Social Mobility and Sense of Purpose From Midlife to Old Age: Examining the Role of Major Life Events

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Abstract

Purpose in life (PIL) has been linked with numerous health benefits and adaptive aging, yet it diminishes with age, possibly due to loss of social or familial roles through life transitions. Drawing from the longitudinal surveys of the Midlife in the US study (*n* = 3418), we use time-varying coefficient models to investigate how the trajectory of PIL differs across cumulatively (dis)advantaged, upwardly mobile, and downwardly mobile groups and the role of major life events in shaping these trajectories. We found the upwardly mobile group exhibits higher PIL than the cumulatively disadvantaged and downwardly mobile groups. The consistently disadvantaged group experiences more adverse events at non-normative times. Socioeconomic status disparities in PIL during old age decrease after controlling for life events. We discuss how and why well-being changes and the role of structural and social factors in facilitating or impeding the development or maintenance of PIL over the life course.

Keywords

well-being, purpose in life, aging, life course, socioeconomic status, life events

Introduction

Developing and maintaining a sense of purpose is a key component of the human experience and, in fact, is necessary to find meaning in one's life (King & Hicks, 2021). Not only is a sense of purpose linked to numerous health benefits and adaptive aging (Alimujiang et al., 2019; Lewis et al., 2017), but it is also integral to identity development in early life, particularly during adolescence (Bronk, 2011; Erikson, 1968). In fact, the development of purpose and identity is co-occurring such that adolescents' sense of what they hope to be and accomplish is intertwined with who they are as a person (Bronk, 2011). Research suggests, however, that early-life socialization processes shaped by advantaged or disadvantaged backgrounds can either facilitate or impede purposeful thinking about future life pursuits (Halleröd, 2011; Hitlin, 2006; Nurmi, 1991; Schafer et al., 2011). Early-life socioeconomic circumstances, therefore, can be a powerful engine for launching mutually reinforcing patterns over time between socioeconomic status (SES) and purpose in life.

As one advances from midlife to old age, sense of purpose tends to diminish (Hill & Weston, 2019; Springer et al., 2011; Ryff & Keyes, 1995), possibly due to loss of social, familial, and physical roles through life transitions, including retirement, widowhood, and health problems (Koren & Lowenstein, 2008; Hill & Weston, 2019; Pinquart, 2002). Differential exposure to later-life transitions may contribute to an age-graded decline in purpose for certain socioeconomic groups more than others, leading to a widening or narrowing of the SES gradient in purposeful thinking. Using longitudinal data from the Midlife in the US study, we investigate how the trajectory of purpose in life differs across social mobility groups (measured by childhood and adult SES) and the role of later-life events in those trajectories.

Background

Life-Course Perspectives on Social Stratification of Purpose in Life

Life-course paradigms emphasize the complex interplay between micro- and macro-level factors in shaping an individual's developmental trajectories. Individuals often encounter agentic opportunities to make decisions and choices that can shape their future and put them on a path of purposeful pursuits (Hitlin & Johnson, 2015). At the same time, macro-level social structures (e.g., socioeconomic status,

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sociohistorical contexts, and cultural norms) can either constrain or facilitate access to the personal and social resources that lead to such opportunities across the life course (Elder, 1994; Seabrook & Avison, 2012). Cumulative advantage/disadvantage (CAD) theory, in particular, highlights the role of exposure to cascading (dis)advantages across the life course in shaping the available choices or decisions one can make (Dannefer, 2020), thereby limiting one's ability to both cultivate and maintain psychological resources such as purpose in life (Hitlin & Elder, 2007). Research establishing that individuals with higher SES report higher levels of purpose relative to their less advantaged counterparts suggests that socioeconomic circumstances are one mechanism of (dis)advantage that inhibits or facilitates the development of purpose throughout the life course (Hill et al., 2016; Pinquart, 2002). However, there remains a dearth in the literature regarding the ways in which socioeconomic circumstances during childhood shape purposeful thought in later life.

The development and maintenance of purposeful thought stem from a number of social, behavioral, and environmental factors that individuals encounter across the life course (Pinquart, 2002). Early life serves as the foundation through which life expectations and goals can develop through daily experiences and interactions with others (Bronk, 2011; Hill et al., 2013; Johnson & Hitlin, 2017; Kiang, 2012), which may play an important role in shaping practices and values that promote a purposeful life. Research suggests, for instance, that children from privileged families are often exposed to circumstances that promote the development of purposeful and future-oriented thought. For example, socioeconomic positions and parental financial success are positively associated with adolescents' optimistic expectations that they will be successful and satisfied later in life (Hitlin, 2006; Jessor et al., 1996; Johnson & Hitlin, 2017). This may be because affluent environments can attune children towards the future rather than the present by encouraging them to set goals that will be actualized at a later stage of life, such as those in the realms of education or occupation (Bozick et al., 2010; Fieulaine & Apostolidis, 2015; Nurmi, 1991). For these children in higher social classes, the future is a predetermined path where developmental goals at all stages of life can be easily realized, such as graduation from quality educational institutions from preschool to university, stable paid employment, a successful marital union, and starting a family (DiPrete & Eirich, 2006). Facilitated by the accrual of financial resources in early life, individuals from higher social classes are more likely to achieve these goals, all of which can serve as significant sources of purpose in adulthood (Pinquart, 2002).

In contrast, children from disadvantaged families are exposed to radically different environments with respect to purposeful future-oriented thoughts. Socioeconomic disadvantage during childhood may hold considerable power in shaping an optimistic future orientation during childhood and beyond (Jessor et al., 1996). In line with this assertion, individuals in impoverished environments are more likely to focus on day-to-day happenings while limiting plans and thoughts about the future (for a review, see Fieulaine & Apostolidis, 2015). For instance, youths from disadvantaged families are likely to exhibit lower expectations for their lives than those from higher SES backgrounds, such as their ability to attend college (Bozick et al., 2010).

By incorporating elements from cumulative disadvantage and life-course theories, cumulative inequality theory proposes that human agency plays an undeniable role in modifying the way and degree to which structural factors shape individual lives (Ferraro & Shippee, 2009; Ferraro et al., 2009). Agency can be defined as the "individual capacity for meaningful and sustained action, both within situations and across the life course" (Hitlin & Elder, 2007, p.39). Individuals may use agency to respond to an array of both current situations and situations that can shape personal trajectories across the life course. Thus, agency has a distinctly temporal quality in that it significantly influences individuals' ability to plan for, contemplate, and make choices and decisions related to one's future.

One way that agency manifests itself is through the mobilization of psychological resources in response to a wide array of circumstances. In the face of financial hardship early in life, for example, some individuals can motivate themselves to foster optimistic expectations about future purposeful life pursuits (Halleröd, 2011; Schafer et al., 2011). This is in line with research indicating that individuals can stimulate their personal growth by seeking meaning in the face of adverse experiences (Pudrovska, 2010; Tedeschi & Calhoun, 1996; Watanabe, 2019). That is, for some but not all individuals, disadvantaged environments in early life may inspire them to escape such adversities (Roberts & Rosenwald, 2001), and they may exhibit a strong desire for upward mobility, thus circumventing risk behaviors that are common in disadvantaged environments (Ritterman-Weintraub et al., 2015). Compared to others with the same early-life SES, their stronger willingness and ability to overcome their early disadvantage may yield higher socioeconomic positions and higher purpose in life in adulthood.

Changes in Purpose in Life from Midlife to Old Age

Mounting evidence shows that levels of purposeful thought remain stable and high in midlife (Ko et al., 2016) but decline from midlife to old age (Hill & Weston, 2019; Springer et al., 2011). Researchers have hypothesized that social, physical, and role-related transitions and events in later life may shape the trajectory of purpose among middle-aged and older adults (Ryff & Kim, 2020). For example, because employment provides opportunities for meaningful social interaction and support from colleagues (Rowe & Kahn, 1997), individuals who lose a job or enter retirement earlier than anticipated may subsequently experience a decline in the pursuit of purposeful goals. Indeed, retirement can be conceptualized as an entirely new life stage in which some older individuals adjust to the

loss of purposeful work-related daily activities once provided at work (Bordia et al., 2020).

Similarly, good health assists older individuals in working on productive and meaningful tasks, obtaining personal achievements, and providing emotional and instrumental support to their loved ones (Reker & Wong, 1988). After encountering an unfortunate health diagnosis, individuals often experience biographical disruption, a process marked by the inability to perform the social roles and activities one was accustomed to prior to diagnosis (Bury, 1982), potentially resulting in a diminished sense of purpose. Finally, family and marriage provide a significant source of purpose, particularly for older adults (Charles & Carstensen, 2002), and encountering the worsening health or death of a life-long companion or other family member may lead to a loss of meaning in life for many individuals. However, in response to stressful life events, most individuals maintain their health and well-being (for review, see Cohen et al., 2019). Some evidence shows that surviving from life-threatening diseases and family caregiving bring back purpose in one's life (Cohen et al., 2002; Pudrovska, 2010). Still, prior studies have identified some events (i.e., retirement) that can compromise sense of purpose in later life (Lewis & Hill, 2020) and other events (i.e., health status) that have mixed results (Hill et al., 2021; Hill & Weston, 2019).

Social Stratification of Changes in Purpose in Life: Role of Major Life Events

Although most individuals face stressors—large and/or small—over the life course, exposures are patterned across the socioeconomic spectrum in terms of their probabilistic risk as well as various characteristics of stressors including timing, duration, frequency, severity, and controllability (McLeod & Kessler, 1990; Schuring et al., 2013). In line with CAD, it could be that those with a consistently high SES encounter a series of advantageous circumstances beginning in childhood that are amplified across the life course so that they encounter later-life challenges at older ages compared to their disadvantaged counterparts. As a consequence, those who are consistently privileged from childhood to adulthood may demonstrate less dramatic declines in purposeful thought during later life. In contrast, low childhood SES can initiate a trajectory of exposure to subsequent disadvantages, putting those with low childhood SES at higher risk of exposure to later-life challenges, such as undesirable labor force positions, illness, and loss of a spouse at younger ages than their higher childhood SES counterparts. Because loss of purpose typically accompanies these events, a higher likelihood of exposure generates steep declines in purposefulness from midlife to old age for those from disadvantaged backgrounds.

How sense of purpose changes in later life for the upwardly mobile is an open question. According to the dissociative hypothesis (Sorokin, 1927/1959), achieving a higher-class position than one's parents is a taxing process that adversely impacts later-life well-being and health, possibly because individuals are likely to experience a dissociation from early-life class ties, alienation from the new class environment, and psychological distress (Friedman, 2016; Simandan, 2018; 2020). Individuals who move from disadvantaged to advantaged social positions may gain and maintain a sense of purpose, yet might not completely reverse the harmful consequences of growing up in a disadvantaged environment. For example, individuals with low childhood SES, regardless of their adult SES, are more likely to encounter health problems in later life, which could shorten their life or introduce physical disabilities (Hamil-Luker & O'Rand, 2007; Hayward & Gorman, 2004). Therefore, even for those who lift themselves out of childhood disadvantage through self-control and perseverance, their greater risk of later-life challenges and cumulative physiological and emotional toll may ultimately inhibit their sense of purpose.

Aims and Hypotheses

This study will test several interconnected hypotheses to further two aims. First, we investigate the role of later-life events/transitions (leaving the labor force, becoming widowed, worsening health of oneself or close family members) in explaining later-life purpose. We expect that life events are inversely associated with purposeful thoughts, particularly when the events occur at non-normative times (Hypothesis 1). Second, we investigate to what degree the age trajectory of purpose in life varies by social mobility group and whether life events explain the variation across groups. We expect that more advantaged groups exhibit higher levels of purposefulness in midlife and slower declines from midlife to old age than less advantaged groups (Hypothesis 2-1). As for underlying mechanisms, we expect that those who are more disadvantaged will be more likely to experience later-life events and be exposed to life challenges and transitions at more unfavorable times than those who are more advantaged. Accounting for differential exposure to later-life events will reduce class disparities in purposefulness (Hypothesis 2-2).

Data and Methods

Sample

We used the core longitudinal data of the Midlife in the United States (MIDUS), including waves M1 (1995–96), M2 (2004–2005), and M3 (2013–2014). At M1, MIDUS targeted non-institutionalized, English-speaking adults aged 25–74 in the coterminous United States (Brim et al., 2019). MIDUS includes a national random-digit-dialing sample (n = 3478), siblings of the random-digit-dialing sample (n = 950), a national random-digit-dialing sample of twins (n = 1914), and oversamples from five metropolitan areas in the US (n = 757). MIDUS consists of a two-stage survey: a telephone interview

and a self-administered questionnaire (SAQ). The response rate for the phone interview ranged from 60% for the twin subsample to 70% for the main sample. Among those who completed the phone interview at M1 (n=7108), 6325 also completed mail-in SAQs. At M2, the MIDUS cohort was re-contacted for a follow-up telephone interview (which was completed by $n = 4963$) and SAQ ($n = 4041$). Finally, the cohort was again interviewed at M3 via telephone ($n = 3,294$) and SAQ ($n = 2732$). Our sample includes respondents who completed the SAQ during M1 and participated in the following waves. Given our focus on the age trajectory of purposeful thoughts from midlife to old age, life-course SES and life events, we limited the final sample to those 3418 respondents who were aged 40 to 80 throughout M2 and M3 (which include a 7-item measure of purpose in life) and have information on SES and demographic characteristics at M1 and life events at M2 or M3. We established 80 as the upper age limit because few participants were older than 80.

Measures

Social Mobility (at M1). To establish temporal order of SES with the outcomes of interests, all indicators of SES come from M1. Following prior work (e.g., Gruenewald et al., 2012; Glei et al., 2020), we generate multi-dimensional SES measures with a wide array of indictors. Childhood SES includes six indicators: (1) educational status for mother and father, (2) occupational prestige score for mother and father (Hauser & Warren, 1997), (3) whether the family received welfare or Aid to Dependent Children for at least 6 months, and (4) financial level growing up. For adult SES, we used nine indicators: (1) highest level of education completed, (2) occupational prestige, (3) household income, (4) wage/salary income, (5) current financial situation, (6) control over financial situation, (7) availability of money to meet basic needs, (8) level of difficulty paying bills, and (9) money that would remain after liquidating all assets and allocating everything toward any debts.

Our creation of social mobility groups took place in three phases. First, we computed two SES indexes for childhood and adulthood by standardizing and averaging the items (Cronbach's α = 0.71–0.79). To avoid misclassification of social class assignment due to cohort differences in SES, we divided respondents into three generations: "Born before 1943 (1920–1942)," "Early baby boomer (1943–1953)," and "Later baby boomer (1954–1964)." We then standardized each SES indicator within respondent's generation. Second, we assigned each individual a social class (low, middle, or high) during childhood and adulthood, respectively, based on their position (the first, second, or third tertile) on the SES index distribution, which resulted in nine combinations (=3*3) of social mobility groups. Finally, to focus on our hypotheses and avoid extensive comparisons across groups, we reassigned the nine groups to the five social mobility groups: *stable low* (low/low), *downward mobility* (high/middle, high/low, and middle/low), *stable middle* (middle/middle), *upward mobility* (low/

middle, low/high, and middle/high), and *stable high* (high/high).

Major life events (at M2 and M3). We included six dummy variables to capture social, familial, or physical role-related transitions or events. No work was coded based on the respondent's current employment status (not working now for pay or not self-employed). Widowed includes respondents whose last marriage ended with the death of their spouse and who did not remarry. Life-threatening illness indicates whether respondents have ever been diagnosed with any leading-cause death in the US, including heart problems, cancer, stroke, diabetes, and lung problems. We also created three binary variables related to worsening health of family members (parents, spouse/partner, and children) based on questions regarding whether these family members had a chronic disease or disability in the past 12 months.

Purpose in life (at M2 and M3) came from Ryff's Psychological Well-Being measure (Ryff & Keyes, 1995). At M2, participants were asked to respond to seven items on a 7-point scale ranging from strongly agree to strongly disagree, for example, "Some people wander aimlessly through life, but I am not one of them" and "I have a sense of direction and purpose in life." The seven items were summed to form the purpose in life scale with higher scores indicating higher levels of purpose. The internal consistency of the seven-item measure was 0.71 at M2 and 0.72 at M3.

Covariates. We included four controls in all models: age (the underlying timescale), gender, race (White vs. non-White), and attrition status. While men and women are evenly distributed, the majority of the sample (95%) is White. Of 3419 respondents, 78% remained in the study throughout all three waves, whereas 28% died or were lost to follow up (LFU) following M2. We controlled for the missing pattern to adjust for differential mortality and dropout rates across social mobility groups.

Analytic Strategies

We used varying-coefficient models, which employ non-parametric local regression to estimate regression coefficients as a continuous function of time and allow the time-varying effects of covariates to be examined. Unlike other growth curve models that estimate changes as specific functions of time (a linear, quadratic, or cubic trajectory), this approach allows the estimated coefficient functions to be of any shape, thus allowing complex shapes over time. Moreover, using local regression provides more accurate and precise estimates (Fan & Gijbels, 1996). For instance, to find the estimated regression coefficient at, say, age 45, we create a local interval between ages 40 and 50 and fit the model using the data in that interval instead of fitting the model "globally" using the whole dataset (from ages 40–80). The data closer to 45 receives more weight in the estimation than data that is

further away. The optimal width of the intervals is found based on the cross-validation method which focuses on finding the width that produces the least amount of errors in our estimation (Fan & Zhang, 2008).

We estimated the average levels of purpose as a function of age using an intercept model after adjusting for controls. The purpose score is a discrete variable that is positively skewed and follows a Poisson distribution, which is a member of the exponential family of distributions. Thus, we used a generalized varying-coefficient model (Cai et al., 2000) to analyze this dataset. This model can be expressed as

$$PIL_{it} = \exp\{\beta_0(t) + \beta_1(t)Controls_i\} + \varepsilon_{it} \qquad (1)$$

where PIL_{it} represents the purpose in life scale score for individual i at age t. The intercept coefficient function $\beta_0(t)$ represents the estimated mean purpose score as a smooth, continuous function of age after controlling for a vector of time-invariant control variables.

To investigate the role of later-life events in change in purpose over time (Aim 1), we included time-varying predictors as follows:

$$PIL_{it} = \exp\{\beta_0(t) + \beta_1(t)Event_{it} + \beta_2(t)Controls_i\} + \varepsilon_{it} \qquad (2)$$

Here, $Event_{it}$ (e.g., widowed) is expressed as a time-varying covariate with a *time-varying effect*. That is, the effect of losing a spouse on PIL, denoted $\beta_1(t)$, is dynamic and changes with age.

For *Aim 2*, we first investigated whether change in purpose over time differs across social mobility groups. We added a time-invariant predictor (SES) into equation (1), as follows:

$$PIL_{it} = \exp\{\beta_0(t) + \beta_1(t)SES_i + \beta_2(t)Controls_i\} + \varepsilon_{it} \qquad (3)$$

Let SES be the social mobility group indicator which includes five categories. SES at baseline is static across time, but the effect of SES is allowed to vary over time. We then expanded the model (3) by introducing a vector of six time-varying later-life events, as follows:

$$PIL_{it} = \exp\{\beta_0(t) + \beta_1(t)SES_i + \beta_2(t)Event_{it} + \beta_3(t)Controls_i\} + \varepsilon_{it} \qquad (4)$$

We compared the effect of SES in (3) and (4) to investigate whether accounting for differential exposures to later-life events will reduce the gap in purpose across social mobility groups.

Given differential mortality and dropout rates across social mobility groups (i.e., Stable Low is less likely to participate in all three waves; see Table 1), restricting the sample to respondents who completed all three waves only would yield biased estimates of disparities in purpose in life across social mobility groups. To minimize prospective selection bias, this study includes all respondents who have information on baseline covariates (gender, race, social mobility) in Wave 1

and mediators and outcomes (life events and purpose in life) in Wave 2 or Wave 3. Furthermore, to adjust for differences in attrition rates across social mobility groups, missing data patterns are included in all models as a covariate. The effect of predictors on the outcomes was estimated using a maximum likelihood estimation, assuming missing at random (MAR). This approach accommodates missing data by calculating each parameter of particular statistics using all data available in the sample. Simulation studies reported that time-varying coefficient models produce unbiased estimates under MAR (Kauermann, 2000; Salazar et al., 2016).

All models were run in R. We present the results of varying-coefficient models as Figures because the coefficients are estimated as a continuous function of time (i.e., age), making the number of coefficients across ages (range from 40 to 80) too large to present in tables. For point estimates of purposefulness and 95% confidence intervals (CI), we present data every 10 years throughout midlife (ages 40, 50, and 60) and, for later life, at age 75, which is the midpoint between 70 and 80 and has more observations and less statistical uncertainty than age 80.

Results

Table 1 shows sample characteristics across five social mobility groups. Consistently advantaged individuals (Stable High) exhibit the highest sense of purpose followed by those in the Upward, Stable Middle, Downward, and Stable Low groups. Consistently disadvantaged individuals (Stable Low) are more likely to experience negative life events—namely, no work, sickness of spouse, widowhood, or sickness of children—than other groups (p values <.05). More importantly, Table S1 (supplementary material) shows that the Stable Low group experienced such life events earlier than the other groups (i.e., before age 55). Compared to individuals who participated in all waves, those who were LFU or died after M2 had lower SES in both childhood and adulthood.

Later-life events and purpose in life

Figure 1 presents the estimated age-varying effects of six life events on purpose in life. Solid lines represent the estimated effect of each event on purposefulness after adjusting for controls. 95% CIs (shaded) that include 1.0 on the Y-axis can be interpreted as no significant association (because ln[1.0] = 0), while less than 1.0 indicates a negative effect and greater than 1.0 indicates a positive effect. Three out of six life events were significantly and negatively associated with purposeful thought. Specifically, unemployed individuals show lower levels of purpose than their counterparts for most of midlife and throughout old age (ages 44–78). Being widowed at ages 40 to 49 is negatively associated with purposeful thought, but the wide confidence intervals make it statistically insignificant, possibly because the small number of observations yields low statistical power. However, the effect of being widowed is

Table 1. Sample Characteristics by Social Mobility Group at M1.

	Stable low	Downward	Stable middle	Upward	Stable high	Total
	n = 379	*n* = 918	*n* = 389	*n* = 1097	*n* = 636	*n* = 3419
Purpose in life at M2*	36.13 (7.70)	37.71 (6.81)	38.44 (6.70)	39.65 (6.45)	41.08 (6.26)	38.87 (6.86)
Purpose in life at M3*	36.05 (6.91)	37.50 (6.98)	38.51 (7.04)	39.63 (6.59)	40.80 (5.93)	38.85 (6.81)
Life events at M 2						
No work*	43.8%	35.5%	33.1%	35.0%	31.3%	35.2%
Widowed*	13.3%	7.7%	6.5%	5.6%	3.6%	6.7%
Life-threatening illness*	46.5%	42.1%	36.4%	39.1%	37.2%	40.1%
Sickness of parents*	16.3%	23.2%	22.2%	20.3%	20.1%	20.4%
Sickness of spouse/partner*	18.9%	12.5%	13.5%	12.8%	14.0%	13.7%
Sickness of children*	12.4%	9.7%	8.5%	6.9%	7.7%	8.6%
Life events at M3						
No work*	49.5%	39.4%	39.0%	44.8%	40.4%	42.3%
Widowed*	16.4%	8.6%	5.6%	7.0%	7.7%	8.3%
Life-threatening illness*	41.4%	33.7%	26.4%	32.4%	28.7%	22.5%
Sickness of parents*	10.1%	16.6%	11.7%	14.2%	18.6%	15.0%
Sickness of spouse/partner	19.7%	14.2%	11.7%	13.2%	12.5%	13.8%
Sickness of children	12.5%	11.3%	8.2%	7.8%	10.4%	9.7%
Demographics						
Age at M2	57.00 (10.75)	56.74 (10.60)	56.86 (11.04)	57.41 (10.34)	56.89 (10.35)	57.03 (10.54)
Age at M3	61.50 (9.45)	61.69 (9.57)	60.87 (9.55)	62.76 (9.49)	62.98 (9.70)	62.20 (9.70)
Women*	71.5%	60.0%	53.5%	46.3%	47.5%	53.8%
White*	90.8%	94.7%	95.9%	94.1%	96.5%	94.5%
Attendance from M1 to M3*						
Attended M1, M2 and M3	71.5%	76.2%	78.7%	79.2%	83.5%	78.3%
Attended M1, M2 and LFU	17.9%	15.1%	14.6%	12.6%	11.5%	13.9%
Attended M1, M2 and died	10.5%	8.7%	6.7%	8.2%	5.0%	7.8%

Notes. M = MIDUS; LFU = lost to follow-up; parenthesis includes standard deviation;
* refers to significant differences across social mobility groups at *p* < .05.
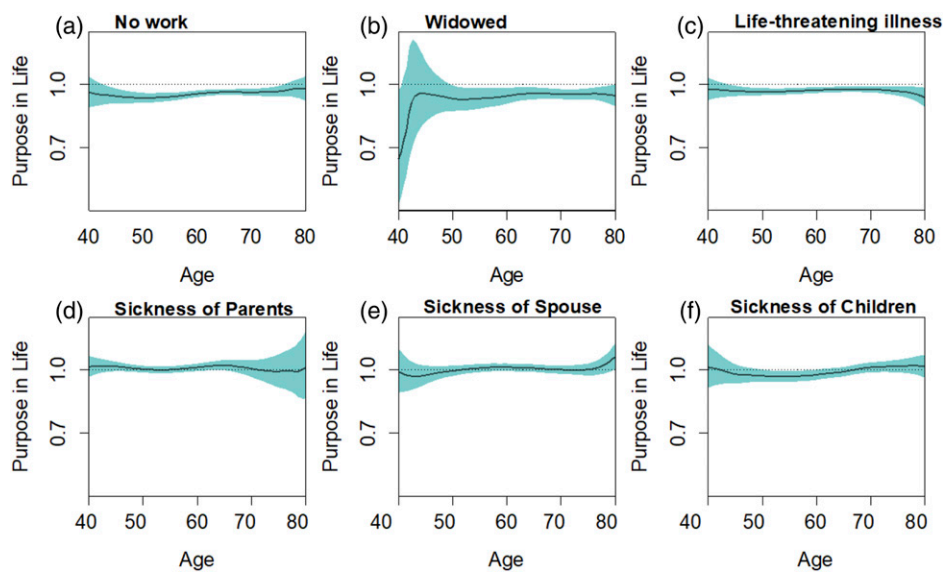
Figure 1. Age-varying effects of later-life transitions on purpose in life.

significantly negative from age 50 to 80. Furthermore, having a life-threatening illness has a significant negative effect from early midlife to old age, although the coefficients are close to 1.0 throughout the lifespan. On the contrary, the other three events related to worsening health of family members have no significant effect on purposefulness as 95% CIs include 1.0 from ages 40 to 80.

Social mobility and purpose in life

Figure 2 A illustrates levels of purpose across social mobility groups. Model 1 in Table 2 presents estimates of purpose at specific ages (40, 50, 60, and 75) for each group and comparisons of point estimates across the five groups after adjusting for controls. Estimated differences in Table 3 were computed based on the difference between the lower bound of the 95% CI for the reference group (more advantaged) versus the upper bound of the 95% CI for the comparison group (less advantaged); thus, any difference is statistically different while "overlap" indicates no significant difference. Although there are 10 possible combinations of two-group comparisons

from these five groups, the hypothesis tests (in Table 3) focus on comparing disparities across four groups (Stable Low, Upward, Downward, and Stable High).

Specifically, the purpose in life of the Stable High group is higher than that of the Downward group for most of midlife and old age, although the 95% CIs start to overlap around age 75. From age 40 to 75, the average purposefulness among the Stable High consistently exceeds that of the Stable Low. When compared with the Stable High group, the Upward group has slightly lower levels of purposeful thought for most of midlife and throughout old age, yet the disparities are statistically significant only during early midlife (approximately ages 43 and 55). Comparing point estimates at ages 60 and 75 in Model 1, the Upward group (40.14–38.97 = 1.17) shows a steeper decline in purpose than the Stable High group (41.08–40.28 = 0.8), yet the 95% CIs overlap between the two groups during the period.

The Upward, however, maintains significantly and substantially higher levels of purposefulness than the Stable Low until age 75 and shows higher levels of purpose than the Downward for most of midlife and into early old age.
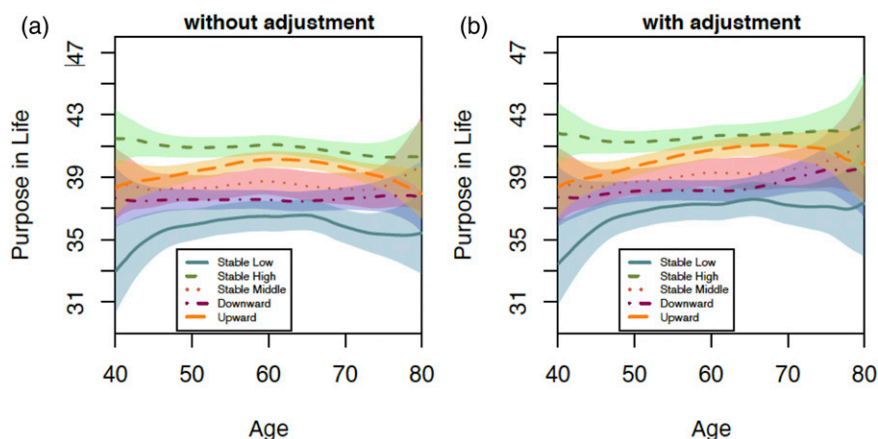

Figure 2. Estimated mean of purpose in life across social mobility groups before and after adjusting for later-life events.

Table 2. Point Estimates (95% CI) of Purpose in Life at Ages 40, 50, 60, and 75 across Social Mobility Groups.

	Stable low	Downward	Stable middle	Upward	Stable high
Age 40	32.96 (30.30, 35.86)	37.65 (35.79, 39.61)	38.47 (36.24, 40.82)	38.28 (36.54, 40.12)	41.49 (39.70, 43.36)
Age 50	35.95 (34.95, 36.97)	37.56 (36.93, 38.21)	38.29 (37.48, 39.13)	39.34 (38.77, 39.93)	40.91 (40.25, 41.57)
Age 60	36.48 (35.52, 37.45)	37.53 (36.93, 38.15)	38.72 (37.87, 39.58)	40.14 (39.64, 40.65)	41.08 (40.48, 41.69)
Age 75	35.32 (33.88, 36.82)	37.81 (36.77, 38.88)	38.43 (37.04, 39.87)	38.97 (38.17, 39.77)	40.28 (39.28, 41.30)
	Stable low	Downward	Stable middle	Upward	Stable high
Age 40	33.42 (30.79, 36.29)	37.71 (35.85, 39.67)	38.41 (36.07, 40.89)	38.34 (36.44, 40.33)	41.83 (39.90, 43.84)
Age 50	36.72 (35.69, 37.78)	38.10 (37.43, 38.77)	38.69 (37.84, 39.55)	39.68 (39.07, 40.30)	41.26 (40.57, 41.96)
Age 60	37.25 (36.23, 38.30)	38.13 (37.47, 38.80)	39.28 (38.39, 40.19)	40.76 (40.18, 41.35)	41.64 (40.97, 42.32)
Age 75	37.11 (35.39, 38.92)	39.47 (38.07, 40.93)	40.04 (38.35, 41.81)	40.75 (39.48, 42.06)	41.97 (40.55, 43.44)

Notes. Model 1 includes controls; Model 2 includes five later-life events in addition to controls.

Table 3. Estimated Differences in Purpose in Life between Reference and Comparison Groups in Model 1 → Model 2

Reference	Stable high	Stable high	Stable high
Comparison	Upward	Downward	Stable low
Age 40	Overlap → overlap	0.09 → 0.23	3.84 → 3.61
Age 50	0.32 → 0.27	2.04 → 1.80	3.28 → 2.79
Age 60	Overlap → overlap	2.33 → 2.17	3.03 → 2.67
Age 75	Overlap → overlap	0.40 → overlap	2.46 → 1.63
Reference	Upward	Upward	Downward
Comparison	Downward	Stable low	Stable low
Age 40	Overlap →Overlap	0.68 → 0.15	Overlap → overlap
Age 50	0.56 → 0.30	1.80→1.29	Overlap → overlap
Age 60	1.49 → 1.38	2.19→ 1.88	Overlap → overlap
Age 75	Overlap → overlap	1.35→ 0.56	Overlap → overlap

Notes. Estimated differences are computed based on the difference between the lower 95% CI for the reference group versus the upper 95% CI for the comparison group. Overlap indicates no significant difference.

Compared with the Stable Low, the Downward shows higher levels of purposefulness, but the 95% CIs overlap throughout most of midlife and old age.

Major Life Events and Reduced Gaps in Purposefulness Across Social Mobility Groups

As illustrated in Figure 2 (A vs. B), the disparities in purposeful thought across social mobility groups shrink after controlling for major life events. We present point estimates of purpose in life for each group (Model 2 in Table 2) and group comparisons of point estimates after including all life events (Table 3). Specifically, the difference in purposefulness between the Stable High and the Upward lessens after controlling for life events, for example, from 0.32 to 0.27 at age 50. The gap between the Stable High and the other two disadvantaged groups (Downward and Stable Low) shrinks for most age periods. Similarly, controlling for life events reduces the gap between the Upward and the Stable Low from ages 40 through 75. After adjusting for life events, 95% CIs between the Downward and the Stable Low overlap from age 40 through 80 (Figure 2(b)).

Discussion

This study offers several conceptual and methodological contributions to the literature. First, employing a cutting-edge longitudinal method (i.e., time-varying coefficient model), we found that some life events compromise sense of purpose from midlife to old age. Specifically, not having a job or losing a spouse diminishes sense of purpose throughout most of the second half of life. This finding is consistent with prior work which shows that working and retirement status are significantly associated with levels of purposeful thought (Hill & Weston, 2019) and that married individuals show higher levels of meaningfulness than non-married individuals (Steptoe & Fancourt, 2020). Indeed, losing a job or a spouse signify the loss of important social roles (i.e., employed person and husband/wife) that provide older adults with sources of connection and meaning in numerous ways. For instance, losing a spouse can result in the termination of a life-long companion and the concomitant loss of support, affection, and marriage-/family-based recreational activities (Charles & Carstensen, 2002), while retirement forces older individuals to contend with the loss of purposeful work-related activities (Bordia et al., 2020).

Moreover, having life-threatening illnesses slightly lowers levels of purposefulness, particularly in early midlife—when such major health events are unusual in the general population and in some periods of old age—when health conditions are strongly tied to social isolation and fear of dying. Yet, throughout most of midlife and early old age, having life-threatening illnesses has a negligible effect on purpose in life. The findings were consistent across different measures of health adversities in later life (see Supplementary Figure S1). Although unexpected, our finding is somewhat consistent with recent evidence showing no impact of aging-related illnesses on change in purposefulness among older adults (Hill et al., 2021). There might be a heterogeneous impact of declining health on purposeful thinking across different stages of a chronic illness which this study cannot scrutinize. An abrupt and unexpected adverse health event may lead to a jarring biographical disruption marked by interruptions to daily life and altered relationships (Bury, 1982; Lawrence, 2010). Yet, those who survive life threatening health conditions exhibit higher levels of personal growth in old age compared to those without such an experience (Pudrovska, 2010).

In contrast to our hypothesis, there is no significant impact of having ailing family members on purposeful thought. There might be two reasons why the worsening health of family members is not significantly linked to one's purpose. First, in terms of measurement issues, the yes/no indicator of each family member's chronic illness or disability during the limited period (in the past 12 months) might not fully capture the complex characteristics of health conditions (e.g., chronicity, duration, and severity) or the respondent's relationship with the ill family member. For example, an individual's psychological stress might vary by the phase of an ailing family member's illness (Northouse et al., 2012). Second, having an ill family member or caring for a family member is mentally and physically taxing and may erode a sense of purpose (Pearlin et al., 1990). Yet, caring for close family members might provide unique opportunities to strengthen family bonding and foster a sense of fulfillment, meaning in life, and feeling needed and useful (Jones et al., 2011). Having ill family members might therefore be a double-edged sword, yielding both positive and negative effects on purposeful thought that cannot be disentangled in our results.

Our study uniquely contributes to the literature by investigating how the developmental trajectory of purposefulness from midlife to old age is associated with life histories of socioeconomic background. We found that purposeful thought varies across social mobility groups, with the most advantaged group exhibiting the highest level and the most disadvantaged showing the lowest level across most age periods. This might be because the lives of persons in the most advantaged group are characterized by a series of accumulating advantages, high expectations, and confidence beginning in early life and the consistent realization of developmental goals that facilitate life expectations and future-oriented thought (Bozick et al., 2010; DiPrete & Eirich, 2006; Nurmi, 1991). Indeed, a central tenet of CAD is that one advantage at an early stage (e.g., high childhood SES) can lead to larger advantages over the life course (DiPrete & Eirich, 2006). Such advantages, such as attaining a high-paying and prestigious job, act as significant sources of purpose as they foster the perception that one's life is successful and meaningful (Pinquart, 2002). Meanwhile, those who grow up in disadvantaged families are often socialized to manage daily stressors emanating from financial strain, helplessness, and an unpredictable future, which can inhibit the ability to set and strive toward purposeful life pursuits (Fieulaine & Apostolidis, 2015).

We found that the upwardly mobile group exhibits higher levels of purpose than the cumulatively disadvantaged and the downwardly mobile. This finding indicates that exposure to childhood financial disadvantage and deprivation might not always inhibit the cultivation of purposeful thought. As per cumulative inequality theory (Ferraro & Shippee, 2009; Ferraro et al., 2009), even in the face of childhood disadvantage, persons can mobilize psychological assets, such as purposeful thinking, that enable them to contemplate and make decisions that can shape life trajectories and lead to a

successful life. In turn, realizing achievements such as attaining economic success can foster the perception that one's life is fruitful and rewarding, further yielding purposeful thoughts during midlife (Ward & King, 2016). Based on the dissociative hypothesis (Sorokin, 1959/1927), we expected the Upward group to struggle to maintain high levels of purpose at the end of their lives. While we found a steeper decline in purposeful thought in later old age for the Upward than the Stable High group, the slope difference is not statistically significant. Thus, our finding falls short of supporting the dissociative hypothesis.

Finally, our study shows that the consistently disadvantaged group exhibits significantly lower levels of purposeful thought in early midlife than later midlife, which is markedly different from the Stable High group. Researchers have consistently noted that individuals placed in the bottom of the social hierarchy are more likely to be exposed to negative life events than their higher-status counterparts (Lantz et al., 2005) and that the difficulties emanating from these life events might hamper well-being (Lucas, 2007). Consistent with this work, we found that those in the consistently disadvantaged group were more likely to experience several major life events at atypical times (e.g., before age 55) during the life course. Seeded by childhood financial strain, these accumulating negative events across the life course can block opportunities that would otherwise serve as sources of purpose for those with low SES (Dannefer, 2020; Hitlin & Elder, 2007). As expected, socioeconomic disparities in purposeful thought during old age decrease after controlling for major life events, yet the distinctive gaps between the consistently disadvantaged and the two advantaged groups (Stable High and Upward) at age 75 suggest that inequalities in psychological well-being remain even in later life.

Limitations and Future Directions

There are several limitations to our study that could drive future research. First, although we used age (instead of wave) as an analytic clock and investigated average levels of purpose in life at age 40 through age 80, MIDUS only has two waves with a 7-item measure of purpose in life, the assessments were 9–10 years apart, and the data at baseline included respondents from the baby boomer generation as well as an earlier generation. Thus, the developmental pattern of purposeful thought in our study is contingent on there being no cohort effects. Second, though we allude to the potential role of significant life events on purpose trajectories and SES disparities in the association, the current study has the potential for endogeneity and a limited ability to evaluate causal associations. That is, the association between SES, stressful life events, and purposeful thinking are mutually reinforcing throughout the life course and the associations might be confounded by other factors, such as early life health and personality traits (Damian et al., 2015; Haas, 2006). Third, while a time-varying coefficient model is a cutting-edge method with multiple strengths

over a latent growth model, formal mediation analyses using this approach are in the early stages of development; thus, we cannot explicitly estimate indirect effects. Fourth, researchers have noted that negative events (e.g., loss of a spouse) likely harm well-being immediately following the event, yet most individuals eventually return to baseline well-being, although the pattern of adaptation differs across different events (Lucas, 2007). Due to the limited number of assessments in MIDUS, we focused on the short-term effects of life events (e.g., spousal illness in the past 12 months) on purposeful thought. Analyses using other datasets are needed to investigate the long-term impact of major life events, which might diminish over time as individuals adapt. Finally, the core longitudinal sample of MIDUS is only 5% non-White, which limits generalizability of the findings to older adults in the US. Future research may replicate our approaches using other nationally representative data, such as the Health and Retirement Study.

Despite these caveats, our findings add to the large and growing body of research demonstrating developmental progression of psychological well-being across the life course and how and why the pattern changes during older adulthood. Moreover, this study uncovers structural inequality in purposeful pursuits. There might be structural constraints and socialization processes that prevent low-SES children from developing goal-oriented thinking. Our findings also suggest that not all individuals from low-SES backgrounds are "doomed" to have low levels of purpose in later life; instead, they are more on par with those who were consistently advantaged. There is a growing number of studies that highlight the importance of cultivating a sense of purpose in youth (Sumner et al., 2018). Given that a host of benefits (e.g., higher academic achievement, income, and better health) emerge for individuals who seek a purposeful life, it is important to expand intervention programs that help to foster purposefulness among children and youths from disadvantaged families.

Author Contributions

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Supplemental Material

Supplemental material for this article is available online.

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