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Longitudinal Trajectories of Illicit Drug Use on Mental Health: Evidence from a Cohort of US Adults, 1998-2021

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Abstract

Purpose

Illicit drug use during adolescence and early adulthood remains a major public health concern, yet how distinct developmental patterns of use shape long-term mental health is not well understood. This study identifies trajectories of illicit drug use and examines their associations with adult psychological well-being.

Methods

Data were drawn from the National Longitudinal Survey of Youth 1997 (N = 8,984), a nationally representative cohort followed from adolescence into adulthood (1997–2021). Illicit drug use frequency (excluding marijuana) was assessed from 1998 to 2011. Abstainers were identified, and latent class mixture modeling was used among users to identify trajectories. Adult outcomes included anxiety (GAD-7), depressive symptoms (CES-D), emotional limitations on productivity, and social functioning.

Results

Four groups emerged: abstainers, low-stable users, low-to-high increasing users, and high-to-low declining users. Compared with abstainers, low-to-high increasing and high-declining users had higher anxiety ($b = 0.046$ and 0.221; $p < .001$) and depressive symptoms ($b = 0.052$ and 0.198; $p < .001$). The low-to-high increasing group also had greater emotional limitations on productivity (IRR 1.307; $p < .001$) and social functioning (IRR 1.507; $p < .001$). All non-abstaining groups reported higher social limitations, though low-stable users had lower anxiety ($b = -0.082$; $p < .001$) and depression ($b = -0.027$; $p = .015$).

Conclusions

Developmental trajectories of illicit drug use are differentially associated with adult mental health. Increasing and early high-frequency use confer elevated risk, underscoring the importance of life-course approaches to prevention and intervention.

Introduction

Illicit drug use (i.e., the use or misuse of illegal and controlled drugs) during adolescence and early adulthood remains a significant public health concern in the United States (U.S.), with substantial implications for long-term psychological well-being and functional health. National estimates indicate that initiation of substances such as cocaine, heroin, and other non-prescribed drugs commonly occurs during the teenage years, when neurobiological, identity, and social systems are still developing.[1,2] Although extensive research documents the immediate risks associated with illicit drug use, including overdose, risky behavior, and acute psychiatric symptoms, far fewer studies have examined how patterns of use unfold over time or how these developmental trajectories shape mental health outcomes later in adulthood.[3,4] This gap is critical, as adolescents who experiment infrequently, escalate over time, or engage in persistent high-frequency use may experience markedly different and troubling long-term consequences (e.g., dependence, increased risk of death). Moreover, the U.S. is at a critical juncture to address both substance use and mental health problems, but national indicators have shown worsening mental health and substance use at the population level.[5]

Life-course and developmental psychopathology frameworks suggest that substance use during sensitive developmental periods can alter psychological, behavioral, and social pathways that persist into adulthood.[6-8] Illicit drug use may dysregulate stress-response systems, contribute to chronic emotional distress, or disrupt key transitions related to education, employment, and social relationships, each of which is associated with later anxiety, depression, and functional limitations.[9,10] However, it is equally plausible that some individuals who engage in limited or sporadic use do not experience long-term psychological harm, underscoring the

need to understand heterogeneity in substance use patterns rather than treat illicit drug exposure as a uniform risk factor. Identifying these distinct patterns and understanding their consequences requires longitudinal, population-based data that capture behavioral change across developmental stages. Person-centered analytic approaches, such as latent class or latent trajectory modeling, are particularly well suited to identifying diverse developmental pathways and isolating their long-term mental health implications.[11,12] However, understanding these nuanced patterns is critical for informing targeted prevention and education, early intervention, and policy strategies aimed at reducing the enduring burden of substance-related mental health problems.

Life-course theory further emphasizes that early behavioral exposures, such as illicit drug use, can redirect developmental trajectories through cumulative, mediated, and interactive processes that unfold over time.[7] Early substance use may generate cumulative disadvantage, whereby initial deviations from typical pathways compound across adolescence and early adulthood, increasing vulnerability to later psychological distress.[13] These disruptions often occur through chains of risk, in which one adverse event (e.g., early drug initiation) elevates the likelihood of subsequent risks such as school disengagement, unstable employment, or affiliation with deviant peer networks, all of which predict poorer adult mental health outcomes.[14,15] Life-course models also highlight timing and sensitivity, proposing that exposures during critical developmental windows can have disproportionate long-term effects on neurocognitive, social, and emotional functioning.[16,17] Applying a life-course lens, therefore, underscores the importance of identifying not only whether adolescents use illicit drugs, but when, how persistently, and under what contextual conditions, as these dimensions collectively

shape the likelihood of engaging in related risky behaviors and enduring poor mental health over time.

The purpose of this study is to identify distinct longitudinal patterns of illicit drug use from adolescence into adulthood among a large nationally representative sample and to examine how these developmental trajectories are associated with psychological well-being in later life**.** By leveraging robust population-based, multi-wave data, this study aimed to capture heterogeneity in substance use pathways and to assess their differential associations with adult mental health outcomes.

Methods

Sample and Study Design

The data for the current study come from the National Longitudinal Survey of Youth 1997 (NLSY97), a nationally representative study of individuals born in the U.S. from 1980 to 1984. The NLSY97 was conducted by the Bureau of Labor Statistics in Partnership with the Center for Human Resource Research (CHRR) at The Ohio State University and the National Opinion Research Center (NORC) at the University of Chicago. The NLSY97 research team employed a stratified sampling procedure to identify a cross-sectional sample of individuals born in 1980-1984, along with supplemental samples of Hispanic and Black individuals born during the same time. This sampling procedure yielded 9,907 individuals from 75,291 households, of which 8,984 individuals participated in the initial NLSY97 survey conducted in 1997. The NLSY97 research team administered yearly interviews from 1997 to 2011 and biennial interviews from 2013 to 2021. The NLSY97 achieved a high degree of retention, with more than 75% of individuals responding to each survey (after accounting for deceased individuals). More

information about the NLSY97 interview process, sampling procedures, and data are detailed elsewhere[18], and can be reviewed at https://www.nlsinfo.org/content/cohorts/nlsy97. The analytical timeframe for the current study included 1997-2011 for the independent variables and the 2011-2021 interviews for the dependent variables (conditional upon when the respondent turned 29 and 38-39 years of age). The analytical sample for the current study comprised 8,984 individuals (the full sample) and was obtained using Multiple Imputation by Chained Equations (MICE).[19] The multiple imputation strategy was implemented after conducting a comprehensive analysis of missing data (i.e., Little's MCAR test, pattern analysis [visualization and data identification], and distributional comparisons of missing and non-missing cases across all variables).

Dependent Variables

Four dependent variables assessed the effects of illicit drug use groups on mental health status and health limitations during adulthood: 1) general anxiety (measured by the Generalized Anxiety Disorder scale [GAD; 7-item][20], which was administered when the respondents were ages 38-39 years; 2) depression (measured by the Center for Epidemiological Studies Depression Scale [CES-D; short form][21], administered to participants in 2019 and 2021 and calculated as the average score in 2019 & 2021 when respondents were 34-42 years old); 3) emotional problems limiting productivity (assessed at age 29 years, by the following: "During the past 4 weeks, have you accomplished less than you would like with your work or other regular daily activities as a result of any emotional problems [such as feeling depressed or anxious]?" on a 1-3 scale where "1" = no, not at all and "3" = yes, a lot); and 4) physical and emotional problems limiting social activities (assessed at age 29 years, by the following: "During

the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities [like visiting with friends, relatives, etc.]?" on a 1-6 scale ranging from "1" = none of the time to "6" = all of the time).

Primary Independent Variable: Illicit Drug Use (1998-2021)

Illicit Drug Use captured the frequency at which one used "any drugs like cocaine or crack or heroin, or any other substance not prescribed by a doctor, in order to get high or to achieve an altered state" (excluding marijuana use, as this was assessed with a distinct item in the survey) since the date of their last interview (top coded at 500 times to protect the confidentiality of the respondents). The questions used to capture the frequency of illicit drug use were administered in 1998-2011, when individuals were between 13-19 (formative years) and 26-32 years of age, respectively.

Covariates

Twenty-four covariates were included in the weighting and post-weighting procedures to adjust for potential confounding effects. These covariates were selected for inclusion based on theory and empirical evidence suggesting that they influence adolescent/early adulthood illicit drug use and mental health status during adulthood. These covariates included the total number of months incarcerated in an adult jail or prison from 1992-2011, average number of weeks employed from 1997-2011, average self-reported general health from 1997-2011 (self-report captured on a scale where "1" = excellent and "5" = poor), average score on the Mental Health Inventory (MHI-) from 2000-2010 (administered biennially), and total number of years married from 1997-2011.

Categories to capture ethnicity of the respondent include Hispanic (ref. non-Hispanic), Black (ref. White), and Other Race (i.e., Asian/Pacific Islander, American Indian, Eskimo, Aleut, or other; ref. White). The demographics also included biological sex (Male, ref. Female), age in 1997, and whether the respondent was associated with the initial sample or the supplemental subsample ("2" = oversample). In addition, adverse housing was assessed if the parent reported that the youth had lived without water or electricity, or in a homeless shelter, prior to the 1997 interview. Household net worth captured the parent-reported assets minus debts. Current residential region measured if an individual lived in the north central, south, or western United States (ref. northeast).[22] Due to the desire to maintain confidentiality of the respondents, the publicly available version of the NLSY97 provides only the broad residential regions in which the respondents resided.

Metropolitan Statistical Area (MSA) and Urban indicated if a respondent's residence was in an MSA or in an urban (ref. Rural) region of the United States. The remaining covariates included parent incarceration before age 16 ("1" = Yes), maternal and paternal educational attainment – years of school completed (min, max = 1, 20), parent health (ranging from "1" = excellent to "5" = poor), both parents in household during childhood ("1" = Yes), and if the individual was in child care during their 1st year of life ("1" = Yes; an approximation for parental attachment).[23]

Analytical Strategy

A four-step analytical strategy was implemented. First, post-imputation descriptive statistics were produced. Second, the individuals who abstained from illicit drug use from 1998-2011 were manually identified as a unique group (N = 6,839), while the individuals who

reported using illicit drugs at least once from 1998-2011 were subjected to a Latent Class Mixture Model (LCMM; N = 2,145).[24] The abstainers were removed before the implementation of the LCMM to ensure that these individuals were not misclassified in one of the illicit drug use groups. Five LCMMs were estimated to evaluate if the variation in illicit drug use was empirically associated with from one through five latent illicit drug use groups, with the models being comparatively evaluated using the model AIC, AIC per-subject, and the average group probabilities.[25] Theory and empirical evaluation suggested that the three-group model best fit the trajectories in illicit drug use observed from 1998-2011.[26]

Third, group-level trajectories of illicit drug use between 1998 and 2011 were plotted to visually evaluate differences in temporal change across groups, while between-group differences in the dependent variables and covariates were assessed using ANOVA. Fourth, multigroup Average Treatment Effects-Inverse Probability Weights for the illicit drug use groups were calculated using the TWANG package in R.[27] The pre-weighting and post-weighting balancing statistics are presented in Appendix A. Finally, weighted outcome models were estimated where the four dependent variables were regressed on illicit drug use group classification and the identified covariates using a normal distribution (GAD scale and CES-D scale) or a Poisson distribution (emotional problems limit productivity and physical and emotional problems limit social activities)[28]. The models were replicated without the Average Treatment Effect- Inverse Probability Weight (ATE-IPW) included and with non-imputed dependent variables. All supplemental analyses are available at https://anonymous.4open.science/r/Substance-use-and-Mental-Health-DEEF/.

Results

Table 1 provides the descriptive statistics for the analytical sample. As it can be observed, on average, individuals used illicit drugs approximately 1-2 times per year (1998-2011). Additionally, individuals on average reported a .49 on the GAD scale, a .44 on the CES-D Scale, 1.10 ("1" = not at all) on the emotions limit productivity at age 29 and a 1.38 ("1" = none of the time) emotions and physical health limit social activities at age 29.

Table 2 provides the results of the LCMM for the subsample of individuals who reported illicit drug use at least 1 time between 1998 and 2011 (abstainers were manually identified as a unique group of drug users in the population and excluded from the LCMM). The Model AIC, AIC per-subject, and group probabilities suggest that the three-group model best fit the variation in illicit drug use over time, with the four and five-group models suggesting that only three groups exist.

Figure 1 provides the illicit drug use trajectories from 1998-2011 for the abstainers (represented with "0") and the three illicit drug use groups identified by the LCMM. The means for each group were stabilized using a locally estimated scatterplot smoothing (LOESS) regression model. Group 1 had a low frequency of illicit drug use in 1998 and a substantial increase over time (labeled as *low-high increase*), while group 3 seemed to have a high frequency of drug use in 1998 and a decline over time (labeled as *high decline*). Group 2 remained stable from 1998-2011, reporting a similar frequency of illicit drug use each year (~ 5-10 times per year; labeled as *low stable*).

Table 3 presents the results of four ATE-IPW models regressing GAD (Model 1), CES-D (Model 2), emotions limit productivity (Model 3), and emotions and physical health limit social activity (Model 4) on three illicit drug use groups (reference: abstainers). As shown in Model 1,

the low-high increase (b = 0.046; p < 0.001) and high decline (b = 0.221; p < 0.001) groups were associated with higher GAD scores than the abstainers group. However, the low-stable group was associated with lower GAD scores (b = -0.082; p < 0.001) compared with the abstainers group. A similar pattern was observed for the CES-D scale, where low-high increase (b=0.052; p<0.001) and the high decline (b=0.198; p<0.001) groups were associated with higher CES-D scores, and the low stable (b=-0.027; p=0.015) group was associated with lower CES-D scores in comparison to the abstainers group.

The findings from Model 3 suggested that the low-high increase group was statistically associated with higher levels of emotions limiting productivity at age 29 than the abstainers group (*IRR*: 1.307; p<0.001). This represents a 31 percent increase in the mean score on the emotion-limiting productivity item at age 29. Nonetheless, the low-stable and high-decline groups were not associated with lower or higher levels of emotion, which would limit productivity at age 29. Model 4 suggested that the low-high increase (*IRR*: 1.507; p<0.001), low stable (*IRR*: 1.047; p<0.001), and high decline (*IRR*: 1.048; p=0.009) illicit drug use groups were associated with higher reported scores on emotions and physical health, limiting social activities at age 29, compared to the abstainers group.

Discussion

This study identified four distinct longitudinal patterns of illicit drug use from adolescence into early adulthood (abstainers, low-stable users, low-to-high increasers, and high-to-low decliners) and demonstrated that these pathways were differentially associated with adult psychological well-being. These findings reinforce the value of examining substance use as a developmental process, as person-centered patterns more accurately capture behavioral heterogeneity than

single-timepoint indicators.[29,30] Moreover, life-course and developmental models emphasize that trajectories—reflecting timing, persistence, and change—shape long-term outcomes in ways that isolated exposures cannot.[31]

Individuals in the low-to-high increasing and high-declining groups exhibited significantly worse mental health in adulthood, including higher anxiety and depression symptoms and greater social and functional impairment. These patterns align with developmental cascade perspectives, which posit that early behavioral risks can initiate sequences of psychosocial difficulties that accumulate and reinforce each other over time.[32] Early or escalating illicit drug use may disrupt critical academic, occupational, and relationship transitions, elevating exposure to chronic stressors that undermine emotional health. Even individuals who later reduced use—such as those in the high-declining group—show persistent mental health vulnerabilities, suggesting that early heavy exposure may exert “sleeper” effects that manifest long after behavioral change.[33] Neurodevelopmental evidence supports this idea; adolescent drug use can alter neural circuits related to reward, stress regulation, and emotion processing, with downstream consequences for adult well-being.[34]

Surprisingly, the low-stable group demonstrated lower levels of anxiety and depression than abstainers. Although counterintuitive, similar patterns have been observed in trajectory studies showing that individuals engaged in low-level, non-escalating substance use often function comparably or sometimes better than abstainers on certain psychological outcomes.[35] This may reflect contextual differences; namely, low-level use may occur within socially integrated settings, while abstainers may include individuals with preexisting internalizing

symptoms, heightened behavioral inhibition, or adverse childhood histories that suppress experimentation but elevate later psychological distress.[36]

Importantly, the associations between high-risk trajectories and reduced adult well-being persisted, underscoring the robustness of these developmental patterns. The findings support life-course principles emphasizing that the timing**,** duration**,** and intensity of exposure shape long-term psychological outcomes.[7] Adolescence and young adulthood represent sensitive periods; substance use during these windows may disrupt neurobiological maturation, interfere with age-graded role transitions, and amplify vulnerability to stress across subsequent decades.[4,6]

These results have important implications for health equity and promotion. Prevention initiatives could benefit from early identification of individuals on increasing or high-use early-life pathways, as these groups demonstrate enduring vulnerability. Screening within schools, youth services/activities, primary care settings, community centers (e.g., parks, recreation centers), places of worship, and the justice system may help detect developmental shifts, especially acceleration in use, which precede prolonged impairment. Moreover, because early high-frequency use carries lasting consequences even when later use declines, interventions should extend beyond cessation and address long-term psychological vulnerabilities and structural disadvantages. Person-centered approaches, including trajectory-based screening tools, may also help tailor interventions to the specific patterns and contexts of substance use rather than assuming uniform risk.[37]

Limitations

Several limitations should be considered when interpreting the results from the current study. Illicit drug use was measured using self-reported frequency, which may be affected by recall error or social desirability bias; however, repeated assessments over multiple waves likely reduced random measurement error, and any remaining misclassification would be expected to bias estimates toward the null. The measure of illicit drug use aggregated multiple substances and did not capture drug-specific patterns, routes of administration, or contextual factors, limiting inferences regarding substance-specific pathways. Although the longitudinal design and analytic approach incorporated extensive covariate adjustment and inverse probability weighting to address confounding, the study remains observational, and residual confounding by unmeasured factors cannot be ruled out. Trajectory group membership was probabilistic, and some classification uncertainty is inherent in latent class models. In addition, mental health outcomes were assessed using validated screening instruments rather than diagnostic interviews and were measured at different points in adulthood, which may limit direct comparability across outcomes. Finally, the findings reflect a cohort born between 1980 and 1984, and changes in substance use patterns, drug availability, and social contexts over time may affect generalizability to more recent cohorts.

Conclusions

In this nationally representative longitudinal cohort, distinct trajectories of illicit drug use from adolescence into early adulthood were associated with differences in adult mental health symptoms and functional limitations. Patterns characterized by increasing or initially elevated levels of use were consistently associated with higher levels of anxiety, depressive symptoms, and selected functional impairments in adulthood, whereas low-stable use was

associated with lower symptom levels relative to abstainers. These findings are consistent with life-course perspectives emphasizing the relevance of timing and persistence of exposure, while also highlighting heterogeneity in developmental pathways. Importantly, the results do not imply causality but rather indicate long-term associations between patterns of illicit drug use and later psychological well-being. From an epidemiologic perspective, findings suggest that distinguishing between developmental patterns of substance use, rather than relying on single-timepoint or binary indicators, may improve the characterization of long-term mental health risk in population-based research. Further studies using more recent cohorts, substance-specific measures, and designs that strengthen causal inference are needed to clarify underlying mechanisms and assess the extent to which these associations persist across historical contexts.

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Table 1: Descriptive Statistics for the Analytical Sample

	Mean	SD	Min	Max		Mean	SD	Min	Max
Dependent Variables					**Covariates Until 2010/2011**				
GAD (38-39)	0.49	0.66	0	3	Months Incarcerated 1992-2011	2.00	10.59	0	145
CES-D 2019-2021	0.44	0.49	0	3	Weeks Worked 1997-2011	30.94	12.34	0	52.21
Emotions Limit Productivity at 29	1.10	0.37	1	3	General health 1997-2011	2.89	0.63	0.375	4
Emotions and Physical Limit Social at 29	1.38	0.91	1	6	MHI-5 2000-2010	1.91	0.36	1	3.6
Illicit Drug Use (# of Times Used)					Years Married 1997-2011	2.10	3.15	0	14
1998	5.19	42.07	0	500	**Demographics**				
1999	1.57	19.50	0	500	Hispanic (ref. Non-Hispanic)	21.16%	--	0	1
2000	2.44	26.16	0	500	Other Race (ref. White)	14.48%	--	0	1
2001	2.13	21.33	0	500	Black (ref. White)	26.75%	--	0	1
2002	2.31	25.87	0	500	Male	51.19%	--	0	1
2003	2.37	26.08	0	500	Age 97	14.39	1.49	12	18
2004	1.81	21.94	0	500	Sample	1.25	0.43	1	2
2005	1.78	21.30	0	500	**Covariates in 1997**				
2006	1.60	19.94	0	500	Adverse Housing	5.11%	--	0	1
2007	1.86	23.99	0	500	Household Net Worth	93326.74	139717.57	-935251	600000
2008	1.25	18.04	0	500	North Central (Ref = Northeast)	22.82%		0	1
2009	0.98	16.35	0	500	South (Ref = Northeast)	37.39%		0	1
2010	1.45	20.38	0	500	West (Ref = Northeast)	22.15%		0	1
2011	1.34	20.45	0	500	Metropolitan Statistical Area	82.44%	--	0	1
					Urban Region (Ref = Rural)	76.12%	--	0	1
					Parent Incarceration Before 16	6.48%	--	0	1
					Maternal Educational Attainment	12.40	2.91	1	20
					Paternal Educational Attainment	12.38	3.17	1	20
					Parent Health	3.67	1.10	1	4
					Both Parents in Household	48.92%	--	0	1
					Child Care 1st Year	28.02%	--	0	1
N					8,984				

Notes: "GAD" Generalized Anxiety Disorder scale (7-item); "CES-D" Center for Epidemiological Studies Depression Scale (short form); "MHI-5" Five-item Mental Health Inventory.

Example:

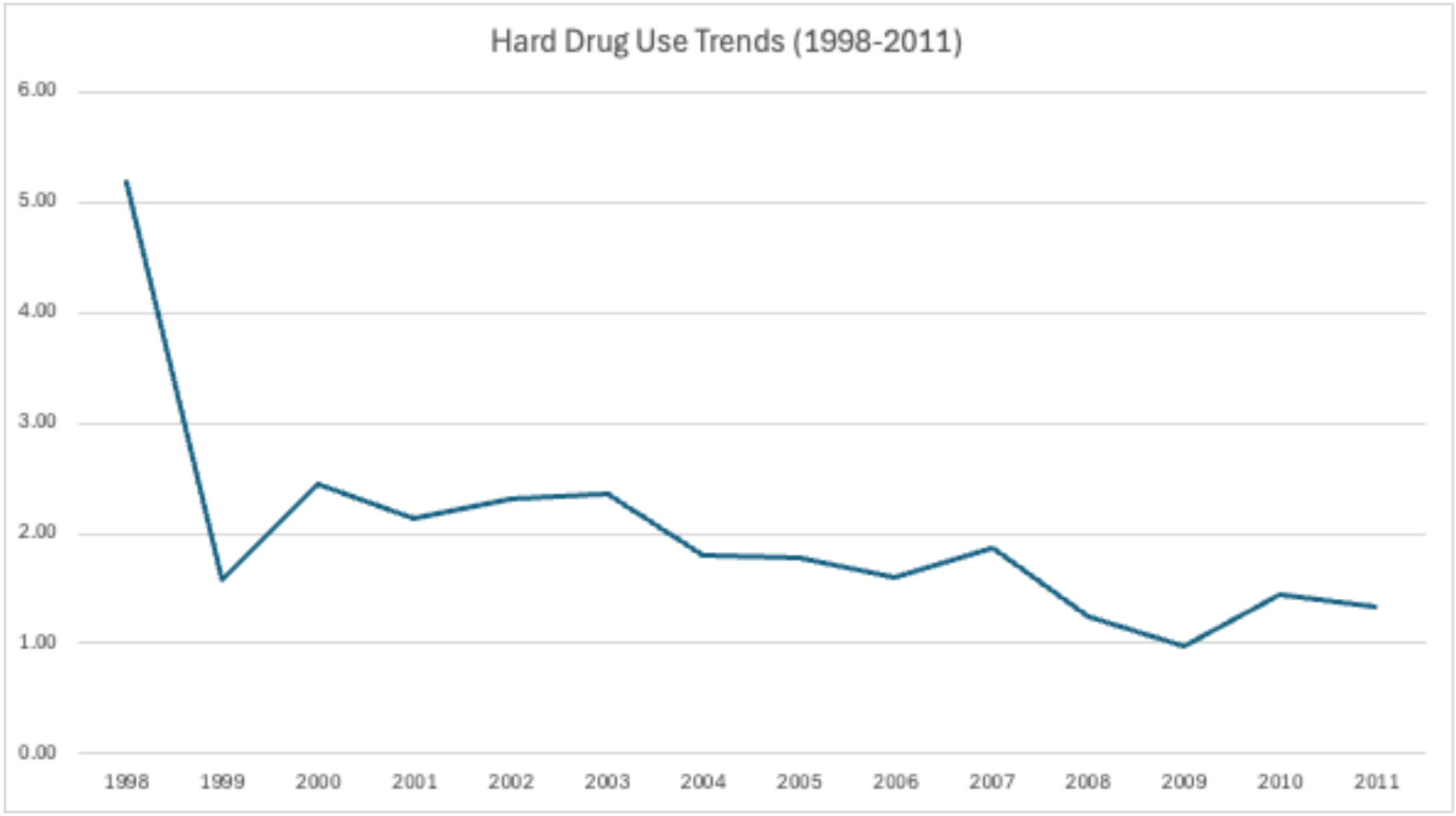

Hard Drug Use Trends (1998-2011)
6.00
5.00
4.00
3.00
2.00
1.00
0.00
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011

Table 2: Latent Class Mixture Model for Subsample of Individuals that Used Illicit Drugs from 1998-2011.

Model Specification	Model AIC	AIC Per-Subject	Group Probabilities (Class Identification)				
			Group 1 (N)	Group 2 (N)	Group 3 (N)	Group 4 (N)	Group 5 (N)
1 Group	318040.03	81.52	1.000 (2,145)	--	--	--	--
2 Groups	315556.09	71.84	0.997 (2008)	0.980 (137)	--	--	--
3 Groups	313998.30	70.08	0.968 (44)	0.996 (1981)	0.970 (120)	--	--
4 Groups	314004.30	70.08	NaN (0)	0.968 (44)	0.995 (1981)	0.9700 (120)	--
5 Groups	314010.30	70.08	NaN (0)	0.968 (44)	0.965 (1971)	0.966(121)	NaN (0)

Notes: Drug use abstainers were manually identified as a unique group of drug users in the population and excluded from the model (N = 6,839).

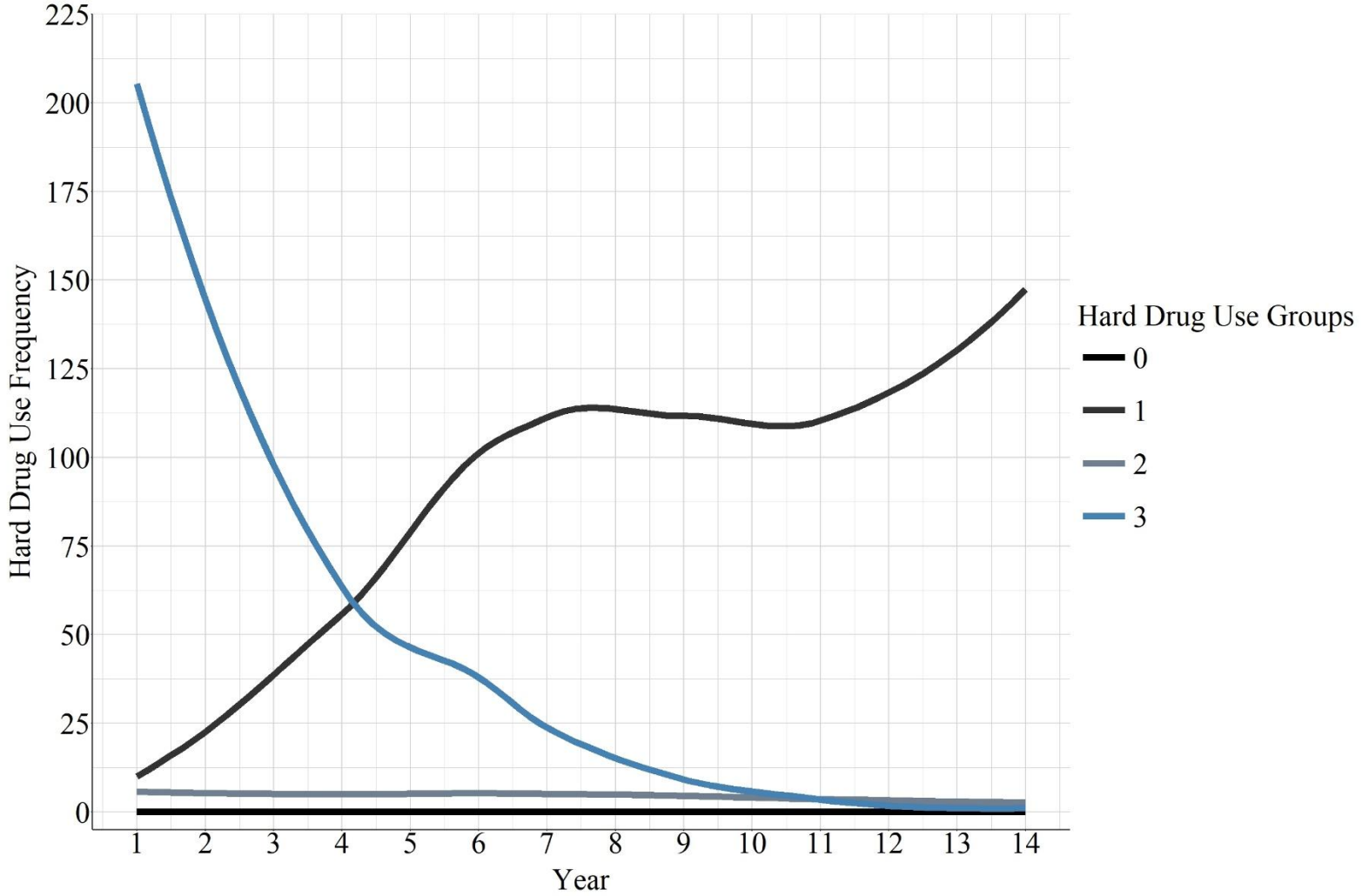


Figure 1: Illicit Drug Use Trajectories from 1998-2011 using the Abstainers (Group 0) and the three-group latent class mixture model.
Notes: Drug use abstainers were manually identified as a unique group of drug users in the population and excluded from the latent class mixture model (N = 6,839). A Loess smoother was used to stabilize the trajectories across the 14 year period.

Table 3: Models Regressing Depression, Anxiety, and Health Limitations on Identified Illicit Drug Use Groups.

	Model 1: GAD (38-39)				Model 2: CES-D 2019-2021				Model 3: Emotions Limit Productivity at 29				Model 4: Emotions and Physical Limit Social at 29			
	b	**L 95% CI**	**U 95% CI**	***p*-value**	**b**	**L 95% CI**	**U 95% CI**	***p*-value**	**IRR**	**L 95% CI**	**U 95% CI**	***p*-value**	**IRR**	**L 95% CI**	**U 95% CI**	***p*-value**
Illicit Drug Use Groups																
Low-High Increase	0.046	0.026	0.066	<0.001	0.052	0.036	0.067	<0.001	1.307	1.265	1.351	<0.001	1.507	1.465	1.549	<0.001
Low Stable	-0.082	-0.110	-0.053	<0.001	-0.027	-0.049	-0.005	0.015	1.028	0.998	1.057	0.064	1.047	1.020	1.074	<0.001
High Decline	0.221	0.196	0.246	<0.001	0.198	0.179	0.217	<0.001	0.963	0.924	1.004	0.076	1.048	1.012	1.086	0.009
Covariates Until 2010/2011																
Months Incarcerated	0.000	-0.001	0.001	0.977	0.002	0.001	0.003	<0.001	0.998	0.997	0.999	0.004	0.996	0.994	0.997	<0.001
Weeks Worked	-0.003	-0.003	-0.002	<0.001	-0.001	-0.001	0.000	0.036	0.997	0.996	0.998	<0.001	0.995	0.994	0.996	<0.001
General health	-0.096	-0.111	-0.080	<0.001	-0.162	-0.174	-0.151	<0.001	0.969	0.948	0.990	0.004	0.917	0.900	0.934	<0.001
MHI-5	0.436	0.410	0.463	<0.001	0.274	0.254	0.295	<0.001	1.199	1.156	1.244	<0.001	1.447	1.403	1.493	<0.001
Years Married	0.000	-0.003	0.003	0.841	-0.004	-0.006	-0.001	0.003	0.994	0.990	0.998	0.005	0.988	0.984	0.992	<0.001
Demographics																
Hispanic	-0.129	-0.159	-0.099	<0.001	-0.051	-0.074	-0.028	<0.001	0.932	0.894	0.972	0.001	0.976	0.941	1.013	0.198
Other Race (ref. White)	0.221	0.191	0.251	<0.001	0.160	0.138	0.183	<0.001	1.225	1.177	1.275	<0.001	1.207	1.165	1.249	<0.001
Black (ref. White)	-0.200	-0.228	-0.172	<0.001	-0.109	-0.130	-0.087	<0.001	1.030	0.991	1.071	0.132	1.049	1.015	1.085	0.005
Male	-0.090	-0.108	-0.072	<0.001	-0.009	-0.023	0.005	0.197	0.988	0.964	1.013	0.352	0.939	0.919	0.960	<0.001
Age 97	0.062	0.056	0.068	<0.001	0.026	0.022	0.031	<0.001	1.059	1.051	1.068	<0.001	1.060	1.052	1.067	<0.001
Sample	0.123	0.097	0.149	<0.001	0.156	0.136	0.176	<0.001	0.998	0.963	1.034	0.907	1.047	1.016	1.080	0.003
Covariates in 1997																
Adverse Housing	0.019	-0.023	0.060	0.379	0.113	0.082	0.145	<0.001	1.001	0.944	1.062	0.962	0.929	0.882	0.979	0.006
Household Net Worth	0.000	0.000	0.000	<0.001	0.000	0.000	0.000	<0.001	1.000	1.000	1.000	<0.001	1.000	1.000	1.000	<0.001
North Central	0.151	0.124	0.178	<0.001	0.092	0.072	0.113	<0.001	0.974	0.938	1.012	0.175	0.998	0.965	1.032	0.898
South	0.195	0.170	0.219	<0.001	0.202	0.183	0.220	<0.001	1.104	1.069	1.142	<0.001	1.169	1.136	1.204	<0.001
West	0.043	0.015	0.070	0.003	-0.036	-0.058	-0.015	0.001	0.998	0.960	1.036	0.899	0.921	0.890	0.953	<0.001
Metropolitan Statistical Area	-0.006	-0.031	0.018	0.609	-0.039	-0.057	-0.020	<0.001	1.051	1.015	1.088	0.005	1.082	1.049	1.116	<0.001
Urban Region	0.024	0.002	0.047	0.034	-0.002	-0.019	0.015	0.822	1.006	0.975	1.038	0.712	1.072	1.042	1.102	<0.001
Parent Incarceration Before 16	-0.156	-0.190	-0.121	<0.001	-0.109	-0.135	-0.083	<0.001	0.928	0.883	0.975	0.003	1.260	1.214	1.308	<0.001
Maternal Educational Attainment	0.019	0.015	0.023	<0.001	0.013	0.010	0.016	<0.001	1.001	0.996	1.007	0.600	1.002	0.998	1.007	0.318
Paternal Educational Attainment	-0.012	-0.016	-0.009	<0.001	-0.014	-0.016	-0.011	<0.001	1.001	0.997	1.006	0.601	0.993	0.989	0.997	0.001
Parent Health	-0.008	-0.016	0.001	0.071	-0.020	-0.027	-0.014	<0.001	1.011	0.999	1.023	0.082	1.005	0.995	1.015	0.339
Both Parents in Household	0.001	-0.018	0.019	0.937	0.078	0.064	0.092	<0.001	1.055	1.028	1.083	<0.001	1.016	0.993	1.039	0.185
Child Care 1st Year	-0.017	-0.036	0.002	0.075	-0.023	-0.038	-0.009	0.001	0.987	0.962	1.013	0.316	0.866	0.846	0.886	<0.001
N	8984				8984				8984				8984			

Notes: Models 1 and 2 are OLS regression models, while models 3 and 4 are Poisson regression models. "GAD" Generalized Anxiety Disorder scale (7-item); " CES-D" Center for Epidemiological Studies Depression Scale (short form).

Appendix Materials

Table of Contents:

Appendix A: Pre-weighting and post-weighting balancing statistics.

Appendix A: Pre-weighting and post-weighting balancing statistics

Table A1: Multi-group pre- ATE-IPW and post ATE-IPW balancing statistics

Group 1	Group 2	Variable	Pre-Weighting				Post-Weighting			
			Mean Group 1	Mean Group 2	Cohen's D	*p*-value	Mean Group 1	Mean Group 2	Cohen's D	*p*-value
Abstainers	Low-High Increase	Months Incarcerated 1992-2011	1.59	5.64	0.38	0.02	1.88	2.15	0.03	0.78
Abstainers	Low-High Increase	Weeks Worked 1997-2011	31.02	24.26	0.55	0.00	30.96	25.36	0.45	0.02
Abstainers	Low-High Increase	General health 1997-2011	2.92	2.56	0.57	0.00	2.89	2.70	0.30	0.08
Abstainers	Low-High Increase	MHI-5 2000-2010	1.88	2.19	0.87	0.00	1.90	2.06	0.43	0.00
Abstainers	Low-High Increase	Years Married 1997-2011	2.20	1.18	0.33	0.00	2.12	0.93	0.38	0.00
Abstainers	Low-High Increase	Hispanic (ref. Non-Hispanic)	0.21	0.16	0.12	0.37	0.21	0.20	0.03	0.88
Abstainers	Low-High Increase	Other Race (ref. White)	0.15	0.14	0.03	0.85	0.15	0.15	0.00	0.98
Abstainers	Low-High Increase	Black (ref. White)	0.31	0.09	0.49	0.00	0.27	0.10	0.38	0.00
Abstainers	Low-High Increase	Male	0.50	0.64	0.28	0.06	0.51	0.60	0.18	0.33
Abstainers	Low-High Increase	Age 1997	14.41	13.66	0.50	0.00	14.39	13.99	0.27	0.21
Abstainers	Low-High Increase	Sample	1.27	1.14	0.31	0.01	1.25	1.16	0.21	0.26
Abstainers	Low-High Increase	Adverse Housing	0.05	0.05	0.02	0.88	0.05	0.03	0.10	0.26
Abstainers	Low-High Increase	Household Net Worth (USD)	90875.26	113153.27	0.16	0.33	93124.24	156638.51	0.46	0.10
Abstainers	Low-High Increase	Northeast	0.18	0.23	0.13	0.74	0.18	0.33	0.39	0.28
Abstainers	Low-High Increase	North Central (Ref = Northeast)	0.23	0.18	0.12	NA	0.23	0.15	0.18	NA
Abstainers	Low-High Increase	South (Ref = Northeast)	0.39	0.41	0.04	NA	0.37	0.36	0.04	NA
Abstainers	Low-High Increase	West (Ref = Northeast)	0.21	0.18	0.06	NA	0.22	0.17	0.13	NA
Abstainers	Low-High Increase	Metropolitan Statistical Area (Ref = No)	0.83	0.77	0.15	0.38	0.83	0.81	0.05	0.82
Abstainers	Low-High Increase	Urban Region (Ref = Rural)	0.76	0.73	0.07	0.67	0.76	0.73	0.06	0.75
Abstainers	Low-High Increase	Parent Incarceration Before 16	0.06	0.11	0.21	0.28	0.06	0.07	0.02	0.91
Abstainers	Low-High Increase	Maternal Educational Attainment	12.33	12.61	0.10	0.38	12.39	13.02	0.22	0.08
Abstainers	Low-High Increase	Paternal Educational Attainment	12.32	12.23	0.03	0.86	12.39	13.26	0.28	0.20
Abstainers	Low-High Increase	Parent Health	3.66	3.68	0.02	0.90	3.67	3.96	0.27	0.15
Abstainers	Low-High Increase	Both Parents in Household	0.50	0.30	0.40	0.00	0.49	0.36	0.27	0.15
Abstainers	Low-High Increase	Child Care 1st Year	0.28	0.34	0.15	0.36	0.28	0.39	0.26	0.22
Abstainers	Low Stable	Months Incarcerated 1992-2011	1.59	3.03	0.14	0.00	1.88	1.89	0.00	0.97
Abstainers	Low Stable	Weeks Worked 1997-2011	31.02	30.86	0.01	0.59	30.96	30.95	0.00	0.99
Abstainers	Low Stable	General health 1997-2011	2.92	2.79	0.20	0.00	2.89	2.87	0.04	0.20
Abstainers	Low Stable	MHI-5 2000-2010	1.88	2.00	0.33	0.00	1.90	1.93	0.06	0.03
Abstainers	Low Stable	Years Married 1997-2011	2.20	1.77	0.14	0.00	2.12	1.99	0.04	0.16
Abstainers	Low Stable	Hispanic (ref. Non-Hispanic)	0.21	0.23	0.04	0.13	0.21	0.21	0.00	0.95
Abstainers	Low Stable	Other Race (ref. White)	0.15	0.14	0.01	0.60	0.15	0.14	0.02	0.59
Abstainers	Low Stable	Black (ref. White)	0.31	0.15	0.37	0.00	0.27	0.24	0.06	0.04
Abstainers	Low Stable	Male	0.50	0.56	0.12	0.00	0.51	0.54	0.06	0.04
Abstainers	Low Stable	Age 1997	14.41	14.34	0.04	0.11	14.39	14.36	0.02	0.40
Abstainers	Low Stable	Sample	1.27	1.19	0.20	0.00	1.25	1.23	0.05	0.12

Abstainers	Low Stable	Adverse Housing	0.05	0.05	0.02	0.52	0.05	0.05	0.01	0.77
Abstainers	Low Stable	Household Net Worth (USD)	90875.26	101475.27	0.08	0.00	93124.24	93476.09	0.00	0.93
Abstainers	Low Stable	Northeast	0.18	0.18	0.01	0.00	0.18	0.17	0.01	0.67
Abstainers	Low Stable	North Central (Ref = Northeast)	0.23	0.22	0.02	NA	0.23	0.23	0.00	NA
Abstainers	Low Stable	South (Ref = Northeast)	0.39	0.33	0.12	NA	0.37	0.36	0.02	NA
Abstainers	Low Stable	West (Ref = Northeast)	0.21	0.27	0.16	NA	0.22	0.23	0.03	NA
Abstainers	Low Stable	Metropolitan Statistical Area (Ref = No)	0.83	0.81	0.04	0.13	0.83	0.81	0.04	0.16
Abstainers	Low Stable	Urban Region (Ref = Rural)	0.76	0.78	0.06	0.02	0.76	0.77	0.03	0.36
Abstainers	Low Stable	Parent Incarceration Before 16	0.06	0.07	0.04	0.10	0.06	0.06	0.00	0.92
Abstainers	Low Stable	Maternal Educational Attainment	12.33	12.68	0.12	0.00	12.39	12.46	0.02	0.39
Abstainers	Low Stable	Paternal Educational Attainment	12.32	12.62	0.09	0.00	12.39	12.46	0.02	0.36
Abstainers	Low Stable	Parent Health	3.66	3.70	0.04	0.14	3.67	3.67	0.01	0.84
Abstainers	Low Stable	Both Parents in Household	0.50	0.48	0.02	0.38	0.49	0.49	0.01	0.62
Abstainers	Low Stable	Child Care 1st Year	0.28	0.29	0.04	0.09	0.28	0.28	0.02	0.54
Abstainers	High Decline	Months Incarcerated 1992-2011	1.59	7.08	0.52	0.00	1.88	1.12	0.07	0.03
Abstainers	High Decline	Weeks Worked 1997-2011	31.02	29.79	0.10	0.29	30.96	31.95	0.08	0.54
Abstainers	High Decline	General health 1997-2011	2.92	2.59	0.52	0.00	2.89	2.80	0.14	0.33
Abstainers	High Decline	MHI-5 2000-2010	1.88	2.05	0.48	0.00	1.90	2.01	0.28	0.11
Abstainers	High Decline	Years Married 1997-2011	2.20	2.17	0.01	0.90	2.12	2.36	0.08	0.67
Abstainers	High Decline	Hispanic (ref. Non-Hispanic)	0.21	0.18	0.06	0.48	0.21	0.17	0.12	0.40
Abstainers	High Decline	Other Race (ref. White)	0.15	0.10	0.13	0.09	0.15	0.05	0.29	0.00
Abstainers	High Decline	Black (ref. White)	0.31	0.12	0.43	0.00	0.27	0.14	0.29	0.06
Abstainers	High Decline	Male	0.50	0.58	0.16	0.09	0.51	0.60	0.19	0.22
Abstainers	High Decline	Age 1997	14.41	14.47	0.04	0.67	14.39	14.48	0.06	0.70
Abstainers	High Decline	Sample	1.27	1.19	0.18	0.03	1.25	1.13	0.28	0.03
Abstainers	High Decline	Adverse Housing	0.05	0.05	0.00	0.99	0.05	0.03	0.08	0.40
Abstainers	High Decline	Household Net Worth (USD)	90875.26	91252.58	0.00	0.98	93124.24	84674.90	0.06	0.59
Abstainers	High Decline	Northeast	0.18	0.18	0.00	0.04	0.18	0.16	0.06	0.52
Abstainers	High Decline	North Central (Ref = Northeast)	0.23	0.21	0.05	NA	0.23	0.15	0.18	NA
Abstainers	High Decline	South (Ref = Northeast)	0.39	0.31	0.16	NA	0.37	0.45	0.15	NA
Abstainers	High Decline	West (Ref = Northeast)	0.21	0.31	0.25	NA	0.22	0.25	0.07	NA
Abstainers	High Decline	Metropolitan Statistical Area (Ref = No)	0.83	0.83	0.01	0.87	0.83	0.87	0.11	0.40
Abstainers	High Decline	Urban Region (Ref = Rural)	0.76	0.78	0.07	0.47	0.76	0.78	0.05	0.75
Abstainers	High Decline	Parent Incarceration Before 16	0.06	0.12	0.22	0.06	0.06	0.09	0.11	0.60
Abstainers	High Decline	Maternal Educational Attainment	12.33	12.33	0.00	0.98	12.39	12.46	0.03	0.85
Abstainers	High Decline	Paternal Educational Attainment	12.32	12.08	0.08	0.39	12.39	12.30	0.03	0.86
Abstainers	High Decline	Parent Health	3.66	3.52	0.13	0.14	3.67	3.66	0.00	0.98
Abstainers	High Decline	Both Parents in Household	0.50	0.29	0.41	0.00	0.49	0.43	0.12	0.45
Abstainers	High Decline	Child Care 1st Year	0.28	0.33	0.11	0.25	0.28	0.29	0.02	0.88
Low-High Increase	Low Stable	Months Incarcerated 1992-2011	5.64	3.03	0.25	0.14	2.15	1.89	0.03	0.79
Low-High Increase	Low Stable	Weeks Worked 1997-2011	24.26	30.86	0.54	0.00	25.36	30.95	0.45	0.02
Low-High Increase	Low Stable	General health 1997-2011	2.56	2.79	0.37	0.02	2.70	2.87	0.26	0.13

Low-High Increase Low Stable	MHI-5 2000-2010	2.19	2.00	0.54	0.00	2.06	1.93	0.37	0.01
Low-High Increase Low Stable	Years Married 1997-2011	1.18	1.77	0.19	0.09	0.93	1.99	0.34	0.00
Low-High Increase Low Stable	Hispanic (ref. Non-Hispanic)	0.16	0.23	0.16	0.24	0.20	0.21	0.03	0.87
Low-High Increase Low Stable	Other Race (ref. White)	0.14	0.14	0.02	0.92	0.15	0.14	0.01	0.96
Low-High Increase Low Stable	Black (ref. White)	0.09	0.15	0.12	0.22	0.10	0.24	0.31	0.01
Low-High Increase Low Stable	Male	0.64	0.56	0.16	0.29	0.60	0.54	0.13	0.50
Low-High Increase Low Stable	Age 1997	13.66	14.34	0.46	0.00	13.99	14.36	0.25	0.25
Low-High Increase Low Stable	Sample	1.14	1.19	0.11	0.36	1.16	1.23	0.16	0.39
Low-High Increase Low Stable	Adverse Housing	0.05	0.05	0.04	0.79	0.03	0.05	0.11	0.24
Low-High Increase Low Stable	Household Net Worth (USD)	113153.27	101475.27	0.08	0.61	156638.51	93476.09	0.45	0.10
Low-High Increase Low Stable	Northeast	0.23	0.18	0.14	0.37	0.33	0.17	0.40	0.24
Low-High Increase Low Stable	North Central (Ref = Northeast)	0.18	0.22	0.10	NA	0.15	0.23	0.18	NA
Low-High Increase Low Stable	South (Ref = Northeast)	0.41	0.33	0.17	NA	0.36	0.36	0.02	NA
Low-High Increase Low Stable	West (Ref = Northeast)	0.18	0.27	0.22	NA	0.17	0.23	0.16	NA
Low-High Increase Low Stable	Metropolitan Statistical Area (Ref = No)	0.77	0.81	0.11	0.53	0.81	0.81	0.00	0.99
Low-High Increase Low Stable	Urban Region (Ref = Rural)	0.73	0.78	0.12	0.44	0.73	0.77	0.09	0.66
Low-High Increase Low Stable	Parent Incarceration Before 16	0.11	0.07	0.17	0.39	0.07	0.06	0.02	0.92
Low-High Increase Low Stable	Maternal Educational Attainment	12.61	12.68	0.02	0.85	13.02	12.46	0.19	0.13
Low-High Increase Low Stable	Paternal Educational Attainment	12.23	12.62	0.12	0.47	13.26	12.46	0.25	0.25
Low-High Increase Low Stable	Parent Health	3.68	3.70	0.02	0.91	3.96	3.67	0.26	0.16
Low-High Increase Low Stable	Both Parents in Household	0.30	0.48	0.38	0.01	0.36	0.49	0.26	0.18
Low-High Increase Low Stable	Child Care 1st Year	0.34	0.29	0.10	0.52	0.39	0.28	0.25	0.26
Low-High Increase High Decline	Months Incarcerated 1992-2011	5.64	7.08	0.14	0.56	2.15	1.12	0.10	0.32
Low-High Increase High Decline	Weeks Worked 1997-2011	24.26	29.79	0.45	0.01	25.36	31.95	0.53	0.02
Low-High Increase High Decline	General health 1997-2011	2.56	2.59	0.04	0.80	2.70	2.80	0.16	0.49
Low-High Increase High Decline	MHI-5 2000-2010	2.19	2.05	0.39	0.04	2.06	2.01	0.15	0.49
Low-High Increase High Decline	Years Married 1997-2011	1.18	2.17	0.31	0.03	0.93	2.36	0.45	0.03
Low-High Increase High Decline	Hispanic (ref. Non-Hispanic)	0.16	0.18	0.06	0.71	0.20	0.17	0.09	0.73
Low-High Increase High Decline	Other Race (ref. White)	0.14	0.10	0.10	0.54	0.15	0.05	0.28	0.18
Low-High Increase High Decline	Black (ref. White)	0.09	0.12	0.06	0.62	0.10	0.14	0.09	0.66
Low-High Increase High Decline	Male	0.64	0.58	0.12	0.48	0.60	0.60	0.00	1.00
Low-High Increase High Decline	Age 1997	13.66	14.47	0.54	0.00	13.99	14.48	0.34	0.21
Low-High Increase High Decline	Sample	1.14	1.19	0.13	0.38	1.16	1.13	0.07	0.75
Low-High Increase High Decline	Adverse Housing	0.05	0.05	0.02	0.90	0.03	0.03	0.02	0.88
Low-High Increase High Decline	Household Net Worth (USD)	113153.27	91252.58	0.16	0.40	156638.51	84674.90	0.52	0.08
Low-High Increase High Decline	Northeast	0.23	0.18	0.14	0.33	0.33	0.16	0.45	0.39
Low-High Increase High Decline	North Central (Ref = Northeast)	0.18	0.21	0.06	NA	0.15	0.15	0.00	NA
Low-High Increase High Decline	South (Ref = Northeast)	0.41	0.31	0.21	NA	0.36	0.45	0.19	NA
Low-High Increase High Decline	West (Ref = Northeast)	0.18	0.31	0.31	NA	0.17	0.25	0.20	NA
Low-High Increase High Decline	Metropolitan Statistical Area (Ref = No)	0.77	0.83	0.16	0.40	0.81	0.87	0.16	0.51
Low-High Increase High Decline	Urban Region (Ref = Rural)	0.73	0.78	0.13	0.47	0.73	0.78	0.11	0.66
Low-High Increase High Decline	Parent Incarceration Before 16	0.11	0.12	0.01	0.96	0.07	0.09	0.09	0.76

Low-High Increase	High Decline	Maternal Educational Attainment	12.61	12.33	0.10	0.51	13.02	12.46	0.19	0.30
Low-High Increase	High Decline	Paternal Educational Attainment	12.23	12.08	0.05	0.81	13.26	12.30	0.30	0.26
Low-High Increase	High Decline	Parent Health	3.68	3.52	0.15	0.41	3.96	3.66	0.27	0.28
Low-High Increase	High Decline	Both Parents in Household	0.30	0.29	0.01	0.96	0.36	0.43	0.15	0.55
Low-High Increase	High Decline	Child Care 1st Year	0.34	0.33	0.04	0.85	0.39	0.29	0.24	0.36
Low Stable	High Decline	Months Incarcerated 1992-2011	3.03	7.08	0.38	0.02	1.89	1.12	0.07	0.04
Low Stable	High Decline	Weeks Worked 1997-2011	30.86	29.79	0.09	0.37	30.95	31.95	0.08	0.54
Low Stable	High Decline	General health 1997-2011	2.79	2.59	0.32	0.00	2.87	2.80	0.11	0.48
Low Stable	High Decline	MHI-5 2000-2010	2.00	2.05	0.15	0.16	1.93	2.01	0.22	0.21
Low Stable	High Decline	Years Married 1997-2011	1.77	2.17	0.13	0.18	1.99	2.36	0.12	0.52
Low Stable	High Decline	Hispanic (ref. Non-Hispanic)	0.23	0.18	0.10	0.26	0.21	0.17	0.12	0.40
Low Stable	High Decline	Other Race (ref. White)	0.14	0.10	0.12	0.14	0.14	0.05	0.27	0.00
Low Stable	High Decline	Black (ref. White)	0.15	0.12	0.06	0.35	0.24	0.14	0.23	0.14
Low Stable	High Decline	Male	0.56	0.58	0.03	0.72	0.54	0.60	0.13	0.40
Low Stable	High Decline	Age 1997	14.34	14.47	0.08	0.41	14.36	14.48	0.09	0.59
Low Stable	High Decline	Sample	1.19	1.19	0.02	0.85	1.23	1.13	0.23	0.08
Low Stable	High Decline	Adverse Housing	0.05	0.05	0.02	0.85	0.05	0.03	0.09	0.36
Low Stable	High Decline	Household Net Worth (USD)	101475.27	91252.58	0.07	0.43	93476.09	84674.90	0.06	0.58
Low Stable	High Decline	Northeast	0.18	0.18	0.00	0.86	0.17	0.16	0.05	0.52
Low Stable	High Decline	North Central (Ref = Northeast)	0.22	0.21	0.04	NA	0.23	0.15	0.18	NA
Low Stable	High Decline	South (Ref = Northeast)	0.33	0.31	0.04	NA	0.36	0.45	0.17	NA
Low Stable	High Decline	West (Ref = Northeast)	0.27	0.31	0.09	NA	0.23	0.25	0.03	NA
Low Stable	High Decline	Metropolitan Statistical Area (Ref = No)	0.81	0.83	0.05	0.56	0.81	0.87	0.15	0.26
Low Stable	High Decline	Urban Region (Ref = Rural)	0.78	0.78	0.01	0.93	0.77	0.78	0.03	0.88
Low Stable	High Decline	Parent Incarceration Before 16	0.07	0.12	0.18	0.14	0.06	0.09	0.11	0.61
Low Stable	High Decline	Maternal Educational Attainment	12.68	12.33	0.12	0.22	12.46	12.46	0.00	0.99
Low Stable	High Decline	Paternal Educational Attainment	12.62	12.08	0.17	0.06	12.46	12.30	0.05	0.75
Low Stable	High Decline	Parent Health	3.70	3.52	0.17	0.06	3.67	3.66	0.01	0.95
Low Stable	High Decline	Both Parents in Household	0.48	0.29	0.39	0.00	0.49	0.43	0.11	0.50
Low Stable	High Decline	Child Care 1st Year	0.29	0.33	0.07	0.49	0.28	0.29	0.01	0.97