened social bonds between individuals, and so any hesitancy on the part of low SSS individuals to access social support may contribute to widening health inequalities.

A third takeaway from our study involve the results that support the life course accumulation model (additive specification) (Ferraro & Morton, 2018). Indeed, a higher

cumulative SSS (a summation of childhood and adulthood measures of SSS) was associated with a nearly four times lower risk of reporting consistently poor health during the pandemic.

Compared to adulthood SSS, which had associations with consistently poor health and declines in health, a lower cumulative SSS only predicted higher odds of remaining in consistently poor health over the study period. This may be because childhood SSS only had an association with poor health, which would bear equal weight to adulthood SSS in an additive model. We should, however, note that the effect of cumulative SSS on health is fairly similar to that for adulthood SSS on its own, as lower cumulative SSS was associated with nearly four times higher risk of being in consistently poor health. This result aligns with prior research which has found that people with chronically low SSS have differences in their psychological and physiological stress responses and is associated with worse health over time. (Brosschot, Verkuil, & Thayer, 2018). Our results did not show that the impact of childhood SSS for health was contingent on adulthood SSS, or vice versa.

Finally, we also found support for the social mobility model. While average levels of childhood and adulthood SSS were fairly similar, there was a fair amount of change in SSS perceptions amongst our respondents. In line with the pathway and accumulation model, it should come as no surprise that those with consistently high SSS reported a lower risk of being in consistently poor health over time. However, we also found that individuals who perceived upward mobility between childhood and adulthood had less risk of reporting consistently poor health. Perceptions of downward mobility, however, were not associated with health.

This last result differs from those reported by Jin and Tam (2015), who found that only perceived downward social mobility was associated with worse self-rated health in a national sample of Chinese adults. These authors argue that people may be more sensitive to losses than

gain; losing status may be accompanied by losses in self-esteem or the sense of control, deficits which are linked to a myriad of health problems. Moreover, Jin and Tam posit that as individuals move up the social ladder, they grow accustomed to their higher positions, so positive influences on health may not be long lasting. We see two reasons that might account for these discrepant findings. First, Jin and Tam (2015) measured self-rated health at one point in time, whereas we measured changes in health over two time points. Second and more likely, our data were collected during the COVID-19 pandemic. In such unusual times, individuals may compare themselves to their past selves, or to an imagined “collective other” who represents what one believes to be of average social status during the pandemic.

This last point raises the important question of what perceptions of social status may be capturing during a pandemic. A major challenge of studying the effects of SSS on health is defining appropriate reference groups. During the pandemic, neighbors living in close proximity (and within close view) may be a particularly important reference group during stay-at-home orders. Past research by Andersson (2018) demonstrated that well-being suffers when one’s perceived status among narrow reference groups (e.g., neighbors or friends) is lower than one’s perceived status in the wider society. However, it is possible that at the onset of the pandemic, observing large scale layoffs and unemployment may lead individuals to feel grateful to have retained their job, and watching the infection rate and death tolls rise may give people new appreciation for life. All considered, at a time when differences in access to material goods may be neutralized to some extent, individuals may perceive that they are relatively better off.

Taken together, our study shows the value of integrating a life course approach in studies focused on the link between SSS and health. Existing studies of SSS show that the effects of SSS are strong and large after objective SES measures are adjusted (Adler et al., 2000). Findings from

our study are suggestive that some of the predictive power of SSS at any point in time may also be capturing the cumulative effects of past social status with present.

4.1 Limitations and Future Directions

Before we conclude, several limitations of our study deserve mention. First, our sample was intended to be representative of Canadian workers, which underrepresented the larger population of other Canadians. However, those without jobs at the onset of the pandemic may have perceived even lower social status during this time. Therefore, the risk to self-rated health of a low childhood or adulthood SSS are likely even stronger than those reported here.

Second, our analyses also relied on a single-item measure of self-rated health. Future research could study the consequences of SSS for objective health indicators, such as the presence of disease, or biomarkers related to stress, such as cortisol or C-reactive protein (e.g., Harris & Schorpp, 2018). We also recognize the limits to the causal claims made in this study. We argued that SSS affects health, but the alternative direction is also possible (health predicts perceptions of social status) (Garbarski, 2010). Future studies with several waves of data can be used to sort out these questions of causal ordering.

Third, the measure of childhood SSS is based on a person's recall of their childhood family environment when they were growing up. Ideally, a more specified time frame in retrospective measures of SSS would have been preferable to gain assurance that respondents are indeed recalling the same life course period. However, future research should collect measures of subjective and objective SSS prospectively at multiple points in the life course to establish greater precision surrounding the relationships among childhood SSS, adulthood SSS, and health.

5. Conclusion

The documentation of a robust relationship in the current study between SSS and health in such a short time period of two months provides a first glimpse that SSS has, and may continue to, affect population level health. It will become ever more important for researchers to pay attention to mechanisms that might mitigate the influence of low SSS on health. Isolating how to turn off or minimize the damage of accumulated or adulthood SSS is especially important for public policy initiatives. These may range from government income transfers to vulnerable segments of the population to prevent material deprivation, to business strategies to protect jobs, and finally to initiatives that foster community trust and engagement and promote trust in one's neighbors, to the extent possible. It is clear that widescale efforts will be needed to combat the negative health consequences of the pandemic, and the current study suggests that researchers and policymakers should be attuned to individual perceptions of social status over the life course.

References

- Adjaye-Gbewonyo, K., & Kawachi, I. (2012). Use of the Yitzhaki Index as a test of relative deprivation for health outcomes: a review of recent literature. *Social Science & Medicine*, *75*(1), 129-137.
- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, White women. *Health Psychology*, *19*(6), 586–592.
- Andersson, M. A. (2015). How do we assign ourselves social status? A cross-cultural test of the cognitive averaging principle. *Social Science Research*, *52*, 317-329.
- Andersson, M. A. (2018). An odd ladder to climb: Socioeconomic differences across levels of subjective social status. *Social Indicators Research*, *136*(2), 621–643.
- Ben-Shlomo, Y., & Kuh, D. (2002). A life course approach to chronic disease epidemiology: Conceptual models, empirical challenges and interdisciplinary perspectives. *International Journal of Epidemiology*, *31*(2), 285–293.
- Brosschot, J., Verkuil, B., & Thayer, J. (2018). Generalized unsafety theory of stress: Unsafe environments and conditions, and the default stress response. *International Journal of Environmental Research and Public Health*, *15*(3), 464.
- Cundiff, J. M., & Matthews, K. A. (2017). Is subjective social status a unique correlate of physical health? A meta-analysis. *Health Psychology*, *36*(12), 1109–1125.
- Cundiff, J. M., Smith, T. W., Baron, C. E., & Uchino, B. N. (2016). Hierarchy and health: Physiological effects of interpersonal experiences associated with socioeconomic position. *Health Psychology*, *35*(4), 356–365.

- Demakakos, P., Nazroo, J., Breeze, E., & Marmot, M. (2008). Socioeconomic status and health: The role of subjective social status. *Social Science & Medicine*, *67*(2), 330–340.
- Douglas, M., Katikireddi, S. V., Taulbut, M., McKee, M., & McCartney, G. (2020). Mitigating the wider health effects of COVID-19 pandemic response. *BMJ*, *369*, m1557.
- Eibner, C., & Evans, W. N. (2005). Relative deprivation, poor health habits, and mortality. *Journal of Human Resources*, *40*(3), 591-620.
- Ferraro, K. F., & Morton, P. M. (2018). What do we mean by accumulation? Advancing conceptual precision for a core idea in gerontology. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *73*(2), 269–278.
- Ferraro, K. F., Schafer, M. H., & Wilkinson, L. R. (2016). Childhood disadvantage and health problems in middle and later life: Early imprints on physical health? *American Sociological Review*, *81*(1), 107–133.
- Galea, S., Merchant, R. M., & Lurie, N. (2020). The mental health consequences of COVID-19 and physical distancing: The need for prevention and early intervention. *JAMA Internal Medicine*, *180*(6), 817-818.
- Garbarski, D. (2010). Perceived social position and health: Is there a reciprocal relationship? *Social Science & Medicine*, *70*(5), 692–699.
- Giatti, L., Camelo, L. V., Rodrigues, J. F., & Barreto, S. M. (2012). Reliability of the MacArthur scale of subjective social status—Brazilian Longitudinal Study of Adult Health (ELSA-Brasil). *BMC Public Health*, *12*(1), 1096.
- Goodman, E., Adler, N. E., Kawachi, I., Frazier, A. L., Huang, B., & Colditz, G. A. (2001). Adolescents' perceptions of social status: Development and evaluation of a new indicator. *Pediatrics*, *108*(2), e31.

- Goodman, E., Huang, B., Schafer-Kalkhoff, T., & Adler, N. E. (2007). Perceived socioeconomic status: A new type of identity that influences adolescents' self-rated health. *Journal of Adolescent Health, 41*(5), 479–487.
- Habersaat, S., Abdellaoui, S., Geiger, A. M., Urben, S., & Wolf, J. M. (2018). Low subjective social status in the police is linked to health-relevant changes in diurnal salivary alpha-amylase activity in swiss police officers. *Stress: The International Journal on the Biology of Stress, 21*(1), 11–18.
- Hanspal, T., Weber, A., & Wohlfart, J. (2020). *Exposure to the COVID-19 stock market crash and its effect on household expectations* (CESifo Working Papers No. 8244). Retrieved from SSRN website
- Hardt, J., Vellaisamy, P., & Schoon, I. (2010). Sequelae of prospective versus retrospective reports of adverse childhood experiences. *Psychological Reports, 107*(2), 425–440.
- Harris, K. M., & Schorpp, K. M. (2018). Integrating biomarkers in social stratification and health research. *Annual Review of Sociology, 44*(1), 361–386.
- Hitlin, S., & Johnson, M. K. (2015). Reconceptualizing agency within the life course: The power of looking ahead. *American Journal of Sociology, 120*(5), 1429–1472.
- Idler, E. L., & Benyamini, Y. (1997). Self-rated health and mortality: A review of twenty-seven community studies. *Journal of Health and Social Behavior, 38*(1), 21–37.
- Jin, L., & Tam, T. (2015). Investigating the effects of temporal and interpersonal relative deprivation on health in China. *Social Science & Medicine, 143*, 26-35.
- Kingston, D., Sword, W., Krueger, P., Hanna, S., & Markle-Reid, M. (2012). Life course pathways to prenatal maternal stress. *Journal of Obstetric, Gynecologic & Neonatal Nursing, 41*(5), 609–626.

- Marmot, M. (2004). *The status syndrome: How social standing affects our health and longevity*. Henry Holt and Company.
- Mendelson, T., Thurston, R. C., & Kubzansky, L. D. (2008). Affective and cardiovascular effects of experimentally-induced social status. *Health Psychology, 27*(4), 482–489.
- Miller, G. E., Chen, E., & Parker, K. J. (2011). Psychological stress in childhood and susceptibility to the chronic diseases of aging: Moving toward a model of behavioral and biological mechanisms. *Psychological Bulletin, 137*(6), 959–997.
- Nobles, J., Weintraub, M. R., & Adler, N. E. (2013). Subjective socioeconomic status and health: Relationships reconsidered. *Social Science & Medicine, 82*, 58–66.
- Operario, D., Adler, N. E., & Williams, D. R. (2004). Subjective social status: Reliability and predictive utility for global health. *Psychology & Health, 19*(2), 237–246.
- Pearlin, L. I. (1989). The sociological study of stress. *Journal of Health and Social Behavior, 30*(3), 241–256.
- Pearlin, L. I., & Bierman, A. (2013). Current issues and future directions in research into the stress process. In C. S. Aneshensel, J. C. Phelan, & A. Bierman (Eds.), *Handbook of the sociology of mental health* (2nd ed., pp. 325–340). New York: Springer Science+Business Media.
- Pearlin, L. I., Schieman, S., Fazio, E. M., & Meersman, S. C. (2005). Stress, health, and the life course: Some conceptual perspectives. *Journal of Health and Social Behavior, 46*(2), 205–219.
- Präg, P., Mills, M. C., & Wittek, R. (2016). Subjective socioeconomic status and health in cross-national comparison. *Social Science & Medicine, 149*, 84–92.

- Pudrovska, T., & Anikputa, B. (2014). Early-life socioeconomic status and mortality in later life: An integration of four life-course mechanisms. *The Journals of Gerontology: Series B*, 69(3), 451–460.
- Rahal, D., Chiang, J. J., Fales, M., Fuligni, A. J., Haselton, M. G., Slavich, G. M., & Robles, T. F. (2020a). Early life stress, subjective social status, and health during late adolescence. *Psychology & Health*, 1-19.
- Rahal, D., Chiang, J. J., Bower, J. E., Irwin, M. R., Venkatraman, J., & Fuligni, A. J. (2020b). Subjective social status and stress responsivity in late adolescence. *Stress*, 23(1), 50-59.
- Reitzel, L. R., Vidrine, J. I., Li, Y., Mullen, P. D., Velasquez, M. M., Cinciripini, P. M., & Wetter, D. W. (2007). The influence of subjective social status on vulnerability to postpartum smoking among young pregnant women. *American Journal of Public Health*, 97(8), 1476-1482.
- Schafer, M. H., Ferraro, K. F., & Mustillo, S. A. (2011). Children of misfortune: Early adversity and cumulative inequality in perceived life trajectories. *American Journal of Sociology*, 116(4), 1053–1091.
- Schnittker, J., & Bacak, V. (2013). A mark of disgrace or a badge of honor? Subjective status among former inmates. *Social Problems*, 60(2), 234-254.
- Schnittker, J., & McLeod, J. D. (2005). The social psychology of health disparities. *Annual Review of Sociology*, 31, 75–103.

- Settersten, R., Bernardi, L., Harkonen, J., Antonucci, T.C., Dykstra, P.A., Thomson, E. 2020. Understanding the effects of COVID-19 through a life course lens. Early access at *Advances in Life Course Research*. <https://doi.org/10.1016/j.alcr.2020.100360>
- Singh-Manoux, A., Marmot, M. G., & Adler, N. E. (2005). Does subjective social status predict health and change in health status better than objective status? *Psychosomatic Medicine*, 67(6), 855–861.
- Thompson, M. G., Gaglani, M. J., Naleway, A., Thaker, S., & Ball, S. (2014). Changes in self-rated health and subjective social status over time in a cohort of healthcare personnel. *Journal of Health Psychology*, 19(9), 1185–1196.
- von Fintel, D., & Posel, D. (2016). Errors in recalling childhood socio-economic status: The role of anchoring and household formation in South Africa. *Social Indicators Research*, 126(1), 119–140.
- Ward, M. M. (2011). Concordance of sibling's recall of measures of childhood socioeconomic position. *BMC Medical Research Methodology*, 11(1), 147.
- Wilkinson, R. G. (1997). Comment: Income, inequality and social cohesion. *American Journal of Public Health*, 87, 1504–1506.
- Wilkinson, R. G., & Pickett, K. E. (2006). Income inequality and population health: A review and explanation of the evidence. *Social Science & Medicine*, 62(7), 1768–1784.
- Wilkinson, R. G., & Pickett, K. E. (2007). The problems of relative deprivation: Why some societies do better than others. *Social Science & Medicine*, 65(9), 1965–1978.
- Williams, M. M., Kemp, B. R., Ferraro, K. F., & Mustillo, S. A. (2019). Avoiding the major causes of death: Does childhood misfortune reduce the likelihood of being disease free in later life? *The Journals of Gerontology: Series B*, 74(1), 170–180.

Yang, Y. C., Johnson, M. P., Schorpp, K. M., Boen, C. E., & Harris, K. M. (2017). Young adult risk factors for cancer: Obesity, inflammation, and sociobehavioral mechanisms. *American Journal of Preventive Medicine*, 53(3S1), S21–S29.

Table 1. Study Descriptive Statistics, 2020 C-QWELS Survey (N=1,186)

	Range	Mean/Proportion	Standard Deviation
<i>Change in Self-Rated Health</i>			
Consistently Poor	0.07		
Consistently Good/Increasing	0.78		
Decreasing	0.15		
Childhood SSS	1-10	5.53	1.88
Adulthood SSS	1-10	5.76	1.65
Cumulative SSS	2-20	11.28	2.83
<i>Social Mobility</i>			
Stable Low SSS		0.25	
Stable High SSS		0.35	
Decreasing SSS		0.16	
Increasing SSS		0.24	
<i>Controls</i>			
Age	18,83	44.30	13.05
Visible Minority Status		0.14	
B.A. degree		0.47	
<i>Household income</i>			
< 25K		0.06	
25K-50K		0.15	
50K-75K		0.34	
75K-100,000K		0.26	
100-125,000K		0.13	
>125,000K		0.06	
Number of children	0,6	1.75	1.04
<i>Marital Status</i>			
Single		0.23	
Married		0.62	
Previously Married		0.04	
Cohabiting		0.11	
<i>Occupational Status</i>			
Professional/administrative		0.41	
Clerical		0.13	
Sales		0.08	
Service/All workers categories		0.26	
Other		0.11	
<i>Work Transitions</i>			
Employed			
→Unemployed		0.09	

Table 2. Multinomial Logistic Regression Models of Changes in Self-Rated Health
2020 C-QWELS Survey (Relative Risk Ratios shown with 95% confidence intervals)
N=1,886

	Model 1		Model 2	
	<i>Poor vs. Good SRH</i>	<i>Decreasing vs. Good SRH</i>	<i>Poor vs. Good SRH</i>	<i>Decreasing vs. Good SRH</i>
Childhood SSS			0.85** (0.77-0.94)	1.03 (0.92-1.15)
<i>Controls</i>				
Age	1.03*** (1.02-1.05)	1.02* (1.00-1.04)	1.03*** (1.01-1.05)	1.02* (1.00-1.04)
Visible Minority Status	1.67* (1.04-2.68)	0.79 (0.41-1.51)	1.67* (1.04-2.70)	0.78 (0.41-1.50)
B.A. degree	0.82 (0.51-1.30)	1.01 (0.64-1.60)	0.87 (0.55-1.39)	1.00 (0.62-1.59)
<i>Household income</i>				
25K-50K ^a	1.18 (0.54-2.56)	0.69 (0.25-1.88)	1.20 (0.54-2.63)	0.70 (0.26-1.92)
50K-75K ^a	0.56 (0.26-1.21)	0.93 (0.38-2.32)	0.57 (0.26-1.24)	0.96 (0.38-2.40)
75K-100,000K ^a	0.46 (0.20-1.07)	0.79 (0.30-2.08)	0.48 (0.21-1.11)	0.82 (0.30-2.19)
100-125,000K ^a	0.41 (0.14-1.15)	0.51 (0.15-1.70)	0.41 (0.14-1.18)	0.52 (0.16-1.79)
>125,000K ^a	0.15 (0.02-1.03)	0.17 (0.02-1.39)	0.14 (0.02-1.02)	0.18 (0.02-1.45)
Number of children	0.93 (0.75-1.16)	1.07 (0.85-1.35)	0.92 (0.74-1.14)	1.07 (0.85-1.35)
<i>Marital Status</i>				
Married ^b	0.68 (0.41-1.13)	0.72 (0.41-1.26)	0.66 (0.40-1.10)	0.71 (0.40-1.26)
Previously Married ^b	0.51 (0.16-1.60)	0.65 (0.18-2.37)	0.49 (0.16-1.53)	0.65 (0.18-2.37)
Cohabiting ^b	0.97 (0.49-1.89)	1.10 (0.53-2.30)	1.03 (0.51-2.06)	1.06 (0.50-2.23)
<i>Occupation</i>				
Clerical ^c	1.27 (0.68-2.39)	1.38 (0.71-2.68)	1.32 (0.70-2.49)	1.34 (0.69-2.64)
Sales ^c	1.17 (0.56-2.47)	0.54 (0.18-1.61)	1.16 (0.54-2.48)	0.55 (0.18-1.65)
Service/All workers categories ^c	1.16 (0.67-2.00)	1.44 (0.81-2.54)	1.09 (0.62-1.91)	1.50 (0.83-2.68)
Other ^c	0.95 (0.49-1.81)	1.11 (0.54-2.28)	0.95 (0.50-1.82)	1.10 (0.54-2.27)
<i>Work Transitions</i>				
Employed →Unemployed	1.73 (0.92-3.24)	2.81*** (1.70-4.67)	1.71 (0.91-3.19)	2.82*** (1.69-4.67)

Notes *** $p < .001$, ** $p < .01$, * $p < .05$

a Compared to < 25K

b Compared to Single

c Compared to Professional/Administrative

Table 2 cont'd (N=1,886)

	Model 3		Model 4	
	<i>Poor vs. Good SRH</i>	<i>Decreasing vs. Good SRH</i>	<i>Poor vs. Good SRH</i>	<i>Decreasing vs. Good SRH</i>
Childhood SSS	0.91 (0.81-1.01)	1.08 (0.96-1.21)		
Adulthood SSS	0.72*** (0.62-0.84)	0.78*** (0.68-0.90)		
Cumulative SSS			0.83*** (0.77-0.90)	0.95 (0.99-1.03)
<i>Controls</i>				
Age	1.04*** (1.01-1.05)	1.02* (1.00-1.04)	1.03*** (1.02-1.05)	1.02* (1.00-1.04)
Visible Minority Status	1.64* (1.01-2.66)	0.77 (0.40-1.47)	1.65* (1.02-2.67)	0.77 (0.40-1.49)
B.A. degree	0.94 (0.59-1.50)	1.07 (0.67-1.72)	0.93 (0.58-1.47)	1.05 (0.66-1.67)
<i>Household income</i>				
25K-50K ^a	1.39 (0.63-3.06)	0.80 (0.29-2.21)	1.31 (0.60-2.88)	0.72 (0.26-1.98)
50K-75K ^a	0.84 (0.38-1.87)	1.30 (0.50-3.32)	0.72 (0.32-1.58)	1.02 (0.40-2.61)
75K-100,000K ^a	0.87 (0.37-2.06)	1.25 (0.45-3.53)	0.69 (0.29-1.61)	0.90 (0.32-2.51)
100-125,000K ^a	0.81 (0.27-2.45)	0.90 (0.26-3.12)	0.61 (0.21-1.81)	0.60 (0.17-2.09)
>125,000K ^a	0.35 (0.05-2.66)	0.34 (0.04-2.99)	0.24 (0.03-1.70)	0.20 (0.02-1.72)
Number of children	0.92 (0.74-1.15)	1.06 (0.84-1.34)	0.92 (0.74-1.14)	1.06 (0.84-1.34)
<i>Marital Status</i>				
Married ^b	0.69 (0.41-1.14)	0.73 (0.41-1.29)	0.66 (0.40-1.10)	0.70 (0.40-1.24)
Previously Married ^b	0.51 (0.16-1.67)	0.67 (0.18-2.47)	0.49 (0.16-1.56)	0.65 (0.18-2.35)
Cohabiting ^b	0.99 (0.49-1.99)	1.00 (0.48-2.12)	1.02 (0.51-2.05)	1.07 (0.51-2.25)
<i>Occupation</i>				
Clerical ^c	1.18 (0.63-2.21)	0.80 (0.29-2.21)	1.24 (0.66-2.35)	1.32 (0.67-2.57)
Sales ^c	0.95 (0.44-2.04)	1.30 (0.51-3.33)	1.04 (0.48-2.24)	0.54 (0.18-1.61)
Service/All workers categories ^c	0.91 (0.51-1.61)	1.31 (0.73-2.35)	0.98 (0.55-1.72)	1.44 (0.81-2.57)
Other	0.78 (0.40-1.52)	0.96 (0.46-2.02)	0.85 (0.44-1.64)	1.08 (0.52-2.23)
<i>Work Transitions</i>				
Employed →Unemployed	1.66 (0.89-3.09)	2.67*** (1.59-4.47)	1.69 (0.90-3.18)	2.72*** (1.63-4.54)

Notes *** $p < .001$, ** $p < .01$, * $p < .05$

a Compared to < 25K

b Compared to Single

c Compared to Professional/Administrative

Table 2 cont'd (N=1,886)

	Model 5		Model 6	
	<i>Poor vs. Good SRH</i>	<i>Decreasing vs. Good SRH</i>	<i>Poor vs. Good SRH</i>	<i>Decreasing vs. Good SRH</i>
Childhood SSS	0.91 (0.69-1.21)	0.98 (0.72-1.32)		
Adulthood SSS	0.73* (0.52-0.99)	0.70* (0.49-1.00)		
Childhood X Adulthood SSS	1.00 (0.94-1.06)	1.02 (0.96-1.08)		
<i>Social Mobility</i>				
Stable High SSS ^a			0.29*** (0.16-0.52)	0.72 (0.40-1.29)
Decreasing SSS ^a			0.65 (0.39-1.10)	1.27 (0.71-2.26)
Increasing SSS ^a			0.45** (0.26-0.80)	0.60 (0.31-1.18)
<i>Controls</i>				
Age	1.04*** (1.02-1.05)	1.02 (1.00-1.04)	1.03*** (1.02-1.05)	1.02* (1.00-1.04)
Visible Minority Status	1.64* (1.01-2.66)	0.77 (0.40-1.47)	1.72* (1.06-2.79)	0.79 (0.41-1.51)
B.A. degree	0.84 (0.59-1.49)	1.07 (0.66-1.72)	0.89 (0.56-1.43)	1.04 (0.65-1.66)
Household income				
25K-50K ^b	1.39 (0.63-3.06)	0.80 (0.29-2.20)	1.25 (0.57-2.75)	0.74 (0.27-2.01)
50K-75K ^b	0.84 (0.38-1.87)	1.31 (0.51-3.37)	0.69 (0.31-1.54)	1.12 (0.45-2.77)
75K-100,000K ^b	0.87 (0.37-2.05)	1.36 (0.45-3.57)	0.68 (0.29-1.60)	1.04 (0.39-2.80)
100-125,000K ^b	0.81 (0.27-2.44)	0.90 (0.26-3.14)	0.61 (0.20-1.86)	0.71 (0.22-2.36)
>125,000K ^b	0.35 (0.05-2.67)	0.35 (0.04-3.02)	0.25 (0.03-1.87)	0.25 (0.03-2.07)
Number of children	0.92 (0.74-1.15)	1.06 (0.84-1.34)	0.92 (0.74-1.15)	1.07 (0.85-1.34)
<i>Marital Status</i>				
Married ^c	0.68 (0.41-1.15)	0.73 (0.41-1.28)	0.68 (0.41-1.13)	0.71 (0.40-1.26)
Previously Married ^c	0.51 (0.16-1.66)	0.68 (0.19-2.49)	0.49 (0.16-1.53)	0.68 (0.19-2.47)
Cohabiting ^c	0.99 (0.49-1.99)	1.00 (0.47-2.11)	0.98 (0.49-1.96)	1.02 (0.48-2.15)
<i>Occupation</i>				
Clerical ^d	1.18 (0.63-2.21)	1.20 (0.61-2.36)	1.22 (0.65-2.29)	1.22 (0.62-2.41)
Sales ^d	0.95 (0.44-2.05)	0.47 (0.16-1.42)	1.08 (0.50-2.33)	0.50 (0.17-1.51)
Service/All workers categories ^d	0.91 (0.51-1.61)	1.30 (0.73-2.34)	1.00 (0.57-1.76)	1.39 (0.77-2.50)
Other ^d	0.78 (0.40-1.51)	0.85 (0.45-2.01)	0.84 (0.44-1.61)	1.02 (0.49-2.12)

<i>Work Transitions</i>				
Employed	1.65	2.67***	1.71	2.77***
→Unemployed	(0.88-3.08)	(1.59-4.48)	(0.91-3.18)	(1.67-4.60)

Notes *** $p < .001$, ** $p < .01$, * $p < .05$

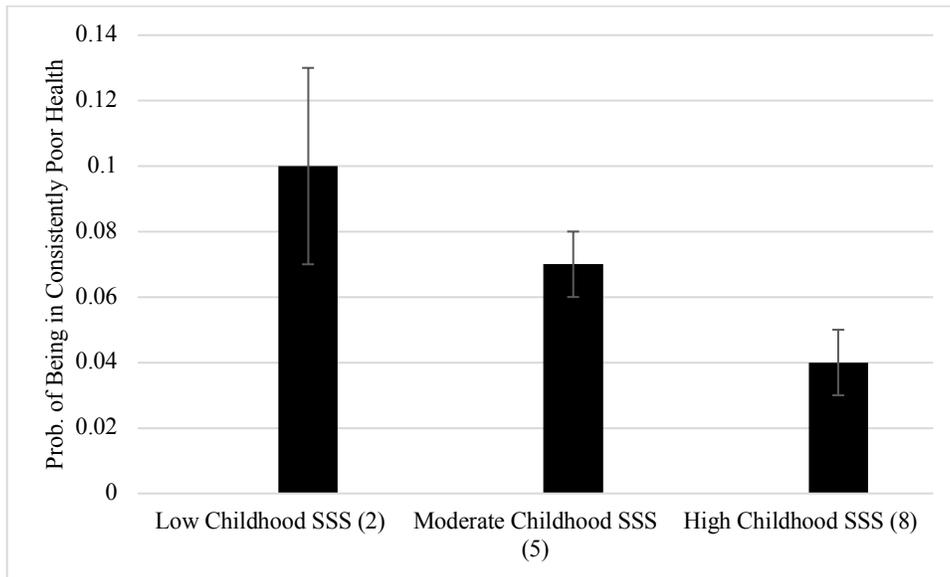
a Compared to Stable Low SSS

b Compared to < 25K

c Compared to Single

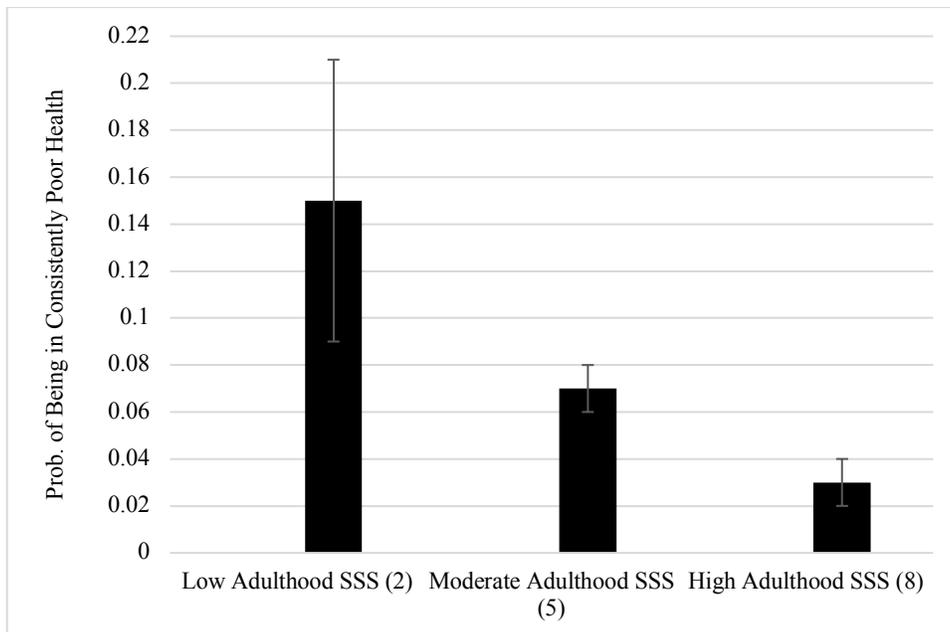
d Compared to Professional/Administrative

Figure 1. Predicted Probability of Being in Consistently Poor Health, by Childhood SSS



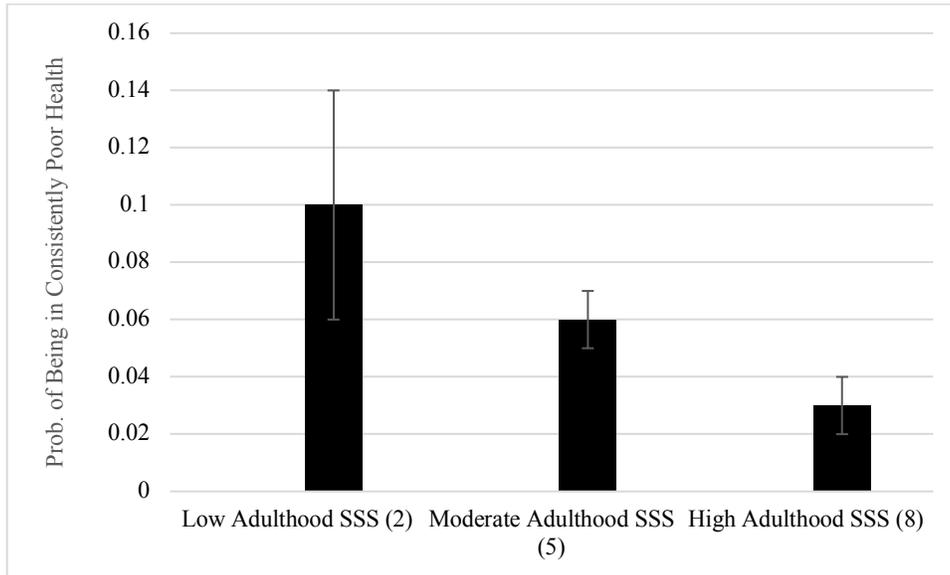
Note: Estimates are derived from Model 2 of Table 2, holding all covariates at their means. 95% confidence intervals are displayed.

Figure 2. Predicted Probability of Consistently Poor Health, by Adulthood SSS



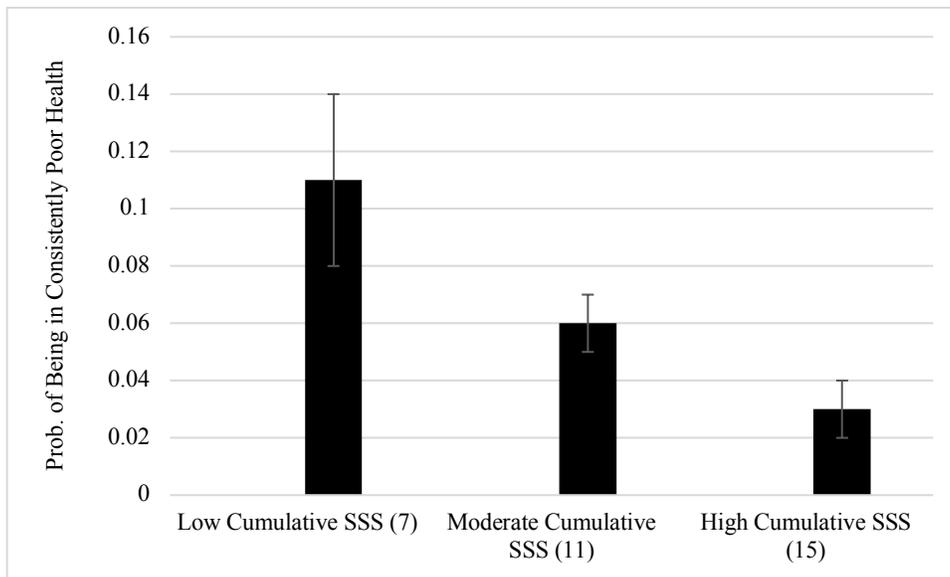
Note: Estimates are derived from Model 3 of Table 2, holding all covariates at their means. 95% confidence intervals are displayed.

Figure 3. Predicted Probability of Decreasing Health, by Adulthood SSS



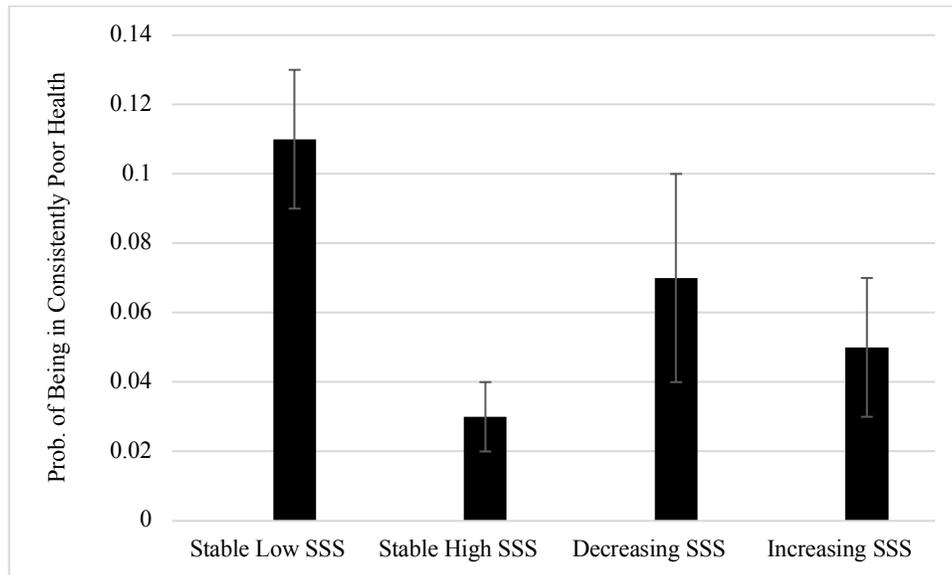
Note: Estimates are derived from Model 3 of Table 2, holding all covariates at their means. 95% confidence intervals are displayed.

Figure 4. Predicted Probability of Consistently Poor Health, by Cumulative SSS



Note: Estimates are derived from Model 4 of Table 2, holding all covariates at their means. 95% confidence intervals are displayed.

Figure 5. Predicted Probability of Consistently Poor Health, by SSS Mobility from Childhood to Adulthood



Note: Estimates are derived from Model 6 of Table 2, holding all covariates at their means. 95% confidence intervals are displayed.