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4-1-2016

### Church Attendance and Intrinsic Religiosity Predict a Lower Likelihood of Hypertension in 18 to 60 Year Olds


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#### Citation Information

Clements, Andrea D.; and Cyphers, Natalie. 2016. Church Attendance and Intrinsic Religiosity Predict a Lower Likelihood of Hypertension in 18 to 60 Year Olds. Poster Presentation. *37th Annual Meeting of the Society of Behavioral Medicine*, Washington, DC.

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# Church Attendance and Intrinsic Religiosity Predict a Lower Likelihood of Hypertension in 18 to 60 Year Olds

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# Church Attendance and Intrinsic Religiosity Predict a Lower Likelihood of Hypertension in 18 to 60 Year Olds



## Background and Objectives

Religiosity has been shown to predict various health outcomes, with greater religiosity predicting better health and less disease. One common health measure is blood pressure. Consistently elevated blood pressure, or specifically hypertension, is predictive of heart disease and can result in heart attack or stroke.

- Determine whether Intrinsic Religiosity (IR) and Religious Service Attendance (Attendance) predict self-reported hypertension in college students as found in older people
- If such a relationship is found, determine whether IR and Attendance account for variability over and above age, gender, and stress level.



## Method

### Participants and Procedure

A sample of 917 college students participated in an online survey during spring 2013 or fall 2014.

#### Sample Characteristics

Characteristic	Number (%)	Range
Age—Mean (SD) Range	20.81 (4.80)	18 - 60
Stress—Mean (SD) Range	18.23 (6.84)	0 - 38
Gender		
Female	625 (68.2)	
Male	290 (31.8)	
Intrinsic Religiosity		
High (4 or 5)	332 (36.2)	
Low (1 - 3)	585 (63.8)	
Frequency of religious service attendance		
Once/week or more	320 (34.9)	
Less than once/week	597 (65.1)	
Hypertension		
No	860 (93.8)	
Yes	57 (6.2)	

## Measures

### Covariates:

#### Demographic Characteristics

Age (<21; 21-30; 31-40; >40)  
Gender (Female, Male)

#### Perceived Stress Scale (Stress) (Total Score)

### Predictors:

#### Intrinsic Religiosity (IR)

"I try hard to carry my religious beliefs over into all my other dealings in life" (1 - Strongly Agree to 4 -Strongly Disagree)

#### Frequency of Church Attendance (Attendance)

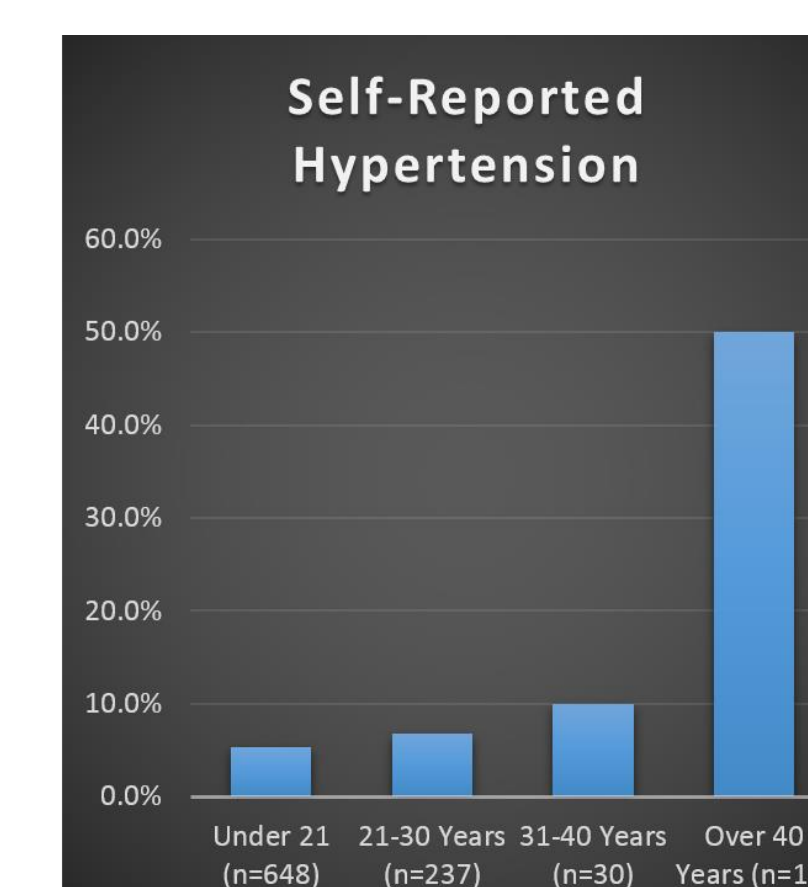
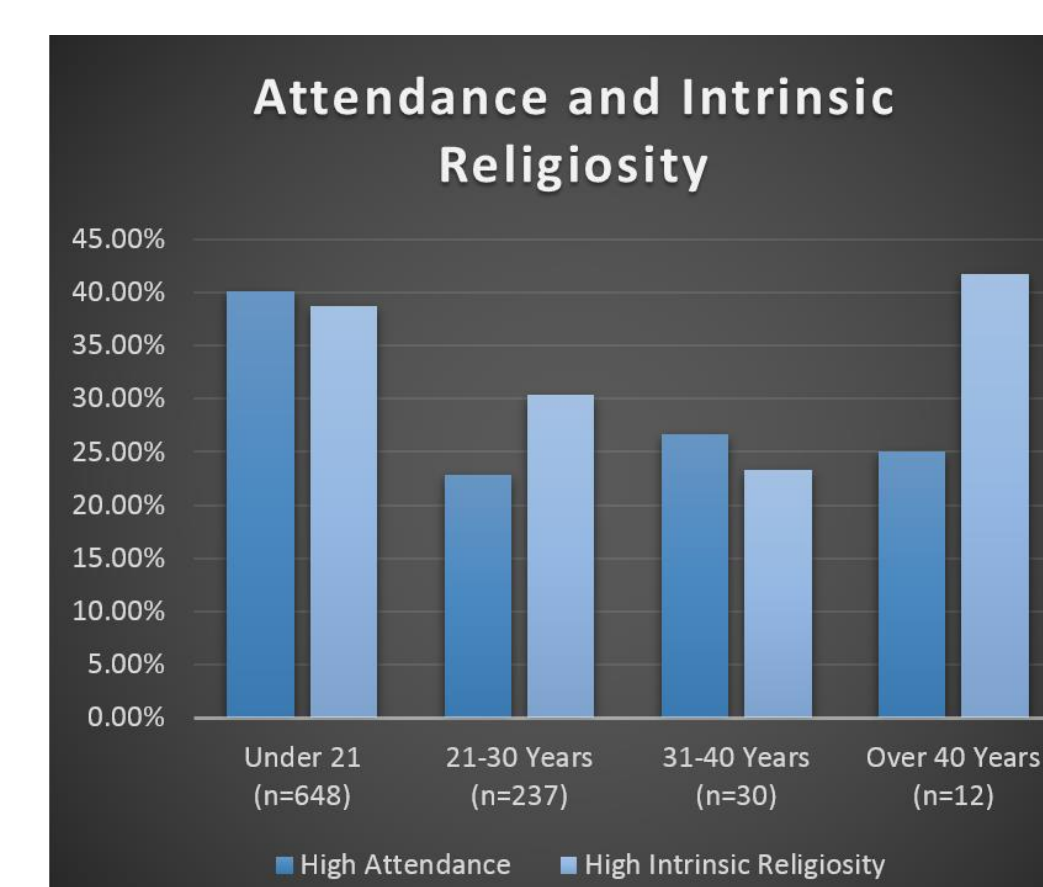
"How often do you go to religious services?" (1 time/week or more vs. Less than once per week)

### Criterion:

#### Self-Reported Hypertension Diagnosis (Hypertension)

"Have you ever been told by a doctor or other health professional that you had hypertension, also called high blood pressure?" (Yes, No)

## Results



- The youngest group attended more often ( $\chi^2 (1, n=921) = 24.14, p < .001$ ), but age group did not predict Intrinsic Religiosity ( $\chi^2 (1, n=921) = 7.64, p = .054$ ).
- Hypertension was predicted by Attendance ( $\chi^2 (1, n=921) = 6.32, p = .021$ ) and Intrinsic Religiosity ( $\chi^2 (1, n=921) = 4.57, p = .033$ ).

#### Logistic Regression Model Estimating Effects of Intrinsic Religiosity on Self-Reported Hypertension (n = 917)

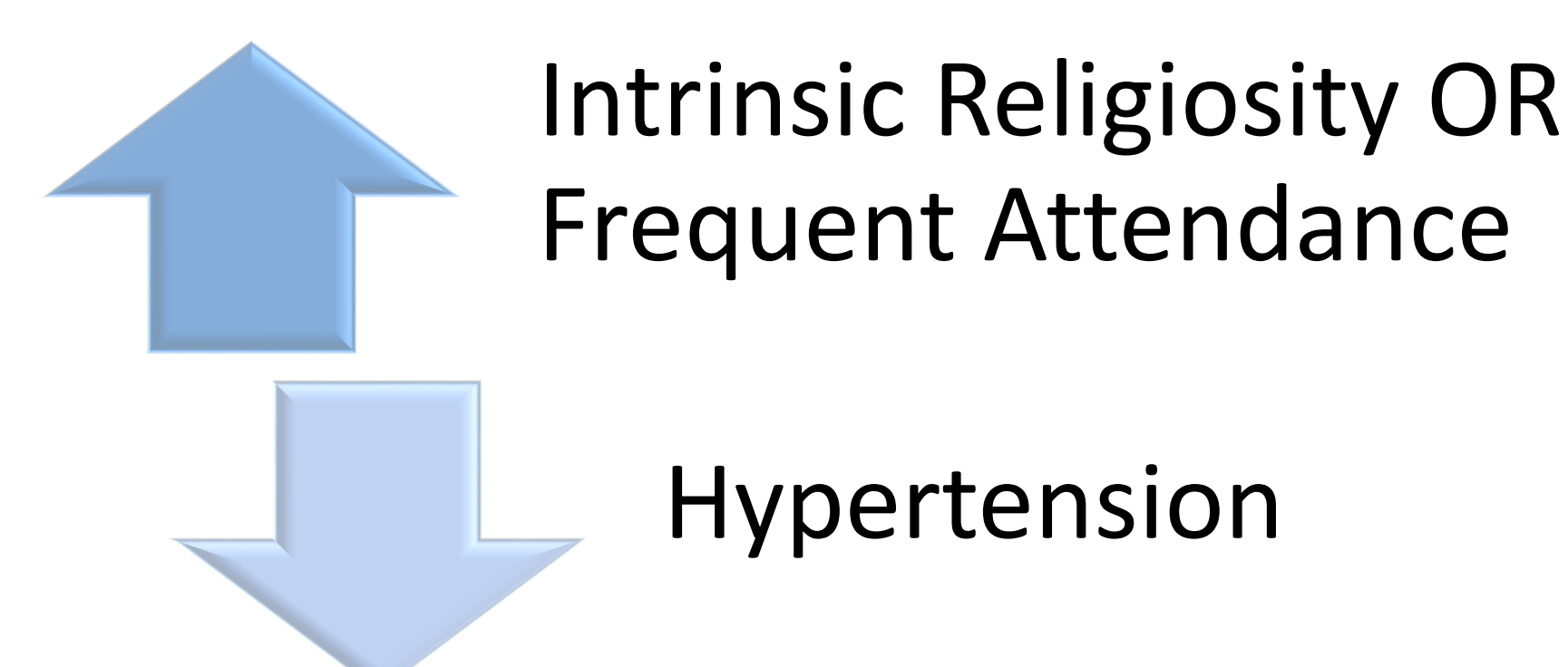
Variable	B	SE	p	OR	95% C.I.
Age					
<20 years (referent)					
21-30 years	0.048	0.33	.883	1.05	0.55-2.00
31-40 years	0.515	0.64	.421	1.67	0.48-5.86
>40 years	3.029	0.63	<.001	20.68	6.08-70.36
Gender	0.148	0.30	.244	1.16	0.64 - 2.09
Stress	-0.019	0.02	.833	0.98	0.94 - 1.02
High Intrinsic Religiosity	-0.750	0.34	.027	0.47	0.23 - 0.92
(Constant)	-2.339	0.47	<.001		
Model $\chi^2 = 25.70, df = 6, p < .001$					

#### Logistic Regression Model Estimating Effects of Religious Service Attendance on Self-Reported Hypertension (n = 917)

Variable	B	SE	p	OR	95% C.I.
Age					
<20 years (referent)					
21-30 years	-0.012	0.33	.971	0.99	0.52-1.89
31-40 years	0.518	0.64	.419	1.68	0.48-5.90
>40 years	2.289	0.62	<.001	17.93	5.32-60.48
Gender	0.189	0.40	.528	1.21	0.67-2.16
Stress	-0.016	0.02	.450	0.98	0.94-1.03
Frequent Attendance	-0.831	0.35	.019	0.22	0.22-0.87
(Constant)	-2.388	0.46	<.001		
Model $\chi^2 = 26.58, df = 6, p < .001$					

## Conclusions

- High intrinsic religiosity predicts a lower incidence of hypertension when controlling for age, gender, and stress.
- Attending church once per week or more predicts a lower incidence of hypertension when controlling for age, gender, and stress.



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Hooker, S. A., Masters, K. S., & Carey, K. B. (2014). Multidimensional assessment of religiousness/spirituality and health behaviors in college students. *International Journal for the Psychology of Religion, 24*(3), 228-240. doi:10.1080/10508619.2013.808870

Mishra, S. K., Togneri, E., Tripathi, B., & Trikamji, B. (2015). Spirituality and religiosity and its role in health and diseases. *Journal of Religion and Health, doi:10.1007/s10943-015-0100-z*