Cigarette smoking is the leading cause of preventable death in the United States. Most smokers begin smoking before age 18, so efforts to disrupt the trajectory from susceptible smoker to established smoker are crucial. Although the etiology of adolescent smoking susceptibility is complex, parental disapproval appears to be an important factor. The family unit is an important influence on young people’s smoking behaviors. This study examined whether parents discussing the harms of tobacco with their children relates to the youth’s susceptibility to smoking. Specifically, we investigated the relationship between parental discussions and susceptibility while statistically controlling for demographic characteristics. We also examined potential mediators and moderators of this relationship.

To examine this relationship, we used a logistic regression model to regress susceptibility to smoking on parental discussions, while statistically controlling for other social influences and attributes about the tobacco companies, using data from the 2008 Mississippi Youth Tobacco Survey (MS YTS). With technical assistance from the CDC, we administered the 2008 Mississippi Youth Tobacco Survey (MS YTS) to a random sample of 3,750 eighth-grade students and 3,751 ninth-grade students across Mississippi during the spring semester of 2008. Youth who had never tried cigarettes and reported that they would definitely not do so were classified as not susceptible, those who had not tried cigarettes but did not report that they would definitely not do so were classified as susceptible.

Adjusted odds ratios indicated that youth who reported that their parents had not discussed the dangers of smoking were 1.481 times more likely to begin smoking as those who parental discussion occurred (p < 0.001). This demonstrated that the risk for smoking persisted, even after controlling for demographic factors. Subsequent analyses revealed that this relationship might be partially mediated by having friends who smoke, but that the role of parental discussion remains significant as young people developed increased knowledge of the harms of tobacco. Given the ease of prevention relative to cessation of smoking, CDC guidelines encourage efforts to reduce susceptibility or to prevent susceptible youth from experimenting with tobacco. Tobacco control efforts should strive to educate parents about the importance of discussing tobacco with their children.

Hypothesis: Based on previous research, we predicted that individuals whose parents discussed the dangers of smoking would be less likely to begin smoking. We expected that parental discussion to continue to be a significant predictor of smoking susceptibility even after controlling for other demographic variables.

Methods
The Mississippi Youth Tobacco Survey (YTS) assesses self-reported tobacco use, exposure to secondhand smoke knowledge and attitudes, and smoking susceptibility factors. The YTS was designed by the CDC to enhance the capabilities of states agencies to design, implement, and evaluate their statewide tobacco control program. Data was collected in the spring semester of 2008 via anonymous self-administered questionnaires. A multi-stage sample design was applied with public middle schools selected with a probability proportional to enrollment size. Classrooms were chosen randomly and all of the students in selected classes were eligible for participation. A weighting factor was applied to each student record to adjust for non-response at the school, class, and student levels. SPSS Complex Samples software was used to calculate standard errors for estimates and 95 percent confidence intervals. Multivariate logistic regression models were specified to examine the relationship of parental discussion with smoking susceptibility while controlling for demographic factors.

Summary
Overall, our results revealed that exposure to parental discussion did decrease youth smoking susceptibility. Initially, we examined the relationship between parental discussion and smoking susceptibility while controlling for grade, gender, and race. Using a series of logistic regressions we examined this relationship and found that individuals who’s parents or guardians discussed the dangers of tobacco use sometimes, often, or very often were 1.48 times less likely to be susceptible to smoking. Using cross tabulations, it was found that 32% of middle school girls were susceptible to smoking as opposed to 25% of middle school boys. Also, it was found that sixth grade students were more likely to experience this protective factor against susceptibility than students in other grades.

Second, we examined the same relationship between media and smoking initiation while controlling for the perceived social value of smoking. The predictive power of parental discussion was only weakened minimally when including these variables concluding that it was still an important risk factor for smoking susceptibility.

Hypothesis 1: In all of our logistic regressions, parental discussion was a significant protective factor against smoking susceptibility for our middle school sample. After examining other significant risk factors including sociodemographic factors, perceived social benefits, and perceived danger of smoking, parental discussion was still a significant predictor of smoking initiation. These results confirm our hypothesis.

Implications
These findings add to the previous literature showing that parental discussion about smoking decreases adolescent smoking susceptibility to begin smoking. These findings suggest that anti-tobacco initiatives should be extended to education of parents about the rewards to discussing the dangers of smoking with their children.

Caveat
A significant drawback of this study is that it is a programmatic survey which seeks to examine smoking from a behavioral perspective and not necessarily a psychological perspective. The data in this study was gathered from a previously administered survey, so we were unable to design our own questionnaires to examine these variables more effectively.

Future Directions
Further exploration of the relationship between smoking susceptibility and parental discussion is needed. In particular, examination of parental education level and smoking habits may potentially add to our knowledge as to what increases the possibility that parents will speak to their children about smoking dangers. This research may add to the anti-smoking initiative to not only target young people, but to encourage parents to be proactive in preventing their child from smoking.

References: