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CHAPTER

29 Personality and Socioeconomic Status Over the Adult Working Years

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Abstract

Measuring the interrelationship of personality and socioeconomic status (SES) over the adult life span is crucial in assessing how—or if—personality traits are involved in SES health differentials. Using data from Midlife in the United States cohort members of working age throughout a 16- to 17-year period, we studied the reciprocal relationship between personality traits and SES. Results indicated that standing on socioeconomic indicators was heavily shaped by both family of origin SES and education, with small positive associations of Openness and Conscientiousness and negative associations of Neuroticism and Agreeableness with SES indicators at subsequent waves. Results revealed small associations between socioeconomic factors and future Neuroticism, Conscientiousness, and Openness. Continuity in SES and personality dwarfed reciprocal influences. Findings suggest that any major selection effects of personality on SES occur prior to midlife, and that family of origin SES and education are common links to both adult SES and personality.

Keywords: [socioeconomic status](#), [personality traits](#), [health](#), [working years](#), [family](#), [education](#), [openness](#), [conscientiousness](#), [neuroticism](#), [agreeableness](#)

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Introduction

In this chapter, we consider the reciprocal influences across the working years of personality and socioeconomic status (SES; we use the terms *socioeconomic position* [SEP] and *social class* interchangeably, although these terms arise from distinct approaches to social stratification beyond the scope of this chapter). SES differences in health outcomes are well known, but debates regarding their cause persist. One explanation focuses on the social structural factors creating and perpetuating socioeconomic stratification, whereas a competing explanation suggests that individual attributes such as personality traits drive self-selection into different socioeconomic strata as well as health. In this chapter, we examine a key issue at the intersection of these two types of explanations for health outcomes: the extent to which personality and SES are themselves related across working life. Using three waves of MIDUS data, we estimate reciprocal influences between these two powerful determinants of health. We conclude with an analysis of implications for policy focused on personal versus social responsibility for health, as well as future directions.

Background Literature

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The intersection between personality and SES in the adult working years is crucial in debates over the origins of socioeconomic health disparities. Fundamental cause theory (Link & Phelan, 1995) suggests that such disparities are a genuine function of societal hierarchies of status and resources and cannot ultimately be attributed or reduced to other factors. Economic and social disenfranchisement are argued to prevent disadvantaged portions of society from living in healthy environments free from chronic stress, acquiring health knowledge, engaging in healthy lifestyles, and enjoying the economic and social capital necessary to promote health and longevity (Berkman & Kawachi, 2014).

One framework considering individual traits in conjunction with social class influences on health casts traits as individual-level vulnerability or resilience factors that moderate the links between social class factors and health. In other words, not everyone from lower socioeconomic strata experiences poor health, and not everyone from higher strata enjoys better health. Individual characteristics that either facilitate or detract from people's ability to deal with the health risks of their class strata may explain that. For instance, one study using baseline MIDUS data found that higher Conscientiousness and lower Openness appear to increase the association of education with having never smoked (Chapman, Fiscella, Duberstein, & Kawachi, 2009). More recently, another study found that higher levels of perceived control reduced the mortality risk posed by low education (Turiano, Chapman, Agrigoroaei, Infurna, & Lachman, 2014). Other recent studies (Elliot & Chapman, 2016; Elliot, Turiano, & Chapman, 2017) found interactions of SES with traits in relation to the inflammatory markers interleukin 6 and C-reactive protein. Results suggested that excess inflammatory risk associated with low SES may be attenuated at high levels of conscientiousness and perceived control but amplified by greater neuroticism, whereas high control might serve to offset advantages of higher SES for inflammation in men.

Another class of investigation has considered whether personality traits “account” for (either mediate or confound) SES–health associations. Relatively little evidence for this hypothesis emerged for body mass index and obesity when both childhood and adult SES were considered in relation to adult personality in the initial wave of MIDUS (Chapman, Fiscella, Duberstein, Kawachi, & Coletta, 2009). In a follow-up study of mortality through 2004, it appeared that the Big 5 personality traits explained some degree of the SES gradient in mortality risk (roughly 20%; Chapman, Fiscella, Kawachi, & Duberstein, 2010). As only baseline MIDUS data were used, however, it was unclear whether lower SES led to maladaptive personality traits (personality as a mediator), whether certain personality traits led to both lower SES and earlier mortality

(personality as a confounder) or some degree of both. This exact question is critical, however, for understanding what role—if any—personality traits play in SES–health gradients.

In this chapter, we consider the reciprocal interplay, over time, of SES and personality using data on persons of employment age across three waves of MIDUS (1995, 2004–2005, and 2012–2013). We focus on the Big 5 personality dimensions of Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. Although the Big 5 are by no means the only trait taxonomy or level of analysis that bears consideration in these questions, they represent the prevailing approach and represent a comprehensive set of summary dimensions for general studies of personality. It should be noted that modern trait theory views constructs such as intellectual ability or personality as a hierarchically organized set of dimensions, with broader traits encompassing more specific ones. Thus, it is crucial to understand that the Big 5 are relatively broad constructs near the top of a personality trait hierarchy. Each of them is composed of, or subsumes, several more specific traits. As an example, Extraversion involves more specific constructs, such as positive affect, sociability, and activity, vigor or energy. Therefore, a variety of more distinct personality constructs examined in health and other literatures, such as optimism or hostility, are not “competing” traits. Rather, optimism is a component of the positive affect trait constituting one facet of Big 5 Extraversion. Hostility is a specific subcomponent of (low) Agreeableness, as well as dispositional anger, a component of Neuroticism. We do not delve into this level of trait detail, focusing instead on the broadest level of personality variation, focusing instead on the Big 5 themselves as a comprehensive tool capturing the major axes of personality variation.

Social Causation and Structural Determinism

p. 397 It is well established that individuals with more education, better jobs, more money, and access to social class cultures or contexts with healthier norms enjoy a variety of health benefits (Wilkinson, Pickett, & Chafer, 2011). Fundamental Cause theory is distinguished by its undergirding implication that social conditions outside of the individual’s control drive health outcomes. This is a quintessentially sociological perspective in that societal forces are placed squarely at the causal nexus of life span health. The stratification of society is a macrosystemic feature, and though it clearly resounds in endless meso- and microsystem consequences on a daily basis, these originate from an enduring social hierarchy based on material (and sociopolitical) resources. One ↴ does not determine where one starts out in this hierarchy at birth, and social ethicists have perhaps best summarized this feature of Fundamental Cause theory with the term *brute luck* (Bowles & Gintis, 2002; Cappelen & Norheim, 2005; Rawls, 2009).

Moreover, intergenerational and intragenerational continuity of social class is the norm, rather than the exception, with “social mobility” (i.e., upward or downward movement in the socioeconomic hierarchy) possible, but often only with difficulty, particularly for those beginning at lower SEP (Mitnik & Grusky, 2012). Recent evidence in the United States indeed suggests that upward social mobility is less frequent and pronounced than the American ethos would suggest (Mitnik & Grusky, 2012). Fundamental cause theory and similar positions thus emphasize the weight of the class hierarchy over individual self-determination based on personal attributes and have been called “structuralist” positions relying on the notion of “social causation,” or the powerful causal force of SEP on important life outcomes.

Social Selection and Individual Self-Determination

The *indirect selection* hypothesis is a directly competing explanation for socioeconomic inequalities in health. It was first put forth in the UK *Black Report* (Black, 1988; Macintyre, 1997), a now-famous document in social epidemiology, and suggests that SES differences in health are attributable to factors affecting both socioeconomic status attainment and health. Generally, the term has referred to psychological and behavioral attributes such as personality and cognitive ability (Chapman et al., 2010; Deary, Weiss, & Batty, 2010; Mackenbach, 2010; Nabi et al., 2008). The concept of *social selection* played a major role in earlier debates over whether mental illness led to downward socioeconomic mobility (social selection) or vice-versa (social causation) (Dohrenwend et al., 1992; Ritsher, Warner, Johnson, & Dohrenwend, 2001).

While specific findings vary, IQ relatively early in life and elements of the Big 5 traits Conscientiousness, Neuroticism, Extraversion, Agreeableness, and Openness, have all been linked to subsequent educational attainment (Asendorpf & van Aken, 1999; Beaujean et al., 2011; Caprara, Vecchione, Alessandri, Gerbino, & Barbaranelli, 2011; Harms, Roberts, & Winter, 2006; John, Caspi, Robins, Moffitt, & Stouthamer-Loeber, 1994; Lundberg, 2013); occupational success (Diener, Nickerson, Lucas, & Sandvik, 2002; Elder, 1968, 1969; Johnson, Brett, & Deary, 2010b; Thienpont & Verleye, 2004; Touhey, 1973; Viinikainen, Kokko, Pulkkinen, & Pehkonen, 2010; von Stumm, Gale, Batty, & Deary, 2009; Waller, 1971); and wages (Filippin & Paccagnella, 2012; Groves, 2005; Hall & Farkas, 2011; Murnane, Willett, Braatz, & Duhaldeborde, 2001; Nyhus & Pons, 2005). Trait theorists argue that individual dispositions shape SES attainment both directly (through the cumulative effects of daily choice and volitional behavior) and indirectly (i.e., by evoking social–environmental reactions that solidify SEP) (Caspi, Bem, & Elder, 1989; Caspi & Shiner, 2006). Some have also recently proposed that there is a common genetic substrate to traits, SES, and health (Möttus, Marioni, & Deary, 2017).

Whatever the mechanisms, there are some suggestive findings. Earlier work in the MIDUS cohort (Chapman et al., 2010), as well as studies in other countries (Nabi et al., 2008), suggested that personality traits (primarily those related to neuroticism and conscientiousness) explain anywhere from 11% to 39% of the SES–mortality association, although estimates are often of unknown precision. Others reported even larger portions of the gradient (30–40%) attributable to IQ (Batty & Deary, 2005; Chapman, Fiscella, Duberstein, Kawachi, & Muennig, 2014; Deary, Batty, & Gottfredson, 2005; Hart et al., 2003).

Open Questions

There are at least four central challenges to interpreting social selection findings. First, there is wide variation in how, or even if, people's point of origin in the class structure is controlled or incorporated in underlying analyses. Family of origin SES is a profound determinant of the importance placed not only on education—which serves as the gateway into the adult socioeconomic hierarchy—but also on a number of psychological factors, including personality (Bradley & Corwyn, 2002; Conger & Donnellan, 2007; Damian, Su, Shanahan, Trautwein, & Roberts, 2015; Shanahan, Bauldry, Roberts, Macmillan, & Russo, 2014). Epidemiologists would call this a “confounding” relationship because apparently salient selection effects of personality traits on later SES factors are a function of an even earlier common cause. Psychologists would call personality a mediator in the chain of continuity (or discontinuity) of earlier life to later life SES.

p. 398 Second, most selection findings are focused on individual characteristics that promote educational success in childhood, adolescence, and young adulthood. These are the periods in which intervention, prevention, and other resources have traditionally been concentrated, and for good reason. Nevertheless, increasing life spans and recognition of the importance of continued development after young adulthood (which inspired MIDUS) have generated considerable interest in midlife as a point of both intervention and prevention regarding the emergence of chronic diseases of aging, as well as a potential period of

“reversibility” for earlier experiences deleterious to health. The majority of studies on selection effects during the adult working years emanate from industrial/organizational psychology (Barrick & Mount, 2005), where the emphasis is on personnel selection and job performance rather than inter- or intragenerational mobility and stratification. Thus, the impact of preceding occupational history, let alone family of origin SES, is often difficult to deduce.

Third, while labor economists have been particularly concerned about the impact of personality traits on earnings (Borghans, Duckworth, Heckman, & ter Weel, 2008), arguing defensibly that personality represents a neglected aspect of human capital in which society should invest (e.g., through early childhood programs developing traits such as conscientiousness), it is difficult to compare the size of personality effects to that of earlier position in the class hierarchy. The latter would be of interest primarily to sociologists pursuing work in social stratification (Hout & Hauser, 1992), whereas labor economists are understandably interested in economic output metrics such as dollars of additional income, often with a secondary interest in the sociology of class stratification. From the perspective of intragenerational social mobility, it would be useful to gauge the proportion of change in occupational or financial status attributable to personality, above and beyond that due to prior standing in the socioeconomic hierarchy.

A fourth and final issue is the impact of changes in SES on personality change throughout midlife. This issue is principally of interest to personality psychologists (Roberts, Caspi, & Moffitt, 2003; Sutin, Costa, Miech, & Eaton, 2009), although it played a key role in earlier stratification theories in sociology (Kohn & Schooler, 1983; Spenner, 1988). From a health disparities perspective, large and continued impacts of SEP on personality traits relevant to health throughout midlife would tend to reinforce fundamental cause over indirect selection perspectives.

Purpose of This Chapter

We set out to explore the reciprocal associations between the Big 5 personality traits and occupational status, income, and wealth (accumulated assets) across three measurements spanning 16–17 years of adult working life. This work represents an important step forward in understanding the personality–SES interface within MIDUS, as prior work has involved cross-sectional representations of these constructs (Chapman et al., 2010; Chapman, Fiscella, Duberstein, & Kawachi, 2009; Chapman, Fiscella, Duberstein, Kawachi, & Coletta, 2009; Elliot & Chapman, 2016; Elliot et al., 2017; Turiano et al., 2014).

Figure 29.1 displays a stylized schematic (not a formal path diagram) of the cross-lagged panel design. The three repeated SES indicators are among the most commonly used in health research (Galobardes, Shaw, Lawlor, Lynch, & Davey Smith, 2006a, 2006b) and are strongly shaped by education attained during young adulthood (itself a function of family of origin SES). While it would be possible to take a composite approach grouping these together, they are often considered separately because they may have differential effects on health or operate through different mechanisms (Galobardes et al., 2006a, 2006b).

Participants

The MIDUS sample is well known, and methods of recruitment and assessment are described throughout this book. For the present analysis, we included participants who were age 65, the typical retirement age, or younger as of MIDUS 3 (including Random Digit Dial and city oversamples as well as Sibling and Twin samples) in order to capture socioeconomic dynamics over adult working life. This period spans age ranges from 26 at MIDUS 1 and 41 at MIDUS 3 to 49 at MIDUS 1 and 65 at MIDUS 3, thus capturing primarily early-to-late midlife. A total of 4,094 cases contributed to the analysis, the mean (*M*)/standard deviation (*SD*) age at baseline being 36.9 (6.63). Of these participants, 49.7% were female and 10.8% were of minority race/ethnicity. While mortality and loss to follow-up occurred across waves, we utilized full information maximum likelihood (FIML; see the section on analytic strategy) to incorporate all available data.

Measures

p. 399 Personality at each time point was assessed using the Midlife Development Inventory (MIDI) Big 5 scales (Lachman & Weaver, 1997). Briefly, the MIDI measures each of the Big 5 with between 4 and 7 trait adjectives, to which individuals respond on a 4-point scale ranging from *not all like me* to *a lot like me*. Trait adjectives are one common method of assessing the Big 5, differing in full question-based assessment in that they constitute single words, representing the “lexical hypothesis” that the most important elements of personality are embedded in (widely used) natural language terms. An overview of the origins of the lexical tradition can be found in the work of Goldberg (1993). In MIDUS, the specific MIDI Big 5 trait adjectives were selected from pilot factor analysis from a larger set of adjectives and have been used extensively in MIDUS personality research as well as in other cohorts, such as the Health and Retirement Study. Zimprich, Alleman, and Lachman (2012) provided extensive data on the MIDI psychometrics, including longitudinal invariance.

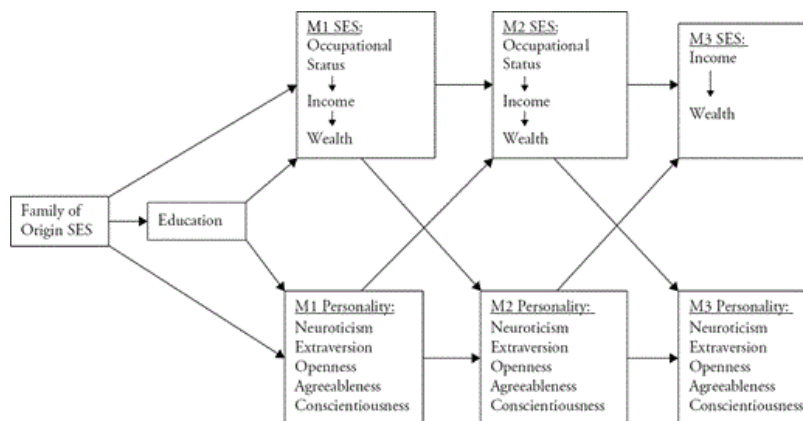


Figure 29.1 Conceptual model of reciprocal relations between personality and SES factors across three waves of MIDUS (M1, M2, M3). This model informs the design of the path model reported in Tables 29.1 and 29.2. The cross-lagged or diagonal paths in this figure represent reciprocal influences between personality and SES over time that are of primary interest. Arrows from M1 to M2 to M3 personality represent paths in these tables reflecting the degree of personality continuity when effects of prior SES factors have been taken into account. The same logic applies to arrows between SES factors. Note that the path model in the tables reflects the directional paths noted within SES boxes at each time point, wherein occupational status at a given point is presumed to affect income, which in turn is presumed to affect wealth at that time point. The path model in the tables also includes paths from each of the SES factors at a prior wave to the same SES factor at a prior wave.

The SES indicators consisted of occupational prestige, household income, and wealth at each stage. Occupational status was measured with Duncan’s Socioeconomic Index (SEI), which reflects average income

and education for a particular occupation. MIDUS 1 and 2 used 1980 and 1990 SEI scores, respectively, whereas SEI was not available at MIDUS 3. We used combined gender norms, with higher scores reflecting more prestigious occupations.

At each time point, annual household income from all sources was used, reflecting the economic advantages of shared resources in dual-earner households. This variable was capped at \$300,000 at each time point. Accumulated wealth, reflecting assets from all sources, was also used and assessed with a question asking individuals how much money they would have left over if they liquefied all assets and paid off all debts. Wealth was capped at \$1 million at each time point. Individuals who were in debt were assigned a value of zero.

While it would be possible to also utilize employment status directly, we opted not to for three reasons. First, a variety of reasons exist for being unemployed while of working age, including disability, student status, stay-at-home parenting, and so forth. Thus, a crude unemployment variable reflects too heterogeneous a mix to be considered an economic “success” or “failure” affected by personality. Second, it is the economic effects of unemployment that were of interest; these were reflected in both lower household incomes and ↓ accumulated wealth among the unemployed. Third, the cross-lagged panel model (see the next section) over three time periods, with additional earlier exogenous variables and covariates in every equation, was already highly complex. Our goal was to maintain specificity of different economic and trait outcomes while retaining some degree of focus and as much parsimony as reasonably possible.

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Two socioeconomic indicators were used to reflect background socioeconomic status prior to the cross-lagged relationships that are the focus of the model. Education measured at MIDUS 1 was used to reflect educational attainment prior to entering the labor force. It was correlated with education at MIDUS 2 at approximately .90 and is a popular indicator of SES in social epidemiology precisely because it is completed relatively early in life and thus precedes most outcomes of interest occurring during later periods. We also included a factor score representing family of origin SES, based on a single-factor model fit to maternal and paternal education, as well as maternal and paternal SEI. Loadings from this model (root mean square residual of approximation [RMSEA] = .072, comparative fit index [CFI] = .99) were as follows: paternal education, .87; paternal SEI, .66; maternal education, .57; maternal SEI, .39. Factor scoring from FIML was based on available information, so persons with nonworking mothers (and hence missing maternal SEI) were not “penalized,” but merely received scores based on other information available. Finally, age at MIDUS 1, gender (female vs. male reference category), and minority race/ethnicity (against a reference category of white) were included as demographic controls.

Analytic Strategy and Key Findings

Structural equation modeling (SEM) was used to study cross-lagged panel associations depicted stylistically in Figure 29.1. Note that this was a path analysis using observed variables, with the exception of childhood SES, for which a factor score was used (i.e., a measurement model was not fit simultaneously). At each time point (corresponding with MIDUS 1, 2, and 3), household income, wealth, and the Big 5 traits were endogenous or outcome variables, with occupational status also included at MIDUS 1 and 2. Income and wealth were measured in \$100 units. Natural log transformations (adding \$100 to each point to remove undefined values at zero) were applied at each time point to normalize these distributions, as is typical with income distributions (Greene, 2003). Education was allowed to predict all MIDUS 1 outcomes because it provides the “gateway” to higher status occupations, earnings, and wealth. Finally, family of origin SES was a completely exogenous factor, predicting education and MIDUS 1 personality and SES factors (cf. Figure 29.1). Within each wave, a logical series of paths from occupational status to income to assets was included, reflecting the impact of higher status occupations on contemporaneous income and in turn of higher income on greater contemporaneous wealth.

An initial model was fit including all cross-lagged panels as well as autoregressive paths (i.e., a variable predicted by itself at an earlier time point). Age, gender, and minority race/ethnicity were included as covariates in each equation. Residual correlations between Big 5 personality traits were included, reflecting other unmeasured factors associated with their covariance. After fitting this full model, in which a large number of paths were not significant, we then trimmed it to include only personality and SES paths, which reached at least a trend level ($p < .10$). Including these paths allows for the possibility that despite failing to reach conventional significance, they are still strong enough to produce suppression effects or control confounding that, unaccounted for, might bias estimates of other paths of interest. The final model was examined for overall model fit, and cluster-robust standard errors were used to adjust for the inclusion of respondents from the same family in the twin and sibling samples.

In addition to path estimates, we examined indirect effects, as well as explained variance obtained from path model R^2 values for each endogenous variable. We considered variance in endogenous SES variables when including only demographic factors, followed by the addition of SES factors and, finally, personality factors (with this order reversed for endogenous personality variables). FIML was used to incorporate all available data and minimize selection bias arising from mortality (most of which occurred in older members of the cohort not included in this analysis) and loss to follow-up. FIML provides consistent estimates when data are missing at random (MAR), a slight misnomer referring to missing patterns dependent on observed variables.

The trimmed path model achieved a CFI of .93 and RMSEA of .043, indicating that the defined pathways provided adequate fit to the data. Table 29.1 displays standardized path coefficients from significant paths to SES indicators at each wave, while Table 29.2 shows significant paths to Big Five traits measured at each

Table 29.1 Standardized Path Coefficients for Endogenous SES Variables

	M1	M1	M1	M1	M2	M2	M2	M3	M3
	Edu	Occ	Inc	Wlth	Occ	Inc	Wlth	Inc	Wlth
	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)
Age	.10 *** (.02)	.04 (.01) **	.06 (.02) **	.17 *** (.02)	-.04 ** (.02)	-.05 ** (.02)	.09 *** (.02)	-.10 ** (.03)	.07 ** (.02)
Female	-.04 * (.01)	-.06 *** (.01)	-.04 (.02) *	-.09 *** (.02)	.02 (.02)	-.07 *** (.02)	.00 (.02)	-.04 (.02)+	-.05 * (.02)
Minority	-.01 (.02)	-.01 (.01)	-.12 *** (.02)	-.11 *** (.02)	.03 (.02)+	-.02 (.03)	-.10 *** (.03)	-.07 (.04)	-.09 ** (.03)
Chd SES	.45 *** (.02)	.10 *** (.02)		.05 (.02) **	-	-	-	-	-
Education	-	.57 *** (.01)	.09 *** (.02)	.16 *** (.02)	-	-	-	-	-
M1 Occ	-	-	.15 *** (.02)	-	.64 *** (.02)	.06 (.03) *	.12 *** (.02)	-	-
M1 Inc	-	-	-	.29 *** (.02)		.24 *** (.05)	.07 (.04)+	-	-
M1 Wlth	-	-	-	-	.09 *** (.02)	.08 (.03) *	.30 *** (.03)	-	-
M2 Occ	-	-	-	-	-	.11 *** (.03)	-	.11 *** (.03)	.14 *** (.02)
M2 Inc	-	-	-	-	-	-	.08 (.03) **	.21 *** (.05)	.11 ** (.04)
M2 Wlth	-	-	-	-	-	-	-	.19 *** (.03)	.46 *** (.03)
M3 Inc	-	-	-	-	-	-	-	-	.15 *** (.03)
M3 Wlth	-	-	-	-	-	-	-	-	-
N1	-	-	-	-	-.03 * (.02)		-.05 (.02) *	-	-
E1	-	-	-	-				-	-
O1	-	-	-	-	.06 ** (.02)			-	-
A1	-	-	-	-	-.04 ** (.02)		-.06 ** (.02)	-	-
C1	-	-	-	-			.12 *** (.02)	-	-
N2	-	-	-	-	-	-	-	-.09 ** (.03)	-.06 * (.02)

E2	-	-	-	-	-	-	-	-.05 [*] (.02)	-.05 [*] (.02)
O2	-	-	-	-	-	-	-		
A2	-	-	-	-	-	-	-		
C2	-	-	-	-	-	-	-		.06 (.02) [*]
R ² Dem	.01	.02	.03	.08	.01	.02	.07	.03	.10
R ² + SES	.20	.39	.08	.22	.46	.14	.23	.15	.44
R ² + Pers	.20	.39	.08	.22	.46	.14	.24	.16	.45

Notes. Results from FIML estimation to which 4,094 cases contribute. M1, M2, M3 = MIDUS Waves 1, 2, and 3, respectively. Inc = log household income; Occ = Duncan SEI measure of occupational status; Wlth = log total assets. A = agreeableness; C = conscientiousness; E = extraversion; N = neuroticism; O = openness. Chd SES = childhood SES factor based on parental education and occupational status. Education uses the MIDUS 12-point scale of educational attainment. Female versus reference category of male, minority race/ethnicity versus reference category of white.

R² Dem = variance accounted for by demographics, with + SES indicating additional variance from SES factors and + Pers additional variance from personality factors.

+ $p < .10$;

* $p < .05$;

** $p < .01$;

*** $p < .001$.

p. 402 As expected, both family of origin SES and education were associated with SES indicators at Time 1, both through direct effects and for childhood SES, indirect effects via education (significant for all M1 SES variables). Higher childhood SES was also associated directly with higher openness and lower agreeableness at MIDUS 1, net of education. Trend direct effects were observed for lower neuroticism and conscientiousness. Education was negatively associated with neuroticism and positively associated with openness and conscientiousness at Time 1. Indirect effects of childhood SES via education (not shown in the table) were also highly significant ($p < .001$), ranging from $-.05$ for neuroticism to $.06$ for openness and conscientiousness. As shown in Table 29.3, total associations of childhood SES with MIDUS 1 traits thus ranged from $-.08$ for neuroticism, $.14$ for openness, $-.06$ for agreeableness, to $.02$ for conscientiousness; the last consisted of a positive indirect effect counterbalancing a negative direct effect and was thus smaller. The additional variance in MIDUS 1 personality factors attributable to education and childhood SES was on par with or larger than that of demographic factors for neuroticism and openness, roughly half that of demographic factors for conscientiousness, and minimal for extraversion and agreeableness; both sources of variance in MIDUS 1 personality traits were small in absolute terms.

Over the roughly 17-year span from MIDUS 1 to MIDUS 3, associations of SES markers with prior measurements of that marker were substantial, as expected. In a cross-lagged panel design, the cross-lagged paths reflect changes in one variable attributable to the level of another at a previous time point. Thus, higher neuroticism at MIDUS 1 predicted decreases in occupational status at MIDUS 2 and additional decreases in wealth above and beyond the influence of occupational status on wealth. Higher Openness and lower Agreeableness at MIDUS 1 were also associated with increases in occupational status at MIDUS 2, with both the latter trait and higher Conscientiousness predicting increases in wealth net of occupational status. Higher Neuroticism and Extraversion at MIDUS 2 predicted decreases in household income at MIDUS 3, as well as additional decreases in wealth independent of decreases in income, while higher MIDUS 2 Conscientiousness predicted further increases in wealth at MIDUS 3. The size of these effects suggested that

a 1 SD difference in traits was typically associated with less than 0.1 SD change in SES indicators, after other SES indicators and demographics had been accounted for; thus, unique effects were present, but they were small in an absolute sense.

p. 403 Influences of socioeconomic indicators on personality change are highlighted in Table 29.2. ↪ Higher income at MIDUS 1 was associated with reductions in Neuroticism at MIDUS 2, while higher occupational status at the latter wave was associated with reductions in Neuroticism at MIDUS 3. Higher occupational status was associated with increases in Openness over the subsequent period for both MIDUS 2 and MIDUS 3 follow-ups and with increases in Conscientiousness over the second period. Finally, greater wealth was associated with increases in Conscientiousness over both periods.

Table 29.1 and Table 29.2 also report the variance in each endogenous variable accounted for by demographic, socioeconomic, and personality predictors. As would be expected, large portions of the variance in each outcome are accounted for by its prior measurement, above and beyond demographics. Unique additional variance in socioeconomic changes attributable to significant personality predictors was minimal, while unique variance in personality change attributable to SES predictors was also quite small. Thus, once demographics and prior standing on either personality traits or SES were accounted for, variation in change among one set of factors due to the other was small. Table 29.3 reports the total effects for all endogenous variables, which tends to reinforce the substantial impact of prior SES and personality on future versions of these factors, relative to personality change due to SES or social mobility effects of personality. Table 29.4 summarizes total effects.

Summary and Interpretation

We examined the reciprocal relations between indicators of SES and personality over a 16- to 17-year period, using all three waves of MIDUS. While some reciprocal influences were noted, they were relatively small in absolute terms. In the main, the arc of SES through adult working life was characterized by strong inertia built up from earlier socioeconomic standing, with personality also demonstrating a moderate degree of continuity. It is important to note that our findings do not suggest an *absence of change* in general among SES and personality, as considerable unexplained variance remained in both personality and SES factors. Rather, the central finding is that reciprocal influences between these two phenomena are relatively small across a substantial period of working adult life.

At the baseline of MIDUS, there are noteworthy influences of family of origin SES, both directly and through education, on personality. These effects are generally in line with reviews on the impact of family of origin socioeconomic conditions on personality development (Conger & Donnellan, 2007), suggesting that those who begin life at higher socioeconomic strata (as reflected in parental indicators) end up less Neurotic, more Open, and perhaps slightly more Conscientious. This analysis suggests two additional noteworthy observations, however: First, there is an inverse effect on agreeableness. Agreeableness in MIDUS is measured by adjectives that primarily reflect warmth and trust. These characteristics are often associated with so-called helping professions, many of which bring with them lower occupational status and pay. Conversely, competition is an intrinsic element of all capitalist economies, and parents achieving higher paying occupations might socialize (or genetically endow) offspring with a degree of guardedness and self-interest that they regard as adaptive in the US labor market. This is in line with some recent ethnographic studies (Fiske & Markus, 2012).

A second novel dimension of these results was that the impact of family of origin SES on personality, both directly and indirectly through education, can be seen as far into the future as midlife, as participants were as old as 49 at MIDUS 1. It is almost certain that some of these effects are transmitted through personality in adolescence and early adulthood, information about which was not available here. Thus, these results speak

to the long arm of social class upbringing for personality development in terms of the Big Five traits and, in general, provide evidence for a pronounced degree of social causation in the impact of SES on personality, concentrated relatively early in the life span. A caveat, however, is that there are doubtless personality influences on education (and early entry into the labor market) that are not captured here; thus, social selection by personality is also present to an unknown degree during this relatively early period.

Across the 16- to 17-year span of working life captured by these data, there was evidence for some degree of change in SES factors in that less than half of the variance in any given socioeconomic indicator could be explained by demographics and prior standing on that indicator. Although we did not focus on the nuanced dynamics of social mobility itself, which are discussed elsewhere (Mitnik & Grusky, 2012), these results suggest that there is some degree of upward and downward movement over time in the US socioeconomic structure. Only relatively minor degrees of this movement appeared systematically linked to personality, however.

Table 29.2 Standardized Path Coefficients for Endogenous Personality Variables

	M1	M1	M1	M1	M1	M2	M2	M2	M2	M2
	N	E	O	A	C	N	E	O	A	C
	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)
Age	-.04* (.02)	-.06*** (.02)	-.05** (.02)	.00 (.02)*	.02 (.02)	-.02 (.02)	.04* (.02)	.04* (.02)	.08*** (.02)	-.01 (.02)
Female	.13*** (.02)	.05** (.02)	-.11*** (.02)	.26*** (.02)	.14*** (.02)	.05** (.02)	.02 (.02)	-.02 (.02)	.13*** (.02)	.02 (.02)
Minority	-.04* (.02)	.03 (.02)	.07*** (.02)	.01 (.02)*	-.02 (.02)	.03 (.02)	.06** (.02)	.05* (.02)	.04 (.02)+	.02 (.02)
Chd SES	-.03 (.02)+		.08*** (.02)	-.06*** (.02)	-.04 (.02)+	-	-	-	-	-
Educ	-.11*** (.02)		.14*** (.02)		.14*** (.02)	-	-	-	-	-
M1 Occ	-	-	-	-	-			.05*** (.01)		
M1 Inc	-	-	-	-	-	-.06* (.02)				
M1 Wlth	-	-	-	-	-					.04* (.02)
N1	-	-	-	-	-	.62*** (.01)	-	-	-	-
E1	-	-	-	-	-	-	.69*** (.01)	-	-	-
O1	-	-	-	-	-	-	-	.67*** (.01)	-	-
A1	-	-	-	-	-	-	-	-	.59*** (.02)	-
C1	-	-	-	-	-	-	-	-	-	.63*** (.02)
R2 Dem	.02	.01	.02	.07	.02	.02	.01	.02	.10	.01
R2 + Pers	-	-	-	-	-	.40	.48	.47	.42	.41
R2 + SES	.04	.01	.06	.07	.03	.41	.48	.47	.42	.41

	M3	M3	M3	M3	M3
	N	E	O	A	C
	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)

Age	-.06 (.02)**	.00 (.02)	.02 (.02)	.01 (.02)	-.01 (.02)**
Female	.01 (.02)	.02 (.02)	.00 (.02)	.11 (.02)***	.06 (.02)
Minority	-.05 (.03)*	-.01 (.03)	.01 (.03)	-.03 (.03)	.00 (.03)
M2 Occ	-.06 (.02)**		.04 (.02)**		.05 (.02)*
M2 Inc					
M2 Wlth					.05 (.02)*
N2	.67 (.02)***	-	-	-	-
E2	-	.72 (.01)***	-	-	-
O2	-	-	.70 (.01)***	-	-
A2	-	-	-	.64 (.02)***	-
C2	-	-	-	-	.66 (.02)***
R2 Dem	.03	.01	.03	.10	.02
R2 + Pers	.46	.52	.50	.46	.46
R2 + SES	.47	.52	.50	.46	.46

Notes. Results from FIML estimation to which 4,094 cases contribute. M1, M2, M3 = MIDUS Waves 1, 2, and 3, respectively. Inc = log household income; Occ = Duncan SEI measure of occupational status; Wlth = log total assets. A = agreeableness; C = conscientiousness; E = extraversion; n = neuroticism; O = openness. Chd SES = childhood SES factor based on parental education and occupational status. Education uses the MIDUS 12-point scale of educational attainment. Female versus reference category of male, minority race/ethnicity versus reference category of white. R^2 Dem = variance accounted for by demographics, with + Pers indicating additional variance from personality factors and + SES additional variance from personality factors.

+ $p < .10$;

* $p < .05$;

** $p < .01$;

*** $p < .001$.

p. 405 Higher neuroticism showed small associations with falling occupational status between 1995 and 2004–2005, probably reflecting the maladaptive influence of neuroticism on job success (e.g., Judge, Higgins, Thoresen, & Barrick, 1999; Sutin et al., 2009) and according demotions to lower status occupations. Higher neuroticism was also associated with reductions in wealth independent of declines in occupational status over this period, which could be explained by ↪ a variety of factors, including, but not limited to, the influence of habitual negative affect on financial decisions, loss of assets from domestic partnership dissolution, or other unmeasured life events prior to MIDUS 1 that both impacted neuroticism and caused long-term wealth reductions (e.g., a chronic family illness fraught with medical expenses). Higher neuroticism was also associated with decreases in household income at MIDUS 3, which may reflect further downward slides in occupational status not measured at this wave. Higher Openness and lower ↪ p. 406 Agreeableness predicted increased occupational status, while lower Agreeableness and higher Conscientiousness predicted increased wealth, the latter trait over both follow-up periods.

Table 29.3 Standardized Total Effects for Endogenous SES Variables

	M1	M1	M1	M2	M2	M2	M3	M3
	Occ	Inc	Wlth	Occ	Inc	Wlth	Inc	Wlth
	β	β	β	β	β	β	β	β
Age	.04**	.06**	.21***	.04*	-.01	.17***	-.06*	.15***
Female	-.06***	-.04**	-.11***	-.06***	-.10***	-.06***	-.09***	-.12***
Minority	-.01	-.12***	-.15***	.01	-.07*	-.16***	-.11**	-.19***
Chd SES	.10***		.15***	.25***	.08***	.11***	.07***	.11***
Education	.57***	.09***	.21***	.40***	.14***	.18***	.11***	.18***
M1 Occ	-	.15***	.05***	.65***	.17***	.16***	.14***	.20***
M1 Inc	-	-	.29***	.03***	.27***	.17***	.10***	.13***
M1 Wlth	-	-	-	.09***	.09**	.30***	.09***	.18***
M2 Occ	-			-	.11***	.01***	.14***	.18***
M2 Inc	-	-	-	-	-	.08***	.22***	.18***
M2 Wlth	-	-	-	-	-	-	.19***	.48***
M3 Inc	-	-	-	-	-	-	-	.15***
M3 Wlth	-	-	-	-	-	-	-	-
N1	-	-	-	-.03*		-.05***	-.07***	-.07***
E1	-	-	-				-.04***	-.04***
O1	-	-	-	.06***		.00***	.01***	.01***
A1	-	-	-	-.04**		-.06***	-.02***	-.04***
C1	-	-	-			.12***	.02***	.10***
N2	-	-	-				-.09***	-.07***
E2	-	-	-				-.05*	-.06**
O2	-	-	-					
A2	-	-	-					
C2	-	-	-					.06*

Notes. Results from FIML estimation to which 4,094 cases contribute. Total effects represent sum of direct effects in Tables 29.1 and 29.2 and indirect effects. M1, M2, M3 = MIDUS Waves 1, 2, and 3, respectively. Inc = log household income; Occ = Duncan SEI measure of occupational status; Wlth = log total assets. A = agreeableness; C = conscientiousness; E = extraversion; N = neuroticism; O = openness. Chd SES = childhood SES factor based on parental education and occupational status. Education uses the MIDUS 12-point scale of educational attainment. Female versus reference category of male, minority race/ethnicity versus reference category of white.

+ $p < .10$;

* $p < .05$;

** $p < .01$;

*** $p < .001$. Values of .00 that are significant reflect effect sizes that exist only at the third decimal or further, with correspondingly small standard errors.

p. 407 Taken together, these results suggest that those who are more thoughtful and creative, hardworking, less trusting, and perhaps more competitive and self-interested are able to propel themselves upward ↘ in SEP. This is exactly what one would expect in a market economy and to some extent captures the ethos of a meritocracy. Conscientiousness and Neuroticism findings are consistent with previous studies focused on adulthood in the United States (Judge et al., 1999; Sutin et al., 2009). However, another finding emerged in which higher Extraversion was associated with reduced income and wealth at MIDUS 3. This tends to run contrary to most prior findings. There is, however, an element of risk-taking or excitement-seeking to extraversion, which may have an impact on financial decisions. The recession also occurred between MIDUS 2 and 3, and it would be in such an environment that higher risk financial decisions would exert worse effects. Although speculative, it is possible that a ↘ historical or time-of-measurement effect is at least partly involved.

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Table 29.4 Standardized Total Effects for Endogenous Personality Variables

	M1	M1	M1	M1	M1	M2	M2	M2	M2	M2	M3	M3	M3
	N	E	O	A	C	N	E	O	A	C	N	E	O
	β	β	β	β	β	β	β	β	β	β	β	β	β
Age	-.05**	-.06***	-.04*	.00	.03	-.06**	.00	.02	.07***	.01	-.10***	.00	.04
Female	.13***	.05**	-.11***	.26***	.13***	.14***	.06**	-.10	.29***	.09***	.11***	.06**	-.0
Minority	-.04*	.03	.06**	.01	-.02	.01	.08**	.09***	.05*	.00	-.05	.05	.07
Chd SES	-.08***		.15***	-.06***	.03	-.06***		.12***	-.04***	.02	-.05***		.09
Educ			.14***		.14	-.08***		.12***		.09***	-.07***		.10
M1 Occ	-	-	-	-	-	-.01***		.05***		.00***	-.04***		.07
M1 Inc	-	-	-	-	-	-.06*				.01***	-.04**		.00
M1 Wlth	-	-	-	-	-					.04*	-.01***		.00
M2 Occ	-	-	-	-	-	-	-	-	-	-	-.06**		.04
M2 Inc	-	-	-	-	-	-	-	-	-	-			
M2 Wlth	-	-	-	-	-	-	-	-	-	-			
N1	-	-	-	-	-	.62***	-	-	-	-	.42***		.00
E1	-	-	-	-	-	-	.69***	-	-	-		.49***	
O1	-	-	-	-	-	-	-	.67***	-	-	.00**		.47
A1	-	-	-	-	-	-	-	-	.59***	-	.00**		.00
C1	-	-	-	-	-	-	-	-	-	.63***			
N2	-	-	-	-	-	-	-	-	-	-	.67***	-	-
E2	-	-	-	-	-	-	-	-	-	-	-	.72***	-
O2	-	-	-	-	-	-	-	-	-	-	-	-	.70
A2	-	-	-	-	-	-	-	-	-	-	-	-	-
C2	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes: Results from FIML estimation to which 4,094 cases contribute. Total effects represent sum of direct effects in Tables 29.1 and 29.2 and indirect effects. M1, M2, M3 = MIDUS Waves 1, 2, and 3, respectively. Inc = log household income; Occ = Duncan SEI measure of occupational status; Wlth = log total assets. A = agreeableness; C = conscientiousness; E = extraversion; N = neuroticism; O = openness. Chd SES = childhood SES factor based on parental education and occupational status. Education uses the MIDUS 12-point scale of educational attainment. Female versus reference category of male, minority race/ethnicity versus reference category of white.

+ $p < .10$;

* $p < .05$;

** $p < .01$;

*** $p < .001$. Values of .00 that are significant reflect effect sizes that exist only at the third decimal or further, with correspondingly small standard errors.

To some extent, however, the social selection effects implied by the impact of personality on SES markers may be in the eyes of the beholder: Their relatively small size would argue against strong social selection influences, at least due to the Big 5, on socioeconomic standing in adulthood. One reason may be that lagged SES influences are accounted for in these estimates, which is not always the case. It would seem important, then, to account for the influence of childhood SES and years of education in particular on subsequent personality and SES when attempting to accurately gauge the impact of personality on occupational status, earnings, and wealth. Yet, it is equally difficult to interpret such results without childhood personality, which affects socioeconomic status attainment years later, in part through education (Damian et al., 2015; Roberts, Harms, Caspi, & Moffitt, 2007; Shanahan et al., 2014). Some argue that the strongest trait-based social selection effects throughout the life span involve cognitive abilities rather than personality (Johnson, Brett, & Deary, 2010a; Nettle, 2003), and that even when prior education is accounted for, it reflects prior cognitive ability as much as prior SES (Johnson et al., 2010b).

Higher income (MIDUS 1) and occupational status (MIDUS 2) were associated with decreases in Neuroticism, echoing results from the Baltimore Epidemiologic Catchment Area cohort (Sutin et al., 2009). Although some findings indicate that very high income ceases to have beneficial effects, or even has inverse effects, on happiness, increases within the normal range may indeed increase well-being (Diener & Biswas-Diener, 2002), which is closely tied to Neuroticism (Weiss, Bates, & Luciano, 2008). Income evidenced the typical heavy positive skew in this sample, suggesting that the vast majority fell within normal ranges.

Higher occupational status at the first and second wave predicted increases in Openness at the second and third wave, respectively. To the extent that higher status occupations feature more intellectually demanding or stimulating work, this finding is largely consistent with classic sociological studies on work and personality, showing that intellectual self-direction—a trait analogous to facets of Openness—is influenced by job complexity (Spencer, 1988).

Finally, higher status occupations led to increases in Conscientiousness from the first to second wave, and higher wealth at waves 1 and 2 was associated with increases in Conscientiousness at waves 2 and 3, respectively; this is consistent with the notion that social roles requiring responsibility may increase Conscientiousness (Roberts & Jackson, 2008). Moreover, a prior study reported that in women in the MIDUS 1 age range (all college graduates), career success was associated with increases in norm adherence, arguably a facet of Conscientiousness, and agency, which may reflect goal-striving or achievement-oriented elements of this Big Five domain (Roberts, 1997). However, effects of SES indicators on personality change observed here were again rather small in comparison to the impact of prior standing on the Big 5. A larger impact of occupational experience on personality was noted in a cohort aged 18–26 (Roberts et al., 2003; Roberts, Walton, Bogg, & Caspi, 2006), essentially the period in which the youngest MIDUS 1 participants were first assessed, and others have concluded that the impact of occupational experience (including income) is stronger early on in the career (Sutin et al., 2009).

Future Directions

Findings must be interpreted in light of study limitations, which also point toward important avenues for future work. First, while FIML is superior to complete case analysis and protects against some biases arising from dropout and nonresponse, it is not robust to “nonignorable missingness,” in which missing data depends not on other observed factors but on unobserved factors. Thus, if such factors operate in such a way as to selectively censor persons who increase estimates of the impact of personality on SES, the current findings may be too conservative.

Second, our analyses are limited to a span of 16–17 years of working life and do not capture trends over longer periods. As MIDUS continues, it will be useful to more fully utilize the longer follow-up periods that unfold. Although the measures of the Big 5 in MIDUS have established reliability and validity, they are necessarily brief measures. It is possible that specific facets of the Big 5 composites may reveal somewhat differing patterns. Presumably one could examine the specific trait adjectives of the MIDI, which has been done as secondary analyses in prior work (Chapman et al., 2010). It would further seem possible to utilize MIDUS twin and sibling data to partition genetic and environmental sources of personality, as well as SES continuity versus change.

p. 409 Another future direction would be to consider unemployment specifically as a focal SES factor, which we did not (although its impact was reflected in lower household income and assets). Recent work in the United Kingdom has considered personality-based selection and causation explanations for links between personality traits and persistent unemployment (Perkins, 2016), and other major unemployment work occurred in young adults from New Zealand (Roberts et al., 2006). Work later in the adult life span and in the United States in particular will be important, particularly over the time period spanned by MIDUS, during which a major recession occurred.

These findings suggest that personality-based selection into socioeconomic strata is, at least over this span in working age US adults, rather small. Socioeconomically driven effects on traits are also rather small. Therefore, despite the common origins they might share during childhood, adolescence, and possibly young adulthood, they are relatively dissociated at subsequent points in the life course in the statistical sense of common variance. Intriguing reciprocal relations exist, but appear scarcely large enough here to constitute a major confounding or mediating relationship with respect to health outcomes emerging at midlife or later. Despite some small overlap of a bidirectional nature in adulthood, most of the health risk posed by these two sets of factors may be apportionable into independent contributions.

This has been called the “compensatory–cumulative model” (Chapman et al., 2010) because a strong degree of independently additive effects imply that the health risks of socioeconomic disadvantage can be offset by health-protective traits (compensatory) or additively increased by health-damaging traits (cumulative risk from individual disposition and socioeconomic environment). Such a model sounds similar to moderation/buffering involving interaction, and it is important to distinguish them. Interaction models imply superadditive (or, in nonlinear models like logistic regression, supermultiplicative) conjoint influences of a trait and SES factor. In other words, their combination is more than the sum of their parts. They are usually conceptualized and presented as changing effects of one variable (such as SES) across the level of the other (i.e., a personality trait). The overall conceptual result is indeed that a trait can offset or increase SES-based health risk, as well as contribute its own positive or negative influence on overall risk for the health outcome. In the compensatory–cumulative model, neither factor directly moderates, modulates, or changes the risk of the other factor; they can simply offset or add to each other in contributing to overall risk. The key quantitative distinction with respect to an individual’s overall likelihood of experiencing an outcome lays primarily in magnitude (additive vs. more than additive). In both cases, promoting health adaptive traits can have positive impacts on a person’s overall risk factor profile.

Both cases also point to the importance of considering social structural and trait factors conjointly because health researchers are presumably interested in general or comprehensive approaches to understanding health outcomes. For instance, having demonstrated SES associations with an outcome in a statistical model, considerable heterogeneity will remain in the outcome, evidenced in lower values of overall explained variance such as R^2 (or nonlinear analogues). This residual variance represents not only “error,” but also unaccounted for effects of other, independently operative factors not included in the model. Personality traits may be useful in this regard, used to “soak up” residual outcome variance not attributable to social–structural factors. Conceptually, they represent a level of social–ecological nesting in which health originates from meso- and macrolevel factors attached to SES, as well as from individual-level influences.

Such independent additivity also has important implications for health policy. One school of policy tacitly presumes that the indirect selection model is correct, and that worse health outcomes among economically disadvantaged persons are due to deficits in personal responsibility (Buyx, 2008; Cappelen & Norheim, 2005, 2006; Minkler, 1999; Resnik, 2007; Steinbrook, 2006; Wikler, 2002). Policies aim to incentivize more “Conscientious” behavior in this group. For instance, the WVA Medicaid program instituted “personal responsibility” policies requiring recipients to attend primary care appointments regularly, meet health benchmarks (i.e., weight, blood sugar control), and abstain from behavior like not showing for appointments and misusing emergency rooms (Blacksher, 2008). Those who did so enjoyed significantly expanded benefits, while benefits were reduced for those who did not (Blacksher, 2008).

p. 410 While enhancing conscientiousness is certainly an admirable goal, an independent additive effect of SES and personality would suggest that doing so will improve health outcomes across all socioeconomic strata, not selectively within those of lower SES. As a result, general health will improve, but ↴ disparities themselves are not likely to be reduced. From an evidence-based perspective, it will be important to determine the right mix within health policy of social–safety net programs (which directly seek to counteract socioeconomic disadvantage) with personal responsibility initiatives and not assume that the latter could effectively replace the former. Ideally, the relative emphasis of these two components ought to be determined empirically by their respective independent associations with a particular health outcome. Developing such an evidence base will also require considering interactions between personality and SES factors (Turiano, Chapman, Agrigoroaei, Infurna, & Lachman, 2014), which pose further intriguing issues that space precludes discussing here. Ultimately, a robust empirical evidence base around these issues requires large national cohorts, followed for many years, from which rich sociological, psychological, and health data can be collected. MIDUS represents both a pioneering effort in this regard, as well as a crucial future resource for social and health research in the United States.

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