



VCU

Virginia Commonwealth University
VCU Scholars Compass

Theses and Dissertations

Graduate School

2010

A Qualitative Analysis of Messages Conveyed in Parent-Adolescent Communication about Substance Use: Variations Along Dimensions of Maternal and Familial History of Substance Abuse

Nikola Zaharakis
Virginia Commonwealth University

Follow this and additional works at: <https://scholarscompass.vcu.edu/etd>



Part of the [Psychology Commons](#)

© The Author

Downloaded from

<https://scholarscompass.vcu.edu/etd/2309>

This Thesis is brought to you for free and open access by the Graduate School at VCU Scholars Compass. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of VCU Scholars Compass. For more information, please contact libcompass@vcu.edu.

A QUALITATIVE ANALYSIS OF MESSAGES CONVEYED IN
PARENT-ADOLESCENT COMMUNICATION ABOUT SUBSTANCE USE:
VARIATIONS ALONG DIMENSIONS OF MATERNAL AND FAMILIAL HISTORY OF
SUBSTANCE ABUSE

A thesis submitted in partial fulfillment of the requirements for the degree of Master of
Science at Virginia Commonwealth University.

By: NIKOLA ZAHARAKIS
B.A, Macaulay Honors College at CUNY Hunter College, 2001

Director: Wendy Kliewer, Ph.D.
Professor of Psychology
Department of Psychology

Virginia Commonwealth University
Richmond, Virginia
June, 2011

Acknowledgement

I would like to extend thanks to those who have aided me in the achievement of completing this thesis. First, I would like to acknowledge and thank my advisor and committee chair, Dr. Wendy L. Kliewer, for her guidance and mentoring throughout this project, and for her encouragement in exploring my research interests. I would also like to thank my committee members, Drs. Bryce McLeod and Rick Zimmerman, for their suggestions and advice during the completion of this thesis. On a more personal note, I would like to thank my boyfriend for his encouragement, support and patience during the lengthy time spent working on this project and throughout my time in graduate school and to my family for supporting my graduate school goals.

Table of Contents

	Page
Acknowledgement.....	ii
List of Tables.....	vi
Abstract.....	vii
Introduction.....	1
Review of the Literature.....	3
Parent-Adolescent Communication.....	4
Parent-Offspring Communication about ATOD and Linkages to Behavior.....	4
Anti-smoking Socialization Research.....	6
Alcohol-Specific Socialization and Alcohol Use Norms.....	10
Exploring the Content of Communication.....	11
Qualitative Studies of Parent-Offspring Substance Use Communication.....	13
Parent-Child Communication about another Risky Behavior: Adolescent Sexual Activity.....	16
Utilizing a Sexual Communication Framework within ATOD Communication.....	18
Review of Evidence of Communication Variables on Parent-Offspring Communication about Substance Use.....	20
Research on Source Variables Related to Communication about Substance Use.....	21
Research on Contextual Variables Related to Communication about Substance Use.....	24
Summary.....	26
Purpose and Proposal.....	27
Method.....	28

Participants.....	28
Measures.....	30
Procedures.....	31
Data Analysis.....	32
Results.....	35
Qualitative Analysis of Content Themes.....	35
Comparison of Themes across Groups.....	43
Messages Common to All Three Groups.....	43
Messages Specific to Adolescents with a Maternal or Family History of Substance Abuse.....	43
Messages Specific to Adolescents without a Maternal History of Substance Abuse..	45
Messages Specific to One Group	45
Summary.....	45
Discussion.....	46
Comparison with Current Intervention Programs.....	51
Study Limitations.....	53
Implications and Directions for Future Research.....	55
List of References.....	59
Appendices	
A FADS Alcohol Drinking Patterns.....	65
B FADS Drug Use Patterns	67
C FADS Genogram.....	69
D Question about Parent-Offspring ATOD Conversations.....	70

E	Parental Consent to Participate in Project COPE.....	71
Vita.....		75

List of Tables

	Page
Table 1. Table of Sample Characteristics.....	29
Table 2. Table of Themes According to Domain and Group.....	44

Abstract

A QUALITATIVE ANALYSIS OF MESSAGES CONVEYED IN PARENT- ADOLESCENT COMMUNICATION ABOUT SUBSTANCE USE: VARIATIONS ALONG DIMENSIONS OF MATERNAL AND FAMILIAL HISTORY OF SUBSTANCE ABUSE

By Nikola Zaharakis, B.A.

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University.

Virginia Commonwealth University, 2011

Director: Wendy Kliewer, Ph.D., Professor, Psychology Department

Little research has examined the content of parent-adolescent communication about substance use and variables that may influence it. Using a grounded theory approach for secondary data analysis, qualitative data were drawn from a longitudinal study of coping and substance use in a sample of urban African American adolescents ($N=132$; $M= 13.77$ years) and their mothers in Richmond, VA. Transcripts of interviews with participants' mothers regarding their conversations with their adolescent about alcohol, tobacco or other drugs were microanalyzed by two coders in three sets according to the youth participant's maternal and familial history of substance abuse. Findings revealed considerable similarity in themes across groups, particularly in providing information, warning about the harms of use, and offering strategies to resist use. Differences in messages were most obvious in the expectations and attitudes conveyed. Future research should further address variables that

influence message content and make links from these messages to later youth substance use or abstinence.

A qualitative analysis of messages conveyed in parent-adolescent communication about substance use: variations along dimensions of maternal and familial history of substance abuse

Researchers continue to make progress in the adolescent substance use research field. Overall, recent results from the Monitoring the Future study, which began collecting data on adolescent attitudes about and use of drugs in 1975, suggest that adolescent substance use levels are decreasing (National Institutes on Drug Abuse [NIDA], Infofacts, Dec. 2008). While these results are promising, not all the study's findings were as hopeful. One of the particular concerns highlighted by the most recent Monitoring the Future study results includes the fact that marijuana use declines, which had been consistent yearly since the mid-1990's, have leveled off across the 8th, 10th and 12th graders surveyed. Prescription drug use is also alarming, with 15.8% of 12th grade responders in the 2008 survey reporting having used these pills nonmedically in the past year (NIDA, Infofacts, Dec. 2008). Also scary is the finding that perceptions of the harmfulness of marijuana, inhalants and LSD appear to be decreasing, despite actual increases in the harmfulness of these substances.

Research has revealed racial and ethnic differences in adolescent substance use trends. Monitoring the Future data spanning 1976 to 1989 report Native American students engaging in the highest levels of alcohol, tobacco, marijuana and illicit drug use, followed by Whites (Bachman et al. 1991). Asian Americans were among the lowest substance users across all substances, while African Americans scored as low or lower on substance use on all substances except marijuana and alcohol (Bachman et al. 1991). Five years of more recent Monitoring the Future data (1997-2001) confirm that African American adolescents are more likely to abstain from alcohol and other substance use (Wallace, Brown, Bachman, & Laveist,

2003). Interestingly, these racial differences may be mediated by religiosity of the adolescent, with African American adolescents reporting more religiosity than White adolescents. Likewise, recent data from the Seattle Social Development Project indicate that African American youth are less likely to initiate alcohol use than Whites (Williams et al., 2007). However, though African American adolescents use substances at rates comparable to or lower than whites, they suffer from higher substance-related problems (Wallace & Muroff, 2002) and experience worse outcomes. While African American adolescents had the lowest levels of substance use in early adolescence, they had some of the strongest associations with young adult substance use disorders and psychiatric disorders among early users (Gil, Wagner, & Tubman, 2004).

One protective factor that has begun to gain ground in the literature and that has been promoted widely by agencies and interventions involved in adolescent substance use is parent-offspring communication. Generally, research suggests that the more communication about substance use that a parent engages in with her child, the less likely the child is to engage in substance use in adolescence. National agencies invested in the fight against youth substance use, such as the Partnership for a Drug Free America, have created media campaigns to encourage parents to discuss alcohol, tobacco and other drugs with their children. Family-focused interventions often teach parents communication skills and likewise, encourage conversations about substance use. However, there is a dearth of research on the content of such communication or on what variables might influence the content of that communication. The current study is designed to fill that gap in the literature.

Review of the Literature

A number of interventions designed to prevent youth substance use encourage parents to communicate with their children about alcohol and other drug use. One such intervention is Familias Unidas – a family-focused prevention intervention for Hispanic immigrant adolescents (Pantin et al. 2007). As part of the intervention, parents role play discussions about alcohol, tobacco and other drugs (ATOD) with other parents. However, the intervention makes no recommendations for the suggested content of these messages. Another intervention, the Strong African American Families program (Brody et al., 2006), is aimed at reducing youth risk behaviors, largely through encouraging parent-child communication. Unlike Familias Unidas, SAAF does make recommendations to parents for the content of parent-child communication, but these recommendations are not based on prior research.

Likewise, a number of agencies promote conversations between parents and their offspring about alcohol, tobacco and other drug use. The Partnership for a Drug Free America has established a website, entitled “Time to Talk,” as a resource for parents seeking more information about what to say to their children. The site offers strategies and suggestions for the content of ATOD messages, grouped by age range. For example, for preschool-age children, the site recommends discussing vitamins and medication as an entrée into discussions about ATOD later. More frank communication that sets clear expectations for substance use is recommended for talking with middle-school age children, as ATOD is now likely a more salient influence in their daily lives (www.timetotalk.org). For high school age children, the recommendations include encouraging the adolescent to confide in the

parent about any topic, without fear of the parent “freaking out” and to confront the adolescent calmly but seriously if substance use is suspected.

Parent-Adolescent Communication

Research on parent-adolescent communication in general has shown that conversations between the two groups occur infrequently (Noller & Bagi, 1985). Of the communication that does occur, evidence suggests that communication patterns differ between mothers and fathers, with adolescents talking more with and disclosing more to moms than dads (Noller & Bagi, 1985). Mothers communicate with their adolescents on a wider range of subjects than fathers and can more accurately judge their adolescents’ perceptions (Noller & Bagi, 1985). Adolescents’ perceive mothers as more open, understanding, willing to listen and interested in the day-to-day problems adolescents’ face (Youniss & Smollar, 1985). Both mothers and adolescents perceive each other as more open in communication than father-adolescent discourse (Barnes & Olson, 1985), and adolescents report more positive interactions with moms throughout adolescence than with fathers (Noller & Callan, 1990).

Parent-Offspring Communication about ATOD and Linkages to Behavior

Research on parent-adolescent communication about substance use echoes the findings about general communication between the parties. In a 2002 study (N=67) of parent-teen communication about drugs, 67% of the sample reported feeling closest to their mother and 70% preferred talking with their mother about important topics to talking with other family members, such as their father, grandparents, or siblings (Miller-Day, 2002). Less than 60% of the sample reported that their parents had even mentioned ATOD prevention messages to the adolescent, while only about 43% reported a more in-depth discussion on the

topic (Miller-Day, 2002). Thus, as in other topic areas, communication between parents and adolescents about ATOD is infrequent, but occurs most frequently and in more detail with mothers.

Most studies that have examined parent-child communication about substance use have measured the frequency with which such communication occurs. Most of these studies have tried to relate communication about ATOD to adolescent use of and norms about substance use, but findings have been inconsistent. One of the earliest studies that attempted to measure the types of communication that were occurring between parents and adolescents and the impact that this communication had on adolescent initiation of substance use was that conducted by Andrews, Hops, Ary and Tildesley (1993). Data for the study were obtained from the first two waves of an 8-year longitudinal study of family influence on adolescent substance use, with a sample of 763 adolescents, ages 11 to 15 years old, and their families. The sample was purposely selected to disproportionately represent youth at-risk for substance use, sampling higher percentages of youth smokers or youth with parents who were smokers. Six items in a self-report survey completed both by the adolescent and the parent assessed the frequency with which these parents conveyed “cautionary statements” about the use of cigarettes, alcohol and marijuana (defined as telling the child that the substance was harmful and should not be used) and criticized or scolded their child (“negative consequences”) for use of one of the substances. In general, less frequent cautionary statements were associated with a greater likelihood of initiation of cigarette smoking, alcohol use and marijuana use among adolescents at follow-up one year later. In contrast, and contrary to expectation, adolescents who had already begun experimenting with substance use and maintained that use during the one-year study period had parents who

tended to give cautionary statements about use more frequently. The authors posit that perhaps this is a rebellion response by the adolescent (Andrews et al., 1993). The effects of criticism of adolescent substance use were more consistent, but also contrary to expectation. In general, the more criticism the parent offered, the greater the likelihood that the adolescent initiated or maintained use of all substances. Additionally, mother's negative consequences (criticism) predicted initiation and maintenance. Also interesting was the finding that cautionary statements about one substance affected the initiation and maintenance of use of other substances for particular groups. For example, for boys, mother's report of cautionary statements about alcohol was positively related to cigarette initiation. For single-mother households, adolescents maintained alcohol use when mothers more often cautioned about smoking cigarettes (Andrews et al., 1993).

A more recent study by Miller-Day explored links between parent-adolescent communication about ATOD use and adolescent refusal of substance use offers (2002). Her hypothesis that participants (N=67) who had refused drug use offers had also spoken with their parents about ATOD use was almost statistically significant, and would likely be significant with a larger sample. Of the participants who reported accepting drug use offers, 77% had not spoken with a parent about substance use, suggesting that communication may factor into adolescent drug use resistance strategies (Miller-Day, 2002).

Anti-smoking Socialization Research

The largest amount of research in this area has focused specifically on the socialization of using tobacco. Anti-smoking socialization has been defined as "the transmission of knowledge, attitudes, and skills that prepare children to resist smoking" (Henriksen & Jackson, p. 87, 1998). Jackson and Henriksen (1997) measured the frequency

with which 3rd to 5th grade children (N=1352) perceived that their parents offered anti-smoking socialization to them and its' effects on their early onset of smoking. Results showed that children who reported receiving anti-smoking socialization messages in multiple different forms (including rule setting about indoor smoking in the home, parent monitoring of child's smoking involvement and establishing clear expectations for consequences of child cigarette smoking) were at substantially lower risk of early onset of cigarette smoking. In a longitudinal sample with three generations of data (mothers, grandparents, and adolescents; N=182), results similarly showed that greater frequency of communication was significantly associated with a lesser likelihood of adolescent smoking according to child report and marginally related to a decreased likelihood of adolescent smoking according to mothers' report (Chassin, Presson, Todd, Rose & Sherman, 1998). Herbert and Schiaffino conducted a more recent study along a similar research line of anti-smoking socialization (2007). Their study measured adolescents' smoking behavior and their perceptions of their mothers' inquiries about their own and their friends' smoking. Results showed that adolescents' who reported currently smoking perceived their mothers' as making more smoking inquiries into their behavior. Taken together, these inconsistent results seem consistent with the Andrews et al. finding (1993) that parent-adolescent communication about substance use may have differential effects on initiation and maintenance of substance use.

Smoking-specific socialization and communication has also been the focus of a number of studies based on a few large Dutch samples and helps to shed further light on the issue. In two studies published from the data collected by the Family and Health Project (N=428 two-parent homes with 2 adolescent siblings between the ages of 13 and 16 years), cross-sectional analyses revealed that more frequent communication between parents and

adolescents about smoking was related to more adolescent smoking (de Leeuw, Scholte, Harakeh, van Leeuwe & Engels, 2008; Harakeh, Scholte, de Vries, & Engels, 2004). In contrast, higher quality communication about smoking was related to less adolescent smoking in both studies. In the Harakeh et al. (2004) study, longitudinal analysis similarly revealed that quality of communication was related to decreased adolescent smoking one year later, while frequency was related to increased adolescent smoking at follow-up (2004). Both findings however, were only significant for adolescents without a stable best friend (the study focused on the impact of parent anti-smoking socialization in relation to the influence of adolescents' friendships; Harakeh et al., 2004). In a third study that analyzed longitudinal data from this same sample, adolescent smoking was related to increased parent-adolescent communication one year later. However, unlike in the other two earlier studies, frequency of communication was not a significant risk factor for communication, but also did not prevent smoking initiation (Harakeh, Engels, Blockland, Scholte & Vermulst, 2009). The authors argue that this may provide evidence that parents increase communication about smoking in response to finding out or suspecting that their child is smoking cigarettes. Thus, the timing of communication may be an important variable to explore.

In still another Dutch study that sampled the control subjects from a prevention program aimed specifically at smoking, the European Smoking prevention Framework Approach (EFSA) project (N=1721 students, with a mean age of 12.83 years), results revealed that adolescents who smoked more at baseline had parents that communicated with them more about smoking at follow-up one year later (Huver, Engels, Vermulst, & de Vries, 2007). Similar patterns were found between the 1-year and 2-year follow-up periods.

Communication was a relatively stable factor overall compared with the household rules factor, but was not predictive of adolescent smoking at either follow-up (Huver et al., 2007).

Additional work on the data from the Family and Health Project revealed a more complicated picture, exploring attitudes and cognitions as pathways between anti-smoking socialization and adolescent smoking behavior. In yet another study of this data, higher quality communication about smoking between parents and adolescents was associated with lower pro-smoking attitudes, higher self-efficacy, and lower parental approval (Otten, Harakeh, Vermulst, Van den Eijnden, & Engels, 2007). However, increased frequency of communication was related to higher pro-smoking attitudes, lower self-efficacy not to smoke and higher perceived parental approval of smoking. The authors argue that this is further points to the idea that parents increase communication about smoking after learning that their child is smoking or suspecting the same, and that future research should focus on the content of communication and its impact on adolescent substance use (Otten et al., 2007).

Another Dutch sample, the Study of Medical Information and Lifestyles in Eindhoven (SMILE; N= 482 adolescents aged 12 to 19 years), concluded similarly that communication about smoking between parents and adolescents was effective in decreasing pro-smoking attitudes, but did not directly impact adolescent use of tobacco (Huver, Engels, Vermulst, & de Vries, 2007). A smaller Dutch sample that included 116 two-parent families with one adolescent between 10 to 19 years of age looked at the relation between communication about smoking, parental warnings about smoking and house rules about tobacco use to adolescent self-efficacy to smoke, and attitudes about smoking (Engels & Willemsen, 2004). Results showed that frequency of communication was negatively associated with self-efficacy (according to both mother and fathers' report). House rules and

warnings about smoking were associated with smoking attitudes (according to both mothers' and fathers' reports). However, house rules, warnings, and communication about smoking were not related to intentions to smoke. Interestingly, adolescents were less likely to smoke when their mother and father reported that they would discuss the adolescent's smoking behavior with them if they discovered the adolescent smoking and when parents were confident that they could influence their child's smoking behavior (Engels & Willemsen, 2004).

Alcohol-Specific Socialization and Alcohol Use Norms

Other research has focused particularly on parental alcohol-specific socialization and on their influence in the development of their offspring's alcohol use norms. Brody, Flor, Hollett-Wright and McCoy (1998) measured the frequency and openness of parent-child discussions about alcohol use and its' impact on a child's alcohol use norms in a sample of Caucasian married families with a 10- to 12-year-old child (N=171 families). During home visits, computer-assisted self-report questionnaires were administered to both the child and the parent separately. Two questions assessed the child's perceptions of the frequency and bidirectionality of parent-child conversations about alcohol use. Both the parent and child reported separately on 14 items pertaining to their alcohol use norms. Results indicated that frequent parent-child discussions that were more open in nature were correlated with more abstinence-based and less liberal norms on the part of the child. Assuming a child's alcohol use norms correlate with the likelihood of his or her actual alcohol use, the Brody et al. (1998) findings are similar to the Henriksen and Jackson (1997) in associating frequent parent-child communication about the substance with less probability of use. In a study drawing from the Family and Health Project reviewed earlier in this proposal, more frequent

communication about alcohol was related to more alcohol consumption by adolescents (van der Vorst, Engels, Meeus, Dekovic, & Van Leeuwe, 2005). However, these are based on correlational data from the first wave of the project, and further data have not yet been published.

Exploring the Content of Communication

A smaller number of studies have tried to explore parent-adolescent communication about substance use in more depth, exploring the content of such messages and collecting data from both parents and adolescents. One fairly recent study has tried to get closer to understanding the content of parent-offspring communication about tobacco and alcohol use and the impact of that communication on youth use of those substances. Sampling the control participants from a national family-based intervention program to prevent adolescent tobacco and alcohol use, Ennett, Bauman, Foshee, Pemberton and Hicks (2001) measured the frequency of communication about these 2 substances in each of 8 domains, using telephone interviews. Parent-adolescent pairs (N=537) were interviewed by telephone when the adolescent was between 12 and 14 years old. The adolescent was again interviewed by telephone one year later. Based on the intervention program from which the sample came, items about parent-child communication targeted the specific content areas encouraged in the intervention, assessing the frequency that parents reported using each strategy in the last six months when discussing alcohol and tobacco use, separately, with their child. Results indicated that parents discussed the negative consequences of use, strategies for resisting peer pressure to use, encouragement of non-use and rules about use most frequently of the content areas (Ennett et al., 2001). Factor analysis revealed that messages fell into three major categories: Rules, Consequences and Media.

Despite the variability discovered in the content of communication in the Ennett et al. sample, communication about any of the content areas was not related to initiation of adolescent smoking or drinking (2001). In contrast to expectation, more communication about rules and reprisals for use was marginally positively related to escalation of adolescent substance use (Ennett et al., 2001). In another Dutch study that also drew on the sample of control participants from the European Smoking prevention Framework Approach (EFSA) project, content areas of parent-adolescent communication about smoking were differentially related to adolescent smoking (Huver, Engels, & de Vries, 2006; N=2312 students, with a mean age of 13.22 years). In this sample, communication about the health risks of smoking and of breathing in smoke, and about the addictive qualities of smoking were related to less adolescent smoking. However, communication about price of cigarettes, about being allowed to smoke and the frequency of anti-smoking communication were positively related to increased chances of lifetime smoking (Huver et al., 2006). The frequency of communication in this sample was fairly stable over a 3 year follow-up period, while the number of topics discussed about smoking increased.

These two studies are the only two that have quantitatively linked different content areas of substance use socialization to adolescent substance use. The larger group of studies reviewed above provide some of the little evidence we currently have on research on the topic of parent-child communication about substance use. Most of what has been researched so far focuses on the frequency of conversations related to the adolescent's use of substances (Andrews et al., 1993; Brody et al., 1998; de Leuw et al., 2008; Ennett et al., 2001; Harakeh et al., 2004; Harakeh et al., 2009; Herbert & Schiaffino, 2007; Huver et al., 2006; Huver et al., 2007; Jackson & Henriksen, 1997; Otten et al., 2007). Few have looked at more "hard

core” drugs; rather they have largely focused on tobacco, and with some research on alcohol and marijuana. Additionally, all of the above studies measured communication quantitatively, often using brief measures to capture this data.

Qualitative Studies of Parent-Offspring Substance Use Communication

A qualitatively different study is that of Miller-Day and Dodd (2004). This study measured communication about ATOD between parents and college freshman in a qualitative approach, using narrative theory. Parent-offspring dyads (N=75) were asked separately to recount a conversation they had previously had with the other about drug prevention, getting as close to the actual transcript of the conversation as possible from memory. The conversations were coded for themes of content, form, and function of parent-offspring communication about ATOD. This is the only study to date that has built a qualitative framework of the content of messages parents relate to their offspring about alcohol, tobacco and other drugs, despite calls for it from the field (Miller-Day, 2002). Themes of parental messages about substance use seemed to fall into three major categories: “Framing drugs and drug use as a problem, substantiating claims with evidence, and providing proscriptive and prescriptive information” (Miller-Day & Dodd, 2004, pg. 76). Interestingly, the two most frequently coded themes were personal examples of substance use (56%) and warnings (44%) about substance use.

Miller-Day followed up this work with two further studies (2008). In the first, she surveyed a sample of 421 first-year college students about the strategies they recalled their parents using to deter them from ATOD use. Participants were specifically asked to “list and then describe” the ways in which their parents expressed their expectations regarding ATOD to the participants and to state the specific substance that was discussed. Results revealed that

parents spoke with their adolescents most often about alcohol, reported as the topic of interest 83% of the time, with tobacco cited at 76%, and marijuana 57% of the time. Coding of the participants' responses suggested seven strategies used by parents to deter offspring from ATOD use. The most frequently cited was "Use your judgment," reported by 79.3% of participants, followed by "Provided information" coded in 42.5% of the responses (Miller-Day, 2008). "Threat of punishment" (18.1%) and "Rewarded for nonuse" (7.8%) were the least frequently cited strategies. Almost nine percent (8.8%) of participants reported that their parents had not addressed the issue of ATOD use with them.

Miller-Day used the results of this first study to create survey items for a second study (2008). A majority female sample of 424 first-year college students were asked to rate how much they agreed with statements pertaining to their parents use of the strategies identified in the first study, in interactions with them. Participants were also asked about the family communication environment and about their personal drug use. Similarly to the first study, 78.6% endorsed their parents conveying a "Use your judgment" strategy, and 50% cited that their parents provided them with information about the risks of substance use (Miller-Day, 2008). Again, approximately 9% of participants reported not having been spoken to about ATOD use. However, zero-order correlation coefficients revealed that few of these strategies were significantly associated with ATOD use. A "No tolerance rule" was the only strategy significantly and inversely correlated to alcohol, tobacco and marijuana use in the past month (Miller-Day, 2008). Interestingly, "Threatened punishment for use" was positively, though weakly correlated, with alcohol and tobacco use in the past month. This initial research combined with the results of Ennett et al.'s work and Huver et al.'s work

suggests that the content of the messages parents relay may have different effects on adolescent substance use.

Another recent research study took a more qualitative approach, gathering data from focus groups of Latino mothers and adolescents on their thoughts about smoking communication between parents and offspring (Guilamo-Ramos, Bouris, Dittus and Jaccard, 2008). Mother-adolescent dyads (N=40) were recruited by telephone invitation from the roster of a Bronx, NY middle school, with adolescents aged 11 to 14 years. Twelve focus groups were conducted, each with an average of seven participants, separately for mothers and children. Facilitators posed questions to the group from an interview guide of 8 questions, pertaining to the content and influences on anti-smoking socialization. Results supported the findings of previous research, with the major messages identified including a discussion of smoking's health consequences, social and peer influences on smoking and the impact of smoking on future opportunities. However, unlike previous research, this study measured parents' and adolescents' beliefs about what the most important topics are when discussing smoking, not what they may or may not have actually spoken about with the other. These focus groups and the quantitative studies reviewed earlier suggest that characteristics of the parent likely influence the content of parent-adolescent communication about substance use. Further exploration of the influence of parent characteristics on substance use communication can inform prevention programs that encourage parents to communicate with their children.

Parent-Child Communication about another Risky Behavior: Adolescent Sexual Activity

Substance use is a risky behavior that many parents feel obligated to discuss with their adolescent children, but it is a complicated, taboo topic. Another similarly taboo behavior that parents aim to discuss with their adolescents is sexual behavior. Recent data from the Youth Risk Behavior Survey, which collects data nationally bi-annually among 9th through 12th graders, report that 47.8% of high school students have ever had sexual intercourse (Centers for Disease Control [CDC], YRBS, 2007). Even more troubling is the finding that only 61.5% of the 35% of youth who report being sexually active in the last 3 months used a condom at their last sexual intercourse. Parent-offspring communication about adolescent sexual behavior has received far more press in the literature than communication about substance use. However, like the limited research on substance use, research on the impact of communication on sexual behavior has provided inconsistent findings so far.

Similar to findings on substance use communication, research has shown that communication about sex and sexuality between parents and adolescents is scarce (Sprecher, Harris, & Meyers, 2008), even though it is promoted by intervention programs designed to reduce adolescent risky sexual behaviors, as in the Parents Matter! intervention (Miller et al., 2009). Also like previous work on substance use communication, most of the literature about sex communication has focused on frequency. Those studies that have focused on content have found a wide array of messages being conveyed between parents and adolescents (Epstein & Ward, 2008; DiIorio, Kelley, & Hockenberry-Eaton, 1999). One recent study found that the most frequently discussed topics between parents and their adolescents about sex were messages about abstaining until marriage or messages that were pro-contraception

(Epstein & Ward, 2008). Researchers in another study concluded that most of the messages being sent to adolescents surrounded the negative outcomes of sexual intercourse and sexuality (DiIorio et al., 1999).

A larger proportion of studies within the sex communication literature than the drug communication literature have examined factors related to the likelihood of communication about sex. In one study, a higher likelihood of having a conversation about sex was related to higher self-reported maternal self-efficacy to talk about the subject as well as more positive outcome expectancies of the conversation (DiIorio et al., 2000). Also related to the likelihood of having talked about sex were the importance of mother's religious beliefs and age and sex of the adolescent. Other work has revealed that mothers' reservations about sex communication include concerns about being embarrassed or embarrassing the adolescent and fears of not being able to answer the adolescent's questions about sex (Jaccard, Dodge, & Dittus, 2002). Similarly, another study found that mothers were more likely to discuss sex with their adolescent when they felt more knowledgeable and comfortable with the subject, felt that they wouldn't be embarrassed and felt that it would be helpful to the child (Guilamo-Ramos et al., 2008). In a study that focused on Hispanic parents, results showed these parents more frequently discussed sex with their adolescents when they were less concerned about negative reactions from the child and if they felt more knowledgeable and confident about the subject (Mena et al., 2008).

Some research has begun to examine variables that might influence the content of the messages mothers are conveying to their adolescents about sex. Within the domain of parent variables, Miller et al. (2009) found that mother's responsiveness was the best predictor of having talked with their youth about abstinence, puberty and reproduction. Responsiveness

was defined as the mother's "constellation of knowledge, comfort, skills and confidence" in talking with their adolescent about sex (Miller et al., 2009). Another study found that low-income and minority parents were more likely to discuss the negative consequences of sex, as were politically conservative and religious parents (Swain, Ackerman, & Ackerman, 2006). Non-religious parents as well as minority and low-income families more often discussed birth control within sex communication than other families (Swain et al., 2006). A somewhat different parent variable, HIV status, has been linked with sex communication content as well, demonstrating that HIV-positive mothers are more likely to discuss HIV with their adolescents than HIV-negative mothers (O'Sullivan, Dolezal, Brackis-Cott, Traeger, & Mellins, 2005). In another study of communication within HIV-positive families, results revealed that parents shared their own experiences and lessons learned in conversations with their child about sex and HIV and provided information about HIV-transmission and protection practices (Corona et al., 2008). This study also revealed unique barriers to communication about sex within HIV-positive families. Parents reported being uncomfortable talking about HIV with their child because they were concerned about the child's ability to cope with the parent's illness, while youth reported being uncomfortable with the topic because they worried that they were reminding their parent of the illness (Corona et al., 2008).

Utilizing a Sexual Communication Framework within ATOD Communication

Like research findings about substance use communication, findings about sex communication have not shown consistency across studies or painted a complete picture of parent-adolescent communication about sex. Jaccard et al. (2002) have theorized that this is because communication is a multidimensional variable and needs to be measured as such,

presenting a framework for achieving this in their 2002 article. The authors posit five variables that affect communication, namely: source, audience, message, channel and contextual variables (Jaccard et al. 2002).

Source variables are characteristics of the individual who is delivering the message. They include demographic characteristics, such as sex, age and race, but also can include communication style, perceived trustworthiness and perceived expertise (Jaccard et al. 2002). In the context of parent-child communication, source variables are characteristics of the parent that may affect the content, context and form of communication. Likewise, *audience variables* are those similar characteristics in the individual(s) receiving the message. Here, the characteristics of the adolescent may affect the communication.

Message characteristics refer to the influence of the content of the message itself on the communication. Discussing substance use is qualitatively different than discussing homework. Similarly, discussing cigarette smoking may be qualitatively different than discussing cocaine use. The particular topic at hand plays a role in the communication. In parent-offspring communication, *channel variables* – the characteristics of the medium through which the message is relayed – usually refer to characteristics of face-to-face contact. As the source and audience can physically see each other during most of these conversations, nonverbal behavior may play a role in addition to the actual verbal messages, but may be much more difficult to measure. *Contextual variables* also play a role in communication. Examples of those that have been studied in the sex communication literature include parent marital status, family structure and socioeconomic status (Jaccard et al. 2002).

Review of Evidence of Communication Variables on Parent-Offspring Communication about Substance Use

The impact of the types of communication variables posited by Jaccard et al. (2002) on communication about substance use largely has been overlooked by the research community. Parental and familial history may act as source and contextual variables, respectively, to impact the content of ATOD conversations between parents and their offspring. However, the limited literature in parent-offspring communication about substance use narrows further when searching for evidence of the role of these communication variables on the content of these conversations. The sparse research to date and equivocal findings are reviewed below. Though the empirical bases on which to make recommendations about the impact of the communication variables is limited, the Time to Talk website makes some vague suggestions. This website recommends being honest about past use in order not to lose credibility if the parents' use history is later discovered by the child. Though no specific recommendations are made for addressing a parents' abusive history, a sample answer to the question "Mom/Dad, did you do drugs?" includes a statement about a long struggle with alcohol and its' impact on daily life and family relationships. On a different section of the website, it is again recommended to be honest with the child and use a family member's current substance abuse as a teaching moment in explaining the negative consequences of use and how the family will support each other through this time (www.timetotalk.org). However, the website makes no recommendations for how to deal with a parents' own current substance use or a parent or family member's current substance abuse for which they are not seeking treatment.

Research on Source Variables Related to Communication about Substance Use

A few studies shed some light on the influence of parental and familial history of substance use on the content of parent-adolescent ATOD communication, including some of those reviewed earlier in this proposal. However, as of yet, the results have yielded inconsistent findings on specifically how this type of history affects the content of communication about ATOD , and have focused almost totally on anti-smoking socialization. In considering source variables, a few studies have investigated the impact of parents' substance use status on communication about substance use. In the Ennett et al. (2001) article reviewed earlier, results suggested that more communication about household rules related to smoking occurred when at least one parent smoked cigarettes. Conversely, when neither parent drank alcohol, communication about rules, consequences and media portrayals of substance use increased. Ennett and colleagues also investigated the impact of education level and race of the parent on communication and found that communication about rules and consequences decreased when parents had attained higher education levels, and that White families spoke less about rules than non-white families. In a correlational study reviewed earlier, utilizing data from the Dutch Family and Health Project, alcohol-specific socialization was related to parental drinking, but parental drinking did not have any impact on the relationship between alcohol specific socialization and adolescent drinking (van der Vorst et al., 2005).

Similarly, Herbert and Schiaffino (2007) studied the correlations between mother's smoking status and anti-smoking socialization behavior. Results revealed that mothers who were current cigarette smokers reported offering more anti-smoking messages and more disciplinary consequences to their adolescents. In contrast, mothers who were never smokers

or who were former smokers reported enforcing more household rules about smoking (Herbert & Schiaffino, 2007). Different results were found when studying children's perspectives of the anti-smoking messages they receive from their parents, offering contrary evidence. Henriksen and Jackson (1998) surveyed 937 third through eighth grade children about their perceptions of anti-smoking socialization from their parents. Results revealed that children from households where at least one parent smoked perceived less anti-smoking socialization than their peers from households with non-smoking parents. However, results also revealed that there is hope, for when parents practiced anti-smoking socialization, children had much lower rates of intentions to smoke in the future and of initiation. However, these findings are limited in generalizability, as the study was cross-sectional, allowing only correlational conclusions to be drawn. In contrast to these studies, results of a multi-generational study of substance use reviewed earlier revealed no difference between smoking and non-smoking parents in frequency of anti-smoking discussion with their adolescents (Fearnow, Chassin, Presson, & Sherman, 1998). Thus, as with research on the impact of communication on adolescent substance use, the impact of parental smoking on anti-smoking socialization has also revealed inconsistent results.

A more recent study that investigated parental-level barriers to communication about smoking behavior was that reviewed earlier in this proposal by Guilamo-Ramos et al. (2008). Parental level barriers to communication identified by mothers included knowledge deficits, a generational gap in perspectives, time constraints and parental smoking status. Knowledge deficits included a fear of not knowing "how to talk" and not having access to accurate information about cigarette smoking. A number of mothers revealed their frustration at trying to understand their adolescents' perspectives and the difficulty in finding time to talk in the

face of multiple demands on their schedule (Guilamo-Ramos et al., 2008). Parental smoking status was viewed in multiple ways in relation to anti-smoking socialization. Some mothers identified it as a possible impediment, while others felt it could be used as an example, to explain smoking as an addiction. Still, others did not feel parental smoking played a role, stating that parental smoking did not equate to parental approval of adolescent smoking. This study offers evidence that parents recognize multiple barriers to communication about substance use. However, the study is limited in that it measured beliefs, but not actual behavior. Thus, further research is needed to better understand the impact of parental level characteristics on the content of ATOD communication.

Another study that conducted both focus groups and telephone surveys to explore anti-tobacco socialization in Caucasian and African American families also helps to shed light on the impact of parental substance use on parent-adolescent substance use communication (Clark, Scarisbrick-Hauser, Gautam, & Wirk, 1999). In the survey, if respondents reported that they had set ground rules about tobacco use in the home, they were asked if they had discussed these rules with their children. Almost 87% of respondents reported that they had set ground rules, with just under 70% stating that they had discussed the rules with their children. Moderator analyses revealed that homes with one or more smokers had more rules than home with no smokers. However, smoking and non-smoking homes did not differ in their rates of discussion of these rules. Results of the focus group interviews revealed that parental smoking status was identified more often as an impediment to parent-adolescent discussions of smoking in White families than in African American families (Clark et al., 1999).

The Dutch research on anti-smoking socialization reviewed earlier offers additional insight into the role of parental smoking status on anti-smoking socialization of offspring. In one study based on the Family and Health Project data, non-smoking parents had more house rules about smoking than parents who smoked (Harakeh et al., 2005). In the European Smoking prevention Framework Approach (EFSA) Project, results showed that parental smoking status moderated the effects of adolescent smoking behavior on parenting behavior, but the opposite was not true (Huver et al., 2007). Specifically, for adolescents of one or more smokers, when adolescent smoking increased, house rules about smoking decreased. However, for adolescents of non-smoking parents, when adolescent smoking increased, the breadth of communication about smoking increased (Huver et al., 2007). In another Dutch sample of 600 families with 1 adolescent child (N=550 two-parent families, 50 one-parent families; mean age adolescent = 12.3 years at first data collection wave), parents who were current smokers communicated more with their children about smoking and warned their children more about the negative consequences of smoking than non-smoking parents, while non-smoking parents applied more house rules about smoking (den Exter Blokland, Hale, Meeus, & Engels, 2006).

Research on Contextual Variables Related to Communication about Substance Use

Other research has begun to examine the effects of contextual variables, such as characteristics of the family, on substance use communication. The Henriksen and Jackson (1998) study mentioned above also addressed a family-type variable, parenting style. Authoritative parenting is one of four styles of parenting theorized in developmental psychology (Baumrind, 1966). The style is characterized by a balance in responsiveness and control, the two major domains of parenting behavior. The other three styles – authoritarian,

permissive, and disengaged/uninvolved – vary in the combinations of balance between these two domains. Results revealed an association between authoritative parenting and anti-smoking socialization (Henriksen & Jackson, 1998). This style of parenting was positively, though weakly, correlated with no-smoking rules, warnings about smoking health risks and perceived consequences for smoking. However, this variable may only be a marker for the types of parenting styles that are more likely to communicate with their offspring, and not help to predict the content of messages related to substance use.

Seeking to further the investigation of parenting style on parent drug prevention practices, Stephenson, Quick, Atkinson and Tschida (2005) examined the relationship between parental attitudes and subjective norms about and intentions to engage in drug prevention behaviors with their child, and the role of authoritative parenting style. Parents (N=158) of 7th, 9th and 11th graders, randomly selected from the school roster of a Midwestern city, were interviewed by telephone about their attitudes about drug prevention behaviors, including communication, and the attitudes of those close to them. Results revealed that subjective norms were the strongest predictor of intention to communicate with offspring about drugs. Thus, parents had stronger intentions to engage in ATOD conversations with their child when it was considered important to do so by significant others in the family (Stephenson et al., 2005). This study is limited, however, in that it measured only parents' intentions, and not their actual actions in communication with their offspring, but offers some intriguing evidence for the importance of family attitudes about substance use on the messages conveyed to children in the family.

Summary

In general, most research on parent-offspring communication about substance use has examined the frequency with which such conversations occur. Overall, more frequent communication about substance use is associated with less adolescent substance use. However, few researchers have examined the actual content of such communication and how source and contextual variables may affect the content of the messages relayed. The current literature is limited methodologically, focusing largely on the child's perspectives, and ignoring the bidirectional nature inherent in communication. Additionally, most of the previous research is quantitative in nature, measuring communication with a few simple items. To date, the limited quantitative and qualitative research on the content of ATOD communication suggests that the negative consequences of substance use, personal examples of substance use and strategies for resisting peer pressure surrounding use are the most common discussion topics.

Even more limited than the literature on the content of parent-adolescent communication about substance use is the study of variables that impact the messages conveyed in such transactions. Preliminary work has looked at the impact of source variables, such as parental tobacco and alcohol use status, on the content of anti-socialization of these substances, with inconsistent results depending on substance. Only one study investigated parental drinking on the content of communication, finding that in households where one or more parents drank regularly, there was less communication about rules, consequences and media portrayals of substance use between parents and children. Most of this research has been focused on anti-smoking socialization and parental smoking status. One study found that there was more discussion of household rules related to smoking in homes where at least

one parent was a smoker. However, other research has suggested that current smokers offer more anti-smoking messages and more disciplinary consequences for smoking to their adolescents, but that former smokers and never smokers enforce more household rules about smoking. Still other research has looked at contextual variables, such as parenting style and subjective norms in the family. This work suggests that parents who use an authoritative parenting style are more likely to offer anti-smoking socialization to their youth and that the beliefs of significant family members may be most predictive of parental intentions to communicate with her child about ATOD.

Purpose and Proposal

The purpose of the proposed study was to better understand the types of messages parents relay to their adolescents about substance use, and how source and contextual variables affect this communication. Specifically, this study contributes to the literature in studying the content of parent-adolescent substance use communication in a primarily African American adolescent sample and how that content might be affected by a maternal and/or familial history of substance use. Narrative transcripts of conversations between adolescents and their maternal caregivers about alcohol, tobacco and other drugs were coded for the specific messages conveyed along dimensions of maternal and familial history of alcohol and/or drug abuse.

It was hypothesized that qualitative analysis utilizing a grounded theory approach for secondary data analysis would illuminate an underlying structure similar to the framework adapted from Miller-Day and Dodd's (2004) previous research. Characteristics of the maternal caregiver and the adolescent's family history (source and contextual variables),

specifically, the substance abuse history of each, were expected to play a role in the content of these communications about substance use.

Method

Participants

Data for this study were drawn from a larger longitudinal study on community violence and substance use in a sample of urban adolescents (Project COPE). Participants in Project COPE consisted of 358 maternal caregiver/youth dyads recruited from areas in Richmond, VA with moderate to high violence rates. Most (>85%) of the maternal caregivers were the youth participants' biological mothers. A two-cohort design was employed to follow youth in their transition into middle school and high school. In Wave 1, all youth participants were enrolled in either the 5th or 8th school grades. At Wave 4, most youth were in the 8th or 11th grades. Most of the youth (>90%) and their female caregivers were African American. The current study utilized families who participated in all four waves of the project and who had an adolescent within the younger cohort ($N=132$).

A summary of the descriptive statistics for the sample can be found in Table 1. At the time of the interview, most adolescents were in the 8th grade and averaged 13.77 years of age. Both the maternal caregivers and their adolescents were primarily of African American race (90.9% and 89.3%, respectively). Marital status varied across the sample, with almost 41% of mothers having never been married and another 26.5% reporting currently being married. Likewise, these mothers represented a variety of educational backgrounds, ranging from no high school education to advanced degrees. Income level varied as well, with just over half the sample reporting an income of \$400 or less per week, while another 12.9% reported weekly income of \$900 or greater.

Table 1.

Table of Sample Characteristics.

	Adolescent (N=132)	Maternal Caregiver (N=132)	Household
Age – <i>M</i> (SD)	13.77 (0.72)		
Race (%)			
African American/Black	89.3	90.9	
White or Caucasian	2.3	4.5	
American Indian	4.6	0.8	
Marital Status (%)			
Never Married		40.9	
Married		26.5	
Cohabiting		6.8	
Separate/Widow/ Divorce		25.7	
Highest Education (%)			
None		25.8	
High School/GED		22.7	
Some College, No Degree		24.2	
College Degree (Assoc – PhD)		26.7	
Household Income Per Week (%)			
Less than \$400/week			52.3
Between \$400 – 800/week			30.2
More than \$800/week			17.4

Measures

Demographics. The maternal caregiver was asked to report her age, relationship to the child, current marital status, race, educational level and family income. Both the maternal caregiver and the youth reported on the youth's race, age, gender, and grade in school.

Family Alcohol and Drug Survey (FADS). Familial alcohol and drug use was collected using the FADS at each of the 4 waves of the study. Alcohol and drug use in the first- and second-degree relatives of both the maternal and paternal family of the youth participant was obtained using a family genogram design. The FADS categorizes family members into one of 5 substance use categories, ranging from heavy problematic use (Type A) to abstinence (Type E). The maternal caregiver is asked to classify each family member into one of the categories, based on the family member's heaviest lifetime use, and is probed to make sure the categorization seems appropriate. The definitions for each of the Patterns of Drinking of each FADS Type (A through E) and the Associated Problems of each are listed in Appendix A. Patterns and Problems Associated with Drug Use Types can be found in Appendix B. The genogram used to collect this data can be found in Appendix C. Six to eight hours of training on the administration and interpretation of the FADS was required for each staff member, including observation of at least 2 interviews and completion of a video-taped independent interview, that was reviewed and approved before the completion of an official interview. The FADS typically takes 20-30 minutes to complete. Using the FADS, interrater reliability with the Family History-Research Diagnostic Criteria has been reported at .96 (Svikis, McCaul, Haug & Boney, 1996). As compared with a SCID diagnosis, specificity of diagnosis with the FADS was reported at 92%, with sensitivity also high at 83%.

Question Regarding Alcohol and Drug Use Conversations. During Wave 4, the maternal caregiver was asked to recollect and recount a conversation she had previously had with the youth participant regarding alcohol, tobacco or other drugs (ATOD). The caregiver was instructed to come as close to the actual conversation as she could, using a “I said. . . , then s/he said. . . “ format where possible. The interviewer probed the caregiver to determine if she felt that she and the child understood each other’s viewpoints on alcohol, tobacco, and other drugs. The initial question posed to maternal caregivers and follow-up probe questions can be found in Appendix D. When possible, data was also obtained on the context of the conversations (where the conversation took place and who else was present, if anyone) and the frequency of the conversations. The open-ended structure and wording of the question was adapted from a similar format used in a previous study of parent-offspring communication about ATOD (Miller-Day and Dodd, 2004). This conversation was audiotaped and transcribed.

Procedures

Participants were recruited from areas of moderate to high violence within Richmond, VA and the surrounding counties. Families were recruited through community events and agencies, through flyers posted door-to-door in eligible neighborhoods and by participant referral. Eligible participants were the female caregiver of at least one fifth or eighth grade child during the first wave of data collection. Sixty three percent of eligible families who were approached enrolled in the study. Interviews were conducted in families’ homes. Occasionally, interviews were conducted at a local community center, at Virginia Commonwealth University or some other alternative location, as requested by the participant family.

At the start of the interview, trained research staff reviewed the maternal caregiver consent forms and child assent forms, answered any questions the participants had, and obtained written consent. Interviews lasted approximately 2-3 hours, and were completed simultaneously and separately for both the caregiver and youth participant. Interviews were conducted face-to-face using visual aids. For the maternal caregiver, all questions were read aloud. For the youth participant, a portion of the interview was presented in booklet form. The youth was asked to complete this portion independently, unless the child demonstrated difficulty in reading. All other portions of the child interview were conducted aloud. Families who participated were compensated with \$50 per family in Wal-Mart gift cards at each wave. Families were entered in a monthly drawing for a \$25 Wal-Mart gift card if they returned post cards monthly with address updates. Additionally, lottery prizes of \$100, \$200 and \$300 were distributed at the end of the study.

Interviewers were research assistants who were trained extensively before being approved to conduct interviews. Each completed the Collaborative Investigator Training Initiative (CITI) in Social-Behavioral Research Ethics. In addition, each received face-to-face training with the Principal Investigator and the Study Coordinator. Ongoing supervision of the interviewers maintained their adherence to the training standards. In addition, 10 percent of families were contacted as a quality control measure, to ensure that interviewers maintained professional standards when interacting with the participants.

Data Analysis

Categorization Procedures. For this analysis, data from the FADS assessment were utilized to classify each youth as having a maternal and/or familial history of substance abuse. Youth whose biological mother was classified as Type A on either the Alcohol or Drug

Assessment of the FADS were categorized as having a maternal history of substance abuse. Youth with at least one family member who was similarly classified as Type A on either the Alcohol or Drug Assessment of the FADS were categorized as having a familial history of substance abuse. Family member was defined as including the adolescent's father, both maternal and paternal grandparents and any maternal or paternal aunts and/or uncles. Though data on siblings' substance use was collected, it was not included in the definition of family member for the purposes of categorization in these analyses.

Utilizing these data from the FADS assessment, each youth participant was coded for the presence or absence of a maternal history of substance abuse (biological mother categorized as Type A on alcohol or drug assessment of FADS) and for the presence or absence of a familial history of substance abuse (at least one family member categorized as Type A on the alcohol or drug assessment of the FADS). These codes were in turn used to classify each youth into one of three groups: (A; $n=29$) No Maternal or Familial History of Alcohol or Drug Abuse, (B; $n=17$) Both Maternal and Familial History of Alcohol or Drug Abuse and (C; $n=86$) Familial History of Alcohol or Drug Abuse Without Maternal History of Abuse. A fourth category, Maternal History of Alcohol or Drug Abuse Without Familial History of Abuse yielded no transcripts and was dropped from the analyses. All FADS data, coding and group classifications were completed by the PI of the larger study. All coders were blind as to the classification of each group until all coding was complete.

Content Analysis Plan. Two female psychology graduate student coders completed the content analysis of each group independently. In one sitting, each coder read all of the transcripts in group A. Utilizing a grounded theory approach, the two coders analyzed each transcript line-by-line using microanalysis for the emergent themes of messages

communicated by the maternal caregiver to her child. According to the guidelines of grounded theory (Patton, 2002), the transcripts were first analyzed to create a *basic description* of the messages conveyed by the maternal caregivers to their adolescents. Each coder made notes on the themes she saw present within the interviews. The coders then met to compare their notes and resultant list of themes and to resolve discrepancies through consensus. In a separate session, each coder then read all of the transcripts in group B and again microanalyzed each for the themes present. Coders made detailed notes as to the themes that could be coded using the categories in group A and added categories or amended previous categories where appropriate. After this second coding session, the coders again met to compare their notes and list of themes and to resolve discrepancies about the themes present in Group B. The process was repeated with group C, expanding on and amending the themes uncovered in the first two groups.

Once each of the groups was coded, a complete list of themes was compiled of the messages coded across all three groups. In Level 2 analysis, the messages found in the transcripts were *conceptually ordered* into potential patterns. The coders worked together to group messages into larger domains and write definitions for each of the themes in each domain. In the third level of analysis, I then compared the domains and subcategory messages present across each of the three groups. Statements about the similarities and differences in emergent themes between groups in relation to the study aims were documented as the analysis for this study.

Results

Qualitative Analysis of Content Themes

Overview. Qualitative analysis revealed a rich variety of messages being conveyed from mothers to their adolescents about alcohol, tobacco and other drug use across each of the three groups. Specific themes uncovered in each set of transcripts in the first step of the analysis were grouped together to form larger domains in the second step of analysis. The majority of these messages fell into five major domains, which we titled: *Keepin' It Real*, *Danger! Danger! Harms of Use*, *Explicit Expectations*, *Resistance Tactics*, and *Caregivers' Attitudes about Substance Use*. Each of these domains contained a number of subcategories, for a total of 26 different message themes. These domains and subcategories are defined below.

Keepin' It Real. The two subcategories in this domain included messages that provided the adolescent with information about substances and substance use or demonstrated the effects of use with examples of family and friend's use.

Just the Facts. This theme included messages that offered general information about the types of substances that can be used or abused, where substances can be obtained, what they look like, minimum legal age restrictions on purchasing tobacco and alcohol, and how substances are used, as well as reasons for use and drug stereotypes. These messages were offered within the conversation or with aids, such as educational literature or media. One mother was quoted as saying, "I've sat down and talked to him about how um it's, it's illegal to buy those items or to have someone to purchase them for him." Another mother spoke with her child about why adolescents use or sell drugs, saying ". . .on that particular incident

as we did talking about the economics I think behind why kids will sell drugs or why kids will do drugs, um, as far as escape and whatever like that um.”

Real Examples. This theme included examples of personal, familial, friend or community substance use, or examples from the media, as teaching tools to relay messages about the negative effects that drugs can have on people. For example, one mother stated, “I shared frequently my life experiences or if we um know somebody or maybe a co-worker or somebody may mention something that happened with their child, I share with them.”

Another mother spoke with her child about her father’s use and is quoted below as saying:

“We just talk about my father used to drink. . . I just basically just told him, you know, after he retired and he just started drinking more and more and more. And eventually just got to a point where he didn’t want to do it again, he didn’t want to hunt anymore, he didn’t want to fish anymore. Our father was a great outdoorsman, but eventually he just got to the point where he didn’t want to do anything but drink and sleep- drink- drink, sleep, and eat.”

Danger! Danger! Harms of Use. Categories in this domain included messages that warned about the negative effects of substance use, including messages specifically about health, appearance and personal control and judgment. Other messages included in this domain related to the legal consequences of use and to the impact of an adolescent’s use on family’s reputation within the community.

General Warnings. Messages coded within this category included non-specific messages about the harm of substance use or the long-term consequences of use in general to their child. One mother told her child, “It ruins your life. . . it just ain’t good for you. . . ,” while another mother said, “Don’t try to sell it, use it or none of that.”

Health Consequences. Messages in this theme conveyed information about the negative effects of substance use on health. Some maternal caregivers offered more general messages, as seen in the example, “I was like no you can’t smoke no cigarette [be]cause it’s bad for your health.” Other messages were more specific, naming substance use-related diseases, as in the examples, “I told her it’s called sclerosis of the liver, where the alcohol eats up the liver, you know” and “. . .smoking cigarettes cause[s] you to have lung cancer.”

Effects on Appearance. Some of the messages conveyed information about the negative impact of substance use on personal appearance, either generally or more specifically, citing examples such as yellowed teeth or aged skin. One mother conveyed this message in the example, “. . .people that do drugs, I say, they look all nice and young and their skin so healthy. And I said [child’s name] but when you see them like 3 to 5 weeks later they look so old and they don’t look the same anymore and I say, you don’t want to look like them.”

Effects on Personal Control and Judgment. This theme included messages about the immediate impact of substance use on personal control and judgment or the impact of substance use on long-term judgment, in hopes of deterring the child from substance use. One mother told her daughter, “. . .I told her she was right in that um alcohol alters your, the way you think and the things you say. Even if you think that you’re not being obnoxious, you really are and you can’t really control it.”

Legal Consequences. This theme included messages in which mothers spoke with their adolescent about the legal ramifications of being caught using or selling illicit substances or being under the influence of alcohol, including substance use as a violation of juvenile probation. One example of this type of theme can be seen in the quote, “And we just

had that conversation. . . if you're selling drugs. . . certain drugs you sell, if you get arrested, you become a felony, and with a felony you can't vote. . . you can't get a job really worth having, you can't go to the bank for any loan ."

Negative Consequences for Family. Some messages were concerned with the effects that the adolescent's substance use might have on family relationships and on the family's reputation within the community. One mother conveyed this message by saying, ". . .it doesn't paint a good picture for him in society for somebody to see him walking around, um smoking knowing, people know that he's only thirteen years old, they know who his mom is, they know who his family is. . ."

Explicit Expectations. A third domain of messages included statements about the mother's expectations for the adolescent's personal substance use, and varied from more stringent, no tolerance rules to messages of encouragement to use responsibly.

Abstinence Encouraged. Messages in this theme directly encouraged the child to abstain from using substances at all, as in an example from one mother's interview where she stated, ". . . I just told her that . . . if she loved herself, she wouldn't you know put those type of things in her body . . ." Another mother conveyed this message by stating, "I was like, 'Well, if you put your mind to it you won't do none of them things'."

Zero Tolerance. Messages within this theme explicitly stated that substance use by the adolescent would not be permitted within the family. One mother made her expectations clear stating, ". . . I explained to her that I do not permit smoking [and] alcohol." Another mother set the boundaries for her child, sending the message "As long as he's in this household, he's not going to do nothing."

Do as I Say, Not as I Do. Some caregivers, particularly current smokers, attempted to clarify the conflict between their own substance use behavior and their expectations for their adolescent's use, explicitly directing the child not to imitate the caregiver's substance use behavior. Most of these messages were related to tobacco use, as in the example, "I told him I don't want him to start smoking even though he sees me smoking and children have a tendency to do the same things that they see their parents do, you know, unconsciously. . ."

Use Your Own Judgment. Some mothers encouraged their child to make his or her own decisions about personal substance use. These messages ranged from encouraging the child to make wise or good choices to simply encouraging the child to make their own personal decision. One example of this theme was " . . .if you go hanging out with your friends and they tend to try to do drugs, smoke, or anything, use your mind wisely and know the choices and the outcome of it. . ."

Follow My Lead. A few mothers conveyed explicit statements about abstinence from substance use or responsible use of legal substances, based on their own personal use or abstinence. As in the *Do as I Say, Not as I Do* theme, these messages most often involved tobacco use, as in the example, "I said, 'You thirteen years old.' I said, 'I'm thirty-four years old, and I don't smoke, and I'm not going to smoke'."

Drink Responsibly. Another theme conveyed included the message that moderate use of alcohol is permissible once he or she has reached the legal age for consumption, as in the example, " . . .some of the decisions she need to wait until she become an adult so it won't affect her life."

Disciplinary Threat. Another theme threatened physical punishment if the mother discovered the adolescent using. One mother directly stated to her children, “I said, ‘Well, you all ever decide to use crack, I’m gonna whoop [you].’”

Resistance Tactics. Many mothers offered strategies to their adolescent for how to resist influences or offers of substance use in this domain of messages, including avoiding potential situations of substance use and seeking support from adults when confronted with substance use.

Don’t Give In. Messages coded in this theme encouraged the child to resist influences from others to use substances and to turn down offers of substance use. One mother told her child, “If you ever have friends that want to do drugs, it never, it’s always okay to say no. You shouldn’t let no friends be like, man, come on let’s smoke this joint.” Another mother urged her daughter to turn down offers, even if they are presented by family members, stating “. . . I tried to tell her that if someone approached her about drugs, go the other way. Like she got a family members who does drugs as far as smoking marijuana, you know and I tells her, they offer to you, no! It’s always no!”

Seek Support. Another theme emergent from the interviews with mothers was to encourage their child to seek support from the mother or other authority figures, such as teachers, when they have encountered instances of substance use within the peer group or the community. One mother told her son, “I, you know, try to encourage him to always be honest and open with me when somebody does things like that, if anybody ever offer him drugs.” Another mother urged her daughter to be honest about her friend’s use in order to get them help, stating, “I try to explain to her that if , if she knows someone special, a friend at that age

doing drugs, then let me know because the school and the parent need to know, because maybe they're not aware of it."

Keep Away. This theme contained messages that encouraged the child to avoid people or situations that might involve substance use. One mother told her child, ". . . I'd often tell [my daughter] that she's not allowed to indulge and be around with those folks . . . I always tell her a lot of times association with a crowd can mean you could be a part of what they [are] doing."

Stay Focused. Some messages encouraged the children to keep their focus on academics, instead of substance use, as in the example, "Well, the things that I have said to [child] about drinking, smoking, and alcohol um . . . [is] that she needs to concentrate on school and getting her work done so that she can graduate and become somebody. . ."

Caregiver's Attitudes about Substance Use. Many mothers expressed messages that relayed their personal attitudes toward substance use, mostly conveying a negative tone about substance use or encouraging the youth to consider his or her faith related to substance use decisions.

Drugs Are Bad. One theme conveyed by mothers was a negative attitude toward substances and substance use, including both use in general and personal use by the adolescent. One mom said, "I was like, 'And it's bad for you to drink, it's bad for you to smoke cigarettes, it's bad for you to do any kind of drugs.'"

Don't Be A Cool Fool. This theme consisted of messages that conveyed to the child that substance use does not make one more mature or well-liked among peers. In an example of this theme, one mom told her daughter, "I was letting her know that it's not cool, it's not

sweet, and it don't look cute for a girl to walk around and do that in the streets with her friends.”

What Would Jesus Do?. Religious messages were also used to convey the mother's attitudes about substance use, encouraging the child to consider the family's religious beliefs when making decisions about use. One mother directed her child to Christian faith in making decisions around substance use, stating “. . .and I was like you need to think about how Jesus would handle that situation and it's, it's hard to do the right thing.”

Don't Throw Stones. This theme included messages that encouraged the child not to judge other people's personal decision to use substances negatively, as in the example, “I just pretty much let him know that it's wrong and not to knock nobody for . . . what they do, but if you choose or not choose to, that's cool, but you don't ever downgrade nobody for what they do, and I pretty much left it at that.”

Miscellaneous. Three subcategories of messages did not seem to fall into any of the above domains, and thus are listed below.

Expense of Substance. In this theme, mothers offered practical messages about the costs associated with substance use to deter the adolescent from smoking or using alcohol. One mother simply stated, “I tell him don't drink, don't smoke 'cause it costs too much to drink and it definitely costs too much to smoke.”

Generational Differences. This category included messages in which the mother spoke with her child about the generational differences in knowledge and use of substances between the mothers' own generation and that of the child.

Promoting Phillip Morris. This category included one mother's attempt to educate her child about her employer's campaigns to reduce youth substance use.

Comparison of Themes across Groups

In step three of the analysis, a comparison was made of both the domains and subcategories found in each set of transcripts. A color-coded summary of these comparisons can be found in Table 2. Twelve of the 26 different kinds of messages found were present in all three groups. Another four messages were specific to dyads in which either the mother or another family member had a history of substance abuse. An additional three messages were reported only within dyads where mothers had no personal history of substance abuse. The remaining seven messages were specific to different groups of transcripts.

Messages Common to All Three Groups

The subcategories contained in two domains, *Keepin' It Real* and *Resistance Strategies*, were found in each of the three different groups of transcripts. Four out of the six subcategories subsumed under the *Danger! Danger! Harms of Use* domain were similarly found in all three groups of transcripts. Specifically, Legal Consequences and Negative Consequences for the Family were not found in all groups, while all other subcategories were common to all three sets of transcripts. One subcategory in the Explicit Expectations domain, specifically Zero Tolerance, and one in the Caregivers' Attitudes domain, specifically Drugs Are Bad, was present in each of the three groups.

Messages Specific to Adolescents with a Maternal or Family History of Substance Abuse

Four messages were specific to the two groups of transcripts in which adolescents had at least one family member (either mother or another family member) categorized as Type A on the FADS. Legal Consequences, within the Danger! Danger! Harms of Use domain, was reported in families with a history of abuse. Similarly, Use Your Own Judgment within the

Table 2.

Table of Themes According to Domain and Group.

	NO MOM / NO FAM HX (N=29)	BOTH MOM /FAM HX (N=17)	NO MOM HX/ FAM HX (N=86)
KEEPIN' IT REAL	JUST THE FACTS	JUST THE FACTS	JUST THE FACTS
	REAL EXAMPLES	REAL EXAMPLES	REAL EXAMPLES
	HEALTH CONSEQUENCES	HEALTH CONSEQUENCES	HEALTH CONSEQUENCES
	GENERAL WARNINGS	GENERAL WARNINGS	GENERAL WARNINGS
DANGER! DANGER! HARMS OF USE	EFFECTS ON APPEARANCE	EFFECTS ON APPEARANCE	EFFECTS ON APPEARANCE
	EFFECTS ON CONTROL /JUDGMENT	EFFECTS ON CONTROL /JUDGMENT	EFFECTS ON CONTROL / JUDGMENT
		LEGAL CONSEQUENCES	LEGAL CONSEQUENCES
		ZERO TOLERANCE	NEGATIVE CONSEQ. FOR FAMILY
EXPLICIT EXPECTATIONS	ZERO TOLERANCE	ZERO TOLERANCE	ZERO TOLERANCE
	ABSTINENCE ENCOURAGED		ABSTINENCE ENCOURAGED
	DO AS I SAY, NOT AS I DO		DO AS I SAY, NOT AS I DO
	DISCIPLINARY THREAT		DISCIPLINARY THREAT
		USE YOUR JUDGMENT	USE YOUR JUDGMENT
RESISTANCE TACTICS	FOLLOW MY LEAD		
	DRINK RESPONSIBLY		
	DON'T GIVE IN	DON'T GIVE IN	DON'T GIVE IN
	SEEK SUPPORT	SEEK SUPPORT	SEEK SUPPORT
	KEEP AWAY	KEEP AWAY	KEEP AWAY
	STAY FOCUSED	STAY FOCUSED	STAY FOCUSED
CAREGIVER'S ATTITUDES	DRUGS ARE BAD	DRUGS ARE BAD	DRUGS ARE BAD
		DON'T BE A COOL FOOL	DON'T BE A COOL FOOL
		DON'T THROW STONES	
		EXPENSE OF SMOKING	WHAT WOULD JESUS DO? EXPENSE OF SUBSTANCE USE
MISCELLANEOUS	GENERATIONAL DIFFERENCES		
	DEFENDING PHILLIP MORRIS		

Explicit Expectations domain, was also only reported within these families, as was Don't Be a Cool Fool, within the Caregivers' Attitudes about Substance Use domain. Another message that did not fall into any of the five major domains, Expense of Use, was also found within these two groups of transcripts.

Messages Specific to Adolescents without a Maternal History of Substance Abuse

Three messages were specific to the two groups of transcripts in which the adolescent's biological mother did not qualify as Type A for alcohol or drug use on the FADS measure. All three of these messages were within the Explicit Expectations domain. Specifically, Abstinence Encouraged, Do As I Say, Not as I Do, and Disciplinary Threat were found only in families without a maternal history of substance abuse.

Messages Specific to One Group

Four messages were specific to the group of transcripts with neither a maternal nor familial history of substance abuse. Two of these subcategories of messages, Follow My Lead and Drink Responsibly, were part of the Explicit Expectations domain. The other two kinds of messages did not fall into any of the five major domains, specifically, Generational Differences and Defending Phillip Morris. Another two subcategories of messages were found only within the set of transcripts classified as having a familial history of substance abuse, but no maternal history of substance abuse. One of these messages, Negative Consequences for Family, fell into the Harms of Use domain, while the other subcategory, What Would Jesus Do?, was grouped within the Caregivers' Attitudes domain.

Summary

Results of a grounded theory approach to secondary data analysis revealed messages being conveyed from mothers to adolescents about ATOD use within five major domains.

The primary themes included providing information, warning of the harms of use, setting expectations for use, offering strategies for resisting use, and conveying personal attitudes about use. Across dimensions of maternal and familial history of substance abuse, themes were more similar than not between groups. The starkest differences were seen in messages related to expectations and personal attitudes. Mothers of youth with at least some family history of substance abuse conveyed messages not found in other transcripts, including warning of the legal consequences of substance use, encouraging the adolescent to use their judgment, advising that substance use does not make one mature, and cautioning about the expense of substance use. Mothers without a personal history of substance abuse offered a greater variety of messages that set expectations for the adolescent's use, including encouraging abstinence, clarifying their own substance use behavior in relation to their expectation for their child's behavior and threatening discipline for use. Mothers of youth without a family history of substance abuse set expectations not seen in other transcripts – encouraging their adolescent to model their own substance use behavior and/or encouraging the adolescent to drink responsibly. In total, twenty six themes were revealed across five domains of communication.

Discussion

This qualitative analysis of mother-adolescent conversations about substance use revealed that mothers are sending a variety of different messages to their adolescents about alcohol, tobacco and other drug use. These messages can be categorized into a small number of domains, but convey messages along a continuum of ideas. The results of this study confirm and expand upon those of previous research, in illuminating the framework of parent-adolescent communication about alcohol, tobacco and other drug use, particularly

within an urban, African American sample, a population seldom studied in this area previously.

Regarding communication about substance use, mothers generally can be described as providing information about and examples of use, warning of the dangers associated with use, setting expectations for their adolescent's use, offering strategies to resist temptations to use and conveying personal attitudes about use. When these messages were compared across dimensions of maternal and familial substance abuse, more similarities than differences were found across groups in the content of messages conveyed. Specifically, all of the messages in two out of five domains, Keepin' It Real and Resistance Tactics, were found in all three groups of transcripts. Thus, across all groups, mothers can be similarly described as supplying their adolescent with more general information about what different substances are, what they look like and how they can be used, as well as providing examples of substance use from family and friends' previous experiences. Mothers also can be similarly described as offering strategies to their adolescent about ways to refuse offers of substance use and advising their adolescent to avoid situations where they might encounter substance use and to stay focused on their academic achievements, instead of getting involved in substance use.

In a third domain, Harms of Use, four out of six themes were found in all three groups. These messages illustrate the dangers that mothers are associating with substance use and of which they are warning their adolescents, including some general warnings as well as more specific warnings about the impact of substance use on health, appearance and personal control. Across all three groups, some mothers also communicated an attitude that drugs are bad and an expectation that the adolescent's substance use would not be tolerated. Thus, providing information about and examples of substance use, offering strategies to resist use

and warning of the harms related to use are among the most common messages being relayed to younger adolescents. Additionally, conveying to the adolescent that ATOD are bad and that use will not be tolerated were common strategies moms utilized in talking about ATOD with their adolescent.

Some messages seemed to be particular to families with at least some degree of substance abuse, particularly messages that conveyed the mother's attitudes about substance use. Within families where at least one family member could be classified as a substance abuser, including mom and/or another family member, mothers warned about legal consequences related to use and cautioned about the expense of substance use. Interestingly, messages within this group of mothers also encouraged the adolescent to use their own judgment making decisions about personal substance use, and advised the child that using alcohol, tobacco or other drugs would not make one appear more mature or more accepted among peers. Other attitudes conveyed to adolescents with a maternal or family history of substance abuse included messages that encouraged the child not to be judgmental of others' substance use and to consider the family's religious beliefs when making decisions about substance use. Families without a maternal or familial history of substance abuse conveyed only a general attitude that drugs are bad and not any other attitudes of the mother.

Mothers without a personal history of substance abuse communicated a greater variety of expectations to their adolescent than mothers with a history of substance abuse, including encouraging abstinence, making statements about their expectations for their adolescent's tobacco and alcohol use in relation to their own behavior, and threatening discipline for use. Among families with no history of any substance abuse, mothers also

conveyed an expectation that the adolescent should drink responsibly and/or model the mother's use or abstinence patterns.

The themes uncovered within this study confirm and expand upon some of the messages previously identified in the literature on parent-adolescent substance use communication. Similar to the Ennett et al.'s findings (2001) of content related to rules, consequences and media, we found evidence of mothers talking about their expectations for the adolescents' substance use and warning of the associated risks, supplementing these talks with examples or material from the media. Like Miller-Day and Dodd's qualitative (2004) findings, we found evidence of messages that conveyed substance use as bad, that offered examples of the harms of use and that communicated strategies for successful avoidance of substance use influences. Similar to other findings from Miller-Day (2008), we found mothers encouraging their adolescents to use their judgment when making decisions about substance use and establishing a no tolerance rule.

Unlike prior work, we found a larger variety of messages being conveyed to adolescents, particularly within the domains of expectations and attitudes. Mothers in this study set up expectations of abstinence, made statements directing their adolescent to model their own behavior, and threatened discipline. The difference in variety of themes found between this data and prior research may be due to differences in the samples studied. Prior research has focused largely on Caucasian samples, while this study utilized an urban, African American sample. Previous research has demonstrated that African American adolescents and adults use substances at rates comparable to or lower than whites (Wallace & Muroff, 2002). Perhaps African American adolescents use substances less often because there is an expectation of abstinence or fear of discipline within the family, or because family

members model abstinence. Additionally, mothers conveyed messages of substance use not making one more mature, being non-judgmental about others use and considerations of religious beliefs. Religious themes might have been expected, given that research has shown that religion is important to African Americans, as they report higher levels of religious involvement, higher rates of church attendance and place a higher value on religion relative to whites (Taylor et al., 1996).

This study also expands upon the limited literature on variables influencing the content of parent-adolescent communication about substance use. The findings reveal that mothers offer many of the same messages whether there is a personal or familial history of substance abuse, particularly related to information, warnings and resistance strategies. The largest differences can be seen within the domains of expectations and attitudes about substance use, which seems logical in relation to the variable. Mothers with a personal history of substance abuse or who have experienced the substance abuse of a family member may have different norms and values about substance use in general and about their child's substance use, which may come through in what they communicate to their adolescent. The variety of attitudes they communicate may account the reconciliation they must make between their own past behavior or that of loved ones with what they want to convey to their adolescent. Mothers without a history of abuse may feel more comfortable setting clear expectations for their child's use, as it may be more congruent with their own behavior. Indeed, research has shown that some mothers may find their own tobacco use an impediment to discussing tobacco use with their adolescent, while others do not feel this way, and still others feel that their use can be the point of conversation, as an example of what not to do (Guilamo-Ramos et al. 2008). Other studies have shown mixed findings, revealing that

when at least one parent smokes cigarettes, there is more communication about rules, while there is less communication about rules when one or more parents drink alcohol (Ennett et al., 2001). A parallel line of research has begun to build ground within the sex communication literature, showing that mothers' current and past sexual behavior may play a role in their sexual socialization of their children. Some early work by Fox and Inazu (1980) showed that adolescent girls who were sexually active were more likely to have mothers who were not married at the birth of their first child. Additionally, more recent research has shown that maternal current sexual risk taking behavior is predictive of higher levels of adolescent sexual risk taking behavior (Kotchick, Dorsey, Miller, & Forehand, 1999). In the study conducted by Kotchick and colleagues (1999), once mother-adolescent communication about sex was added to the model, the link between the former two diminished, with mother-adolescent communication being related to less adolescent risky sexual behavior. Work from both the substance use and sex communication literature may suggest that mothers' experience and behavior related to both sexual risk taking and substance use play a role in the content of messages conveyed to adolescents.

Comparison with Current Intervention Programs

As discussed in the introduction, a number of intervention programs have been developed to deter youth substance use. The Strong African American Families program (Brody et al., 2006) is one such intervention, geared specifically at fostering protective family processes, including encouraging communication, among African American families in the hopes of reducing adolescent risk behaviors, including substance use. The program is delivered over 7 consecutive sessions, each with concurrent individual meetings with the caregiver and youth followed by a combined family meeting, where skills learned in the

individual meetings are practiced (Brody et al. 2006). Each session works to build communication between the youth and caregiver, with the fifth session specifically designed to increase communication about peer pressure and strategies to resist offers of substance use (C. Grange, personal communication, June 14, 2010). Program facilitators make specific recommendations to parents about what to say to youth about substance use and give parents the chance to practice these discussions with other parents while teaching youth about peer pressure, in a separate session. In the combined family session, the dyad practices talking about peer pressure and substance use with each other.

An interesting comparison arises when comparing the recommendations made to African American families involved in this program with the results of this study of African American caregivers. Many of the themes uncovered in this analysis match those recommendations made by the SAAF program. As the intervention recommends, mothers in our study set clear expectations for use, and threatened punishment for violations for these expectations. Moms in our study warned their children of the impact substance use can have on achieving their future goals, similarly recommended within the SAAF program (C. Grange, personal communication, June 14, 2010). Additionally, mothers in our study used examples of family and community members in discussing the effects of substance use on individuals. The SAAF program makes a similar recommendation, encouraging caregivers to use examples from the African American community and from within their family in discussing substance use. The program also recommends that parents discuss family values, routines and rules, and how these relate to substance use and other risk behaviors. Many of the moms in our study set rules for use and conveyed their personal attitudes toward substance use to their adolescents. Finally, the program encourages caregivers to discuss

strategies for resisting peer pressure with their child and to encourage independence in the child. Mothers in our study offered tactics to resist offers to use substances from peers and encouraged their children to use their own judgment in making decisions about substance use.

While many of the themes uncovered in this study were very similar to the content of the SAAF program, not all of the resulting themes were a match to the program recommendations. The SAAF program recommends that parents let their youth know they are trusted and that they are being monitored, two strategies that were not found in this study. Additionally, the SAAF program encourages discussion of the strength of the African American community. While mothers in our study did reference the community in their talks with their child, they didn't highlight the strength of African American culture in trying to deter youth from substance use. Furthermore, a number of other themes were uncovered in this study that did not map onto any of the SAAF program recommendations. Mothers in our study stressed the consequences of use on health and personal control and judgment, and the possible legal ramifications of using illegal substances. They offered basic facts about substances and substance use and warned of the expense of substance use. Religious messages and a focus on education as a resistance strategy were also found in this study, but not recommended in the SAAF program.

Study limitations

While this study makes a contribution to the literature on parent-adolescent substance use communication and the variables that influence it, a number of limitations should be considered. First, the dataset utilized had already been collected and was used for secondary data analysis. Thus, we could not abide by the true spirit of grounded theory analysis, in which the data collected guide the future data collection and the researcher adapts the

questions asked of study participants as more data is collected and findings revealed. This study also focused only on mothers' reports of communication. Arguably, what adolescents gain from such communication may be different and more important than what mothers try to convey. Additionally, this study focused on adolescents in one cohort, limiting the age range in the sample. From a developmental perspective, one might expect to find that parents give their offspring different messages about substance use at different ages. Third, this study did not collect data on the timing and frequency of conversations related in these interviews. Thus, it is unknown whether the themes revealed are messages recently conveyed to adolescents and how often these messages were conveyed. This study also did not link these messages to the adolescent's actual substance use. Thus, it is unknown whether any of the themes revealed actually impact adolescent's substance use and if the influence is differential by message and substance.

One specific confound that must be considered in relation to the study aims and findings is mothers' tobacco use. Data from the 2008 CDC National Health Interview Survey estimate that 20.6% of adults nationally are current smokers. While African American youth substance use rates generally fall below that of other ethnicities (Bachman et al., 1991; Wallace et al., 2003), current national smoking estimates show African American adults just trailing White adults, at 21.3% and 22.0% prevalence respectively (CDC, MMWR, 2009). Unfortunately, the FADS measure utilized in this study did not capture tobacco use history, and little data are available regarding the past or current smoking behavior of the mothers' in this study, beyond individual references made within the interviews by the mothers. One specific theme found in this study highlights this confound. The *Do As I Say, Not As I Do* theme refers to messages a few moms conveyed directing their child to take the mothers'

verbal advice, and not model their current substance use behavior, particularly regarding tobacco use. One message coded within this theme related to alcohol use, but all other messages referred specifically to the contrast between the mothers' directive to the child not to smoke, while being a current smoker personally. This message was found only in Groups A and C, those in which the mother is categorized as not having a personal history of substance abuse or dependence. While we are unsure whether the mothers who relayed this theme would definitely have met for tobacco abuse or dependence per FADS data collection, they may have been included in Group B (the only group that included mothers with a personal history of abuse or dependence), making this theme part of that group, instead of the other two. It is not suspected that any other themes would have been affected by the inclusion of maternal tobacco use history, based on transcript data.

Implications and Directions for Future Research

Results of this study and others in this line of research have direct implications for prevention programming aimed at reducing youth substance use. Because of the dearth of research in the area of parent-adolescent communication thus far, prevention programs like the Strong African American Families program have been forced to develop recommendations for what parents should say to their children about substance use without the guidance of theory. Interestingly, the results of our study largely supported the recommendations made by the SAAF. However, our results offer new messages that may prove beneficial when included in prevention efforts, including messages about a family's religious beliefs and substance use, the consequences of use on health and personal control, legal consequences for using illegal substances, the expense of substance use and a focus on education, instead of alcohol and drugs.

Future work can expand this field of research in many ways. This study examined mothers' recollections of conversations with their early adolescent child. Different results may be obtained when interviewing mothers of older adolescents. Additionally, other work should examine the content of communication from the adolescent's point of view, within a larger range of ages. Future investigators should look at the frequency and timing of these conversations, and prospectively examine how they relate might relate to an adolescent's substance use behavior. Likewise, the process and context of such communication needs to be examined, as knowing *what* is being said does not paint a complete picture without understanding *how* and *why*. Further qualitative interviews with families of adolescents and caregivers can shed light on what triggers these conversations, who initiates them and who participates, and how the style and flow of the communication can be described. Additionally, collecting information on the frequency and timing of these conversations can better guide the field as to which comes first – suspected and/or actual substance use by the youth or communication about substance use. These efforts would best inform the development of a scale to more easily assess both the content and process of communication about substance use.

A multitude of variables can be explored in relation to their influence on the content and process of substance use communication, including further exploration of family substance abuse. The ultimate goal of future research in this area should aim toward informing prevention efforts. Solid evidence of the content and process of substance abuse communication can help us better inform prevention strategies aimed at reducing youth substance use. A better understanding of the influence of a family history of substance abuse

on this communication can serve to inform adaptations to prevention programs for those youth at highest risk for substance use.

List of References

List of References

- Andrews, J., Hops, H., Ary, D., & Tildesley, E. (1993, August). Parental influence on early adolescent substance use: Specific and nonspecific effects. *The Journal of Early Adolescence, 13*, 285-310.
- Bachman, J., Wallace, J., O'Malley, P., Johnston, L., Kurth, C., & Neighbors, H. (1991). Racial/ethnic differences in smoking, drinking, and illicit drug use among American high school seniors, 1976–89. *American Journal of Public Health, 81*(3), 372-377. doi:10.2105/AJPH.81.3.372.
- Barnes, H., & Olson, D. (1985). Parent–adolescent communication and the Circumplex Model. *Child Development, 56*(2), 438-447. doi:10.2307/1129732.
- Baumrind, D. (1966). Effects of Authoritative Parental Control on Child Behavior, *Child Development, 37*, 887-907.
- Brody, G., Flor, D., Hollett-Wright, N., & McCoy, J. (1998, June). Children's development of alcohol use norms: Contributions of parent and sibling norms, children's temperaments, and parent-child discussions. *Journal of Family Psychology, 12*, 209-219.
- Brody, G., Murry, V., Gerrard, M., Gibbons, F., McNair, L., Brown, A., et al. (2006). The Strong African American Families Program: Prevention of youths' high-risk behavior and a test of a model of change. *Journal of Family Psychology, 20*(1), 1-11. doi:10.1037/0893-3200.20.1.1.
- Centers for Disease Control and Prevention [CDC]. Cigarette Smoking Among Adults and Trends in Smoking Cessation—United States, 2008. Morbidity and Mortality Weekly Report [MMWR] 2009;58(44):1227–1232 [accessed 2010June21].
- Centers for Disease Control and Prevention. Youth Risk Behavior Survey Overview (2007). <http://www.cdc.gov/yrbs>.
- Chassin, L., Presson, C., Todd, M., Rose, J., & Sherman, S. (1998). Maternal

- socialization of adolescent smoking: The intergenerational transmission of parenting and smoking. *Developmental Psychology*, 34, 1189-1201. doi:10.1037/0012-1649.34.6.1189
- Clark, P., Scarisbrick-Hauser, A., Gautam, S., & Wirk, S. (1999). Anti-tobacco socialization in homes of African-American and White parents, and smoking and nonsmoking parents. *Journal of Adolescent Health*, 24, 329-339. doi:10.1016/S1054-139X(98)00117-7
- Corona, R., Cowgill, B., Bogart, L., Parra, M., Ryan, G., Elliott, M., et al. (2009). Brief report: A qualitative analysis of discussions about HIV in families of parents with HIV. *Journal of Pediatric Psychology*, 34(6), 677-680. doi:10.1093/jpepsy/jsn119.
- de Leeuw, R., Scholte, R., Harakeh, Z., van Leeuwe, J., & Engels, R. (2008). Parental smoking-specific communication, adolescents' smoking behavior and friendship selection. *Journal of Youth and Adolescence*, 37, 1229-1241. doi:10.1007/s10964-008-9273-z
- den Exter Blokland, E., Hale III, W., Meeus, W., & Engels, R. (2006). Parental Anti-Smoking Socialization. *European Addiction Research*, 12, 25-32. doi:10.1159/000088580
- DiIorio, C., Kelley, M., & Hockenberry-Eaton, M. (1999). Communication about sexual issues: mothers, fathers, and friends. *Journal of Adolescent Health*, 24(3), 181-189.
- DiIorio, C., Resnicow, K., Dudley, W., Thomas, S., Dongqing Terry, W., Van Marter, D., et al. (2000). Social cognitive factors associated with mother--adolescent communication about sex. *Journal of Health Communication*, 5(1), 41
- Engels, R., & Willemsen, M. (2004). Communication about smoking in Dutch families: Associations between anti-smoking socialization and adolescent smoking-related cognitions. *Health Education Research*, 19, 227-238. doi:10.1093/her/cyg042
- Ennett, S., Bauman, K., Foshee, V., Pemberton, M., & Hicks, K. (2001, February). Parent-child communication about adolescent tobacco and alcohol use: What do parents say and does it affect youth behavior?. *Journal of Marriage & the Family*, 63, 48-62.
- Epstein, M., & Ward, L. (2008). "Always Use Protection": Communication Boys Receive About Sex From Parents, Peers, and the Media. *Journal of Youth & Adolescence*, 37(2), 113-126. doi:10.1007/s10964-007-9187-1.
- Fearnow, M., Chassin, L., Presson, C., & Sherman, S. (1998). Determinants of parental attempts to deter their children's cigarette smoking. *Journal of Applied Developmental Psychology*, 19, 453-468. doi:10.1016/S0193-3973(99)80050-1

- Fox, G., & Inazu, J. (1980). Patterns and outcomes of mother–daughter communication about sexuality. *Journal of Social Issues, 36*(1), 7-29.
- Gil, A., Wagner, E., & Tubman, J. (2004). Associations Between Early-Adolescent Substance Use and Subsequent Young-Adult Substance Use Disorders and Psychiatric Disorders Among a Multiethnic Male Sample in South Florida. *American Journal of Public Health, 94*(9), 1603-1609. doi:10.2105/AJPH.94.9.1603.
- C. Grange, personal communication, June 14, 2010.
- Guilamo-Ramos, V., Bouris, A., Dittus, P., & Jaccard, J. (2008). Mother-adolescent communication about tobacco use in urban Puerto Rican and Dominican families. *Youth & Society, 40*(1), 86-113. doi:10.1177/0044118X07308072.
- Harakeh, Z., Engels, R., Blokland, E., Scholte, R., & Vermulst, A. (2009). Parental communication appears not to be an effective strategy to reduce smoking in a sample of Dutch adolescents. *Psychology & Health, 24*, 823-841. doi:10.1080/08870440802074649
- Harakeh, Z., Scholte, R., de Vries, H., & Engels, R. (2005). Parental rules and communication: their association with adolescent smoking. *Addiction, 100*, 862-870. doi:10.1111/j.1360-0443.2005.01067.x
- Harakeh, Z., Scholte, R., Vermulst, A., de Vries, H., & Engels, R. (2004). Parental factors and adolescents' smoking behavior: An extension of The theory of planned behavior. *Preventive Medicine: An International Journal Devoted to Practice and Theory, 39*, 951-961. doi:10.1016/j.ypmed.2004.03.036
- Henriksen, L., & Jackson, C. (1998). Anti-smoking socialization: Relationship to parent and child smoking status. *Health Communication, 10*, 87-101.
- Herbert, D., & Schiaffino, K. (2007, March). Adolescents' smoking behavior and attitudes: The influence of mothers' smoking communication, behavior and attitudes. *Journal of Applied Developmental Psychology, 28*, 103-114.
- Huver, R., Engels, R., & de Vries, H. (2006). Are anti-smoking parenting practices related to adolescent smoking cognitions and behavior?. *Health Education Research, 21*, 66-77. doi:10.1093/her/cyh045
- Huver, R., Engels, R., Vermulst, A., & de Vries, H. (2007). Bi-directional relations between anti-smoking parenting practices and adolescent smoking in a Dutch sample. *Health Psychology, 26*, 762-768. doi:10.1037/0278-6133.26.6.762
- Huver, R., Engels, R., Vermulst, A., & de Vries, H. (2007). Is parenting style a context for smoking-specific parenting practices?. *Drug & Alcohol Dependence, 89*, 116-125. doi:10.1016/j.drugalcdep.2006.12.005.

- Jaccard, J., Dodge, T., & Dittus, P. (2002). Parent-Adolescent Communication About Sex and Birth Control: A Conceptual Framework. *Talking sexuality: Parent-adolescent communication* (pp. 9-41). San Francisco, CA US: Jossey-Bass.
- Jackson, C., & Henriksen, L. (1997, January). Do as I say: Parent smoking, antismoking socialization, and smoking onset among children. *Addictive Behaviors*, 22, 107-114.
- Kotchick, B., Dorsey, S., Miller, K., & Forehand, R. (1999). Adolescent sexual risk-taking behavior in single-parent ethnic minority families. *Journal of Family Psychology*, 13(1), 93-102. doi:10.1037/0893-3200.13.1.93
- Mena, M., Dillon, F., Mason, C., & Santisteban, D. (2008). Communication about sexually-related topics among hispanic substance-abusing adolescents and their parents. *Journal of Drug Issues*, 38(1), 215-234.
- Miller, K., Fasula, A., Dittus, P., Wiegand, R., Wyckoff, S., & McNair, L. (2009). Barriers and facilitators to maternal communication with preadolescents about age-relevant sexual topics. *AIDS & Behavior*, 13(2), 365-374.
- Miller-Day, M. (2002, November). Parent-adolescent communication about alcohol, tobacco and other drug use. *Journal of Adolescent Research*, 17, 604-616.
- Miller-Day, M. (2008). Talking to youth about drugs: What do late adolescents say about parental strategies?. *Family Relations*, 57(1), 1-12.
- Miller-Day, M., & Dodd, A. (2004, February). Toward a descriptive model of parent-offspring communication about alcohol and other drugs. *Journal of Social and Personal Relationships*, 21, 69-91.
- National Institutes on Drug Abuse (NIDA). Infofacts. (2008, December). <http://www.drugabuse.gov/infofacts/HSYouthtrends.html>
- Noller, P., & Bagi, S. (1985). Parent-adolescent communication. *Journal of Adolescence*, 8(2), 125-144. doi:10.1016/S0140-1971(85)80042-7.
- Noller, P., & Callan, V. (1990). Adolescents' perceptions of the nature of their communication with parents. *Journal of Youth and Adolescence*, 19(4), 349-362. doi:10.1007/BF01537077.
- O'Sullivan, L., Dolezal, C., Brackis, C., Traeger, L., & Mellins, C. (2005). Communication about HIV and risk behaviors among mothers living with HIV and their early adolescent children. *The Journal of Early Adolescence*, 25(2), 148-167.
- Otten, R., Harakeh, Z., Vermulst, A., Van den Eijnden, R., & Engels, R. (2007).

- Frequency and quality of parental communication as antecedents of adolescent smoking cognitions and smoking onset. *Psychology of Addictive Behaviors*, 21, 1-12. doi:10.1037/0893-164X.21.1.1
- Pantin, H., Schwartz, S., Coatsworth, J., Sullivan, S., Briones, E., & Szapocznik, J. (2007). Familias Unidas: A Systemic, Parent-Centered Approach to Preventing Problem Behavior in Hispanic Adolescents. *Preventing youth substance abuse: Science-based programs for children and adolescents* (pp. 211-238). Washington, DC US: American Psychological Association.
- Partnership for a Drug Free America. *Parent Talk Kit*. www.timetotalk.org
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. United States of America: Sage Publications, Inc.
- Sprecher, S., Harris, G., & Meyers, A. (2008). Perceptions of sources of sex education and targets of sex communication: Sociodemographic and cohort effects. *Journal of Sex Research*, 45(1), 17-26.
- Stephenson, M., Quick, B., Atkinson, J., & Tschida, D. (2005). Authoritative Parenting and Drug-Prevention Practices: Implications for Antidrug Ads for Parents. *Health Communication*, 17(3), 301-321. doi:10.1207/s15327027hc1703.
- Svikis, D., McCaul, M., Haug, N., & Boney, T. (1996). Detecting alcohol problems in drug-dependent women of childbearing age. *American Journal of Drug and Alcohol Abuse*, 22, 563-575. doi:10.3109/00952999609001681.
- Swain, C., Ackerman, L., & Ackerman, M. (2006). The influence of individual characteristics and contraceptive beliefs on parent-teen sexual communications: a structural model. *Journal of Adolescent Health*, 38(6), 753.e9-753.e18.
- Taylor, R. J., Chatters, L. M., Jayakody, R., Levin, J. S. (1996). Black and White differences in religious participation: A multisample comparison. *Journal for the Scientific Study of Religion*, 35(4), 403-410. doi: 10.2307/1386415.
- van der Vorst, H., Engels, R., Meeus, W., Deković, M., & Van Leeuwe, J. (2005). The role of alcohol-specific socialization in adolescents' drinking behaviour. *Addiction*, 100, 1464-1476. doi:10.1111/j.1360-0443.2005.01193.x
- Wallace, J., Brown, T., Bachman, J., & Laveist, T. (2003). The Influence of Race and Religion on Abstinence from Alcohol, Cigarettes and Marijuana among Adolescents. *Journal of Studies on Alcohol*, 64(6), 843-848.
- Wallace, J., & Muroff, J. (2002). Preventing substance abuse among African American children and youth: Race differences in risk factor exposure and vulnerability. *The Journal of Primary Prevention*, 22(3), 235-261. doi:10.1023/A:1013617721016.

Williams, J., Van Dorn, R., Ayers, C., Bright, C., Abbott, R., & Hawkins, J. (2007). Understanding race and gender differences in delinquent acts and alcohol and marijuana use: A developmental analysis of initiation. *Social Work Research, 31*(2), 71-81

Youniss, J., & Smollar, J. (1985). *Adolescent relations with mothers, fathers, and friends*. Chicago, IL US: University of Chicago Press.

Appendix A

Family Alcohol and Drug Survey (FADS)

Alcohol Drinking Patterns

For each family member, what has been his/her
HEAVIEST pattern of use EVER?

- TYPE A Drank *heavily, often* becoming intoxicated when drinking, AND
had significant problems caused by drinking
- [Review TYPE A Problems]
- TYPE B Drank *heavily, often* becoming intoxicated when drinking, but did
NOT have significant problems caused by drinking
- TYPE C Drank *regularly, normally* did not become intoxicated when
drinking, and did NOT have significant problems caused by drinking (social
drinking)
- TYPE D Drank *rarely, never* became intoxicated when drinking, and did
NOT have significant problems caused by drinking (for example, a drink at
holidays, weddings, or special occasions)
- TYPE E *Never* drank alcohol (or never completed a full drink of alcohol)
-

Family Alcohol and Drug Survey (FADS)

“TYPE A” Alcohol Drinking Problems

- **FAMILY PROBLEMS:** Examples include fights or problems with husband/wife/child or other relative(s) due to the person’s drinking.
 - **SOCIAL PROBLEMS:** Examples include arguments or difficulties with friends or other acquaintances due to the person’s drinking.
 - **JOB OR SCHOOL PROBLEMS:** Examples include poor job performance, missed work or classes, or being fired due to the person’s drinking.
 - **FINANCIAL PROBLEMS:** Examples include difficulty paying bills, buying groceries or necessities, or financial difficulties leading to problems in other areas (i.e., family, social, school) due to the person’s drinking.
 - **LEGAL PROBLEMS:** Examples include more than one DWI, other traffic arrests, or police problems due to the person’s drinking.
 - **HEALTH PROBLEMS:** Examples include liver damage, stomach pains, or heart/blood pressure problems due to the person’s drinking.
 - **TREATMENT FOR ALCOHOL ABUSE:** Examples include inpatient/ residential treatment, outpatient treatment, or regular AA attendance by the person.
-

Appendix B

Family Alcohol and Drug Survey (FADS)

Drug Use Patterns

For each family member, what has been his/her
HEAVIEST pattern of drug or substance use EVER?

- TYPE A Used *heavily* AND had significant problems caused by drug use
 [Review TYPE A Problems]
- TYPE B Used *heavily* but did NOT have significant problems caused by
 drug use
- TYPE C Used *regularly* and did NOT have significant problems caused by
 drug use (social or recreational use)
- TYPE D Used *rarely* and did NOT have significant problems caused by
 drug use (experimental use)
- TYPE E *Never* used illicit drugs
-

Drug Or Substance Use Includes:

- illegal drugs
- legal substances used for the purpose of getting high
- prescription drugs
 - without a doctor's prescription
 - in greater amounts than prescribed
 - more often than prescribed
 - for any reasons other than a doctor said they should be taken

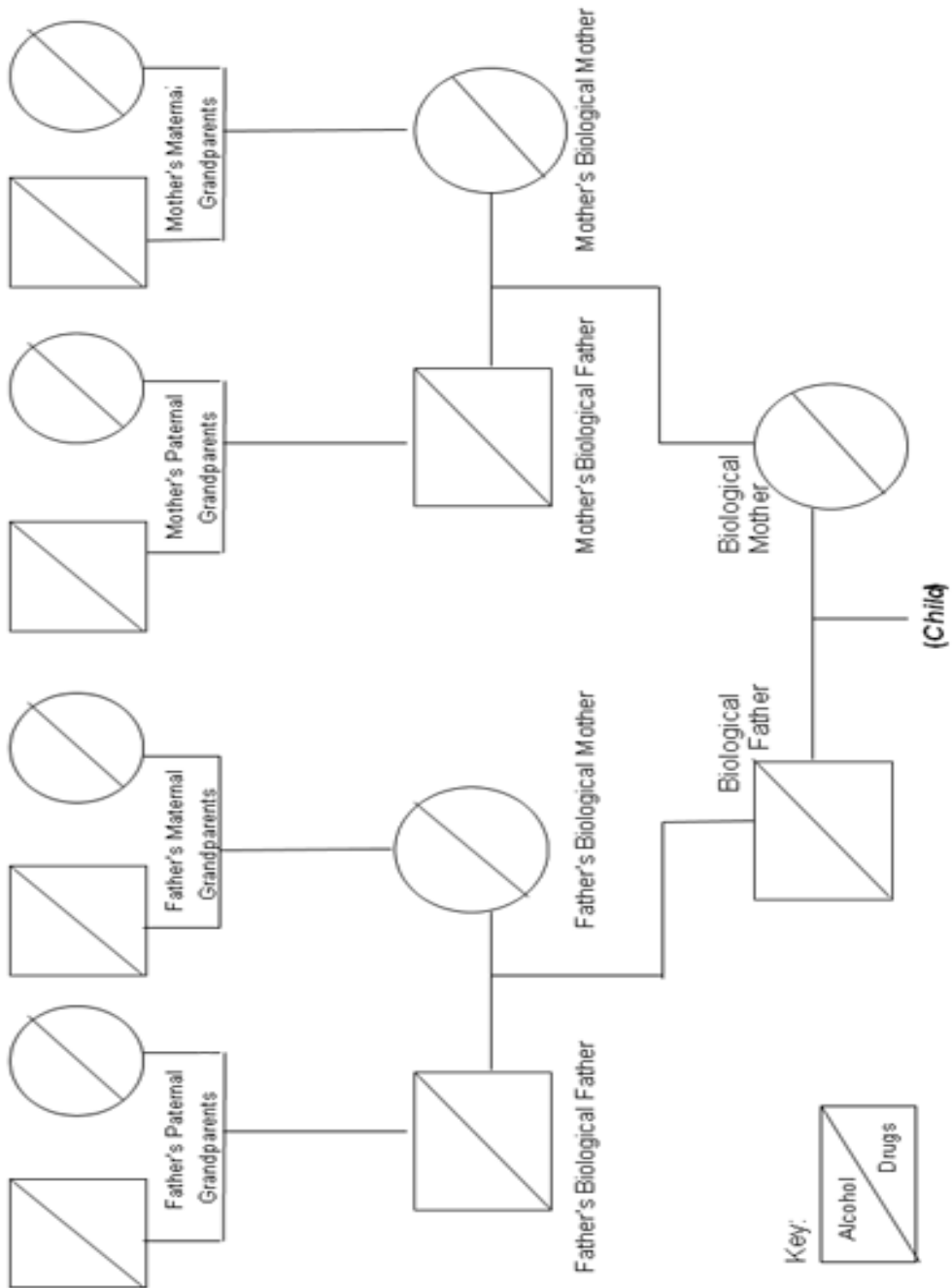
Family Alcohol and Drug Survey (FADS)

“TYPE A” Drug Problems

- **FAMILY PROBLEMS:** Examples include fights or problems with husband/wife/child or other relative(s) due to the person’s drug use.
 - **SOCIAL PROBLEMS:** Examples include arguments or difficulties with friends or other acquaintances due to the person’s drug use.
 - **JOB OR SCHOOL PROBLEMS:** Examples include poor job performance, missed work or classes, or being fired due to the person’s drug use.
 - **FINANCIAL PROBLEMS:** Examples include difficulty paying bills, buying groceries or necessities, or financial difficulties leading to problems in other areas (i.e., family, social, school) due to the person’s drug use.
 - **LEGAL PROBLEMS:** Examples include traffic arrests or police problems due to the person’s drug use.
 - **HEALTH PROBLEMS:** Examples include infections, stomach pains, or heart/blood pressure problems due to the person’s drug use.
 - **TREATMENT FOR DRUG ABUSE:** Examples include inpatient/ residential treatment, outpatient treatment, or regular NA attendance by the person.
-

Appendix C

FADS Genogram



Appendix D

Question about Parent-Offspring ATOD Conversations

[This is audiotaped.] “Tell a story about a conversation you have had with (child) about alcohol, tobacco, or other drug use. Please try to remember what each of you said during the conversations. You can say, for example, “I said ____ then she said ____.” Try to get as close to the actual words as you can.”

Follow-up probes:

1. Who started the conversation?
2. How was the conversation started?
3. How old was (child) when you had this conversation?
4. Who was there when you had this conversation?
5. Where did the conversation take place?
6. Why did you have this conversation with (child)?
5. How often do you have these conversations with (child)?

If a parent is unable to recount a conversation they have had with their child, we will ask:

- Are there conversations you would like to have had with your child but have not? Tell me about those.
- Do you think your child knows your opinions about drug and alcohol use? How do you think they know your opinions?

Appendix E

Parental Consent To Participate in Project COPE

Dear Parent,

This letter is to ask permission for you and your child to take part in a research study designed to learn more about what things best help students cope with stress. This study is being conducted by Virginia Commonwealth University. The funding is provided by the National Institutes of Health in Washington, D.C. A total of 400 families – half with children in the fifth grade and half with children in the eighth grade – are being asked to participate. You are being asked to participate because you live in the greater Richmond area and have a child in the 5th or 8th grade. You may have received a flyer from one of the community agencies or churches that serve the greater Richmond area.

What am I being asked to do?

If you agree to allow your family to participate, this is what will happen:

We will ask you and your child to complete four interviews over the next three years. The interviews with you and your child will be conducted separately to insure everyone's privacy. The first three interviews will be in your home, or if you prefer, at Virginia Commonwealth University. The last interview will be over the phone. The home interviews will take about 2 hours each; the phone interview will last about 30 minutes.

The interviews include a number of topics, such as

- * things adolescents and families might find stressful, like personal or neighborhood violence (such as seeing others harmed or killed), major life events such as moving, and everyday problems;
- * how youth and families cope with stress, including things you and your child do that may work well and things that don't work as well;
- * the resources and strengths you have to cope with stress, including how your family relates to each other and how you view your neighborhood;
- * your child's behavior, including use of alcohol or drugs;
- * ways you help your child cope with stress, and the reasons you use specific strategies to help your child;
- * your child's physical reactions to stress. We will ask your child to give us 6 samples of saliva (spit) during the interview. We will look in the saliva for the hormones which are made by the body during stress.

The National Institutes of Health, who is sponsoring the project, is very interested in why some youth turn to alcohol and drugs to cope with stress while other youth do not. We are trying to understand if there are ways that adolescents react to stress and cope with stress that make it easier or harder to turn to alcohol and drugs as a way to cope.

Beginning in Year 3 of the study, about 125 biological fathers of the students in Project COPE or father figures living in the home with the student will be asked to participate in individual interviews. With your permission, data from your interview and your child's interview will be used along with the interviews with fathers and father figures to understand more about how different parents and parent figures affect youth development.

Also with your permission, a portion of your interview in Year 3 of the study will be tape recorded. This portion of the interview asks about the strategies you might suggest to your child to cope with situations that could lead to violence, and about your hopes for your child.

What are the potential risks and benefits of taking part in this research?

Some of the questions may make you or your child feel uncomfortable. You and your child can choose not to answer any question for any reason and can stop the interview at any time. If your child should become upset, a member of our staff will be glad to continue to talk to your child and address their concerns for as long as they would like. In addition, we can also provide a referral for your child if needed. Although we will assist in providing any referral that is needed, Virginia Commonwealth University or your health insurance may not provide compensation for these services. A potential benefit of this study is that by answering these questions, you and your child may help us learn how to help youth and families cope better with stress.

What will my family receive for participating?

We want to thank families who complete the interviews for the time and energy it took. So, at the end of the first interview in your home, you will receive a \$45 gift certificate to Wal-Mart and your child will receive a \$5 gift card. In some cases, your child will already have received this gift card for returning the consent form. After the second and third interviews in your home, you will receive \$50 in gift certificates to Wal-Mart. When you complete the phone interview, you will receive a \$30 gift certificate to Wal-Mart. Families who complete all 4 interviews will be entered into a drawing for \$300, \$200, and \$100 prizes. Families in the study who stay in touch with us each month will be entered into a monthly drawing for a \$25 gift certificate. One \$25 gift certificate will be given away each month of the project.

If your child has given you this consent form to review, he or she will receive a \$5 gift certificate if you review and return this consent form even if you decide that you do not want your family to participate.

What about privacy and confidentiality?

All of the information that you and your child provide will be kept private. Nothing that either of you tell us will be shared with anyone. But, if your child tells us that someone is hurting her or him, or that he or she might hurt himself/herself or someone else, the law says that we have to let people in authority know so they can protect your child. Even if this should happen, we would attempt to talk with you and tell you exactly what our concerns are regarding your child's safety. You will not see your child's information and your child will not see your information. All information you and your child provide will be coded with an identification number (ID number). Your name or your child's

name and your ID number will not be kept together with any of the information you and your child provide. We tape record 10 -15 minutes of the interview with your child to help us keep track of the answers better. All tape recordings are kept in a locked cabinet at the VCU project office. Study staff will go back and listen to the recordings and type up the conversations. To protect privacy, tapes will be labeled with an identification number, and all names will be changed. After the tapes have been transcribed and the study ends, recordings will be destroyed.

VCU or the sponsor of this project may review research records and the consent form signed by you.

When results of the research are published or discussed, no information will be included that will reveal your child's or your identity.

To help us protect your privacy, we have obtained a Certificate of Confidentiality from the National Institutes of Health. With this Certificate, the researchers cannot be forced to disclose information that may identify you, even by a court subpoena, in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings. The researchers will use the Certificate to resist any demands for information that would identify you, except as explained below.

The Certificate cannot be used to resist a demand for information from personnel of the United States Government that is used for auditing or evaluation of Federally funded projects or for information that must be disclosed in order to meet the requirements of the federal Food and Drug Administration (FDA).

You should understand that a Certificate of Confidentiality does not prevent you or a member of your family from voluntarily releasing information about yourself or your involvement in this research.

The Certificate of Confidentiality does not prevent the researchers from disclosing voluntarily, without your consent, information that would identify you as a participant in the research project if your child tells us that that someone is hurting her or him, or that he or she might hurt himself/herself or someone else.

Voluntary participation and withdrawal

You and your child can choose whether to be in this study or not. Your participation is voluntary. If you volunteer to be in the study, you or your child may withdraw at any time with no consequences of any kind. You and your child may also refuse to answer any question and still remain in the study.

Who should I contact if I have questions?

If you have a question at any time, call Dr. Wendy Kliewer or the study staff at Virginia Commonwealth University at (804) 828-8793.

You may also feel free to contact the Office for Research Subjects Protection at the address and phone number below:

Virginia Commonwealth University
Bio-Tech Park, Building One
800 East Leigh Street, Suite 114
P.O. Box 980568
Richmond, VA 23219-0568
Telephone: (804) 828-0868

Consent

Signing your name below shows that you agree to be in the study. If there is any part of the form that is unclear to you, be sure to ask questions about it. Do not sign the form until you get answers to all of your questions.

I have read this consent form and understand the information about the study. All my questions about the study and my participation in it have been answered.

Federal law requires both parents to sign this consent form, unless the other parent is deceased, unknown, incompetent, not available, or does not have legal custody.

Check here if you **DO NOT WANT** your answers and the student answer to be used along with information from any fathers who are interviewed

Check here if you **DO NOT WANT** your answers to questions about your coping suggestions or your hopes for your child to be tape recorded

Please sign and print names below

Printed name of student

Parent 1/ Signature of parent/legal guardian

Date

Printed name of Parent 1

Witness signature

Date

Please check this box if there is no other parent/legal guardian in the home

Parent 2/ Signature of parent/legal guardian

Date

Printed name of Parent 2

Witness signature

Date

Signature of researcher verifying parental signature requirements (if needed)

Date

Principal Investigator Signature

Date

Vita

Nikola Zaharakis was born on September 11, 1983, in Staten Island, New York, and is an American citizen. She graduated from Staten Island Technical High School, Staten Island, New York in 2001. She received her Bachelor of Arts in Psychology from the Macaulay Honors College at CUNY Hunter College, New York, New York in 2005 and subsequently worked as a clinical trials research coordinator at the Center for the Studies of Addiction, University of Pennsylvania.