Posters   2007: Alcohol Use Across the Lifespan

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Do socio-religious characteristics account for later alcohol onset?

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Do Socio-Religious Characteristics Account for Later Alcohol Onset?

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Abstract

- **Introduction: Religious affiliation is inversely associated with the development of alcohol symptoms in adolescents (Heath, 1999, 2003); however, this association is not clearly understood. This poster examines offspring alcohol risks arising from parental history of alcohol dependence (AD), and the extent to which religious affiliation vary by ethnic group in their influence of adolescent alcohol outcomes.**

- **Methods: Using the MOAFTS data, we examined adolescent females and their parents. Religious affiliation types were Accommodating, Differentiating, Catholic, or None. Analysis examined offspring AD symptom counts as predicted by parental AD, religious affiliation type, and ethnic group.**

- **Results: Findings indicate that African-American and Caucasian adolescents who are at high risk for AD, but who are raised in a 'Differentiating' religious affiliation exhibit significantly reduced AD symptoms during the adolescence. In addition, African-American adolescents, who more often associate with differentiating churches and reflect further increased protection, demonstrate the lowest AD symptom counts of all groups.**

- **Discussion: Religious differentiation is strongly associated with reduced alcohol risk. It appears that religious groups, when promoting 'higher' religious ideals, protect its members from risky cultural norms. This effect is more evident for African-American adolescents given the differentiating influence of Black churches within this community.**

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Introduction

- **Research has shown that religion has consistently been associated with lower risk of alcohol problems.**

- **One explanation that may account for this effect is that religious groups differ in their acceptance of or differentiation from the values of the larger culture as proposed by Weber (1922), Niebuhr (1929), Johnson (1963), and Stark (1985).**

  - **African Americans historically differentiate themselves from the White dominant culture.**

  - **African-American adolescents have been shown to exhibit higher religiosity and lower alcohol use (Heath et al., 1999).**

  - **Therefore the interaction between ethnicity and religion may be an important factor in understanding alcohol use.**

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Methods

- Sample: **3,481 female twins (aged 13-19) and their parents taken from the first wave of the Missouri Adolescent Female Twins Study (MOAFTS).**

- **Assessment variables:**

  - DV: **Offspring AD symptom count reported in each twin's interview.**

  - IV: **History of paternal AD diagnosis as reported in parental interviews.**

  - Moderator: **Religious affiliation was catagorized into four groups:** Accommodating(A) **(Presbyterian, Methodist, Lutheran, etc.),** Differentiating(D) **(Baptist, Church of Christ, Assemblies of God, etc.),** Roman Catholic(C) **(large size would skew other categories), and** None **(no religious affiliation).**

  - Covariates: **Parental education, family income, age of adolescent.**

  - Religious Values: **Questions taken from Jessor and Jessor (1979) asked the importance of religious behaviors. The four questions asked about the importance of (a) Religious Teachings, (b) Belief in God, (c) Religious Beliefs, and (d) Prayer.**

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Data Analysis

- **Means reflecting ethnic groups within each affiliation type were computed for each risk group as well as the entire sample (see Table 1). Tests of mean group differences were conducted to determine whether there are significant ethnic differences in offspring AD symptoms after accounting for affiliation type.**

- **Linear regressions were conducted examining parental AD history (binary), religious affiliation type (A, D, & C), the interaction between parental alcohol history and religious affiliation type (A, D, & C), and ethnicity as predictors of offspring AD symptom counts. Paternal and maternal education, family income, and offspring age were included as covariates to control for SES and child age variation.**

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Results

Figure 1: Beliefs about the importance of religion (Heath et al., 1999)
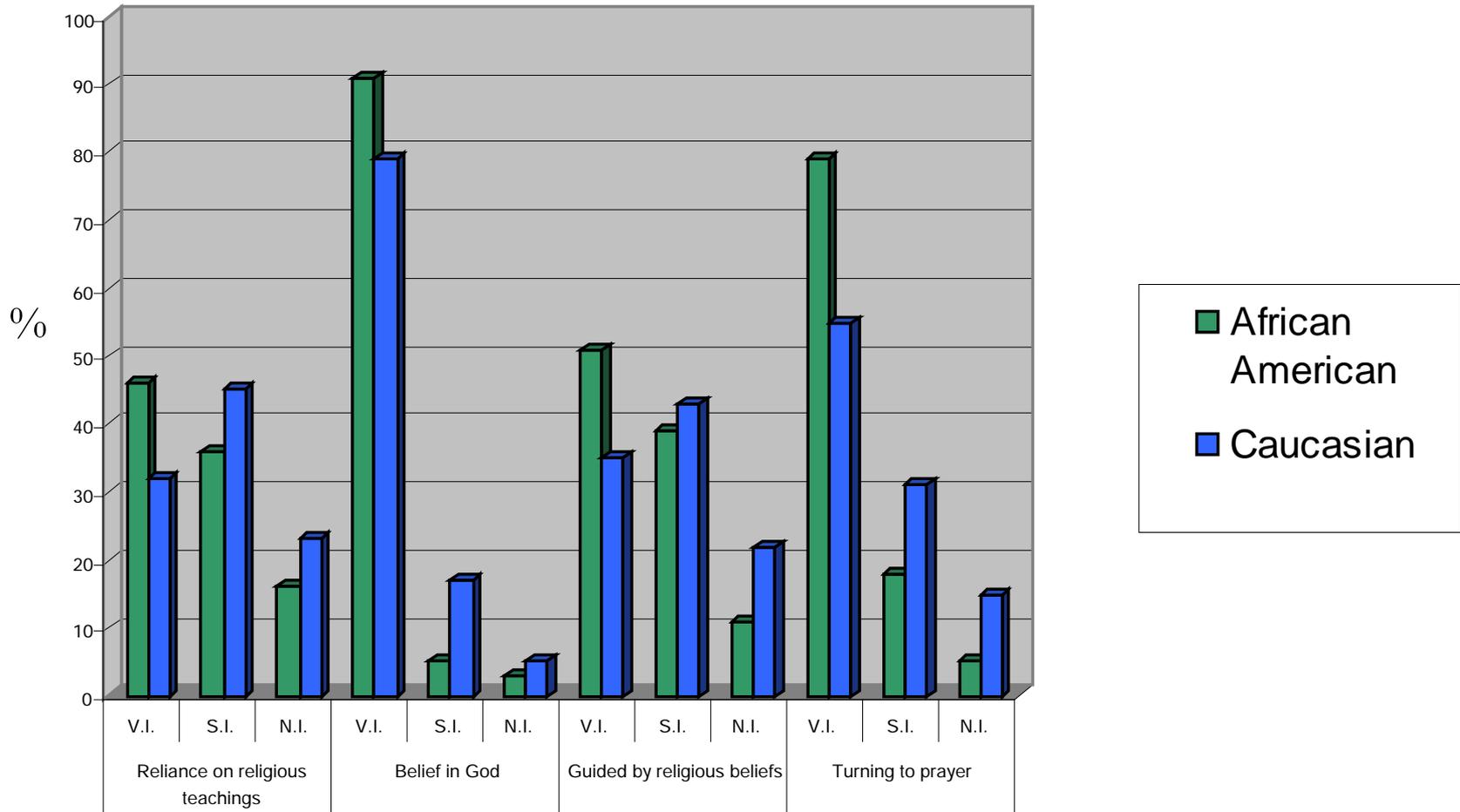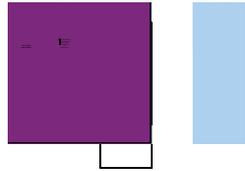

V.I. = Very Important   S.I. = Somewhat Important   N.I. = Not Important

Figure 2: Offspring Mean Symptom Count by Religious Affiliation Type and Parental Alcohol Dependence Status

(low Risk)   (High Risk)   (Very High Risk)

Table 1. Offspring alcohol dependence symptom counts:
number (N), mean (M), standard deviations (sd) by risk (based on parents' alcohol dependence history) and by group (based on race and affiliation type).

	Low Risk Offspring					**High Risk Offspring**					**All Offspring**		
	Gp	**N**	**M**	**sd**		**Gp**	**N**	**M**	**sd**		**Gp**	**N**	**M**	**sd**
1	WD	1052	.24	.78	8	WD	341	.41	1.04	1	WD	1395	.28	.85
2	WC	770	.32	.86	9	WC	199	.31	.82	2	WC	969	.31	.86
3	WA	376	.32	.89	10	WA	96	.94	1.56	3	WA	472	.45	1.09
4	NR	155	.29	.81	11	NR	60	.73	1.73	4	NR	215	.41	1.15
5	BD	265	.09	.42	12	BD	75	.12	.49	5	BD	340	.09	.44
6	BC	19	.21	.54	13	BC	5	.00	.00	6	BC	24	.17	.48
7	BA	32	.09	.53	14	BA	6	.83	1.17	7	BA	38	.21	.70
											Total	3451	.30	.88

WD: White, Differentiating
WC: White, Catholic
WA: White, Accommodating
NR: No Religious Affiliation

BD: Black, Differentiating
BC: Black, Catholic
BA: Black, Accommodating

N = Number of cases in group
M = Mean AD symptoms
sd = standard deviation

Figure 3: Religious Affiliation by Race: Caucasian (White) and African-American (Black).

Summary of Results

- **Frequency distributions for the four religious importance items show that African-American adolescents were more religious than their Caucasian counterparts.**

  - **46% of African-American vs. 31% Caucasian reported that reliance on religious teachings was very important.**

  - **91% of African-American vs. 78% Caucasian reported that belief in God was very important**

  - **51% of African-American vs. 35% Caucasian felt that being guided by religious beliefs was very important.**

  - **77% of African-American vs. 54% Caucasian felt that turning to prayer was very important.**

Summary of Results

- **Differentiating Religious Affiliations:**

    - <u>Low risk</u> **offspring are not significantly different in AD symptoms between the religious types.**

    - <u>High</u> **risk offspring are significantly differentiated by Affiliation Type.**

    - <u>Very high</u> **risk offspring are also significantly differentiated by Affiliation Type.**

        - **Offspring with no religious affiliation exhibit significantly higher rates of AD symptoms compared to all other groups.**

        - **All religious affiliations are significantly protective when compared to those raised without religious affiliation.**

Summary of Results

- **Religious and Ethnic Differences:**

    - **Mean offspring symptom counts were examined for ethnic differences in each affiliation type (and in the entire sample) by family alcoholism risk group (see Table 1).**

    - **Mean patterns point to a differential protective effect that varies by religious affiliation type and by ethnic group (see Figure 3).**

    - **Lower mean offspring AD symptom counts were observed for high risk offspring in two of three religious affiliations (Type D and Type C).**

Summary of Results

- **Consideration of ethnic differences revealed that both Caucasian and African-American ethnic groups displayed very similar patterns of effects for each religious affiliation type as shown by patterns of means (see Table 1, Figure 3).**

- **As well, an expanded linear regression model was constructed to test ethnic group differences in the context of a previous model that included paternal alcoholism, religious affiliation type, their interaction, and now ethnicity, as predictors of offspring AD symptom counts (including covariates). For more details on the original larger model, see Haber (submitted).**

Summary of Results

- **Statistical examination indicated:**

  - **Parental AD was a robust predictor of offspring AD symptoms (t = 3.94, 1 df, p = .000).**

  - **Main effects for religious affiliation types were not significant (p ≥ .27).**

  - **Interaction effects for religious affiliation types were significant for Type D (t = -2.48, 1 df, p = .01) and Type C (t = -3.27, 1 df, p = .000).**

  - **Main effect for ethnicity was robustly significant (t = -3.61, 1 df, p = .000).**

  - **Significant covariates included Family Income (p = .008) and Twin Age (p = .000).**

Discussion

- **Children of alcoholics have significantly increased alcohol dependence symptoms compared to those children without alcoholic parents.**

- **Children of alcoholics who were raised in a Differentiating church or a Catholic church had significantly fewer AD symptoms during adolescence compared to those raised in an Accommodating church.**

- **African-American adolescents raised in Differentiating churches or Catholic churches show a lower AD symptom count than Caucasian adolescents raised in Differentiating churches or Catholic churches, thus confirming the role of religious differentiation for the African-American group.**

- **In addition, African-American adolescents generally exhibit fewer AD symptoms compared to their Caucasian counterparts.**