

Final Report: Expert Review of NLSY26 Needs Assessment on Topics of Inequality and Disparities

Contract # 1605C5-22-A-0006 TO # 1605C5-23-F-00020 Deliverable # 12

January 17, 2024

Prepared for:

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Table of Contents

Introduction	iii
Report from Reviewer: Christopher S. Carpenter, PhD, E. Bronson Ingram	
University Distinguished Professor of Economics and Health Policy, Vanderbilt University	1
Report from Reviewer: David B. Grusky, PhD, Edward Ames Edmond Professor in the School of Humanities and Sciences, Director, Center on Poverty and Inequality, Senior Fellow, Institute for Economic Policy	17
Research, Stanford University	
Report from Reviewer: Aliya Saperstein, PhD, Professor of Sociology, Benjamin	
Scott Crocker Professor in Human Biology, Stanford University	30



Introduction

The National Longitudinal Surveys of Youth (NLSY) have been a valuable resource in the United States for understanding labor market outcomes over the life course. Researchers across the fields of economics, sociology, demography, criminology, education, psychology, and health rely on these rich longitudinal data to understand complex social phenomena such as inequality and mobility.

After nearly 30 years since the start of the last cohort, the U.S. Department of Labor (DOL) Bureau of Labor Statistics (BLS) has the opportunity to update our understanding of these social phenomena through a new cohort. BLS's NLSY 2026 (NLSY26) development activities to date have worked to ensure that the new study's research questions and content reflect the past 30 years of social science research and the need to capture the changes in society over that span. BLS engaged six panels of outside experts to make recommendations about the major content areas of the NLSY26. The content panels included:

- Family and Early Childhood Retrospectives
- K-12 Education and Cognition
- Health and Environmental Outcomes
- Department of Defense Initiatives and Assessments
- Delinquency, Victimization, and Interactions with the Criminal Justice System
- Employment and Work-Related Arrangements

In addition, an extensive needs assessment produced a content and measurements objectives report that outlines critical tradeoffs based on stakeholder outreach activities, a retrospective analysis of prior use of NLSY data, and a detailed evaluation of potential alternative data sources that BLS should consider.

The research questions of most content panels included some focus on inequality given the nature of each subject area and the primary uses of the NLSY data over time. None of the panels, however, were charged with focusing on inequality, which plays out across subject domains in complex and intersecting ways. Recognizing that inequalities play out across subject domains in complex and intersecting ways, BLS is interested in ensuring that the NLSY26 can support research on the patterns, origins, and effects of inequalities over the lifecycle, including research on dimensions such as racial/ethnic, educational attainment, gender identity and expression, sexual orientation, skin tone, immigrant status, disability status, region, and neighborhood of residence and the dynamics underlying the differences across groups.

This project engaged three expert reviewers to review the work of the content panels and the content and measurement objectives report with an eye to how well the study design will allow for the study of inequality and relevant subgroup analyses that researchers may wish to conduct. Each expert reviewer independently produced a written evaluation of the recommendations made in the reports and how those recommendations will facilitate or hamper the use of the NLSY26 to study inequality and mobility, including what content and survey methods will make the NLSY26 a strong tool for the study of differences across groups. This volume includes reports from each of the three reviewers:

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Report from Reviewer:

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Outline of this Report

This report includes comments based on my comprehensive review of materials developed in the National Longitudinal Survey of Youth 2026 (NLSY26) planning process. In particular, the charge was to focus comments on topics of inequality and social mobility, including attention to logistical and methodological issues that may promote or inhibit the ability of NLSY26 to credibly measure inequality. Of particular note is the reference that NLSY26 is "interested in ensuring that the NLSY26 can support research on the patterns, origins, and effects of inequalities over the lifecycle, including research on dimensions such as racial/ethnic, educational attainment, gender identity and expression, sexual orientation, skin tone, immigrant status, disability status, region, and neighborhood of residence and the dynamics underlying the differences across groups." Of these axes of inequality, prior NLSY surveys measured most, except sexual orientation and gender identity. As one of my particular areas of research emphasis and expertise focuses on sexual and gender minority populations in the United States, I begin in Section 1 by describing in detail the importance and feasibility of measuring and analyzing sexual orientation and gender identity (SOGI) information in NLSY26 as it pertains to the study of inequality. I then turn to overarching comments based on a high-level read of all the content panel reports in Section 2 before closing with specific comments on each of the individual content panel reports and the content and measurement objectives report in Section 3.

Section 1: Summary Thoughts on the Importance and Feasibility of Measuring and Analyzing Sexual Orientation, Gender Identity, and Related Constructs in NLSY26 As It Pertains to Understanding Inequality

1A. Context for and Importance of Measuring Sexual Orientation, Gender Identity, and Related Constructs in NLSY26 for Understanding Inequality

One of the clearest areas of importance for NLSY26 to measure inequality is in the area of sexual and gender minority (SGM) status, commonly understood to include lesbian, gay, bisexual, transgender, queer/questioning, and other groups (LGBTQ+). These populations and topics came up repeatedly in multiple content reports provided for this review, including: the content and measurement objectives report (which referenced the increasingly complex nature of SOGI for American society); the family background and early childhood retrospectives panel (which rated measuring youth and parent SOGI as high priority); the K-12 schooling and cognition panel (which noted in-school harassment related to sexual orientation and peer interactions related to gender identity); the delinquency, victimization, and criminal justice panel (which noted increased risk of bullying and harassment online faced by sexual and gender minorities); the health and environmental outcomes panel (which noted that sexual activity questions should be inclusive of all sexual orientations and gender identities and that SGM-based discrimination should be measured); and the employment and work arrangements panel (which discussed harassment based on gender identity). Thus, there is a clear acknowledgment of the increased importance of SOGI, including for understanding human capital accumulation and labor market experiences of adolescents and young



adults, which makes NLSY26 uniquely well-positioned to advance knowledge in these important areas.¹

Of the axes of inequality tasked for this review, "gender identity and expression" and "sexual orientation" are the two constructs that have been nearly exclusively absent from prior National Longitudinal Surveys (NLS) data. While the NLSY97 did include questions about same-sex romantic partners starting in round 6 (described at Sexual Activity & Dating | National Longitudinal Surveys (nlsinfo.org)), it has not included direct questions about either sexual orientation or gender identity. The only samples to have been asked direct questions on these topics appear to be the NLSY79 Young Adult survey, which comprises children age 12 and older born to NLSY79 respondents (described at Gender | National Longitudinal Surveys (nlsinfo.org)). That young adults survey added questions about SOGI to youth age 14+ in 2018 (see survey instrument at Questionnaire: NLSY79 Young Adults: YAdult Round 28: YA2018 (nlsinfo.org)).

Measuring SGM inequality in the context of a survey focused on the labor market is important for several reasons. First, the current Federal data landscape for understanding SGM communities is quite limited.² Of the handful of surveys that do include questions about sexual orientation or gender identity (e.g., National Survey on Drug Use and Health, National Health Interview Survey, Household Pulse), none are focused on labor market outcomes. While surveys such as the American Community Surveys (ACS) and the Current Population Surveys allow identification of individuals in same-sex couples, they do not include information on single sexual minorities, they miss all sexual minorities in different-sex relationships (and most research shows that bisexual people are much more likely to be in different-sex relationships than same-sex relationships), and they do not include any information on gender minority status.³

Second, and related, this data landscape is inadequate in the context of labor market institutions that are relevant for sexual minority and especially gender minority people. For example, the 2020 Supreme Court decision in *Bostock vs. Clayton County* extended Federal nondiscrimination protections in employment on the basis of SOGI throughout the United States, yet the current data landscape does not allow us to answer simple questions such as: are labor market earnings of transgender people different than those of similarly situated cisgender people or what are the industries and occupations of transgender people in the United States?

The ACS plans to pilot a Sexual Orientation and Gender Identity Test for the 2024 ACS, following the recommendations of two recent National Academies of Science, Engineering, and Mathematics reports on LGBTQI populations (one on well-being and one on measurement issues).



NLSY26 Expert Review Final Report

In fact, a recurrent theme in the content panel reports is that there is an overwhelming amount of evidence—much of it based on prior NLSY data products—that documents significant inequalities related to SES, race/ethnicity, immigrant status, and other characteristics, in part justifying the need to continue the focus on those axes of inequality. This is, of course, true, but our ability to document inequalities is a function of the characteristics we measure. Emerging evidence from other surveys of youth and young adults that have included measures of sexual orientation or gender identity, such as the Youth Risk Behavior Survey and the National Longitudinal Study of Adolescent to Adult Health also consistently uncover inequalities related to sexual and gender minority status. Those surveys are limited in important ways due to their focus being different from the NLS; as such, adding the questions about sexual orientation and gender identity to the NLSY26 will provide an unparalleled opportunity to confirm patterns of SGM-related inequalities found in different datasets and extend them to the large set of topics that are unique to NLSY, most notably detailed aspects of skills, abilities, and work-related outcomes. The ability to address intersecting aspects of inequality, most notably SGM status and race/ethnicity and SGM status and gender, will provide significant opportunities for documenting and unpacking the extent, causes, and consequences of SGM-related inequality.

This landscape is tangibly changing with the recent adoption of a Federal Evidence Agenda on LGBTQI+ Equity, a report of the National Science and Technology Council. This report grew out of President Biden's Executive Order 14075, Advancing Equality for Lesbian, Gay, Bisexual, Transgender, and Intersex Individuals, and tasks Federal agencies to create an action plan for the collection of SOGI data.

Third, there are increasingly well-documented population dynamics regarding queer populations: recent representative surveys show large cohort differences in the share of the population that identifies as LGBT. For example, in a 2021 Gallup Poll, 7.1 percent of adults identified as LGBT, which is more than double what it was a decade before (Jones, 2022). But while the rate of self-identification of SGM status has increased across the population, there are very large differences across cohorts. For example, in the same 2021 survey, fully 20.8 percent of people in Gen Z (i.e., those born 1995-2012) identified as LGBT, and there was a monotonic decrease in LGBT identification across the older cohorts. These patterns are consistent with other research showing that queer youth are coming out at progressively earlier ages. For example, a recent survey indicated that 35 percent of queer youth aged 13-17 reported they came out *before* the age of 13 (compared to only 8 percent of queer youth aged 18-24 at the time of that same survey) (Trevor Project, 2022). Together with the increasing prevalence and relevance of LGBTQ+ people in policy, law, television, internet, media, and popular culture, these facts increase the importance and feasibility of credibly measuring both SOGI among young people in NLSY26.

It is worth noting that increases in identification of LGBTQ+ status on surveys are true not only for sexual minorities but also for gender minorities. For example, 2.1 percent of Gen Z people identified as transgender in the Gallup survey described above. Although this rate is low, the Gallup survey did not include other terms for gender minority statuses that are becoming increasingly common, most notably "nonbinary," which refers to individuals who reject binary notions of gender. The Census Bureau's Household Pulse survey, which is nationally representative, added "nonbinary" as an explicit response option to their question about current gender; previously, their response options included only "male," "female," "transgender," or "none of these." If the "none of these" respondents from Household Pulse are best understood as people who would describe themselves as nonbinary, then recent data from the 2021-22 Household Pulse indicates that fully 5.6 percent of Gen Z adults describe themselves as transgender or nonbinary, compared to just 1 percent of Baby Boomers born between 1946-64 (Twenge 2023).

Another reason to focus on LGBTQ+ related inequalities in NLSY26 is the highly evolving state and local policy environment that is likely to be relevant for adolescents and young adults. In addition to Florida's recently adopted 'Don't Say Gay' law, other states have considered similar policies not only in the context of LGBTQ+ topics but also regarding critical race theory and the teaching of discrimination and the history of the United States more generally. In contrast, other states are adopting policies requiring students to learn about LGBTQ+ history. And of course a range of policies relevant to transgender and nonbinary youths and young adults, including bathroom access, sports participation, ease of changing government identity documents, and access to gender affirming care for minors are likely to be directly relevant for a small subset of NLSY26 respondents but could signal a more generally hostile environment for LGBTQ+ youths in the area more broadly.

A large body of research links SGM status to different educational experiences (e.g., bullying) and different human capital accumulation choices, including differential choice of course of study. Research has also clearly linked SGM status to differential labor market outcomes, with a large body of research demonstrating the presence of discrimination against LGBTQ+ people in the labor market. Many policy reforms regarding legal same-sex marriage and employment nondiscrimination may also shape the expectations and life outcomes of queer young people relative to their cisgender and heterosexual counterparts. For these reasons, NLSY26 offers a potent

⁴ Surveys vary regarding whether they ascertain sexual orientation, gender identity, or both, as well as whether they identify queer/questioning individuals, intersex individuals, asexual/aromantic individuals, and other groups. The Gallup survey, for example, identifies lesbian, gay, bisexual, and transgender (i.e., LGBT) people, while in other contexts LGBTQ+ populations more generally are discussed.



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opportunity to document and begin to contextualize and unpack the roles of sexual orientation and gender identity in determining education and employment outcomes in adolescence and young adulthood. The sizable and increasing prevalence of SGM people provides hope that intersectional analyses addressing, say, sexual orientation and marital status or transgender status and race/ethnicity may yield statistically and economically relevant information with respect to labor market and related inequalities in health and family outcomes.

The current knowledge base for understanding queer youth comes from a few surveys in the United States: the Youth Risk Behavior Surveys (YRBS, which sample 9th-12th graders in U.S. high schools), the National Survey of Family Growth (NSFG, which samples individuals aged 15-44), and the National Longitudinal Survey of Adolescent and Young Adult Health (AddHealth), which sampled 20,000 adolescents in grades 7-12 during the 1994-95 school year. The AddHealth cohort is now in their mid-40s, and the YRBS and NSFG do not have longitudinal aspects.

1B. Feasibility of Measuring Sexual Orientation and Gender Identity and Related Constructs in NLSY26 for Understanding Inequality

As with content topic recommendations in the context of LGBTQ+-related inequality, key logistical and methodological issues need to be considered. In particular, LGBTQ+ status is fundamentally different from most of the other axes of inequality examined by potential researchers of the NLSY26 in that it is likely to differ between youths and their parents/caregivers, and, moreover, many parents/caregivers may not know or support the LGBTQ+ status of their child. This raises significant privacy and confidentiality risks that must be considered with respect to survey design. Ensuring that NLSY26 respondents are guaranteed privacy and that their information on these topics will not be shared with parents/caregivers is paramount. LGBTQ+ youths may also be reluctant to report experiences of bullying and victimization related to their LGBTQ+ status. Field staff will need to be appropriately trained on interactions with youths, parents, and caregivers in these contexts, including appropriate and respectful use of terminology, including pronouns and preferred/chosen names. Diversity of backgrounds for NLSY26 field staff with respect to sexual orientation and gender identity should also be prioritized.

A substantial literature exists that documents best practices for asking questions about sexual orientation and gender identity, including to young people (Badgett et al, 2009; Badgett et al, 2014; NASEM, 2022; The Trevor Project, 2021). As increasing shares of youth are identifying as sexual and/or gender minorities, and as attitudes toward SGM people continue to improve, the stigma from SGM identification is falling. Asking young people separately from their parents and with computer-aided modes can also help reduce reporting concerns, though it will be important to integrate these questions into standard core demographic rotation. For sexual orientation, the NLSY could follow the approach taken by YRBS and other surveys that asks questions of the following type: "Which of the following best describes you?" with response options that include "heterosexual/straight," "gay/lesbian," "bisexual," "something else," "not sure," or "other" with a write-in option. For gender identity, the best practice is to ask two questions: one about sex assigned at birth and one about current gender (Badgett et al, 2014; NASEM, 2022). Both children and their parents can ascertain sex at birth, and a photo of a birth certificate may also be helpful information where possible. For current gender, response options could follow current practices of the Census Bureau's Household Pulse dataset, which offers as response options "male," "female," "transgender," and "nonbinary." (Note that the NLSY79 Young Adult survey asks a single gender question and thus cannot identify a transgender boy/man if that individual marks "boy" or "man" instead of "transgender," and similarly for a transgender girl/woman. That is, there is no question on sex at birth.)



Methodologically, it will also be important to conceptualize a person's sexual orientation and gender identity as an evolving construct through time, similar to how we think about educational attainment. It is well documented that sexual orientation and gender identity evolve across the life course, even for the same individual. Along these lines, it will also be useful to include information about complementary topics, such as asking questions about romantic relationships, including questions about the gender of romantic partners; asking questions about gender presentation and gender typicality (e.g., clothes, hobbies); asking questions about exposure to various curricula regarding SGM-inclusive sex education; and related questions. NLSY26 could also consider exploring variation within the set of SGM students by asking the subsample of SGM-identified respondents additional questions about identity disclosure (e.g., when, to whom); degree of social and family support of SGM identity; and availability of institutional supports (e.g., school-based gaystraight alliances, SGM-inclusive sex education) (CDC, 2022). Youths with stronger levels of social and family support for their sexual and gender identities are likely to have better mental health and stronger attachment to educational environments which may positively impact human capital accumulation, employment, and earnings. Although there is a lack of well-identified research that credibly addresses nonrandom exposure to supportive or hostile environments, state policy experiments may provide new NLSY-26-based research opportunities were this additional information collected.

With respect to labor market activity, there are some specific questions and response options that will need to be altered to reflect the survey's inclusion of SGM populations. For example, the employment panel's recommendations regarding questions about discrimination and fairness should be updated to include reference to sexual orientation and/or gender identity as reasons the person may have felt discriminated against on the job or may have experienced harassment in the prior 12 months. Similarly, the questions about experiences of respectful and unfair treatment, harassment, bullying, and violence may have prompts regarding the main reason for the experience; if so, sexual orientation and gender identity should be added as possible response options. Finally, in the list of fringe benefits offered by the employer, it may be informative to ask about same-sex and different-sex domestic partner health insurance and retirement/pension benefits; same-sex and different-sex spousal health insurance and retirement benefits; gender-affirming care and transition-related care; and other benefits that may be disproportionately used by SGM communities (IVF, PrEP, adoption benefits).

Woven throughout the reports is a very legitimate and clear set of considerations around respondent burden, survey length, attrition concerns, costs, and tradeoffs. These are absolutely first-order issues, and difficult decisions will need to be made regarding content. Here it is useful to stress, however, that sexual orientation and gender identity are core demographic characteristics of people, similar to age or race/ethnicity. While questions about, say, exposure to SGM-inclusive curricula or SGM-inclusive workplace benefits should face the same scrutiny as questions about other new content topics in NLSY26, demographic questions about an individual's sexual orientation and gender identity should not.

Section 2: Overall Comments that Span Multiple Content Panel Reports

2A. Other Topics Worth Considering Not Extensively Addressed in the Content Panel Reports

• The Opioid Epidemic, Opioid Overdoses, Policy Responses, and Deaths of Despair. While multiple panels referenced that opioid use questions be added to the battery of questions about drug use and misuse (e.g., the justice panel report), there was less discussion about the broader



context of the opioid epidemic and stark increases in deaths of despair that have been extensively documented as a U.S.-specific phenomenon, particularly among certain geographic and sociodemographic groups. NLSY26 offers a strong opportunity to better understand the medium and longer-term consequences of the opioid epidemic and policy responses to stem it, many of which have been state and local efforts such as must-access prescription drug monitoring programs, expanded treatment centers, increased availability of NARCAN, and others. Questions could be posed not only of youths but also of the parents and caregivers. Medication lists (or photos of medication bottles) of both youths and parents/caregivers may help researchers understand the role of the opioid epidemic in shaping young adult educational and health experiences as well as labor market activity. Recent estimates from the National Survey of Drug Use and Health indicate that 12.4 percent of 12-17 year olds used heroin or a prescription opioid in the past year in 2022 (SAMHSA, 2023), so the opportunities to increase our understanding of its relationship to socioeconomic inequality are significant.

- E-cigarette Use, Vaping, and Other Nicotine/Drug Delivery Systems. A distinguishing feature of the NLSY26 cohort relative to prior NLSY cohorts is that there is a sharply changing role of tobacco use, cigarette smoking, and nicotine delivery. As noted in the criminal justice content panel report, youth smoking rates have declined steadily and sharply over the past decades, partly due to stronger youth access restrictions, higher taxes and prices, and changing social norms. At the same time, however, electronic nicotine delivery systems (ENDS) have entered the market, and research has documented that over 1 in 4 youths has ever tried an ecigarette, with recent e-cigarette use rates in the 10-15 percent range. Conflicting research exists regarding the health consequences of e-cigarette use and whether e-cigarettes are substitutes or complements to combustible cigarette use. Given the changing nature of youth nicotine use, including changes in policies and restrictions regarding minimum sale ages, restrictions of venues where e-cigarettes can be used, and restrictions on flavors, among other things, NLSY26 should consider adding questions about e-cigarette use, including youth's own use and use of other individuals in the household. Doing so would provide researchers with new opportunities to credibly inform policy in this important area with relevance for labor market outcomes.
- Access to Vehicles and the Role of Graduated Driver Licensing. Access to a vehicle is an important predictor of a variety of positive and negative outcomes for young adults, including labor market outcomes. Research has shown that eligibility for a driver's license is associated with a variety of relevant health and socioeconomic outcomes, and this process has changed sharply over the past several decades. Specifically, all U.S. states have adopted graduated driver licensing policies, which have significantly improved traffic safety outcomes and the way that young people experience a key aspect of independence and the transition to adulthood. Including questions about access to transportation in general and private vehicles in particular, as well as whether the individual has a driver's license and, if so, what type/what restrictions, could open several lines of inquiry that are relevant both for labor market outcomes and possibly for inequality as well.
- Housing. Housing is clearly an important factor in determining social, economic, health, and labor market outcomes, and it is deeply related to inequality through its relationship with material hardship. Housing appears intermittently throughout the content panel reports, but a more focused attempt to measure experiences of houselessness, housing stability, and housing quality could be important for unlocking the potential of NLSY26 to measure inequality. For example, the family background content panel report references the measurement of Federal housing benefits and suggests the type of housing is a medium priority. NLSY97 includes information on type of house (detached home, apartment, trailer), but the stability of housing



and characteristics of the housing (e.g., square footage, environmental exposures) could also add important context. In the health content panel report, housing is included with broader social determinants of health, but there is no specific priority recommendation on housing questions. The criminal justice panel report also references housing instability as a risk factor for victimization, but again, there are no specific recommendations for housing-related questions. In contrast, the content and measurement objectives report explicitly includes Department of Housing and Urban Development (HUD) data as a key dataset to prioritize.

• **Political Polarization, News, and Information.** Another distinguishing feature of the NLSY26 cohort is that they will have come of age during a period of increasing political polarization that may have affected and be reflected in many aspects of their life, including access to and consumption of news media, reductions in civil discourse and willingness to entertain opposing views, and views about the value of science and medicine (e.g., vaccinations, masks). These factors may also plausibly be related to inequality and labor market outcomes and should be considered in the context of several of the content panels, including family background, criminal justice, and health. Questions about political views and related topics could be asked to both parents/caregivers and NLSY26 respondents. Some political attitudes and behaviors were asked in prior NLSY data, which increases potential value and comparability.

2B. Overall Comments Relevant Across Panels Related to Methodological Issues

Ages Sampled at Baseline. The proposed ages to be sampled at baseline will need to be addressed quickly and have significant implications for the recommendations of several of the reports. Most of the content panel reports drew recommendations based on the assumption of a 12-16-year-old sample at baseline, with the exception of the K-12 schooling and cognition panel and the Department of Defense (DoD) content panel, which are in direct conflict with each other. The K-12 schooling and cognition panel recommended recruiting multiple cohorts (e.g., 6, 9, 12, 15, 18, and 21) at baseline. The DoD content panel highlighted several alternative sampling approaches to meet DoD needs, including: (a) adding an 18-23-year-old sample at baseline (for more immediate ASVAB norming for military enlistment purposes, instead of waiting for the 12-16-year-olds to age in to the relevant testing ages); (b) adding a third contemporaneous sample of 10th-12th graders for more immediate ASVAB and Find Your Interests (FYI) norming that would occur concurrently with the re-norming of the military enlistment age sample in (a); or c) broadening the original NLSY26 age range from 12-16 with a supplemental 17-18 year old sample to enable sufficient sample of 10th-12th graders for DoD norming of key tests. The DoD content panel considered but rejected the idea of the 6, 9, 12, and so forth approach. While the rationales from each content report have merit, they also both are costly in important ways (e.g., the more age-spaced cohort approach would require re-assessment of the age-appropriateness of many survey questions and the expanded age range would have significant costs of administration). Also important is that this decision may have complex implications for the recommendations of the other content panels, most of which seemed to assume a 12-16 year old baseline sample. It is possible that the other panels would have reached different conclusions or would have altered the prioritization of various items across high/medium/low emphasis if a different age-based sample were discussed. This reviewer's sense is that, from the perspective of studying inequalities and the comparability of how inequality-related relationships have changed across NLS cohorts, the NLSY26 baseline sample should retain the 12-16 age structure or consider a modest lowering of the youngest age. For a given NLS budget, a 12-16-year-old sample will be larger in size than a more spaced 6, 9, 12, and so forth sample and, for key populations, such as sexual and gender minorities, immigrants, and disabled



persons, the larger sample sizes of a more similarly aged set of young persons will be more able to identify within-year inequality-related comparisons as well as trajectories of those inequalities. Put differently, while the 6, 9, 12, and so forth approach has special appeal for understanding the development of key characteristics (especially sexual orientation and gender identity) at critical periods of development, one worries that more modest sample sizes will undercut the ability of such a structured panel to realize those benefits. To address the problem of recall issues in the child's life before age 12, the NLSY26 could prioritize administratively verified information on key aspects of earlier life experiences, including detailed residential histories, elementary school environments, and so forth.

- **Linkages with Administrative Data.** Multiple reports reference linkages with administrative data, increasing the fidelity of collected information, potentially reducing respondent burden and enabling significant new research questions to be addressed, especially questions related to inequality. These include: (a) the employment panel report's recommendation to use administrative linkages to employer characteristics with the Quarterly Census of Employment and Wages (QCEW), the Longitudinal Business Database, the Linked Employer-Household Dynamics (LEHD), the Equal Employment Opportunity Commission EEO-1 records, the IRS Form 5500 data on employee benefits plans, and the Occupational Safety and Health Administration's data on violations; ((b) the K-12 Schooling and Cognition Panel report's recommendation to link to school transcripts, school environments, the Common Core of Data, the Private School Universe Survey (PSS) – Overview (ed.gov), the Integrated Postsecondary Education Data System, health records from Medicaid and private providers, and juvenile court records; (c) the criminal justice panel report's recommendations to link to court records, correctional systems, and state criminal history repositories such as the Criminal Justice Administrative Records System (CJARS), the Jail Data Initiative, and the FBI Interstate Identification Index the family background panel report's recommendation to collect parental socioeconomic status (SES), income, and education, as well as welfare program participation, parental unemployment, and birth outcomes using a combination of administrative data from unemployment insurance, tax records, child protective services records, and birth records; and (e) the health and environmental outcomes panel report's recommendation to use administrative data to collect physical health, disability, injury, oral health, prescription drugs, school absences, illness, diagnosis, treatment, vaccines, utilization, insurance coverage crime, and school discipline. These are highly laudable goals, and I share the excitement for all the proposed benefits of such linkages. There are a few challenges with these recommendations, however.
 - One challenge is a noticeable lack of specificity in some reports regarding the domains where administrative data could be identified and the ability to provide such linkages to NLSY26. For example, this was noticeable in the context of health. Medicaid coverage and utilization is a complex patchwork of different state programs, for example, and it seems unlikely that there would be full cooperation with making such data available on a timely basis. Similarly, what is the specific administrative data source to identify the disability status of NLSY26 respondents? Or injuries, oral health, or prescriptions?
 - It is also challenging that several administrative data systems have coverage that is much better for (or exclusive to) adults compared to minors. This issue was discussed in detail in the criminal justice content panel report, and merits further discussion. Some of the value of the linked administrative data seems to verify the fidelity of self-reported experiences in youth and young adulthood, but if these outcomes cannot be credibly measured, that is a limitation.



- Another challenge is that failed linkages are unlikely to occur at random. Instead, it seems likely that people who cannot be linked to, say, school transcripts are people who have moved around a lot, maybe because of material disadvantage or complicated family dynamics. Multiple reports reference a strategy along the lines of "use the administrative data for the people who can be linked, and then you only need to ask about that information for people who cannot be linked." This raises questions about differential item validity, differential response burden, and differential attrition that may be correlated with characteristics relevant to inequality.
- These issues will need to be addressed more quickly for the linkages that will be needed at earlier ages (e.g., birth records, Medicaid records, juvenile court records) and can be somewhat delayed for the linkages that are not needed until, say, labor market entry (e.g., LEHD, QCEW).

2C. Overall Comments on Recommendations Across Panels That Are Interdependent, Linked, and/or Potentially in Conflict With Respect to Topic Coverage

- **Health of Parents.** The family background and early childhood retrospectives rated measuring parental mental and physical health as high priority, while the health of parents was rated as medium priority by the health and environmental outcomes panel. Given that some axes of inequality are propagated across generations, measuring parental physical and mental health seems especially important for understanding how inequality may be buffered or exacerbated by parent health.
- Adverse Childhood Experiences. The ranking of measuring adverse childhood experiences (ACES) as a low-priority item by the health and environmental outcomes panel stands in contrast to the panel on family background and early childhood experiences, which rated measuring ACES as medium priority, and the panel on K-12 schooling and cognition, which rated measuring ACES as a high priority. (The health and environmental outcomes panel explicitly acknowledges on page 28 of their report that "perhaps these questions are better suited for the 'family background' panel.") This interacts strongly with measuring inequality, as SGM communities and racial and ethnic minority groups are at increased risk of ACES, which may be a meaningful pathway leading to differences in labor market outcomes.
- Criminal Activity. The health and environmental outcomes panel's recommendation that measuring criminal activity is a low-priority item stands in contrast to the panel about delinquency, victimization, and interactions with the criminal justice system, which recommends collection of numerous aspects of criminal activity and experiences with police. This interacts strongly with measuring inequality, as racial and ethnic minority groups, in particular, have systematically greater exposure to the criminal justice system than white populations. (The health and environmental outcomes panel explicitly acknowledges on page 27 of their report that "one concern with data on criminal activity is whether this fit within the focus of this panel on health outcomes.")



Section 3: Comments on Individual Content Panel Reports

3A. Comments on Recommendations from Task 1.03: Content and Measurement Objectives Panel

- It is incredibly helpful to have a bibliometric analysis of research topics based on prior rounds of the NLSY, though it is also useful to note—as above—that this is a direct function of the characteristics that were asked on those surveys. Thus, analyses of variables that are underused in comparison with the rest of the dataset require additional context before drawing conclusions about the relative merits of individual variables or questions.
- The section on factors to consider regarding the content of NLSY26 is thoughtful and comprehensive. No significant concerns were observed in this section.
- Regarding key content tradeoffs, it is clear that some comparability with prior cohorts may need
 to be sacrificed to accommodate new content that the panels identified as critically important
 (e.g., gun violence, social media, SGM status). It could be that some efficiencies gained with
 linked administrative data opportunities may help soften the extent of this tradeoff. A separate
 bibliometric analysis regarding which variables have been most extensively studied in crosscohort comparisons could be informative for helping make difficult decisions about which
 content is most valuable in the context of exact comparability (as opposed to good enough
 comparability or no comparability).
- Another tradeoff highlighted domain-specific research versus research that directly examines labor market outcomes. While this discussion is helpful, and clearly, there is a central role for NLSY26 in advancing the mission of the BLS, there are other potential considerations in this tradeoff, including new funding streams. Adding questions in different domains may not only open new avenues for research but also new avenues for funding the survey in the future. The strong use of NLSY data to study questions related to health is a great example that was referenced in the report, and there may be future opportunities to work with a variety of National Institutes of Health centers and institutes (e.g., National Institute of Child Health and Human Development, National Institute on Alcohol Abuse and Alcoholism, National Institute on Drug Abuse, National Institute of Mental Health, National Institute on Minority Health and Health Disparities, National Institute of Diabetes and Digestive and Kidney Diseases, National Institute of Environmental Health Sciences, National Cancer Institute), as well as the Department of Justice, the Institute for Education Sciences, and others.
- All else equal, the value of unique topic coverage in NLSY26 seems substantial relative to topic overlap with other available surveys.
- There is strong support for the goal of making data access as easy and democratic as possible for the NLSY26, though the report thoughtfully discusses several tradeoffs regarding data dissemination that will need to be considered.

3B. Comments on Recommendations from Task 1.1: Delinquency, Victimization, and Interactions with the Criminal Justice System Panel

The panel's main recommendations to expand the focus and scope of NLSY26 to reflect the
criminal justice environment of the current day are strongly supported by theory and evidence.
The contexts of police interactions, the role of social media, the rise of online bullying and
cybercrime, and related issues raised in the content report are excellent suggestions.



- One topic the content panel did not address was the changing landscape of medicinal and recreational marijuana legalization and its relationship with criminal records, criminal histories, and employment outcomes. This seems worth considering, as it is also one of the youth and young adult substance use trends that are different from the consistently declining rates of alcohol and tobacco use. Given the robust evidence on marijuana possession arrests, convictions, and employment, the questions about marijuana use should be maintained and potentially expanded. The fact that prior NLSY waves included marijuana use questions increases its value and comparability.
- One set of administrative data sources not included was interactions with child protective services (CPS) for abuse and neglect. As I am not a content expert in this area, it could be that such linkages are not possible, but if they were, this would be a good example where having high-fidelity information on the impacted youth and young adults could be especially valuable in thinking about ACES and victimization. CPS is mentioned in the family background content report but not the criminal justice content report; further investigation of these possibilities seems warranted and could be linked in the future if earlier life data are available. Related to this, it would be useful to know if NLSY26 can be linked to the Adoption and Foster Care Analysis and Reporting System (AFCARS).
- In addition to asking questions about the presence and role of school resource officers (SROs), related questions about school counselors and school-based health centers could also be considered, as these may have independent relationships with criminal justice outcomes and may also interact with other people, such as SROs.
- It is unclear how the links with administrative sources are performed. Some data sources seem to reference public information scraped from websites, which presumably includes names and possibly other identifying information such as gender and birthdate. It is worth clarifying that links based on name and gender are likely to be particularly problematic for transgender people, and name-based matching algorithms, in general, have challenges in studying inequality related to gender due to marriage-related last name changes.

3C. Comments on Recommendations from Task 1.2: Employment and Work Arrangements Panel: Defining Work Arrangements Subpanel and Job Characteristics and Early Experiences at Work Subpanel

- The summary overview is exceptionally clear and contains numerous recommendations supported by existing evidence and panel expertise. Key among these is the recommendation to collect information on the identities of the employers for possible linking with administrative or commercial datasets.
- The inclusion of specific example research questions that could be addressed using the recommended content was also helpful in justifying the underlying reasoning. For many of the research questions that referenced axes of inequality related to age, gender, and race/ethnicity, it will of course be important to expand that understanding to include other dimensions, including sexual orientation and gender identity (as well as others).
- For one of the high-priority recommendations regarding work arrangements, it was not totally clear how the seven mutually exclusive and exhaustive categories would be translated into the two standard categories used in prior NLSY data products, which is important for cross-cohort comparability. It will be important to have a clear way to translate the technical terms (intermediated work, platform work, independent contractor, etc.) into language accessible to a



- layperson and for field representatives to be able to assist respondents with the categories. Respondents may not have knowledge about whether they are in intermediated work or not, and the same may be true for whether they are independent contractors or platform workers.
- It was not obvious how recommendations across subpanels of work and employment interacted with each other, if at all. For example, the suggestion by the job characteristics and early experiences subpanel to ask about illegal income-generating activities in the same section as questions about work (to destignatize those activities, which seems sensible for accurate measurement) raises questions about how well they will or will not map into the seven mutually exclusive and exhaustive categories of work recommended by the work arrangements subpanel. Questions about work-based learning, career and technical education, summer work, and other related experiences raise similar potential issues.
- There is strong support for the questions about discrimination and fairness at work, including with respect to sexual orientation and gender identity given current social trends. The focus on intersectionality in these questions is also reflective of current trends and interest in these research areas. Response options about perceptions of discrimination will need to be expanded to reflect the range of demographics to be ascertained in NLSY26 beyond age, gender, and race/ethnicity. For example, to be inclusive of SGM populations, it will be important to make sure questions about sexual harassment are asked of all respondents and use gender-neutral language; response options and pronouns will also need to reflect that sexual harassment can be from same-sex or different-sex supervisors, co-workers, or customers, and all groups—including cisgender heterosexual men—can experience unwanted sexual advances at work.

3D. Comments on Recommendations from Task 2.1.2: Family Background and Early Childhood Retrospectives Content Panel

- There is strong support for the family background content panel report's recommendation to
 include measures of parental incarceration, complex family life—including youths who may live
 in multiple homes, LGBTQ+ status, experiences with immigration and customs enforcement
 (ICE), technology, and COVID-19.
- While COVID-19 is undoubtedly important, the recall concerns for parents and caregivers about
 the pandemic experiences may be substantial, particularly concerning the timing of lockdown,
 COVID-19 mitigation strategies, modes of instruction for children's schooling, and other related
 issues. It could be that collecting detailed residential histories and relying on external or
 administrative data sources may mitigate these concerns.
- There is strong support that stratification by race, ethnicity, and immigration status is linked to increasing social and economic inequalities, meriting continued and expanded inclusion of these topics in NLSY26.
- There is strong support for collecting parent/caregiver information for more than one wave of data collection, possibly through a lower-burden interview mode (e.g., phone).
- While there is support for interviewing multiple caregivers, particularly for NLSY26 respondents who reside in multiple homes (e.g., due to joint custody arrangements), additional specificity is needed regarding which questions would be asked to each caregiver. What aspects of caregiving are most critical to obtain multiple reports about, and why? What is the decision rule on which youth are triggered to have multiple caregivers interviewed? What about a respondent who is equally raised by a co-resident parent and a co-resident grandparent? Or a respondent who is raised by an older sibling and a co-resident parent?



• Reference to sexual preference in the content panel report should be amended to sexual orientation, and recommendations for future such references should be updated accordingly.

3E. Comments on Recommendations from Task 2.2.2: K-12 Schooling and Cognition Panel

- The panel's main methodological recommendation to recruit multiple cohorts in year 1 that start at ages 6, 9, 12, 15, 18, and 21 is highly intriguing. It would, as the panel notes, necessitate more modest sample sizes within each cohort that could plausibly be pooled for near cohorts. While this would allow a potentially clearer picture of the experiences of young people around these critical periods of development, it would seem to reduce the ability to measure disparities associated with key demographic characteristics that are relatively rare within each smaller cohort, such as disability, certain racial/ethnic groups, and sexual and gender minorities. As such, the limitations of the central recommendations for understanding inequality are significant and should be considered carefully. The approach of more but smaller cohorts would also, as the report acknowledges, limit the comparability of NLSY26 with earlier NLS data products.
- Given the increased importance of cellphone technology, more specificity is needed regarding social media experiences, listed as a high-priority recommendation in the out-of-school experiences category. Does this measure access to technology, use of technology, use of social media platforms, experiences with online bullying and harassment, and related concepts?
- There is strong support for measuring multiple topics in academic skills, social-emotional skills, in-school experiences, out-of-school experiences, and educational outcomes.

3F. Comments on Recommendations from Task 2.3.3: Health and Environmental Outcomes f-Panel

- There is strong support for the physical health measures proposed to be collected, especially biomarkers, which may unlock many new research avenues related to early childhood experiences, health, and the development of relevant skills.
- Prescriptions seem more high priority than medium priority, especially since they can be
 measured with high fidelity by taking photos of the medications. Yes, it potentially conflates
 healthcare access with health, but there will be numerous other ways to assess differential
 access to care through questions about health insurance coverage and related items. The value
 of the prescription drug information seems very high, particularly as it relates to disparities
 within households whereby access is mostly controlled for (e.g., concerning the gender of the
 respondent).
- While there is no doubt that information about COVID-19 is important to collect, one does
 worry about the ability of children and parents to accurately recall the information about the
 pandemic that would have happened 6 years before the start of the survey. The validity and
 quality of this information are not obvious, though if individuals can be linked to other thirdparty administrative or survey data about the timing of school reopenings, mode of instruction,
 and related policies, this could be fruitful.
- Linking to subjects' social media accounts should be very carefully considered against the tradeoffs associated with the representativeness of the sample, attrition, and a range of consent issues. It is possible to ask about the use of and exposure to social media without raising a host



- of consent and privacy-related concerns that would be associated with the social media account information.
- It is notable to see vaccinations listed as low priority, given the central importance of this cohort living through the COVID-19 pandemic as one of the core health events of their lifetime. This may have changed people's willingness to vaccinate against COVID-19 and other diseases in varied and complex ways. Given the importance of vaccination to human capital accumulation (e.g., schools have vaccination requirements for school entry), collecting regular information on vaccinations seems at least a medium priority and, more likely, high priority. It also seems like something that could be ascertained with less respondent burden by linking electronic health records or taking photos of youth vaccination cards.

3G. Comments on Recommendations from Task 2.4.2: Department of Defense Content Panel

- I found relatively little in the DoD content panel report that directly bears on the ability of NLSY26 to address researcher needs regarding studying inequality. The recommendations are very DoD-specific in terms of needs for test score norming and appropriate ages for the various tests. I am not sufficiently familiar with the relationship between BLS and DoD concerning funding availability, previous commitments, and related agreements to make clear evaluations regarding the content panel's recommendations. But again, none of them seemed that they would fundamentally inhibit or enable inequality-related analyses.
- Since the Tailored Adaptive Personality Assessment System (TAPAS) has not been tested in the younger age group and includes military-specific components, it is not advisable to include it in NLSY26.
- The large body of research examining associations with the Armed Forces Qualification Test (AFQT) strongly merits its continued inclusion in NLSY26 to study cross-cohort comparisons and examine how associations of AFQT with a range of health and labor market outcomes have changed, if at all.
- Special care will need to be taken regarding respondent fatigue and effort, as well as the role of in-person versus remote proctoring, for the DoD-related tests. This is strongly related to the baseline age structure of the NLSY26 sample and the timing of the first tests within the sample since, if the sample is increased to include older youths or if the tests are given immediately, these issues (e.g., whether remote proctoring compromises the fidelity of the tests) will need to be worked out more quickly. My read of the content panel's report is that there is not sufficient evidence on some of the key design considerations, meaning that it would be recommended to delay the timing of the first test administration to allow time to execute a well-designed study that would provide direct evidence on these test-taking considerations if that is within the purview of the NLSY-DoD partnership. Of course, this is in direct tension with the DoD's express desire for more immediate data for test norming purposes.
- The recommendation to administer the personality, AFQT, and FYI instruments repeatedly at different points over the panel accords with a large body of research and will enable important new knowledge on the evolution of abilities, skills, and interests over the life course, in addition to enabling cross-cohort comparisons with earlier NLS data.



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Report from Reviewer:

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Building an NLSY26 that is Primed for Understanding Inequality in the 21st Century: A Review of the CMO and Content Reports

The purpose of this review is to consider how the many design decisions embedded in the new NLSY26 may affect its capacity to serve as an ongoing resource for understanding U.S. inequality. Because the National Longitudinal Surveys (NLS) have long served as one of the country's premier resources for studying inequality, it is especially important to examine the implications of possible design decisions for the NLSY26's capacity to continue to fill this role. The following review attempts to do just that.

To carry out this review, a total of seven reports on possible NLYSY26 design decisions were examined. These reports include the Content and Measurement Objectives (CMO) Report, the Family and Early Childhood Report, the K-12 Education and Cognition Report, the Health and Environmental Outcomes Report, the Department of Defense (DOD) Initiatives Report, the Delinquency, Victimization, and Interactions with the Criminal Justice System Report, and the Employment Report. It will be useful to begin by sharing some overarching comments relevant to all of the reports and, thereafter, to turn to a narrower commentary on each of them.

Overarching Comments

The seven reports referenced above cover recent inequality trends and research in great depth. As noted in the CMO itself (pp. 2-3), a core conclusion from these reports is that none of the existing NLS domains relevant to inequality research and monitoring has receded in importance, whereas a host of new domains and items will have to be incorporated into the NLSY26 to ensure that it continues to serve as a leading resource on U.S. inequality. These additions are needed to capture the effects of (a) emerging and ongoing shocks to the inequality system (e.g., changes in the criminal justice system, increasing family complexity, new work arrangements); (b) ongoing changes in the distribution of social identities (e.g., the rise of undocumented status, LGBTQ+ and non-cisgender identities, intersectional identities); and (c) new research fields or discoveries within the inequality field (e.g., growing evidence of early childhood and neighborhood effects). These reports thus make it abundantly clear that the NLSY26 will face a firestorm of new demands among its "inequality constituency." This firestorm arises, in part, because the field of inequality has become an especially attractive research zone and is thus accumulating knowledge especially rapidly. It also arises because the especially rapid changes in the structure of inequality itself place considerable demands on the NLSY26 to capture them and their effects. The core problem that therefore must be solved is to ensure that the NLSY26 can handle the most important of these new and continuing "inequality demands" placed on it.

Although the comments below directly address the challenge of doing justice to these many competing demands, it will be useful to first identify a few areas in which the content reports omit or insufficiently stress various new data demands emerging within the inequality zone. As exhaustive as the reports might seem to be, there are a few inequality needs that merit more attention than the reports indicated. I will begin by discussing these additional needs and thereafter address how all of the new needs—both those addressed in the reports and those that were not—may be successfully incorporated into a new NLSY26 without overburdening respondents.



Worry #1: A Backward-Looking Protocol?

The seven reports referenced above stress that, if the NLSY26 is to continue to lead in the study of inequality, it will be necessary to fashion supplementary items that can capture all manner of new inequality developments. The reports referred, for example, to the effects of (a) the pandemic, (b) climate change, (c) new types of family complexity, (d) rapidly evolving social media, (e) new types of training and credentialing, (f) changes in the criminal justice system, (g) changing types of victimization, (h) new types of automation and AI, (i) new types of employment contracts and work arrangements, (j) new types of surveillance and employee monitoring, and (k) the growth of "new" social identities. The reports thus provide an impressive summary of all that has happened within the inequality domain in the quarter-century since the NLSY97 was developed.

But is it enough to simply lay out all that has happened and then make sure that the NLSY26 accommodates such developments? The long list of developments summarized in the reports suggests, to the contrary, that swift change is the order of the day and that we thus need a protocol that is flexible enough to capture what will happen in the future as well as in the past. We need, in other words, a protocol that is fine-tuned for discovery.

This is admittedly a big ask. Given that it is hard enough to build a new protocol that reflects all that has happened in the quarter-century since the NLSY97 was fielded, it might be seen as a luxury to consider building a protocol that also allows for discovery. The good news in this regard is that it is an affordable luxury because, with but a few minor changes to the instrument, the NLSY26 could be primed for discovery (as discussed below).

Worry #2: The Dark Matter of Inequality

The second major worry is that the new NLSY26 instrument will perhaps be unduly focused on marking out the interviewee's "structural position" within key inequality-relevant institutions. The new survey will, for example, capture the respondent's family type (e.g., single-parent), neighborhood type (e.g., segregated), form of training (e.g., the major, the college, the badge), position in the labor market (e.g., occupation), type of criminal justice involvement, type of relationships, and so on. The new NLSY26 will—like most surveys—thus take as its core job that of recording the interviewee's role within each of the many institutions that make up the contemporary world.

Is this a problem? It is, as noted, what most surveys do. It's nonetheless worrying that, by focusing on such structural positions, we squeeze out the possibility of learning about the texture of everyday life within each of those institutions. We want to know the type of relationship problems the interviewees are facing, the topics that come up in their conversations with their friends, the types of places that they visit within their neighborhoods or cities, the density of their interactions with others, their hopes and aspirations for the future, and so on. This raw material of everyday life, which Kathy Edin and Matt Salganik have referred to as the "dark matter" of life, is likely critical for gauging labor market sentiments (e.g., consumer expectations), predicting labor market outcomes and modeling their causes, and alerting us to new labor market problems on the horizon (Salganik et al., 2020). Although the NLSY97 relies heavily on standard survey measures of aspirations, sentiments, and mental health (precisely because of their implications for labor market behaviors and outcomes), this approach assumes that survey-designers always know which questions to ask, that respondents have the capacity to introspect in ways that enable them to surgically extract the variable of interest, and that respondents will always fully and honestly report their views regardless of their social acceptability. Because of these well-known limitations of survey measures, there is value in developing new capacities to secure "dark matter" evidence without assuming the



omniscient survey-designer and the full-disclosure respondent. To put it simply: There's a boatload of "dark matter" that's very relevant to labor market outcomes but isn't well captured by the closed-ended survey in its current incarnation.

It might seem impossible to find the extra time to uncover such evidence. As will be addressed below, creative low-cost approaches are available for capturing the dark matter of everyday life.

A Low-Cost Solution to Worries #1 and #2

The question at hand, then, is how to address worry #1 ("a backward-looking protocol") and worry #2 ("the dark matter problem") without placing any further burden on a protocol that already faces massive over-subscription problems. Because the NLS suite of products has historically played a field-leading role, it is important to consider how it can continue to innovate and lead by pushing the survey form into a new and high-yield frontier.

The solution to these problems, it would seem, is to treat the NLSY26's role as not that of simply "documenting existing structural positions in major institutions" (e.g., family, economy, neighborhood, criminal justice system) but also as serving as an "observatory on life" that reveals how people are thinking and behaving in their current roles. If we want to understand, for example, why young adults turn to gaming or drugs, are being bullied or ostracized, or have dropped out of high school, we need to know what's happening in their everyday lives and what they're thinking and feeling. If we want to know whether adult workers are unfulfilled or disgruntled and at risk of quitting (or "quiet quitting"), we again need to know what's happening in their everyday lives and what they're thinking and feeling. If we want to know why some workers are pursuing remote jobs, gig economy jobs, or dropping out of the labor force altogether, we again need to know how conventional jobs do or do not integrate well with other features of their everyday lives. The current and proposed protocols do of course include many items that speak to such everyday behaviors and attitudes, but it is difficult to sort out whether they are the optimizing ones. The obvious problem here is that conventional surveys place impossible demands on the survey designers to be *omniscient* and thus know what questions should be asked. The authors of the seven reports are likely as good as it gets on this front, but even the most stellar experts in the field will be hard pressed to know exactly what is happening on the ground right now, let alone what will likely happen in the near term.

There may therefore be payoff to setting up an enhanced NLSY26 that, in addition to incorporating the high-priority items discussed in the expert reviews, also serves as an observatory from which one could directly watch the respondents. This "observatory approach" could be achieved by building an NLSY26 app that interviewees would agree to download and would become an ongoing portal through which (a) they could share how their lives are unfolding, (b) provide online interviews, and (c) remain in contact with NLSY26 over their life course. It is likely that an app that delivers on (b) and (c) is already a part of current NLSY26 plans. If it is *not* part of the current NLSY26 plans, it seems all-important to consider the payoff to building an app that would be regularly used to carry out online interviews and otherwise integrate the NLSY26 into the everyday lives of respondents. It could be used, for example, to provide early feeds of results coming out of the latest round of NLSY26 interviewing, to provide resources of general interest to respondents (e.g., job market information), and to alert to upcoming rounds of interviews.

Just as importantly, it could also be used in a more ambitious way (i.e., "option a" above) by providing a vehicle for regular sharing of everyday lives, a vehicle that goes well beyond simply delivering the NLSY26 survey instrument. There are two ways, in particular, that option (a) might be developed, each of which is outlined below. It bears stressing that, insofar as the NLSY26 does



gather new information on "how lives are unfolding," it must obviously provide iron-clad assurances of confidentiality and develop rigorous ways to deliver on those assurances.

Direct Observation of Online Lives

Because so much of life now happens online, the first step in establishing the NLSY26 as a credible observatory is to be able to observe the structure of online life. This is where friendships are built and solidified (and sometimes lost), where critical and mundane events are documented, where hopes and fears are shared, where bullying happens and social isolation is engendered, and where job opportunities are discussed and exploited. The powerful effects of online life on core inequality outcomes is now very clear: we know, for example, that social media friends convey fundamental evidence on social networks and are the single most important determinant of the likelihood of social mobility (Chetty et al., 2020a; 2020b); we know that online conversations have profound effects on views and orientations (Santoro & Broockman, 2022); and we know that online communities are a key zone of ostracization, bullying, and other forms of trauma (Vogels, 2022). Although many of the NLSY26 expert reviewers made reference to these features of contemporary life, they did not drive home the fundamental point that the country's single most important longitudinal study of inequality (i.e., NLSY26) should commit to collecting direct evidence on online life rather than simply asking survey questions about it (e.g., measuring screen time). This portal to online life could, for example, be established by (a) securing individual consent to share data from key platforms (e.g., Instagram) or (b) securing consent to record screenshots at agreed-upon intervals (Reeves et al., 2020; Brinberg et al., 2021). The latter approach, which has been pioneered by the Human Screenome Project (HSP), has the virtue of eliminating selection-to-platform problems that arise when pre-arranged platforms, such as TikTok or Instagram, are studied. Under either of these two approaches, the available evidence shows that high consent rates can be achieved,⁵ and even higher rates may be secured when respondents are participating in a highprofile national longitudinal study.

The HSP currently has a panel of over 400 individuals (Ram et al., 2023) and is developing a taxonomy of "digital phenotypes" based on the structure of engagement with social media and other sites. The HSP team has developed a comprehensive data-processing protocol that exploits new developments in computer vision, AI, machine learning, and natural language processing to measure friends and networks, conversational topics, aspirations and hopes, mental health, and all manner of sentiments (Reeves et al., 2021). The NLSY26 could readily exploit this approach to develop an observatory on online life for a subsample of the NLSY26 cohort. To be sure, the downstream data processing costs would be substantial, but they might be reduced insofar as the BLS, like the Census Bureau, were to set up internal research projects that allowed a carefully vetted contingent of outside researchers (e.g., HSP developers) to become employees and assist in that capacity with processing.

Direct Observation of Face-to-Face Life

The above-mentioned effort, if indeed it were undertaken, would provide a powerful observatory into the online lives of NLSY26 participants. But face-to-face encounters in the outside world also matter for a host of inequality outcomes (Paluck et al., 2018). The question that therefore arises is whether the NLSY26 could be positioned as an outside-world observatory as well. Although some of

⁶ The HSP has been tested with smartphone users recruited from focus groups on media use (Brinberg et al. 2021) and from convenience samples of college students (Yee et al. 2022; also see Ram et al. 2023).



⁵ The consent rates vary across different studies using the HSP methodology. For example, Brinberg et al. (2021) report a consent rate of 86 percent, whereas Reeves et al. (2019) report a lower consent rate of approximately 67 percent.

the expert reviewers suggested that the NLSY26 should incorporate wearable sensors, this is arguably unnecessary given that (a) smartphone penetration for Gen Z is now as high as 98 percent (Kastenholz, 2021), and (b) a full 95 percent of U.S. teens between the ages of 13 and 17 have access to a smartphone (Vogels et al., 2022). These penetration rates vary only trivially by household income. As Vogels et al. (2022) have shown, penetration rates for households making under \$30,000 are as high as 93 percent, compared to rates of 96 percent for households over \$75,000. If the NLSY26 were to build its own app, it could usefully combine online monitoring with daily activity monitoring through mobile phone geolocation data (and indeed existing HSP applications have already tacked on geolocation capacities to their app). These geolocation data could then be used to monitor social isolation (staying at home), the types of face-to-face interactions one has (e.g., the extent to which interaction is politically polarized, socioeconomically polarized, racially polarized), the extent and nature of leisure-time activities (e.g., going to a mall), religious activities (e.g., whether one visits places of worship), gig economy activities (e.g., being an Uber driver), and more (Nilforoshan et al, 2023). It should also be possible to contract with data aggregators, such as Safegraph, to merge NLSY26 participants into full device-level datasets (among those who have consented to the collection of geolocation data).

This is not to gainsay the complications. As with raw social media data, a substantial amount of downstream processing would be needed to convert raw geolocation data into meaningful features, although here again the costs of such processing could be reduced insofar as a small number of internal research projects were allowed. Because smartphone geolocation datasets are regularly used by thousands of researchers, the NLSY26 could count on extremely high engagement with this new data resource, especially because NLSY26's survey data linkages would "supercharge" the data in an unprecedented way. The NLSY26 app could also be used to incorporate other types of smartphone-based sensors (e.g., Fitbit and related exercise sensors as discussed in CMO, p. 27), to measure skills (CMO, p. 17), and to support all manner of other data collection activities. Although here again one might worry about user resistance to undue surveillance, the available evidence (see Jäckle et al. 2023) suggests that consent rates for data linkage are higher when trust has been established (as presumably would be the case here).

Reducing Respondent Burden

These two types of observatories, one online and the other face-to-face, would in tandem provide important evidence on what people are thinking, feeling, and doing. By attaching these data to the institutional scaffolding that survey items provide, the NLSY26 would not just provide "dark matter" evidence on everyday life (e.g., social networks, conversational topics, social contacts, everyday activities), but would also allow analysts to pick up leading signals of new inequality-relevant developments (e.g., the next opioid crisis, the next loneliness crisis) and employment-relevant developments (e.g., the next burnout crisis). This observatory-based design would also serve to underline NLS's credentials as the field-leading suite of inequality-relevant longitudinal studies. It would increase the uses for NLSY26, break new ground in survey design, and create much excitement and buzz. Even better, all of this would happen without adding any new survey items or otherwise increasing the overall length of the NLSY26 protocol, save for a possible minor increase in time devoted to the consent process.

Although the foregoing approaches would not *add* to respondent burden, the new NLSY26 protocol already faces many high-priority demands and must find a way to accommodate as many of them as possible. As discussed at the beginning of this report, the CMO and expert reports advocated for a multitude of new items to capture the effects of ongoing shocks to the inequality system (e.g., new work arrangements), the explosion of new social identities (e.g., LGBTQ+ and non-cisgender identities), and the rise of new research fields within the inequality field (e.g., growing evidence of



neighborhood effects). On page 13, the CMO authors render the appropriately blunt conclusion: "Available interviewing minutes will not meet demand in the NLSY26 survey designers will be faced with tough choices regarding content." How can these new demands, all of which seem high-priority, be accommodated without unduly burdening NLSY26 respondents?

As a starting point to answering this question, a strong case can be made that the CMO report seemed too quick to dismiss the viability of relying heavily on alternative data sources, especially administrative data. If it were decided that the NLSY26 should become the country's first survey to build—in a full-throated way—around an administrative data format, considerable time could likely be freed up to accommodate many (albeit obviously not all) of these new inequality-relevant demands.

The cautions laid out in the CMO on this point are very compelling and thus not to be taken lightly. It is still possible, however, that the costs of honoring those cautions is higher than the cost of overcoming the problems that lie behind the cautions. In this spirit, it is useful to consider each of the CMO's cautions in turn, with a focus on asking whether the underlying problems might be solved. If these problems *could* be solved, the very attractive payoff is that (a) the NLSY26 will not have to spend untold minutes acquiring data that are already available in administrative sources, and (b) it can instead spend that time acquiring data that are unavailable from such sources.

This is not to suggest that the authors of the CMO report are in any way opposed to using administrative data. The CMO's main recommendation, as discussed on page 27, is that the NLSY26 "should prioritize opportunities for *researchers* to link to other data sources" (emphasis added). Under this approach, many researchers may well be able to secure the requisite permissions and make the desired linkages, but there will be no guarantee that they could do so and hence some of the data available in administrative sources will have to be ascertained in the NLSY26 protocol as well. This approach, which treats administrative data as a "bonus" that some researchers will choose to exploit, does not help to reduce the demands on the NLSY26 protocol.

What lies behind the recommendation to proceed in this way? Although the core concern is that legal and bureaucratic blockages will make it difficult to directly insert administrative data into the NLSY26 (see p. 27), a few other more minor concerns were also raised. The CMO authors note, for example, that such seamless integration of administrative data may have the perverse effect of inducing nonrandom attrition. The main worry here is that, insofar as administrative data are indeed preloaded whenever respondents allow doing so, the respondents who refuse to provide this consent to link to administrative data may face such additional interviewing burden that they will be induced to drop out.

The resulting increase in attrition is likely, however, to be quite minor given the available evidence that consent rates are high when the rationale for linkage is well-explained. If these high rates can be maintained when the NLSY26 is administered (as they likely will be), the costs of inducing very minor additional attrition may pale in comparison to the costs of trimming the instrument substantially. It may also be possible to eliminate such residual attrition by filling in missing entries via imputation rather than obliging nonconsenting respondents to complete them. This would result in a trade-off of reduced attrition for some small amount of additional measurement error.

Although various other concerns were also raised in the CMO report (see pp. 37-38), the core concern appears to be that it may prove impossible to secure the requisite permissions in a timely way. It is noted on page 27 that "because there are relatively few existing examples where alternative data has been used as a core component of survey operations, initial rounds of the NLSY26 should be designed without assumptions regarding the availability of these data." On page 28, it is likewise emphasized that an adaptive design (in which the survey instrument only



ascertains an item when the administrative record value is unavailable) holds great "promise," but it was still rejected because "we are aware of no major surveys that have used this approach."

The issue at hand is balancing the risk of failing to succeed in the requisite negotiations (for permission to link) against the very high cost of reducing the scope of the instrument to allow for collection of replicative survey data. There is much resting on this decision. If the formidable resources and reputation standing behind the NLSY26 are not powerful enough to break through the administrative data logjam, one has to wonder if any survey ever will. The cost of capitulation is thus high. It sends a message to all other surveys and data collection initiatives that one-off negotiations between users and agencies are here to stay even though the explicit purpose of the National Secure Data Service is to reduce such frictions. If the NLSY26 were instead to force the issue and to win, it would become known as *the survey* that opened the door to a new world in which data are collected efficiently, in which new opportunities for evidence-based policy are opened up, and in which respondent burden is taken into account and respected.

It seems clear that the CMO authors would like to play this role but are simply being cautious. This go-slow approach comes, however, with real costs. It means that two instruments will have to be built, one for pre-integration data collection, another for post-integration data collection. It means that many important items will not be available in the early rounds of interviewing because much interviewing time in these early rounds will have to be dedicated to securing data already available in administrative sources. It means that, after the shift to administrative data is undertaken, researchers will have to try to correct for mode effects and, in particular, the typically higher measurement error in survey reports. And it raises the possibility that, by going slow and capitulating in the early rounds, the chances of succeeding in later rounds will be reduced because there will be an existing instrument that satisfies requirements and thus reduces any pressure for change.

It bears emphasizing that some types of administrative data would no doubt be very difficult to secure in time for the NLSY26. The CMO report provides a comprehensive and detailed assessment of each type of administrative data and the extent to which they could likely be successfully integrated into the NLSY26 (see pp. 27-32). As that assessment shows, the reasons why integration may prove to be difficult are somewhat idiosyncratic and source-specific, and the possibility of overcoming all challenges for all types of data is exceedingly small. The main point is simply that *some types* of administrative data can likely be integrated in time to show up in the initial interview round. By doing so, the NLSY26 would send a clear message that it is committed to integration, and holdout agencies can be properly held to account for their de facto opposition to evidence-based policy and, arguably, to the *Foundations for Evidence-Based Policymaking Act of 2018*.

Comments on Individual Reports

The balance of this report will provide additional commentary on the individual expert reports. Because the CMO report was discussed in detail in the preceding section, this section will focus on each of the six other reports. In all cases, the comments outlined in this section will only address (a) conclusions that seem to require further clarification or justification, or (b) conclusions that speak to or otherwise complement the "key overarching points" made in the preceding section. As was noted above, the content reports provide very impressive reviews of the main changes in U.S. inequality and U.S. inequality research, and their conclusions and recommendations are therefore compelling. For this reason, this section will only provide quite limited critical commentary. It will focus, as before, on the modest—but all-critical—goal of discussing ways to "free up" the time and space needed to incorporate the recommended new items.



Family Background and Early Childhood

This report properly emphasizes the importance of collecting data from multiple caretakers and of including items on family structure and stability, gender identity and sexual orientation, program participation, criminal justice involvement, pandemic-induced disruptions, child welfare involvement, experiences with discrimination, parenting quality, mental health, parental expectations, and more. The recommendations and priorities of this panel are in accord with the available research evidence and will support the development of vastly improved models of the intergenerational reproduction of inequality.

The main point to be made with respect to this report is that the "family background and early childhood" zone is one in which administrative data can play an especially prominent role (as laid out in Exhibit 2 of the report). If ample administrative data can indeed be secured within this zone, respondent burden will be substantially reduced. A second key point: If it is also decided to secure online data (as recommended in "A Low-Cost Solution to Worries #1 and #2"), it will likely be just as useful to acquire such data from parents as from children. The parental data could speak to parental mental health, parenting behavior, aspirations and expectations, and more. Although the *Child and Family Background Report* focuses on experiences that occur *before* the child enters the sample (see page 2), it is noteworthy that additional post-entry data could be secured by analyzing social media posts. These data would provide a valuable and nearly cost-free source of evidence on the family climate in adolescence and beyond.

K-12 Schooling and Cognition

This is another excellent report that lays out the case for including measures of early childcare and education, academic skills (e.g., directly measured skills, grades, achievement test scores, attendance), social-emotional skills, aspirations and expectations, social behaviors (including risky behaviors), curricula and career pathways, harassment and bullying, afterschool experiences, and more. The recommendations are closely tied to the evidence on early life course dynamics. As in the prior domain, the panel recommends securing administrative records "as much as possible" (p. 16), although it is also stressed that often "they are not a substitute for direct assessments" (p. 18).

The panel recognizes the importance of social media and cellphones and worries about their implications for bullying and antisocial behaviors, addictive behaviors, academic performance, and other social outcomes (see pp. 5, 6, and 11). Although social media comes up in various sections of the report, the sharp rise in smartphone use and the dominant role of online platforms in teen life is seemingly underappreciated. The panel suggests, therefore, that a few questions about "internet addiction" and "antisocial internet behaviors" (p. 11) would suffice within this domain. Given the Surgeon General's new advisory on the mental health effects of social media use (U.S. Department of Health and Human Services, 2023), this is one of the few zones in which the panel's recommendations very clearly fall short (see also NASEM 2023).

Health and Environmental Outcomes

This report is notable because it is the only one that suggests linking to social media accounts (p. 20). Unlike the prior report, it recognizes that teens are experiencing a "dramatically different immersion in the digital world," with much consequent concern about "how this impacts both their physical and mental health" (pp. 4, 20). At the same time, it is arguably regressive in suggesting "the use of wearable sensors to track activity patterns" (p. 11), a recommendation that is at odds with the extremely high levels of smartphone penetration among teens of all ages and income levels. The report suggests, somewhat perplexingly, that smartphones "may lead to bias in data collection"



(p. 25). Although smartphone penetration among teens is, as noted above, essentially universal and unrelated to income, there are small—but also rapidly declining—residual differences across income groups in the quality of smartphone connections. These declines are due, in part, to new federal initiatives, such as the Affordable Connectivity Program. Finally, the authors emphasize the importance of linking to electronic health records (pp. 12, 16), although they cite possible difficulties in securing consent to do so.

Department of Defense

As I am unfamiliar with the testing needs of the DOD, I do not have the necessary expertise to fully and completely evaluate this report. I was, however, surprised that both this report and the other content reports failed to discuss the importance of understanding (a) the transition from schooling into military service, and (b) the transition of military veterans into the workplace (Shepherd, 2021).

The other content reports did, by contrast, discuss current research on transitions between the family (i.e., full-time caretaking) and the formal labor force and between incarceration and the formal labor force. The NLSY26 should also be the country's premier resource for understanding transitions between military service, schooling, and the formal labor market (Boatwright & Roberts, 2020). The only comments about veterans and the military—outside of the DOD content report—are found in the CMO discussion of the possibility of linking to the U.S. VETS database. Within the DOD report itself, the discussion is narrowly focused on issues of testing via the Armed Services Vocational Aptitude Battery (ASVAB), the Tailored Adaptive Personality Assessment System (TAPAS), and the Find Your Interests assessment (FYI). The report does not examine the larger constellation of data that would be needed to understand (a) the institutional forces governing transitions into and out of military service, and (b) the key differences in those processes across groups defined by racial/ethnic, gender, and sexuality identities. This omission should be addressed.

Delinquency, Victimization, and Interactions with the Criminal Justice System

This is an immensely important report because earlier NLSY survey instruments were developed prior to the recent growth of interest in police and gun violence, incarceration and the criminal justice system, and victimization. Because social science research within these areas has relied heavily on administrative data, it is not surprising that the authors of this report are especially focused on integrating data on criminal justice events (e.g., arrests, bookings, case dispositions, sentences, admission and release dates from prisons and jails) into NLSY26. The report notes, for example, that the "potential gains from linking administrative records from officially recorded interactions with criminal justice systems to longitudinal survey data are immense" (pp. 3-4, 6). On pages 15-18, a comprehensive list of possible linkages is provided, although the authors stress that current opportunities are compromised because of incomplete coverage or restrictive linkage requirements (see p. 18). This is clearly a zone in which the CMO's preferred go-slow approach is especially warranted.

The criminal justice report is also notable because, unlike most of the others, it focuses on online bullying and the importance of cellphones for monitoring interpersonal interactions (pp. 4-5). The authors recommend developing a "series of questions designed to gauge the social support network that youth can draw upon and the likely web of protective adults that may prevent victimization, offending, and criminal justice involvement" (p. 13). These survey items would indeed be very valuable, but it would be just as valuable to garner direct observational evidence on social networks from online and smartphone sources.



Employment Report

The employment report stresses, perhaps more so than any of the other reports, the importance and value of linking to administrative and commercial data. The panel's leading recommendation—one that crosscuts the two employment subpanels—is that "identifying information" on employers should be collected, even if it is not immediately possible to link to administrative employer censuses. As the authors put it, "collecting identifying information unlocks a huge number of possibilities and preserves unknown future options, while failing to collect it forecloses many options" (p. 5). This is clearly a spot-on recommendation.

The "work arrangements" subpanel presents a well-designed typology for distinguishing between (a) work arrangements in which the organization hires workers directly as employees or indirectly through intermediated arrangements (e.g., temp agency workers, contract company work), and (b) work arrangements in which workers are self-employed business owners or self-employed contractors (e.g., platform workers). This typology, which deviates from the protocol used for earlier NLSY cohorts, is an important advance and will assist in future research on work arrangements with NLSY26.

The job characteristics subpanel—arguably the most central of all NLSY26 content reports—outlines in detail a host of items that are critical for ensuring that the NLSY26 will be a leading resource for understanding new trends in (a) work-based learning, (b) the gig economy, (c) remote work, (d) informal work (some of which is not legal), (e) summer youth employment, (f) work scheduling, (g) overwork and insufficient hours, (h) work leaves, (i) perceived discrimination, (j) unfair work treatment, (k) harassment, (l) restrictive covenants, (m) noncompete clauses, (n) new technologies (e.g., AI), (o) task complexity, (p) occupational safety, (q) monitoring and surveillance, (r) job search, (s) barriers to work, and (t) work training. In each of these 20 domains, fundamental inequality-relevant changes are in progress, and it is accordingly important that the NLSY26 leads the way in understanding these changes. In many of these domains, the authors emphasize that a large battery of items will be needed to monitor new trends, a conclusion that again draws attention to the need to free up the requisite interview time by using all available administrative data.



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Report from Reviewer: Aliya Saperstein, PhD, Professor of Sociology, Benjamin Scott Crocker Professor in Human Biology, Stanford University



Since the late 1960s, the National Longitudinal Surveys (NLS) have drawn representative samples of youth and followed them through time to understand their labor market behavior, changes in the broader economy, and how the youth make transitions through various stages of their lives. It has been nearly 30 years since data collection began on the most recent cohort (NLSY97) and this review addresses plans for a new cohort of youth who will be aged 12-16 at the time of the initial survey in 2026.

In planning for the new survey, NLS has conducted a user survey and various listening sessions with shareholders, a retrospective analysis of the use of existing surveys, and has commissioned six panel reports on specific content areas. These content reports highlight key concepts and data elements, along with specific recommendations for topics and research questions. A final report, the Content and Measurement Objectives (CMO) report, provides a summary of all development activities to date and an overview of key recommendations from the other reports. All of these documents, along with questionnaires from the NLSY97, were considered as part of an additional round of expert review.

In this final round of review, three reviewers were responsible for examining the collected material with an eye toward facilitating the study of inequality and mobility across domains and along several key demographic dimensions. As my own expertise is in the measurement of race/ethnicity and sex/gender and sexual orientation, and the study of health disparities, this review focuses on conclusions and recommendations related to those specific topics.

There are numerous challenges and opportunities facing the NLSY26. It will be important for the survey to maintain historic strengths of the NLS cohorts in educational and labor market experiences, while updating the content to better match the current structure of schooling and work. It must also attend to other social changes over the past 30 years that affect everything from the modes in which surveys are conducted, to the definition of families, to how we choose to identify ourselves along the lines of race and gender.

Constraints on both time and money will prevent the NLSY26 from implementing all of the recommendations surfaced in the planning process to date. After considering the many potential tradeoffs, and assuming a key priority will be updating measures of schooling and work to reflect new realities, I encourage prioritizing the following three additional areas for improvement:

- 1. Update demographic measures for both youth respondents and their family members, to better reflect, or newly capture, key dimensions of social inequality.
- 2. Retool family and household rosters to record a diversity of family types.
- 3. Gather more information on adverse childhood experiences (ACEs), along with youth and parent health, especially mental health.

These points are elaborated in the thematic sections below, which highlight specific implications and recommendations for either methodology or survey content, or both, as appropriate.



Sampling Strategy

The various reports weigh a range of issues related to sampling strategy. Examples include which age range to target and whether to start the cohort at a series of ages to better disentangle age from period. There are clear pros and cons to each proposal and, as with decisions about content, both time and monetary constraints, and comparability concerns, work against implementing the full suite of potential changes. Among the various possibilities discussed, I highlight two issues that are most central to facilitating research on inequality: oversamples and respondent distribution across states.

Oversamples. The CMO report underscored the need for continuing to include oversamples of Black and Hispanic respondents while noting the potential importance of ensuring adequate representation of other key demographics. Three additional groups were highlighted: Asian youth, youth residing in poor areas, and youth residing in rural areas. Several other potential candidate groups were noted, including American Indian and Alaska Native (AIAN) youth, immigrant youth, and LGBTQ+ youth. However, the latter groups were deemed more challenging to execute and thus implicitly deprioritized despite their obvious importance for understanding inequality in the United States.

Among these competing priorities, I particularly urge the NLSY26 to include an oversample of Asian youth to allow for a fuller understanding of patterns of racial inequality. A resurgence in anti-Asian sentiment during the COVID-19 pandemic has renewed interest in understanding how seeming advantages in some areas (e.g., educational attainment) can coincide with persistent disadvantages in others (e.g., the "bamboo ceiling;" see Zhou and Lee, 2017). Further, the counter argument to an Asian oversample noted in the CMO report—pointing to high intracategory diversity by country of origin—seems to discount the intracategory diversity of Black Americans, by immigrant generation and other factors, which is also not reflected in the existing oversampling strategy. In that sense, aiming for diverse representation in the sampling strategies for each major racial population would be preferable to writing off any one of them due to its complexity.

For example, an oversample of Asian youth would work well in tandem with targeted sampling of youth with immigrant backgrounds. The proportion of immigrants in the U.S. population is about 14 percent, nearly as high as it was at the turn of the 20th century during the peak of the previous wave of massive immigration. The proportion of first-generation immigrants aged 12-16 is much smaller, making focusing solely on them a more challenging and expensive undertaking. However, aiming for adequate representation of a combination of first- and second-generation immigrant youth would be more feasible—as it is easy to identify primary sampling units that have a high proportion of immigrants using census data. Further, a recent latent class analysis of data from the National Asian American Survey finds that variation in a range of outcomes, including experiences of racial discrimination, is better explained by clustering across gender, socioeconomic background, region of residence and immigrant generation than ethnonational origin alone (Drouhot and Garip, 2021; see esp. Figure 3). This suggests that while aiming for representation across national backgrounds is an important consideration (as BLS has outlined in its strategy for the Hispanic oversample), it is not necessarily the only or even most important dimension of within-group stratification. Designing all racial oversamples to include diversity by immigrant generation, region of residence, socioeconomic background, and gender would help to address concerns about treating any of the racial categories as internally homogenous. As recent scholarship has argued, understanding inequality within broad racial populations is just as important as understanding inequality between them (Jimenez et al., 2015).



Similarly, if oversamples of youth in poor areas or rural areas, or both, were to be pursued, it would be important to ensure racial diversity within those samples, so they did not become *de facto* White oversamples. The term *intersectionality* had only recently been coined when the NLSY97 began data collection, but interest in intersectional approaches to inequality is growing and recent scholarship highlights the importance of taking intersectionality into account not only in analysis but in study design (see e.g., Collins, 2015; Else-Quest & Hyde, 2016). Serious consideration should be given to how the various oversamples and the general cross-sectional strategy can work together to better represent multiple dimensions of diversity among today's youth.

Distribution Across States. Another important factor in building the sample will be its distribution across states. As the CMO report highlights, existing interest in using state-level policies in analyses and the potential for future state-level data linkages make it more important to explicitly consider states as a factor in the sampling design. This is not necessarily done when focusing on a "nationally representative" sample but could be an especially relevant feature for this cohort. Health disparities that are driven in part by state-level politics are already well known (e.g., Montez et al., 2022; Torche and Rauf, 2021). The recent rise of state legislation related to teaching about racism and gender identity, state-level bans on gender-affirming health care for minors, and increasing state variation in access to abortion and reproductive health services, are all likely to differentially shape outcomes for this new cohort.

Family and Household Rosters

The family background report highlights the growing complexity of family life in the United States, as families increasingly include non-biological parents and children who have differing parents but may live in the same household. This has important implications not only for whom is recorded in the household and nonresident relative rosters, but also for how they are recorded. It affects who might be chosen for the parent or caregiver questionnaires and how many of those are needed as well.

Data for the NLSY97 cohort appears to have been gathered with a heteronormative model of the family in mind that only recognized the existence of "opposite sex" couples. This assumption plays out in several ways across the data and the associated technical materials. First, there is unnecessary gendering of parents throughout (see Westbrook & Saperstein, 2015), including in variable names such as DISTANCE_MOM and DISTANCE_DAD (indicating how far away the youth respondent lives from their mother and father, respectively). Second, information about biological mothers and fathers is prioritized, even when they are nonresident. Finally, the lack of a question on sexual orientation and limited response options for gender make further assumptions about what constitutes a family and who can take on which role.

Same-sex marriage has been federally recognized in the United States since 2015, and it was previously legalized in a number of states dating to 2004. Thus, for this cohort, it will be necessary to decouple an individual's sex (or gender) and their parental status in the rosters and related questionnaire items (see e.g., Prager, 2020). Increased use of in-vitro fertilization, gestational surrogates, and adoption for all couples, but especially for same-sex couples, also means assumptions about the relevance of the biological parent(s) to the youth respondents' upbringing is an empirical question rather than something to be assumed. Any references in study materials to the biological parents being the "natural" parents should also be removed. Adding a question about sexual orientation and updating the options for marital status for each household occupant will further help to recognize and record the diversity of contemporary family forms.



As the recommendations from many of the content reports highlight, the role of the parent/caregiver questionnaire is likely to take on increased importance for NLSY26. NLSY97 prioritized gathering information from the co-resident biological mother. The family background report recommends collecting data from multiple caregivers and at multiple rounds. If it comes down to a tradeoff between the two, given the complexity of identifying the most relevant caregivers, it may be preferable to designate one primary caregiver who would be surveyed multiple times rather than attempting to determine who among the child's caregivers would be most important to survey separately.

Measurement of Sex, Gender, and Sexual Orientation

The increasing visibility and public recognition of transgender and nonbinary Americans is relatively new, but the need to improve the measurement of sex and gender in research is quite longstanding. There are considerable gaps between social science theories of sex and gender and how they are actually operationalized in surveys, including the NLSY79 (Westbrook & Saperstein, 2015). My collaborators and I have also studied how sexuality has been measured in U.S. surveys (Westbrook et al., 2022), and I served on the National Academies of Sciences, Engineering, and Medicine (NASEM) committee that authored the recent consensus report, *Measuring Sex, Gender Identity and Sexual Orientation* (NASEM, 2022). As my own research and several of the NLS commissioned content reports underscore: Updating measures for sex and gender, and adding information about sexual orientation, is a very high priority area for NLSY26.

Recent surveys have taken a range of approaches to updating measures of sex and gender, but the general consensus for survey research (where respondent confidentiality is guaranteed) is to use a "two-step approach" and ask for the person's sex assigned at birth separately from their gender identity. It is also important to provide more than two answer options for gender identity. The NASEM (2022) recommendations suggest including both "transgender" and the open-ended response option "I use a different term." Offering an open-ended response will be especially important for youth respondents, as younger Americans are more likely to prefer gender expansive terminology, including *nonbinary*, *genderfluid*, *and agender* (Hammack et al., 2022). Indeed, a recent Pew Research Center survey that used the two-step approach found that 5.1 percent of adults under the age of 30 identify as transgender or nonbinary (Brown, 2022).

Gallup data indicates more than 20 percent of Americans born between 1997 and 2003 identify as lesbian, gay, bisexual and/or transgender (LGBT), double that of the immediately preceding generation (Jones, 2022). This suggests that an oversample of LGBT+ youth may be unnecessary for studying between group inequality (LGBT vs. not) as they will likely comprise a sizable portion of any nationally representative data for the NLSY26 cohort. However, individuals who identify as bisexual, particularly among people assigned female at birth, account for the largest component of this subpopulation, with much smaller proportions identifying as gay, lesbian, or transgender, so an oversample could be necessary to conduct within-LGBT analyses of inequality. Unfortunately, because sexual orientation and gender identity (SOGI) data has yet to be included in our nation's flagship surveys, there is little information currently available on which to base a national sampling frame.

The American Community Survey is scheduled to test using a two-step approach for sex and gender, along with the inclusion of a sexual orientation question, in 2024. This will provide important information about proxy reporting of these items in household surveys, though existing evidence from focus groups suggests a general willingness to report among both LGBT and non-LGBT respondents (Holzberg et al., 2019). The Youth Risk Behavior Survey has also asked about both



gender identity and sexual orientation for children as young as age 12, suggesting that all youth respondents can be asked these items beginning in Round 1.

There is little to no guidance on how frequently gender identity and sexual orientation should be queried in longitudinal surveys. Sex assigned at birth refers to a classification that happened in the past and therefore should only need to be asked once for each respondent. Both gender identities and sexual orientations are known to be fluid over the life course and are suspected to be more fluid in young adulthood, though age is difficult to disentangle from differences in question formats or measurement strategies. For example, surveys of adults that use the sexual orientation responses "straight/heterosexual," "gay/lesbian," "bisexual," and "something else," find levels of fluidity on the order of 2–8 percent in the span of a year. Surveys of young adults find levels of fluidity as high as 16-37 percent, but they also tend to use Likert-type measures that include categories such as "mostly heterosexual" or "mostly gay/lesbian" (see Mittleman, 2023). Based on existing research, there would be some evidence of fluidity if both gender identity and sexual orientation were measured in every survey round. What would be most problematic would be to only ask once in the first round and treat SOGI responses as static characteristics. Given current evidence, asking these items more frequently in early rounds (i.e., each year) and less frequently as the sample ages (i.e. every other year/wave) would be a reasonable strategy. It could also be useful to offer the option for sample members to update their basic demographic characteristics via a web form at regular intervals and/or in advance of each interview.

Measurement of Race/Ethnicity, Skin Tone, and Immigration Status

To better understand contemporary inequality, it will also be necessary to update and expand measures of race and ethnicity, skin tone, and immigration status. Each of these dimensions is briefly addressed, drawing primarily on my own expertise in this area. With the exception of immigration status, none of the content reports offered specific recommendations for how to measure these concepts, they only stressed the overall importance of their inclusion in the survey.

Race and Ethnicity. Recent research underscores the importance of recognizing multiple dimensions of race to better identify its role in perpetuating inequality (e.g., Roth, 2016; Saperstein et al., 2016). Both NLSY79 and NLSY97 have already contributed to research in this area by including multiple measures of race in multiple waves. NLSY26 can continue this pattern while also making strategic improvements by building on the growing body of work available in this area since data collection for the last cohort began. These efforts should include the following: distinguish between racial identity and racial ancestry, distinguish between racial identity and racial appearance, and update the question formatting and response options to align with current best practices.

Research using the 2015 Pew Survey of Multiracial Adults shows that a much larger proportion of Americans is aware they have multiracial ancestry than those who select multiple races for self-identification on surveys (Morning & Saperstein, 2018; Xu et al., 2021). This suggests that it is important to not only understand how the youth respondent self-identifies using official racial categories, but also what they or their parents, or both, know about their racial ancestry. The sequence of questions about the respondent's (or their parents') parents, grandparents, and earlier ancestors would only need to be asked once, preferably in Round 1, and the Pew survey can be used as a model. Given increasing migration flows and within-country diversity around the globe, this information would be useful in addition to the current questions about parents' and grandparents' country of origin, which are only available in the restricted-use files.



Research has also highlighted the importance of being able to distinguish between how someone racially identifies and how they are perceived by others (e.g., Vargas & Kingsbury, 2016; Saperstein, 2012). In the past, the NLS cohorts allowed for this kind of measurement by including the interviewer's racial classification of the respondent at multiple points in time. Continuing to record this information in the interviewer remarks would be ideal. In addition, or alternatively, NLSY26 could include a question about *reflected race*—or how the respondent thinks they are racially classified by strangers—in both the youth and caregiver questionnaires. Research indicates that reflected race is not only a predictor of future deprivation but also is predicted by past deprivation (Sosina & Saperstein, 2022), suggesting it should be measured in more than one wave of the youth survey to fully understand the dynamics of racial inequality. Reflected race questions have previously appeared in the Pew Survey of Multiracial Adults, the New York Longitudinal Survey of Wellbeing, the Portrait of American Life Study, and the CDC's Behavioral Risk Factor Surveillance System, among other surveys.

Finally, it will be important to update the question format and response options for the standard racial self-identification question for NLSY26. The Office of Management and Budget is currently revisiting its Statistical Directive 15, and considering several major changes, including adding a Middle Eastern and North African (MENA) category and moving from a "separate question" format for race and Hispanic origin, to a "combined question" format that offers the Hispanic/Latine category alongside other race responses. Research conducted by the U.S. Census Bureau finds both changes improve data quality, by minimizing the number of "some other race" responses (Mathews et al., 2017). By collapsing Hispanic origin and race, NLSY26 will gain back a question to offset additions that need to be made elsewhere. Ideally, as with gender identity and sexual orientation, racial self-identification would be asked in multiple survey rounds (with identical answer options) to allow for fluidity in identification over the life course (see e.g., Liebler et al., 2017; Breen, 2023).

Skin Tone. The separate measurement of skin tone is an important component of recognizing the multiple dimensions of race, and there is longstanding interest in understanding the role of skin tone in perpetuating both between- and within-group inequality (e.g., Branigan & Hall, 2023; Monk, 2021; Stewart et al., 2020). NLSY97 interviewers were asked to record the respondent's facial skin color on a 10-point scale based on a provided color card during Round 12 and in subsequent rounds as needed. The NLS color card is similar to the one the General Social Survey has used since 2012, which originated with the Massey-Martin scale pioneered by the New Immigrant Survey. It would be valuable for the NLSY26 to include a measure of skin color, potentially at multiple waves; however, recent research highlights challenges in the measurement of skin color that should prompt reconsideration of the existing color card (e.g., Campbell et al., 2020; Heldreth et al, 2023; Khan et al., 2023). Using a more varied scale that captures differences in color, not just differences in tone along a white-black spectrum, could be especially important in conjunction with the Hispanic and Asian oversamples (see the PERLA or PRODER palettes for examples; Solis et al. 2024). If interviewer racial classification or respondent reflected race is already being measured, it may be valuable to use a more technical measure of skin tone as obtained through a colorimeter or spectrophotometer instead (e.g., Gordon et al., 2022; Ostfeld & Yadon, 2022; Solis et al., 2024).

Immigrant Status. For NLSY97, basic nativity data is available for the youth respondents in the public-use files distinguishing respondents born in the U.S. from all others. There are also variables identifying the number of parents the respondent has from particular regions of the world, with more specific data available in the restricted-use files for parents' and grandparents' birthplaces. The only citizenship information in NLSY97 pertains to the youth respondent, though parents were asked what year they moved to the U.S. if they were born abroad. As highlighted in the family background report, it will be important to ask about citizenship in the caregiver questionnaire(s) to better understand potential variation in documentation status within the household. If immigration



status is explicitly taken into account in the sampling design, it would also be valuable to inquire about contact with Immigration and Customs Enforcement as part of broader inquiries into incarceration and criminal justice involvement of household members.

Measurement of Discrimination and Structural Racism

Multiple commissioned content reports noted the need to collect data on individual experiences with discrimination as well as broader patterns of structural racism. This is important to highlight because while collecting data on individual characteristics, such as race/ethnicity, skin tone, and immigration status as well as sex, gender, and sexual orientation, helps to identify populations vulnerable to adverse experiences, an individual's race or sex is not the cause of inequality; rather, racism and sexism are causes of inequality and they need to be explicitly accounted for in research as well.

Current approaches to structural racism and sexism treat them as important contextual or environmental variables (e.g., Hardeman et al., 2022; Hohman, 2019; Jahn, 2022). In this sense, it is less important for the NLSY26 to add specific content to the survey questionnaires and more important to expand geocoding of the respondent's home, school(s), and workplace(s). Given that the geo-coded data is only available through restricted-use agreements, offering some frequently used contextual variables even in the public-use files (see e.g., Hummer, 2023) would improve researchers' ability to account for the legal and social contexts in which respondents live and work. This could include local racial composition, measures of racial segregation and economic inequality, as well as measures of differential lead or air pollution and other environmental exposures that are linked to structural racism.

Previous research has also used various measures of perceived discrimination to capture interpersonal experiences with racism, sexism, and other forms of illegal and unequal treatment (Williams et al., 2019). Both the health content panel and the employment panel reports highlight example measures to be considered for NLSY26 related to experiences with discrimination as well as broader perceptions of fairness. One caution to add is that most previous measures of discrimination were not designed with intersectional perspectives in mind (Lewis & Grzanka 2016) and are thus more likely to identify instances of discrimination for some subpopulations compared to others, such as African American men more than African American women (Harnois and Ifatungi, 2011). Thus, careful consideration should be given to the measures included and whether it is appropriate to ask respondents to identify whether they were discriminated against based on a single characteristic rather than allowing for multiple characteristics to be salient simultaneously (see Harnois & Bastos, 2022; Scheim et al., 2021). When used, these measures can be included on the caregiver questionnaire(s) initially and incorporated for youth respondents in later rounds.

Other Adverse Childhood Experiences

Reading across the various content reports it becomes clear that another key improvement for NLSY26 will be to expand measures of ACEs to better understand how the conditions of early life are linked to later adult outcomes. These include measuring exposure to a range of stressors for which there are well-established measures, as well as understanding how youth from this specific cohort were uniquely affected by the COVID-19 pandemic and increasing school shootings in the United States.

Some of this information will be best gained through the caregiver questionnaire(s), establishing trajectories for the youth respondents before they entered the sample. However, some questions



will also be important to ask of the youth themselves in the early rounds of the survey. Questions asked of primary caregivers should include their own experiences with criminal justice contact or incarceration, and that of other family/household members, as such experiences are part of understanding the youth's formative environment.

To complement this information, it will be important to also expand measures of health—particularly mental health—for both the youth respondents and their caregiver(s). The parents' or primary caregiver's health status and history is also a key part of understanding the youth respondent's formative environment. This includes already known inequalities in family loss and bereavement (Umberson et al., 2017), exacerbated by the COVID-19 pandemic (Treglia et al., 2023; Verdery et al., 2020), which will have differentially shaped the lives of some members of this cohort compared to others.

Data linkage and data dissemination

A variety of alternative data sources (ADS) were noted across the content panels as having the potential to augment information gathered for NLSY26. A promising strategy for approaching potential data linkage would seem to be planning for a few key linkages to commonly used federal data sources initially, while continuing to pursue avenues for future linkages that would either shorten later rounds of the survey, provide opportunities to validate key self-report measures, or both. It also seems reasonable to assume that both the linkage procedures themselves and processes for generating use agreements will become more routine over time, making it important to build the sampling design with such features in mind. As noted above, this includes paying more attention to the distribution of respondents across states than is typical for a "nationally representative" sample.

At the same time, as the CMO report noted, it will be important to strike a balance between the resources that go toward creating opportunities for data linkage and the resources that go toward creating easy-to-use public data files. As exciting as the ADS opportunities are, at least in the near term, they are likely to remain accessible to only a small fraction of researchers. Continuing to provide robust public use files, and even expanding access to include features like quick tables, will help ensure both students and researchers from less well-resourced institutions can make contributions to the academic and policy conversations around this new cohort. It would be a shame to provide an outstanding resource to study inequality that itself reinforced existing inequalities among the researcher community.



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