

Introduction

The number of juvenile arrests (JA) remains high with 856,130 reported in 2016 (OJJPD, 2018). As such, it is important to identify which factors can increase or decrease the risk for JA, particularly for more vulnerable or mental health (MH) referred youth (Wasserman et al., 2003), as youth incarceration predicted continued life-long difficulties (Health Policy Institute, 1998).

Previous research on JA have identified multiple contributing factors. For example, being male or an ethnic minority or having more externalizing behaviors (e.g., impulsivity) or family risks (Staff et al., 2015) were all related to greater JA (Sickmund et al., 2017). Age also played a critical role for JA. For instance, hyperactivity and peer influences were the strongest risk factors of JA for young teens (12-14 yrs.). In contrast, substance abuse was the strongest risk factor of JA for older teens (18 yrs.), (Farrington et al., 2009), but a weak predictor for young teens (Hawkins et al., 2000). Unfortunately, most of this research studies adolescents (12-19 yrs.) as a homogenous or aggregate group, preventing a better understanding of age effects for JA.

The current study examined the relationship between sociodemographic (e.g., ethnicity), social (e.g., parental influences), environmental (e.g., community engagement), and psychosocial (e.g., substance abuse) issues to reported JA for young (12-14 yrs.), middle-age (15-16 yrs.), and old (17-19 yrs.) adolescents. Based on the literature, we hypothesized that: 1) being male or ethnic minority or having more externalizing MH behaviors or delinquency influences would predict JA for all age groups, 2) more school non-attendance would predict JA for young age, 3) substance abuse would predict JA for middle-age and old age, and 4) higher delinquency risk and violence history would predict JA for old age groups.

Methods

The sample consisted of 347 African, 70 Asian, 966 Latino, and 479 White American clients at first admission for mental health services in California from a single mental health agency network. All sociodemographic, social, environmental, and psychosocial information and JA status for this study were collected at clinical admission. The sociodemographic independent variables were ethnicity, sex, preferred language (e.g., English), and living situation (e.g., temporary). The other independent variables were internalizing and externalizing MH behaviors, substance abuse, delinquency risk (e.g., history) and delinquency influences (e.g., peer), violence resiliency, emotional/behavioral violence risk (e.g., bullying), violence history, family functioning, community engagement, and school non-attendance (CANS, 2008) (Range 0 = Low and 3 = High). The dependent variable was JA (Yes/No) for young (12-14 yrs.), middle-age (15-16 yrs.), and old (17-19 yrs.) adolescents.

Table 1. Percentages, Means, and SDs for Sociodemographic, Social, Environmental, Psychological Issues and JA by Age Group.

Variables	Young (12-14 yrs.)	Middle-Age (15-16 yrs.)	Old (17-19 yrs.)
Sex: Female	47.00%	45.90%	45.00%
Latino	53.40%	51.20%	47.90%
African American	16.40%	20.00%	24.00%
Asian American	4.00%	4.00%	2.10%
White	26.40%	25.10%	27.00%
Living Situation: Temporary	18.10%	21.00%	27.30%
Preferred Language: English	88.00%	91.40%	93.00%
Externalizing MH Behaviors	.94 (.66)	.97 (.65)	.90 (.65)
Internalizing MH Behaviors	.74 (.52)	.80 (.82)	.82 (.58)
Substance Abuse	.27 (.60)	.28 (.52)	.83 (.58)
Delinquency Risk	.12 (.33)	.36 (.66)	.37 (.57)
Delinquency Influences	.14 (.45)	.36 (.66)	.45 (.71)
Violence Resiliency	.25 (.62)	.28 (.63)	.24 (.55)
Emotional Behavioral Violence Risk	.19 (.48)	.22 (.49)	.21 (.46)
Violence History	.12 (.37)	.18 (.45)	.18 (.47)
Family Functioning	1.46 (.83)	1.53 (.84)	1.42 (.85)
Community Engagement	1.16 (1.03)	1.02 (1.01)	1.14 (1.07)
School Non-attendance	.52 (.87)	.94 (1.06)	.94 (1.07)
Juvenile Arrest (JA)	7.20%	23.00%	21.00%

Table 2. Logistic Regression Analyses. Significant Predictors of JA by Age Group.

Variables	Young (12-14 yrs.)		Middle-Age (15-16 yrs.)		Old (17-19 yrs.)	
	B (S.E)	Wald	B (S.E)	Wald	B (S.E)	Wald
Ethnicity	N.S.		N.S.		W > AF	
Living Situation: Temporary	-.54 (.48)	.05	-.84 (.31)	7.37**	-.92 (.48)	3.62
Externalizing MH Behaviors	1.40 (.38)	13.06***	.75 (.23)	10.72**	1.09 (.40)	7.42**
Internalizing MH Behaviors	-.47 (.36)	1.72	-.14 (.22)	.45	-.78 (.37)	4.37*
Substance Abuse	.45 (.24)	3.31	.67 (.14)	21.39***	.65 (.27)	5.68*
Delinquency Risk	2.52 (.51)	24.59***	.96 (.32)	8.71**	.09 (.50)	.03
Emotional Behavioral Violence Risk	-1.40 (.64)	4.76*	-.02 (.49)	.001	.64 (.83)	.61
Community Engagement	-.27 (.20)	1.84	-.33 (.12)	7.61**	-.44 (.21)	4.52*
School Non-attendance	.51 (.17)	9.51**	.16 (.10)	2.29	.13 (.19)	.46

* $p < .05$, ** $p < .01$, *** $p < .001$.

Note: N.S.= Not Significant

Results

Three logistic regressions analyses were completed to determine whether ethnicity, sex, preferred language, living situation, MH risk, substance abuse, delinquency risk and influences, violence resiliency, emotional/behavioral violence risk, violence history, family functioning, community engagement, and school non-attendance were significant predictors of JA for young, middle-age, and old adolescents.

The logistic regression model predicting JA for young adolescents was significant, $\chi^2(17, N = 913) = 199.59, p < .001$, with a Cox & Snell pseudo $R^2 = .20$. Specifically, externalizing MH behaviors (+), delinquency risk (+), emotional behavioral violence risk (-), and school non-attendance (+) were significant predictors of JA.

The logistic regression model predicting JA for middle-age adolescents was significant, $\chi^2(17, N = 681) = 190.70, p < .001$, with a Cox & Snell pseudo $R^2 = .24$. Specifically, temporary living situation (+), externalizing MH behaviors (+), substance abuse (+), delinquency risk (+), and community engagement (-) were significant predictors of JA.

The logistic regression model predicting JA for old adolescents was significant, $\chi^2(17, N = 268) = 92.65, p < .001$, with a Cox & Snell pseudo $R^2 = .29$. Specifically, externalizing MH behaviors (+), internalizing MH behaviors (-), substance abuse (+), and community engagement (-) were significant predictors. Also, White Americans reported more JA than African Americans for only the old group.

Discussion

The results partially supported the hypotheses. Overall, the highest rate of JA was for middle-age, followed by old, and young age reported the lowest rate of JA. The three strongest predictors were history of delinquency, externalizing MH behaviors, and school non-attendance for the young group, substance abuse, externalizing MH behaviors, and delinquency risk for middle-age group, and externalizing MH behaviors, substance abuse, and community engagement for the old group.

While this adolescent sample reported generally low levels of problem behaviors (e.g., externalizing MH behaviors), it is important to note such variables continued to be strong predictors of JA for all three age groups. Also, moderate levels of community engagement was found to have a positive impact in reducing risk for JA. The results suggests ethnicity played a critical role for older adolescents. Overall, these results suggest the need to consider age as a critical factor when developing prevention and intervention strategies in serving adolescent populations who may be a higher risk for JA.