

# Why Do Black Youth Use Drugs Less Than White Youth?

Sung Joon Jang and Byron R. Johnson  
Department of Sociology, Baylor University

# Introduction

---

- ▶ **Black-white differences in drug use among adolescents**
  - ▶ Use of licit and illicit drugs: Blacks < Whites
  - Cf. Non-drug delinquency: Blacks > Whites



# Introduction

---

- ▶ **Black-white differences in drug use among adolescents**
  - ▶ Use of licit and illicit drugs: Blacks < Whites  
Cf. Non-drug delinquency: Blacks > Whites
- ▶ **Prior research on adolescent drug use**
  - ▶ Protective factors
    - ▶ e.g., parental attachment, “stakes in conformity,” positive self-concept
  - ▶ Risk factors
    - ▶ e.g., drug-using friends, low self-control, psychological distress



# Introduction

---

- ▶ **Black-white differences in drug use among adolescents**
  - ▶ Use of licit and illicit drugs: Blacks < Whites  
Cf. Non-drug delinquency: Blacks > Whites
- ▶ **Prior research: Explanations**
  - ▶ Protective factors
    - ▶ e.g., parental attachment, “stakes in conformity,” positive self-concept
  - ▶ Risk factors
    - ▶ e.g., drug-using friends, low self-control, psychological distress
- ▶ **Prior research: A key limitation**
  - ▶ Non-developmental
    - ▶ Confined to adolescence without childhood & adulthood included
    - ▶ Relatively short-term effects of religious involvement



# Previous Studies

---

- ▶ Exposure to drug users: Risk factor
  
- ▶ Religion: Protective factor



# Previous Studies

---

- ▶ **Exposure to drug users: Risk factor**
  - ▶ Social learning theory
  - ▶ Drug-using parents & peers
    - ▶ Imitation, pro-drug attitudes, differential reinforcement, peer pressure



# Previous Studies

---

- ▶ Exposure to drug users: Risk factor (**Blacks < Whites**)
  - ▶ Social learning theory
  - ▶ Drug-using parents & peers
    - ▶ Imitation, pro-drug attitudes, differential reinforcement, peer pressure



# Previous Studies

---

- ▶ Exposure to drug users: Risk factor (Blacks < Whites)
  - ▶ Social learning theory
  - ▶ Drug-using parents & peers
    - ▶ Imitation, pro-drug attitudes, differential reinforcement, peer pressure
- ▶ **Religion: Protective factor**
  - ▶ Informal social control, prosocial learning, stress moderator
  - ▶ Religiosity & denominational affiliation
  - ▶ Religious background & upbringing: Understudied





# Previous Studies

---

- ▶ Exposure to drug users: Risk factor (Blacks < Whites)
  - ▶ Social learning theory
  - ▶ Drug-using parents & peers
    - ▶ Imitation, pro-drug attitudes, differential reinforcement, peer pressure
- ▶ Religion: Protective factor (Blacks > Whites)
  - ▶ Informal social control, prosocial learning, stress moderator
  - ▶ Religiosity & denominational affiliation
  - ▶ Religious background & upbringing: Understudied



# Previous Studies

---

- ▶ **Exposure to drug users: Risk factor (Blacks < Whites)**
  - ▶ Social learning theory
  - ▶ Drug-using parents & peers
    - ▶ Imitation, pro-drug attitudes, differential reinforcement, peer pressure
- ▶ **Religion: Protective factor (Blacks > Whites)**
  - ▶ Informal social control, prosocial learning, stress moderator
  - ▶ Religiosity & denominational affiliation
  - ▶ Religious background & upbringing: Understudied
- ▶ **Differential reporting: Methodological artifact**
  - ▶ Black youth more likely to underreport drug use than whites
    - ▶ Unlikely to explain away black-white differences in drug use



# The Present Study

---

- ▶ Hypothesis I
  - ▶ Black youth use licit and illicit drugs less than white youth during adolescence and young adulthood.



# The Present Study

---

- ▶ Hypothesis 1

- ▶ Black youth use licit and illicit drugs less than white youth during adolescence and young adulthood.

- ▶ Hypothesis 2

- ▶ Black-white differences in drug use are explained by the race differences in:

- ▶ religious upbringing & **childhood** exposure to parents drug use

- ▶ **current** religiosity & association with drug-using peers



# The Present Study

---

## ▶ Hypothesis 1

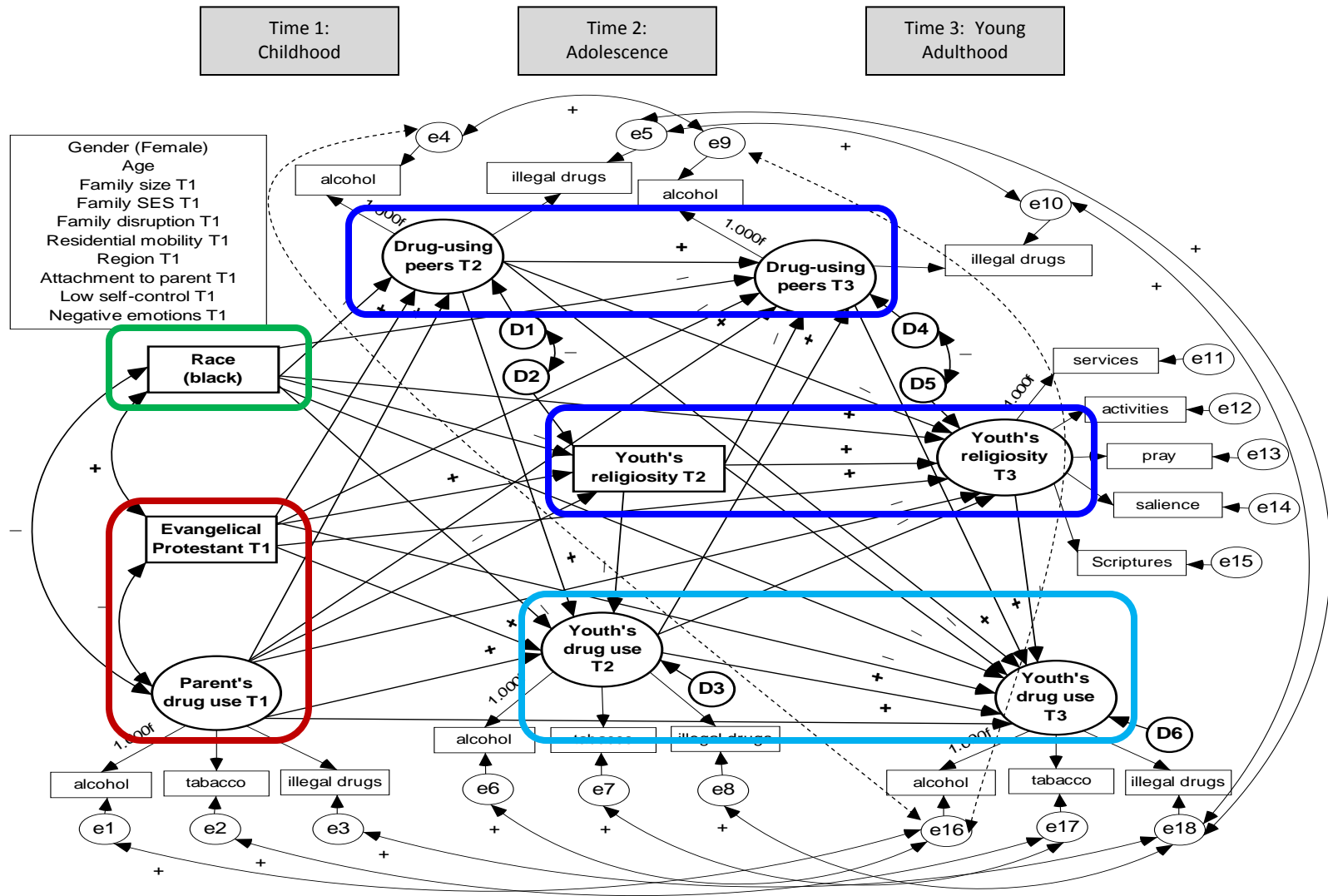
- ▶ Black youth use licit and illicit drugs less than white youth during adolescence and young adulthood.

## ▶ Hypothesis 2

- ▶ Black-white differences in drug use are explained by the race differences in:
  - ▶ religious upbringing & **childhood** exposure to parents drug use
    - **raised in an evangelical Protestant tradition**
    - **parent's smoking, drinking, and/or using illegal drugs**
  - ▶ **current** religiosity & association with drug-using peers
    - **religious involvement**
    - **friends' smoking, drinking, and/or using illegal drugs**



# Figure 1. Theoretical Model of Youth's Drug Use during Adolescence and Young Adulthood



# Data

---

- ▶ National Survey of Children(NSC)
  - ▶ 3-wave panel study of a national sample of children based on multistage, stratified sampling design



# Data

---

- ▶ National Survey of Children(NSC)
  - ▶ 3-wave panel study of a national sample of children based on multistage, stratified sampling design
    - ▶ Waves 1 (1976; ages 7-12), 2 (1981; 11-16), and 3 (1987; 17-22)
    - ▶ The weighted sample ( $n = 1,127$ ) is representative of the U.S. population of **children born between 9/1/64 and 12/31/69** and living in the households in the 48 contiguous states in 1976





# Data

---

- ▶ National Survey of Children(NSC)
  - ▶ 3-wave panel study of a national sample of children based on multistage, stratified sampling design
    - ▶ Waves 1 (1976; ages 7-12), 2 (1981; 11-16), and 3 (1987; 17-22)
    - ▶ The weighted sample ( $n = 1,127$ ) is representative of the U.S. population of **children born between 9/1/64 and 12/31/69** and living in the households in the 48 contiguous states in 1976
- ▶ Measures
  - ▶ Religious upbringing
    - ▶ How important it was to the parent respondent to provide religious training for his/her child aside from attending religious services



# Data

---

- ▶ National Survey of Children(NSC)

- ▶ 3-wave panel study of a national sample of children based on multistage, stratified sampling design
  - ▶ Waves 1 (1976; ages 7-12), 2 (1981; 11-16), and 3 (1987; 17-22)
  - ▶ The weighted sample ( $n = 1,127$ ) is representative of the U.S. population of **children born between 9/1/64 and 12/31/69** and living in the households in the 48 contiguous states in 1976

- ▶ Measures

- ▶ Religious upbringing
  - ▶ How important it was to the parent respondent to provide religious training for his/her child aside from attending religious services
- ▶ Religious affiliation/denominations
  - ▶ Steensland et al.'s (2000) RELTRAD classification scheme
  - ▶ Evangelical Protestant, Mainline Protestant, Catholic, Jewish, Other religion, No religion



# Data (continues)

---

- ▶ Child's religiosity ( $\alpha = .79$  at W3; N.A. for W1 & W2)
  - ▶ Frequency of attendance at religious service (also asked whether the child liked or disliked going to church, Synagogue, or Sunday School)
  - ▶ W3: perceived importance of religion & belief about the Scriptures



# Data (continues)

---

- ▶ Child's religiosity ( $\alpha = .79$  at W3; N.A. for W1 & W2)
  - ▶ Frequency of attendance at religious service (also asked whether the child liked or disliked going to church, Synagogue, or Sunday School)
  - ▶ W3: perceived importance of religion & belief about the Scriptures
- ▶ Parent's drug use ( $\alpha = .60$  at W3)
  - ▶ The child survey: whether parents drank, smoked, and/or used illicit drugs between the child's ages of about 8 and 14



# Data (continues)

---

- ▶ Child's religiosity ( $\alpha = .79$  at W3; N.A. for W1 & W2)
  - ▶ Frequency of attendance at religious service (also asked whether the child liked or disliked going to church, Synagogue, or Sunday School)
  - ▶ W3: perceived importance of religion & belief about the Scriptures
- ▶ Parent's drug use ( $\alpha = .60$  at W3)
  - ▶ The child survey: whether parents drank, smoked, and/or used illicit drugs between the child's ages of about 8 and 14
- ▶ Youth's drug use ( $\alpha = .69$  at W2;  $\alpha = .73$  at W3)
  - ▶ Alcohol, cigarettes, marijuana, cocaine, other non-presc. drugs



# Data (continues)

---

- ▶ Child's religiosity ( $\alpha = .79$  at W3; N.A. for W1 & W2)
  - ▶ Frequency of attendance at religious service (also asked whether the child liked or disliked going to church, Synagogue, or Sunday School)
  - ▶ W3: perceived importance of religion & belief about the Scriptures
- ▶ Parent's drug use ( $\alpha = .60$  at W3)
  - ▶ The child survey: whether parents drank, smoked, and/or used illicit drugs between the child's ages of about 8 and 14
- ▶ Youth's drug use ( $\alpha = .69$  at W2;  $\alpha = .73$  at W3)
  - ▶ Alcohol, cigarettes, marijuana, cocaine, other non-presc. drugs
- ▶ Other protective factors
  - ▶ Attachment to parent, attachment to school, commitment to school



# Data (continues)

---

- ▶ Child's religiosity ( $\alpha = .79$  at W3; N.A. for W1 & W2)
  - ▶ Frequency of attendance at religious service (also asked whether the child liked or disliked going to church, Synagogue, or Sunday School)
  - ▶ W3: perceived importance of religion & belief about the Scriptures
- ▶ Parent's drug use ( $\alpha = .60$  at W3)
  - ▶ The child survey: whether parents drank, smoked, and/or used illicit drugs between the child's ages of about 8 and 14
- ▶ Youth's drug use ( $\alpha = .69$  at W2;  $\alpha = .73$  at W3)
  - ▶ Alcohol, cigarettes, marijuana, cocaine, other non-presc. drugs
- ▶ Other protective factors
  - ▶ Attachment to parent, attachment to school, commitment to school
- ▶ Other risk factors
  - ▶ Low self-control, emotional distress



# Data (continues)

---

- ▶ Child's religiosity ( $\alpha = .79$  at W3; N.A. for W1 & W2)
  - ▶ Frequency of attendance at religious service (also asked whether the child liked or disliked going to church, Synagogue, or Sunday School)
  - ▶ W3: perceived importance of religion & belief about the Scriptures
- ▶ Parent's drug use ( $\alpha = .60$  at W3)
  - ▶ The child survey: whether parents drank, smoked, and/or used illicit drugs between the child's ages of about 8 and 14
- ▶ Youth's drug use ( $\alpha = .69$  at W2;  $\alpha = .73$  at W3)
  - ▶ Alcohol, cigarettes, marijuana, cocaine, other non-presc. drugs
- ▶ Other protective factors
  - ▶ Attachment to parent, attachment to school, commitment to school
- ▶ Other risk factors
  - ▶ Low self-control, emotional distress
- ▶ Sociodemographic controls





# Results: Descriptive Statistics

Table 1. Descriptive Statistics, T-test Results, and Frequency Distribution of Variables (Weighted)

Variable	Mean			Standard Deviation			Minimum	Maximum	n
	Total	Black	White	Total	Black	White			
Race (black)	.152			.359			0	1	1,083
Sex (female)	.489	.491	.488	.500	.501	.500	0	1	1,083
Age T1	9.044	9.104	9.033	1.617	1.570	1.626	6	12	1,083
Family size T1	3.343	4.262	3.178*	1.617	1.947	1.493	1	7	1,083
Family SES T1	.060	-2.038	.436*	2.377	2.326	2.183	-3.30	7.240	1,083
Family SES T2	.047	-1.248	.272*	1.632	1.783	1.494	-6.300	4.460	1,077
Family SES T3	.022	-1.067	.212*	1.666	1.655	1.594	-6.340	4.880	1,029
Family disruption T1	.130	.237	.110*	.336	.427	.313	0	1	1,083
Family disruption T2	.157	.252	.140*	.364	.436	.347	0	1	1,083
Family disruption T3	.161	.301	.136*	.368	.460	.343	0	1	1,083
Residential mobility T1	1.336	1.565	1.295*	1.715	1.760	1.704	0	15	1,083
Residential mobility T2	2.224	2.314	2.208	2.722	2.557	2.752	0	17	1,083
Residential mobility T3	5.094	4.505	5.199+	3.997	3.768	4.029	0	32	1,083
Attachment to parent T1	3.599	3.621	3.596	.762	.791	.757	1	5	1,080
Attachment to parent T2	17.231	17.165	17.242	2.278	2.675	2.205	8	20	1,060
Attachment to parent T3	8.102	7.252	8.254+	2.198	2.651	2.072	1	12	1,083
Low self-control T1	5.826	5.580	5.870	2.348	2.458	2.326	3	18	1,083
Low self-control T2	4.033	4.057	4.029	1.112	1.191	1.099	2	9	1,078
Low self-control T3	7.890	7.610	7.940+	1.937	1.975	1.926	5	15	1,070
Negative emotions T1	-.015	-.165	.012	2.653	2.641	2.656	-5.300	8.210	1,083
Negative emotions T2	3.736	3.855	3.716	1.489	1.587	1.472	1	8	1,059
Negative emotions T3	27.473	28.088	27.200*	8.595	9.683	8.375	16	64	1,070
Parent's drug use T1	.002	-.479	.087*	2.054	1.962	2.059	-4.980	8.610	1,070
Drug-using peers T2	-.025	-.329	.029*	1.615	1.708	1.593	-2.200	2.010	1,070
Drug-using peers T3	-.026	-.247	.014*	1.684	1.864	1.648	-2.770	4.520	1,067
Evangelical Protestant T1	.421	.834	.347*	.494	.374	.476	0	1	1,083
Youth's religiosity T2	12.636	13.041	12.569	5.221	4.796	5.288	1	20	1,047
Youth's religiosity T3	.081	1.836	-.230*	3.673	2.987	3.697	-8.120	8.240	1,070
Youth's drug use T2	-.019	-.643	.087*	2.368	1.977	2.413	-1.960	11.530	1,058
Youth's drug use T3	.007	-1.001	.186*	2.252	2.187	2.217	-3.330	8.320	1,070



## Results: Descriptive Statistics (continues)

Variable	Category	Frequency	Percent	Cumulative Percent
Region of residence T1	Northeast	255	23.5	23.5
	Midwest	349	32.3	55.8
	South	386	35.7	91.4
	West	93	8.6	100.0
		1,083	100.0	
Religion child was raised in T1	Evangelical Protestant	456	42.1	42.1
	Mainline Protestant	248	22.9	65.0
	Catholic	264	24.4	89.5
	Jewish	7	.6	90.1
	Other religion	15	1.4	91.5
	None/No religion	93	8.5	100.0
	1,083	100.0		

Note. Items used to construct variable's measure are mostly not the same across waves, so measures of a same variable cannot be directly compared among the waves in terms of descriptive statistics, such as mean.

\*  $p < .05$  (one-tailed test), +  $p < .05$  (one-tailed test)



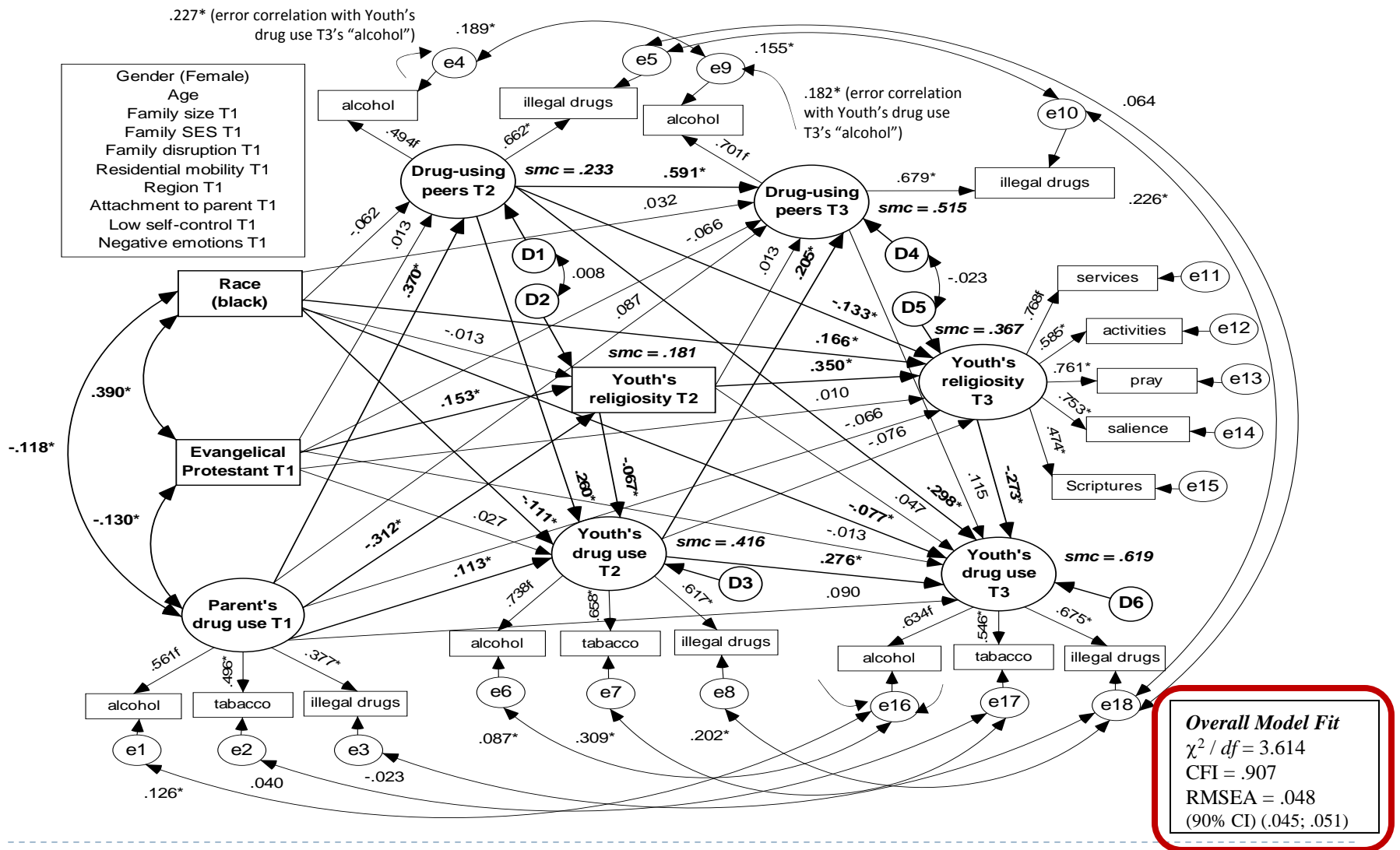
# Results: SEM

Independent Variable	Baseline Model	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)	Full Model
Black ( <i>B</i> )	-.453* (.065)	-.421* (.068)	-.397* (.064)	-.305* (.063)	-.371* (.060)	-.379* (.067)	-.261* (.058)	-.285* (.066)	-.345* (.059)	-.249* (.060)
Female	.222* (.047)	.223* (.047)	.237* (.046)	.121* (.046)	.152* (.044)	.213* (.047)	.076* (.042)	.125* (.046)	.164* (.043)	.093* (.043)
Age	.096* (.015)	.096* (.015)	.087* (.015)	.087* (.014)	.082* (.014)	.087* (.015)	.076* (.013)	.087* (.014)	.076* (.013)	.073* (.013)
Family size T1	.007 (.015)	.005 (.016)	.012 (.015)	.022 (.015)	-.005 (.014)	.010 (.015)	.010 (.014)	.021 (.015)	.000 (.014)	.010 (.014)
Family SES T3	.037* (.015)	.029* (.016)	.036* (.015)	.048* (.015)	.029* (.014)	.028* (.015)	.039* (.013)	.041* (.015)	.028* (.014)	.034* (.014)
Family disruption T3	.077 (.063)	.071 (.064)	.017 (.063)	.047 (.061)	.049 (.058)	.012 (.064)	.028 (.056)	.043 (.061)	.010 (.057)	-.002 (.056)
Residential mobility T3	.024* (.006)	.024* (.006)	.017* (.006)	.017* (.006)	.015* (.006)	.018* (.006)	.011* (.006)	.018* (.006)	.012* (.006)	.010* (.006)
Northeast T1	.243* (.063)	.186* (.069)	.203* (.062)	.078 (.062)	.129* (.059)	.164* (.068)	.006 (.058)	.040 (.067)	.114 (.057)	-.007 (.061)
Midwest T1	.240* (.059)	.206* (.062)	.180* (.058)	.095 (.058)	.167* (.054)	.157* (.061)	.057 (.053)	.074 (.060)	.135 (.053)	.039 (.055)
West T1	.198 (.103)	.159 (.106)	.154 (.101)	.084 (.099)	.158 (.095)	.127 (.104)	.067 (.092)	.059 (.101)	.129 (.092)	.047 (.092)
Attachment to parent T3	-.040* (.012)	-.039* (.012)	-.029* (.011)	-.017 (.011)	-.027* (.011)	-.029* (.012)	-.009 (.010)	-.016 (.011)	-.021* (.010)	-.007 (.010)
Low self-control T3	.096* (.013)	.098* (.013)	.092* (.012)	.078* (.012)	.075* (.012)	.094* (.012)	.063* (.011)	.080* (.012)	.074* (.011)	.064* (.011)
Negative emotions T3	.009* (.002)	.010* (.002)	.007* (.002)	.012* (.002)	.006* (.002)	.008* (.002)	.008* (.002)	.012* (.002)	.005* (.002)	.007* (.002)
Evangelical Protestant T1		-.152 (.059)				-.094 (.058)		-.087 (.056)		-.052 (.051)
Parent's drug use T1			.322* (.071)			.313* (.071)			.197* (.067)	.131* (.067)
Youth's religiosity T3				-.337* (.039)			-.278* (.037)	-.337* (.040)		-.254* (.037)
Drug-using peer association T3					.359* (.048)		.320* (.047)		.331* (.051)	.303* (.049)
<i>n</i> <sup>2</sup>	.246	.252	.406	.451	.472	.410	.547	.454	.408	.560
$\Delta B^a$		-.032	-.056	-.148	-.082	-.074	-.192*	-.168*	-.108	-.204*
( <i>z</i> statistic)		(-.034)	(-.614)	(-1.635)	(-.927)	(-.793)	(-2.204)	(-1.814)	(-1.230)	(-2.306)
% change		7.06%	12.36%	32.67%	18.10%	16.34%	42.38%	37.09%	23.84%	45.03%
Overall model fit										
$\chi^2 / df$	5.702	5.671	5.322	5.090	5.291	5.191	4.746	5.046	5.034	4.508
CFI	.938	.947	.895	.905	.932	.910	.906	.911	.896	.890
RMSEA	.065	.065	.062	.060	.062	.061	.058	.060	.060	.056
(90% CI)	(.055; .075)	(.055; .074)	(.055; .069)	(.055; .066)	(.054; .070)	(.055; .068)	(.053; .063)	(.055; .065)	(.054; .066)	(.052; .060)

<sup>a</sup> Refers to change in the unstandardized coefficient of the race dummy variable (*B*), which measures black-white difference in drug use. Negative value indicates decrease in the coefficient, that is, added variable(s) explaining the race difference. Statistical significance of the change was tested based on *z* statistic (Paternoster et al. 1998).

\* *p* < .05 (one-tailed test), † *p* < .05 (two-tailed test).

Figure 2. Structural Equation Model of Youth's Drug Use during Adolescence and Young Adulthood ( $n = 1,122$ )



# Summary

---

## ▶ Hypothesis I

- ▶ Black youth use licit and illicit drugs less than white youth during adolescence and young adulthood.
- ▶ **Black youth less likely to drink alcohol, smoke cigarettes, and use illegal substances than white youth.**



# Summary & Conclusions

---

## ▶ Hypothesis 1

- ▶ Black youth use licit and illicit drugs less than white youth during adolescence and young adulthood.
- ▶ Black youth less likely to drink alcohol, smoke cigarettes, and use illegal substances than white youth.

## ▶ Hypothesis 2

- ▶ Black-white differences in drug use are explained by the race differences in (a) religious upbringing & childhood exposure to drug-using parents and (b) current religiosity & drug-using peer association.
- ▶ **Black-white differences in drug use during young adulthood were **partly but significantly explained** by the explanatory variables, while the differences during adolescence were **not**.**

