# Protective and Risk Factors for Drug Use among African American Adolescents

*Trenette T. Clark, MSW*
*VCU School of Social Work*

*Faye Z. Belgrave, PhD and Ray Tademy, MS*
*VCU Department of Social Psychology*

*APHA Annual Meeting & Exposition*
*November 7, 2007*

# Prevalence of Cigarette Use Among Youth Ages 12-17

- Prevalence of past 30-day cigarette use was:
  - 18% for American Indian or Alaska Native
  - 14% for White
  - 9% for Hispanic and Latino
  - 6% for Black
  - 3% for Asian Indian

SAMHSA (2006)

# Prevalence of Alcohol Use Among Youth Ages 12-17

- Prevalence of past 30-day alcohol use was:
  - 19% for White
  - 17% for Hispanic and Latino
  - 15% for American Indian or Alaska Native
  - 11% for Black
  - 6% for Asian Indian

SAMHSA (2006)

# Prevalence of Marijuana Use Among Youth Ages 12-17

- Prevalence of past 30-day marijuana use was:
  - 16% for American Indian or Alaska Native
  - 8% for White
  - 7% Hispanic and Latino
  - 7% for Black
  - 1% for Asian Indian

SAMHSA (2006)

# Consequences of Drug Use for Adolescents

- Associated with:
  - Violence and homicide
  - Juvenile delinquency
  - Unprotected sexual activity
  - Adolescent pregnancy
  - School failure
  - Later unemployment
  - Disruption of family life
  - Suicide

# Consequences of Drug Use for African American Adolescents

- Cross-over effect
- Poorer health outcomes
- Increased social problems
- Illicit drug use has contributed to incarceration

# Purpose

- Previous studies have focused almost exclusively on risk factors for substance use within individual (e.g., early drug initiation), peer (e.g., peer drug use), school, and community (e.g., violence) psychosocial domains.

- This exploratory study examined the relative contribution of ethnic identity, spirituality, stress, family communication, peer risky behavior, peer drug use, and neighborhood cohesion on cigarette, alcohol, and marijuana behaviors among African American adolescents.

# Primary Hypothesis

It was expected that individual factors, family factors, peer factors, and neighborhood factors would significantly predict adolescent drug use.

# Procedures

- The sample consisted of 147 youth ages 11-18 (*M* =14.25) considered high-risk, who were recruited to participate in a substance abuse and HIV culturally enriched prevention intervention.
- Participants lived in an urban city and were recruited from community programs, sites, and agencies.
- Data collected prior to intervention exposure was used in this study.

# Sample Characteristics

## Grade Level

| | |
|---|---|
| 6th Grade | 19% |
| 7th – 9th Grade | 47% |
| 10th – 12th Grade | 34% |

## Grades in School

| | |
|---|---|
| Mostly As | 22% |
| Mostly Bs | 35% |
| Mostly Cs | 30% |
| Ds or below | 8.0% |
| Not in School | 1.4% |

# Sample Characteristics

## Head of Household

| | |
|---|---|
| Mother | 74% |
| Father | 17% |
| Grandparents | 13% |
| Other relatives | 8.0% |

## Residence

| | |
|---|---|
| Home or apartment | 85% |
| Living with relatives | 10% |
| Group home | 1.0% |
| Foster home | 4.0% |

# Measures

The majority of the measures came from a comprehensive questionnaire that was used in a national cross-site study funded by the Center for Substance Abuse Prevention (CSAP) for the National Minority Substance Abuse and HIV/AIDS Prevention Initiative.

# Measures

| Scale | Mean | SD | Min. | Max. | Alpha |
|---|---|---|---|---|---|
| • 30 Day Cigarette Use | 1.46 | 1.10 | 1 | 7.0 | N/A |
| • 30 Day Alcohol Use | 1.51 | 1.10 | 1 | 7.0 | N/A |
| • 30 Day Marijuana Use | 1.63 | 1.50 | 1 | 7.0 | N/A |
| • Ethnic Identity | 2.40 | .67 | 1 | 4.0 | .83 |
| • Spirituality | 7.17 | 2.60 | 3 | 13.0 | .72 |
| • Stress | 4.10 | 3.20 | 2 | 10.0 | .98 |
| • Family Comm. | 2.62 | .80 | 1 | 4.0 | .86 |
| • Peer Risky Beh. | 2.49 | .69 | 1 | 4.5 | .78 |
| • Peer Drug Use | 6.44 | 3.20 | 3 | 15.0 | .76 |
| • Neighborhood Cohesion | 2.26 | .88 | 1 | 4.0 | .77 |

# Analyses

- Correlation analyses were conducted to determine relationships between each research variable.

- Hierarchical logistic regression analyses were used to determine significant relationships between predictor and outcome variables.

# Correlations

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 1. 30-Day Cigarette Use | --- | | | | | | | | |
| 2. 30-Day Alcohol Use | .52** | --- | | | | | | | |
| 3. 30-Day Marijuana Use | .46** | .61** | --- | | | | | | |
| 4. Spirituality | -.10 | -.01 | -.00 | --- | | | | | |
| 5. Stress | -.12 | -.14 | -.10 | .03 | --- | | | | |
| 6. Ethnic Identity | -.01 | .10 | .16 | .28* | -.10 | --- | | | |
| 7. Family Communication | -.03 | -.10 | -.14 | -.19* | -.01 | -.27* | --- | | |
| 8. Peer Drug Use | .32** | .45** | .47** | -.06 | -.20* | .07 | -.11 | --- | |
| 9. Close Friends Risky Behavior | .19* | .26** | .39** | .09 | -.05 | .26** | -.24** | .47** | --- |
| 10. Neighborhood Cohesion | .05 | .14 | .09 | .08 | -.03 | .11 | -.27 | .15 | .02 |

- *p<.05, **p<.01

# Results

- The full model for cigarette use was significant ($X^2(147) = 34.03$, $p < .01$).
- Age (OR = 1.44, 95CI (1.05, 1.96)) and peer drug (OR = 1.27, 95 CI (1.07, 1.51)) use were significant predictors of 30-day cigarette use.

# Logistic Regression for Past Month Cigarette Use

| Variable | B | S.E. | OR | Lower CI | Upper CI |
|---|---|---|---|---|---|
| **Age** | **.36** | **.16** | **1.44** | **1.05** | **1.96** |
| Gender | .81 | .57 | 2.25 | .74 | 6.82 |
| Ethnic Identity | -.17 | .41 | .85 | .38 | 1.88 |
| Spirituality | -.15 | .11 | .86 | .70 | 1.06 |
| Stress | -.12 | .11 | .89 | .72 | 1.10 |
| Family Coh. | .05 | .33 | 1.05 | .56 | 2.00 |
| Peer Risky Beh. | .12 | .09 | 1.27 | .49 | 2.58 |
| **Peer Drug Use** | **.24** | **.09** | **1.27** | **1.07** | **1.51** |
| Neighborhood Cohesion | -.17 | .28 | .84 | .48 | 1.46 |

# Results

- The full model for alcohol use was significant ($X^2(147) = 39.36$, $p < .01$).
- Age (OR = 1.35, 95 CI (1.03, 1.78)) and peer drug use (OR = 1.33, 95CI (1.13, 1.57)) were significant predictors of 30-day alcohol use.

# Logistic Regression for Past Month Alcohol Use

| Variable | B | S.E. | OR | Lower CI | Upper CI |
|---|---|---|---|---|---|
| **Age** | **.30** | **.14** | **1.35** | **1.03** | **1.78** |
| Gender | -.81 | .50 | .45 | .17 | 1.19 |
| Ethnic Identity | -.65 | .38 | .52 | .25 | 1.10 |
| Spirituality | .07 | .09 | 1.08 | .90 | 1.28 |
| Stress | -.13 | .09 | .88 | .74 | 1.04 |
| Family Cohesion | .12 | .30 | 1.13 | .62 | 2.05 |
| Peer Risky Behavior | .28 | .38 | 1.32 | .62 | 2.79 |
| **Peer Drug Use** | **.29** | **.08** | **1.33** | **1.13** | **1.57** |
| Neighborhood Coh. | -.21 | .27 | .81 | .48 | 1.38 |

# Results

- The full model for marijuana use was significant ($X^2(147) = 42$, $p < .01$).
- Peer drug use (OR = 1.29, 95 CI (1.07, 1.55)) and peer risky behavior (OR = 2.46, 95 CI (1.06, 5.67)) were significant predictors of 30-day marijuana use.

# Logistic Regression for Past Month Marijuana Use

| Variable | B | S.E. | OR | Lower CI | Upper CI |
|---|---|---|---|---|---|
| • Age | .27 | .16 | 1.31 | .97 | 1.78 |
| • Gender | .34 | .55 | 1.41 | .47 | 4.15 |
| • Ethnic Identity | .26 | .40 | .77 | .35 | 1.70 |
| • Spirituality . | .01 | .11 | .99 | .81 | 1.22 |
| • Stress | .18 | .12 | .84 | .67 | 1.05 |
| • Family Cohesion | .30 | .33 | .74 | .39 | 1.41 |
| • **Peer Risky Behavior** | **.90** | **.43** | **2.46** | **1.06** | **5.66** |
| • **Peer Drug Use** | **.25** | **.09** | **1.29** | **1.07** | **1.55** |
| • Neighborhood Coh. | -.19 | .30 | .82 | .46 | 1.48 |

# Discussion

- Older adolescents and adolescents whose peers engage in drug use were more likely than their counterparts to have smoked cigarettes in the past 30 days.
- Older adolescents and adolescents whose peers engage in drug use were more likely than their counterparts to have consumed alcohol in the past 30 days.
- Adolescents whose peers engage in drug use and risky behavior were more likely than their counterparts to have smoked marijuana in the past 30 days.
- Our findings support peer cluster theory, which posits that peer behaviors are the primary predictors of adolescent drug use. Additionally, peer influence may be especially important to consider among high-risk youth. These findings suggest that further research should be conducted to identify protective factors that reduce drug use risk factor exposure among high risk urban African American adolescents.

# Thank You!

***Trenette T. Clark, MSW***

Virginia Commonwealth University

School of Social Work

1001 West Franklin Street

Box 2027

Richmond, VA 23284-2027

E-mail: clarktt@vcu.edu