The Pennsylvania State University

The Graduate School

College of the Liberal Arts

ADOLESCENT PERCEPTIONS OF MESSAGES ABOUT DRUGS AND DRUG USE FROM SUPPORTIVE OTHERS

A Thesis in

Communication Arts & Sciences

by

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Submitted in Partial Fulfillment
of the Requirements
for the Degree of
Master of Arts

August 2012

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ABSTRACT

Adolescent drug use remains a serious problem in the United States (Johnston, O'Malley, Bachman, & Schulenberg, 2012). The 2011 Monitoring the Future survey (MTF) found that half of the adolescents in a nationwide study had tried an illicit drug by the time they finished high school. Recent studies report higher rates of alcohol and other illicit drug use among rural adolescents when compared to urban counterparts and rural adolescents remain an understudied portion of the population (Mink, Moore, Johnson, Probst, & Martin, 2005; Spoth, Goldberg, Neppl, Trudeau, & Ramisetty-Mikler, 2001; Zollinger, Saywell, Overgaard, Przybylski, & Dutta-Bergman, 2006). Scholars have called for further investigation into the experiences of rural adolescents and the extent to which social processes, such as the role of social support, can help reduce drug use among rural youth. Based on interviews with 113 rural adolescents, this study identified and described the sources and functions of social support messages rural adolescents report receiving within the context of substance use and analyzes their appraisals of those messages. Results indicate that parents, adult experts, and siblings were the most common sources of social support for rural adolescents. Functions of support include emotional, esteem, informational, instrumental, and network support. Informational, instrumental, and emotional support were the most frequently provided functions, while esteem and network support messages were much less common. In terms of emotional support, adolescents gave a positive appraisal to messages from parents that conveyed care and to messages from individuals who had been through similar experiences. Messages providing informational support, the most frequently provided function, were appraised positively when the advice was provided by a source who modeled that behavior, as well as when the advice was provided by a source that was able to base the message on a similar previous experience. Participants noted that siblings were particularly adept at providing advice that was based on previous, shared experiences to which the adolescents could easily relate. In terms of instrumental support, rural adolescents valued messages provided by friends and siblings when intervening during a substance offer, either advocating for them or physically threatening the source of the offer. Messages that provided alternatives to substance use also received a positive appraisal. This was particularly true for adolescents who had a history of substance use. Overall, the findings from this study provide important descriptive information that will increase understanding of the sources, functions, and appraisals of social support messages that rural adolescents report they receive from others to help them make healthy choices and remain drug free.

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Acknowledgements

As part of researching and writing this thesis, I learned a great deal about the importance of social support in the context of adolescent drug use. However, as I reflect back on the entire process, one of the most valuable things I learned is how much I rely on those who provide me with support. This process tested me in ways in which I had never been tested previously, and I can state with a high degree of confidence that I could not have completed it without my social support network. In keeping with the theme of this document, the following sections enumerate the sources of support that I received during this process, and explicate why their support meant so much to me.

To my advisor, Michelle Miller-Day, social support personified, to whom I unquestionably owe the most credit. Your patience, encouragement, and advice helped me more than you will ever know. To me, you are a teacher, advisor, second mother, and most importantly, a friend. I cannot thank you enough for all of your help and am so incredibly thankful that our paths crossed at Penn State. I sincerely hope (and expect) that they will cross again.

To my committee members, Drs. Denise Solomon and Michael Hecht. Thank you so much for your thoughtful insight, poignant questions, and for sticking with me. While your content expertise played a big role in shaping the content of this document, your support throughout this entire process is what I will always remember.

To my parents, Tom and Eileen, and my sister, Allura, further proof that there is nothing quite like support from your family. As has been the case my entire life, your belief in me never wavered, and you were always there to listen, comfort, and encourage. Your love and support has, does, and will continue to mean more to me than anything.

To my girlfriend, Michelle Abel, who had to listen to each of my revised outlines, and comforted me whenever NVivo decided it was time for a technical glitch. Day-in, day-out, you were there to pick me up whenever this process got me down, and keep me going whenever I got on a roll. I am so thankful that I had you around for the completion of this paper – I don’t know what I would have done without you.

And finally, to my grandmother, Janet Moenig, whom we lost before this paper was completed. I suspect few grandmothers have had such a direct role in a thesis before. You came to live with me in Penn State over the summer while I was conducting interviews for this project. You also stayed up well past your bedtime and helped me manually transcribe some of my interviews, all done without a single complaint. If that’s not love and support, I don’t know what is. While you were not there to see the process officially completed, you were the first person I thought of when it was. You are missed, Gram, but as is evidenced by this section, you were a part of so many aspects of my life and will always be remembered.

Chapter 1: Introduction

Statement of Problem

Adolescent drug use remains a serious problem in the United States (Johnston, O'Malley, Bachman, & Schulenberg, 2012). The 2011 Monitoring the Future survey (MTF) provides a view of this issue at a national level. According the results of the 2011 MTF study, the lifetime prevalence rates for any illicit drug use were 20 percent, 38 percent, and 50 percent in grades 8, 10, and 12, respectively. In other words, half of the adolescents in this nationwide study had tried an illicit drug by the time they finished high school. Among these youth, 17 percent of adolescents had used an illicit drug within the past 30 days. Marijuana use was reported as the drug of choice with the annual prevalence of marijuana use at 12.5 percent, 28.8 percent, and 36.4 percent in grades 8, 10, and 12, respectively.

Compounding matters further, the same study found that 25 percent of adolescents had used some illicit drug other than marijuana by the end of 12th grade, while nearly 1 in 5 of all 12th graders reported doing so within 1 year of being surveyed (Johnston et al., 2012). Additionally, 40 percent of adolescents had tried cigarettes by 12th grade, and 19 percent of 12th graders were current smokers. The same study found that 18 percent of 8th-grade adolescents had tried cigarettes and 6.1 percent were current smokers. In regards to alcohol use, 70 percent of adolescents had consumed alcohol by the end of high school, and 33 percent had done so by 8th grade. Furthermore, 51 percent of 12th graders and 15 percent of 8th graders reported having been drunk at least once in their life.

Adolescents who use illicit drugs are at increased risk for a range of negative outcomes. Negative outcomes include psychosomatic symptoms, continued drug use, emotional distress, impaired romantic attachments, and trouble with parents and family (Newcomb & Bentler, 1988). Even casual use has been shown to affect school performance (Forney, Forney, & Ripley, 1989; Paulson, Coombs, & Richardson, 1991; Stoiber & Good, 1998), social relationships (Baumrind & Moselle, 1985; Newcomb, 1987), and increase the potential for substance related injuries (Hall, Room, & Bondy, 1999; Toumbourou et al., 2007). Adolescent substance abuse has also been associated with more frequent suicide ideation and suicide attempts (Felts, Chenier, & Barnes, 1993; King, Hill, Naylor, Evans, & Shain, 1993), as well as depressive and disruptive behavior disorders (Weinberg, Rahdert, Colliver, & Glantz, 1998). The widespread nature of adolescent drug use and related negative health outcomes emphasize the importance of understanding alcohol, tobacco, and other drug (ATOD) trends. Data from the 2002-2004 National Survey on Drug Use and Health revealed an alarming rate of drug use among adolescents including high prevalence rates among adolescents for marijuana, cocaine, heroin, LSD, and inhalants (Gfroerer, Larson, & Colliver, 2007). These trends have been found across numerous demographics, including rural adolescents.

Despite popular beliefs that rural communities' religiosity and lack of access to drugs leads to lower usage (Mainous, Mainous, Martin, Oler, & Haney, 2001), higher usage rates for several substances were reported among rural adolescents, including stimulants, pain relievers, methamphetamines, tobacco, and alcohol (Gfroerer, et al., 2007). There has long been a view of rural adolescents as being at low risk; that is, engaging in fewer or less-severe risk behaviors than urban or suburban youth, but this

view is misleading and there is growing evidence to suggest the contrary (Dew, Elifson, & Dozler, 2007; Van Gundy, 2006).

Recent studies indicate that, in terms of both personal and social risk factors and actual drug use, rural and urban adolescents are comparable (Becker, Barga, Sandberg, Stanley, & Clegg, 1999; D'Onofrio, 1997; Oetting, Edwards, Kelly, & Beauvais, 1997; Pruit, 2009; Scheer, Borden, & Donnermeyer, 2000; Wilson & Donnermeyer, 2006), and that low educational attainment and higher rates of unemployment are key risk factors for comparatively high rates of illicit drug use by rural youth (Lambert, Gale, & Hartley, 2008). In fact, other recent studies report higher rates of alcohol and other illicit drug use among rural adolescents when compared to urban counterparts (Spoth, Goldberg, Neppl, Trudeau, & Ramisetty-Mikler, 2001). Urban and rural comparisons have yielded findings the support higher rates of tobacco/cigarette use (Zollinger, Saywell, Overgaard, Przybylski, & Dutta-Bergman, 2006) and methamphetamine use among rural adolescents (Mink, Moore, Johnson, Probst, & Martin, 2005), and indicate that rural youth begin using many types of drugs at an earlier age (Spoth, et al., 2001).

Despite these trends, and the fact that nearly 20% of the US population resides in rural areas, a review of the literature reveals that urban adolescents have received greater research attention than have rural adolescents, and that rural adolescents remain an understudied portion of the population (Hamdan-Mansour, Puskar, & Sereika, 2007; Fahs et al., 1999; Pruitt, 2009; Vazsonyi, Trejos-Castillo, & Young, 2008). Unfortunately, the disparities between urban and rural adolescents exist not only in terms of academic research, but also in a pragmatic sense in terms of public health resources. For example, mental health workers in rural schools have received less training, are available for fewer

hours, and substance use prevention programs targeting risk or protective factors are implemented rarely in rural populations (Scaramella & Keyes, 2001; Van Gundy, 2006). As a result, additional research focusing on the prevention of rural adolescent drug use is needed.

Purpose of Study

Previous research has emphasized the importance of social processes surrounding substance use (Hansen, 1993; Miller, Alberts, Hecht, Trost, & Krizek, 2000; Tobler et al., 2000). As an example, scholars have called for further investigation into the extent to which social processes such as the role of social support can help reduce drug use among rural adolescents (Oetting et al., 1997; Van Gundy, 2006). Prevention researchers point to the role of social support as a key protective factor, buffering the effects of risk factors on drug use (Barrera & Li, 1996; Dekovic, 1999; Le Poire, 2003; Newcomb & Bentler, 1988). Risk factors are defined as those conditions that are associated with a higher likelihood of negative outcomes (Kazdin, 1997). Protective factors, by contrast, buffer or modify an individual's reaction to risk factors (Jessor, 1993). For example, Scheer et al. (2000) examined the role of family relationships as a protective factor in buffering youth from risks associated with drug use. Their findings suggest social support provided by family members has the potential to buffer adolescents from the effects of certain risks such as peer drug use and pro-drug social norms.

While social support tends to serve as a protective factor for adolescent drug use, not all attempts at social support are successful. In fact, research demonstrates that a key factor in determining whether social support results in positive outcomes is the receiver's perception or appraisal of the support, or the extent to which the receiver perceives the

message to be helpful or supportive (Cutrona, Cohen, & Ingram, 1990). Additionally, when examining the effects of social support on rural adolescent drug use, it is imperative to consider the rural context. Rural communities, when compared to their urban counterparts, feature a lower population density that encourages connections between residents (Hofferth & Iceland, 1998). Smaller communities have been found to exhibit greater solidarity and network support than found in larger metropolitan areas (Dew et al., 2007). Rural communities are also more geographically isolated (Scaramella & Keyes, 2001) and often feature lower geographic mobility (Haan, Boljevac, & Schaefer, 2009). These factors tend to lead children to develop more consistent, stable support networks as they attend the same school with the same children throughout their primary and secondary education, potentially increasing the impact that these networks can have on their decisions regarding drug use.

The first aim of this study is to identify the sources of the social support messages rural adolescents report receiving from others to help them make healthy choices and stay drug free. The second aim is to identify and describe these social support messages. Finally, the study aims to evaluate the adolescents' appraisal of these support messages. Ultimately, by focusing on a proven protective factor and an understudied population, this study seeks to increase the understanding of the role of social support messages in the context of rural adolescent substance use prevention.

Chapter 2: Literature Review

The concept of social support has an extensive history in scholarly research. The origin of this area of study can be traced back to the previous century when scholars posited that marriage serves as a health-promoting institution (Bertillion, 1879; Farr, 1885/1975). More recently, the concept of social support has been more clearly defined across a number of disciplines including psychology, sociology, and communication. Many definitions focus on global assessments of well-being. For example, Moss (1973) defined social support as "the subjective feeling of belonging, of being accepted or being loved, of being needed all for oneself and for what one can do" (p. 237). Offering a similarly broad definition, Cobb (1976) defined support in terms of its impact on emotional states, as information leading the subject to believe that he or she is cared for and loved, esteemed and valued, and belongs to a network of communication and mutual obligation. Other theorists believe that the central function of social support is increasing a person's sense of control and reducing uncertainty (Albrecht & Adelman, 1987).

Social support has been extensively studied across a number of disciplines, each examining the construct through a unique lens. The sociological perspective focuses on the enmeshment of individuals in social roles and networks. In sociology, social support is often operationalized as social integration, or "the extent to which individuals belong to different groups and the actual use they make of those group members" (Stroebe & Stroebe, 1996, p. 598). The psychological perspective, on the other hand, tends to focus on the perceptions of the availability and adequacy of supportive behaviors or relationships. Findings indicate that the perceived availability of support leads to positive physical and mental health outcomes (Cunningham & Barbee, 2000; Sarason, Sarason, &

Gurung, 1997; Wills, 1991). In the communication discipline, however, scholars adopt a communication approach to social support; that is, examining the messages exchanged in socially supportive communication, or verbal and nonverbal behavior produced with the intention of providing assistance to others perceived as needing that aid (Burleson & MacGeorge, 2002).

Burleson, Albrecht, Goldsmith, and Sarason (1994) called for researchers to study social support from a communication perspective, defining this as "studying the messages through which people both seek and express support; studying the interactions in which supportive messages are produced and interpreted; and studying the relationships that are created by and contextualize the supportive interactions in which people engage" (p. xviii). This approach has produced a line of research that emphasizes the importance of the way social support messages are communicated and, most importantly, how they are interpreted or perceived. Given the importance of the role of message interpretation in understanding social support messages, the current study has been designed to gain insight into rural adolescents' interpretations of supportive communication.

Supportive Communication

Sociological and psychological perspectives implicitly recognize that communication plays a role in the origin and impact of social support. However, scholars in the field of communication argue that communication should be central to the study of social support because support is "ultimately conveyed through messages directed by one individual to another in the context of a relationship that is created and sustained through interaction" (Burleson, Albrecht, Goldsmith, & Sarason, 1994, p. xviii). Communication has been identified as a key component of social support (Albrecht & Goldsmith, 2003;

Albrecht, Burleson, & Goldsmith, 1994), and communication research has focused attention on a variety of characteristics of supportive messages such as perceptions of support by providers and recipients and appraisals of supportive behaviors (Adelman, Parks, & Albrecht, 1987; Albrecht & Goldsmith; Barnes & Duck, 1994), as well as fundamental communication processes such as message production (Burleson, 1985; MacGeorge, 2001), message reception (Burleson & Goldsmith, 1998; Kunkel, 2002), and conversational interaction (Jefferson & Lee, 1992).

Barnes and Duck (1994) define social support as "behaviors that, whether directly or indirectly, communicate to an individual that he or she is valued and cared for by others" (p. 176). Additionally, Gardner and Cutrona (2004) define social support as any "verbal communication or behavior that is responsive to another's needs and serves the function of comfort, encouragement, reassurance of caring, and/or promotion of effective problem solving through information or tangible assistance." This latter definition, which explicitly addresses support messages and encompasses the different functions of support, serves as the conceptual definition of social support guiding the current study.

A key distinction from the aforementioned perspectives is that this approach does not assume that supportive communication will be universally well received. Indeed, not everything people say or do when seeking or providing support is equally effective (Burleson & Goldsmith, 1998; Dunkel-Schetter, Blasband, Feinstein, & Herbert, 1992). Several lines of recent research on supportive communication demonstrate that it matters what providers of social support say and how they say it, as well as how that is perceived by recipients (Burleson & Goldsmith; Burleson & MacGeorge, 2002; Goldsmith, 2004). Goldsmith suggests that, "many of the problems and disappointments researchers have

encountered in studying enacted support have come about because we have tried to understand communicative phenomenon without attention to communicative processes" (p. 24). Similarly, a meta-analysis on the effects of social support found that few researchers attend to the specific interactions or behaviors that individuals view as supportive and suggest that future research examine these interactions as well as what individuals perceive as valuable about social support in a given situation (Smith, Fernengel, Holcroft, Gerald, & Marien, 1994).

Models of Supportive Communication

Two specific models developed within the communication discipline focus on how supportive messages are perceived: The dual-process model of supportive outcomes and the optimal matching model. These communication models are based on the premise that the source's intention to provide support is not generally sufficient to produce positive outcomes, and that messages intended to provide support vary in quality, with some messages being quite effective while others are inconsistently effective, ineffective, or potentially even counter-productive (Burleson, 2003; Goldsmith, 2004). Indeed, the effectiveness of a supportive message is based on a number of factors beyond intention and quality (Bodie & Burleson, 2008), including the source of the message, the recipient of the message, and the interactional context (e.g. whether the help was provided spontaneously or upon request) (Cutrona et al., 1990), the nature of the stressful event (Cohen & Wills, 1985; Cutrona, 1990), and the relationship between the source and the recipient (Cutrona et al., 1990; Hobfoll, Nadler, & Leiberman, 1986). As a result, Burleson's dual-process model of supportive outcomes was developed in an attempt to produce a comprehensive, integrative theory that can predict and explain why particular

assortments of variables in supportive interactions produce certain outcomes (Burleson, 2009).

Dual-process model of supportive outcomes. Like other dual-process theories, Burleson's *dual process model* places a particular emphasis on cognitive processing, asserting that the impact of a particular message varies as a function of the extent to which the recipient cognitively processes the message (Burleson et al., 2009; Chaiken & Trope, 1999). Specifically, the theory attempts to explain "how, when, and why supportive interactions exhibiting certain forms and contents have specific effects with selected recipients on particular occasions" (Burleson, 2009; p. 22). Generally speaking, a dual-process model posits that multiple factors influence the amount of thought people give to elements of the situation in which they are involved, and that the effects of those elements on the recipient vary as function of the amount they are scrutinized or processed by those individuals (Moskowitz, Skurnik, & Galinksy, 1999). In terms of message outcomes, dual-process models indicate that message content has the strongest effect on outcomes when the message receiver extensively scrutinizes the message content. Conversely, when the receiver does not extensively process the message, other elements of the situation can trigger heuristics or associations that may significantly impact outcomes (Burleson).

Burleson's *dual-process model of supportive outcomes* (DPMSO), while fairly new, has been tested and largely supported in multiple contexts including recently bereaved adults' responses to grief management messages (Burleson et al., 2007), and college students' evaluations of comforting messages used by peers (Burleson, et al., 2008). The DPMSO model suggests that when the content of supportive messages is

highly scrutinized by the message recipient, the outcomes will be significantly influenced by aspects of that content, such as the perceived quality of the message itself. However, in the event that the message recipient does not scrutinize the supportive message, the message content is likely to have a smaller, potentially inconsequential effect on outcomes. In this case, other elements such as the source of the message or the setting may cue mechanisms that will ultimately affect the outcomes of the interaction. In either scenario, the receivers processing ability as well as their motivation to process the message are key factors in determining the extent to which the message is scrutinized (Burleson, 2009). Another framework, the *optimal matching model of support* (Cutrona & Russel, 1990), also attempts to explain how support messages are perceived based on the specific needs of the receiver.

Optimal matching model of support. Whereas the dual-process model of supportive outcomes places an emphasis on the degree to which a given support message is cognitively processed by the recipient, Cutrona & Russel's (1990) *optimal matching model* predicts that support is most beneficial when it matches the specific needs of the message receiver and helps promote adaptive coping with stressful situations (Cutrona, 1990; Cutrona & Suhr, 1992). As a result, it emphasizes the importance of the context in which the support message occurs in determining how the message is perceived. The optimal matching model has been tested in a number of laboratory settings involving relationship partners and undergraduate peers, each of which demonstrated the benefit of optimal matching (Cutrona et al., 1990; Cutrona, Shaffer, Wesner, & Gardner, 2007; Cutrona & Suhr, 1992; Haven, 1994; Horowitz et al., 2001).

According to the *optimal matching model*, the controllability of the stressful situation is paramount in determining the type of social support that will be perceived as beneficial (Cutrona & Suhr, 1992). A controllable event is defined as a situation in which the receiver can do something to prevent, eliminate, or diminish the stress. In this case, supportive messages that are directed at eliminating the sources of stress or decreasing the severity, termed action-facilitating support, will be perceived as most helpful. However, in the event of an uncontrollable event, in which there is nothing that the receiver can do to prevent, eliminate, or diminish the stress, messages of support that diminish the severity of aversive emotions such as grief, guilt, loneliness, without direct efforts to solve the problem are likely to be most beneficial. According to the model, this form of support is known as nurturant support (Cutrona & Suhr). In either case, the extent to which the support message is matched to the respective problem being addressed is likely to impact how the message is perceived and the degree to which a positive outcome results.

Each of these pragmatic and empirically sound frameworks from the communication discipline highlights the many complex factors that influence the way in which the receiver evaluates the support message. In doing so, these models help inform the current study in that they highlight the importance of considering the receiver's perception or appraisal of supportive messages. While this study's conceptual framework incorporates the importance of the receiver's appraisal of the message from the communication discipline, it is also grounded in the extensive literature linking social support to positive health outcomes.

Social Support and Health

The health implications of social support are well documented. Research on social support and health has focused on the role of interpersonal relationships as a protective factor in resistance to illness (Antonovsky, 1979; Cohen & Syme, 1985). Researchers have spent a great deal of time investigating the relationship between social support and health, and the findings indicate benefits to both physical and mental health (Aneshensel & Stone, 1982; Berkman & Syme, 1979; Cohen, 1988; Krause, 1990; Wills, 1985). Although social support from members of one's social network occasionally has undesirable outcomes (La Gaipa, 1990), social support has been linked to numerous positive outcomes including improved affect, more effective coping, enhanced interpersonal relationships and self-esteem, and even faster healing, reduced symptoms and stress, and lessened pain, (Burleson, 1990; Cohen & Wills, 1985; Jones, 2004; Metts & Manns, 1996; Thoits, 1986). The benefits are often reciprocal in that providers of social support often feel an increased sense of worth and personal strength themselves (Ferguson, 1997). Although there are several models explaining the role of social support in health, including the buffering model and main effects model, one of the most useful models pertaining to the current study is the functional model of support.

The Functional Model of Support

As one of the primary goals of this study is to better understand the social support messages the rural adolescents report receiving, the functional model of social support is used identify and describe those messages. The functional model of social support proposes that "interpersonal relationships enhance adaptation through the provision of supportive functions that are of direct or indirect assistance for the coping process"

(Wills, Blechman, & McNamara, 1996, p. 109). These functions have been classified into several domains, each of which is relevant for adolescents. These include emotional, esteem, informational, instrumental, and network support.

Emotional support refers to a wide range of activities including listening to a person's troubles, validating his or her problems, offering encouraging words to someone who is not feeling well, and simply "being there" for someone during a time of need (Wright, Sparks, & O'Hair, 2008). It also includes efforts to acknowledge and understand how another person is feeling, and places a strong emphasis on listening (Brady & Cella, 2005). Emotional support is particularly valuable when people must adapt to what they cannot change (Albrecht & Adelman, 1987). In fact, most distressed individuals are not looking for advice from others; instead they just want to talk and be heard (Wills, Blechman, & McNamara, 1996). Emotional support depends on a provider who can listen effectively, who cares about the respondent, and can reflect on the problem without blaming or criticizing (Wills et al., 1996). Emotional support often encompasses comforting messages, or messages that are intended to alleviate the emotional distress experienced by others and require a certain degree of skill and cognitive complexity to accomplish (Burleson, 1990).

Esteem support refers to expressions of confidence, respect, and validation that serve to bolster one's self-concept (Xu & Burleson, 2001). An example of esteem support is a parent letting their child know that they believe in them or pointing out their child's strengths. Informational support refers to the receipt of information or advice, as well as the provision of advice, suggestions, and information that a person can use to address problems (Geist-Martin, Berlin Ray, & Sharf, 2003; House, 1981). Informational support

has also been defined as the availability of advice, guidance, and information about community resources (Wills, Blechman, & McNamara, 1996). The fact that informational support provides advice or a new perspective on the problem, rather than simply providing information, is what distinguishes this form of support from the process of information provision (Goldsmith, 2004).

Instrumental support refers to tangible types of assistance, such as when parents give children money so that they can attend a movie with friends, or when a friend helps another friend with a school project (Wright, Sparks, & O'Hair, 2008). Instrumental support is also defined as having a person available who can provide assistance with important instrumental tasks including transportation, help with school work, and financial assistance (Wills, Blechman, & McNamara, 1996). Research shows that instrumental support is most appreciated when receivers feel that they are active participants and involved in the decision-making (Bottorff, Gogag, & Engelberg-Lotzkar, 1995).

Finally, network support, on the other hand, entails generating feelings of social connection and creating a sense of belonging (Xu & Burleson). Examples of network support include a friend offering to provide another child with access to another group of people or offering to spend time with that child in order to help them through a difficult experience.

There are also different forms of social support. One key distinction in the literature is the difference between proactive and reactive support. Proactive support refers to any type of assistance that helps an individual circumvent a problem before it occurs, such as when a parent provides advice about avoiding drugs prior to the child

receiving any offers. However, reactive support refers to assistance that is provided in response to some crisis, problem, or dilemma a person is facing. This could include advice that an adolescent receives after being brought home by the police for underage drinking (Sarason, Sarason, & Pierce, 1990).

Another key distinction within the literature is the difference between perceived and received (or enacted) support. Perceived support assesses recipients' perceptions concerning the general availability of support and/or global satisfaction with the support provided (Sarason et al., 1990). On the other hand, received support is designed to assess the specific supportive behaviors that are provided to recipients by their support networks (Haber, Cohen, Lucas, & Baltes, 2007). The present study focuses on specific messages of support that adolescents report receiving and their interpretation of those messages, with a particular focus on the source of the support message and its perceived function. This unique approach will be referred to henceforth as an interpretive approach to the functional model of support. While reliance on self-report data has its weaknesses, the strength of this approach is that the social support messages adolescents report having received in this study represent the messages they remember and carry with them. The following section focuses on the most common sources of these social support messages provided to adolescents.

Sources of Support in Adolescents' Lives

Family support. Social support is one of the most important and fundamental forms of family communication, and it has been argued that one of the primary functions of the family is to provide social support to its members (Segrin & Flora, 2005). In a study by Furman and Buhrmester (1985) children listed their parents as the primary

source of affection, reassurance of the child's physical worth, physical and material assistance, intimacy, and someone who would always be there when needed by the child. Parents were also listed as the second greatest source for companionship, second only to friends. In another study, children of all ages reported more support from close family members than from all other sources (Levitt, Guacci-Franco, & Levitt, 1993).

Support from family members has been found to result in many positive outcomes for adolescents. A number of studies have examined the effects of parental support on the well-being of adolescents (Burke & Weir, 1978, 1979; Greenberg, Siegel, & Letich, 1983; Hoelter & Harper, 1987; Larson, 1983; Wright & Keple, 1981). Burke and Weir (1978) found that both emotional and information support were both positively related to adolescents' well-being. Results of this study indicated that children of supportive parents have numerous advantages, including the fact that supportive parenting is associated with better mental health and adaptation to stress among children. Additionally, for high school students, the risk of having emotional problems was much higher if students lacked support from their families. In another study by Garnefski and Diekstra (1996) students without supportive families were four times more likely to have behavioral problems or emotional problems and eight times more likely to have both behavioral and emotional problems than those with supportive families. Low levels of parental support have also been linked to depression, poor well-being, unhappiness, and suicidal thoughts among adolescents (Helsen, Vollebergh, & Meeus, 2000).

Additionally, children with supportive parents have been found to have higher self-esteem and belief in their own competence. Parental support has been linked to increased self-esteem in both fifth graders (Franco & Levitt, 1998) and older adolescents

(Barrera, Chassin, & Rogosch, 1993). Compared with children of unsupportive parent, children of supportive parents tend to be physically healthier (Wickrama, Lorenz, & Conger, 1997), have fewer behavior problems and lower rates of delinquency (Quamma & Greenberg, 1994), perform better in school (Cauce, Hannan, & Sargeant, 1992), and tend to have higher-quality relationships with peers (Franco & Levitt, 1998). From a mental health perspective, Kaltiala-Heino and colleagues (2001) found that adolescents' perceptions of parents as a source of social support was a key factor in protection from the onset of depression among 14-16 year old adolescents. Children who did not receive much support from their families were more harmful to others, uncooperative, withdrawn, and exhibited higher levels of hopelessness, demonstrating that a lack of social support can be detrimental to adolescents (Kashani, Canfield, Borduin, Soltys, & Reid, 1994).

Perhaps, most importantly for the purposes of this study, research has found that adolescents with supportive parents are less likely to use alcohol and drugs (Barnes & Farrell, 1992; Wills, 1990). Wills and Cleary (1996) discovered that support from parents shielded some children who had experienced negative life events from turning to substances for relief from stress. As Wills, Mariani, and Filer (1996) explained, parental support deters the onset of a problem behavior by acting as a "brake," making it less likely that adolescents will initiate substance use or experience any substantial increase in frequency of use. Other research indicates that for young adults with an alcoholic parent, social support from family members other than the alcoholic parent may be significantly associated with increased self-esteem (Menees, 1997). Additionally, research has found that family members from rural communities traditionally engage in more frequent

contact, which increases the potential for the sharing of life experiences and providing guidance (Dew et al., 2007).

While parental support has received a significant amount of scholarly attention with findings pointing to the importance of parental support, sibling social support has received much less attention. Sibling social support has not been investigated as thoroughly as marital and parental social support despite the fact that it can be very important in the lives of children (Gardner & Cutrona, 2004). Indeed, social support interactions between family members often go beyond the parent-child relationship. In a rare example of research conducted in this area, Seginer (1998) found that the sibling relationship contributed significantly to the child's emotional and school adjustment. In addition to siblings, it important to note that the inclusion of extended and multigenerational family members into more traditional nuclear families can often lead to sharing of resources and greater interpersonal support, especially during times of need. (Dew et al., 2007). While social support from family members plays an influential role on adolescents, other individuals outside of the family often provide social support.

Peer support. Beyond the boundaries of family households, there is some evidence that social support from individuals outside of the family household including peers, friends, and teachers are influential in preventing adolescent drug use (Clark, MacGeorge, & Robinson, 2008). In fact, as children get older their peer group becomes more influential in their lives (Goldstein, Davis-Kean, Eccles, 2005). The literature regarding social support from those outside the family network is not as definitive as the role of family support, but nevertheless, plays a significant role in adolescent substance use. Some studies have demonstrated the importance of supportive interactions from peer

groups in staying drug free (Clark et al., MacGeorge, & Robinson, 2008; Samter, 2003), while Burleson and Kunkel (1996) found the ability to provide and receive emotional support and comfort was associated with desirable outcomes, including protection against drug use relapse (Wills, Blechman, & McNamara, 1996).

Dekovic (1999) found that adolescent peers offer support, reassurance, and a safe setting for experimenting with different roles and for self-disclosure. Additionally, Jessor (1991) notes that being accepted by one's peers makes it unnecessary for adolescents to engage in risk-taking behaviors for the purpose of gaining respect or peer approval. However, studies have also found that, in contrast to supporting a drug free lifestyle and serving as a protective factor, peers can also serve as a risk factor and support friends drug use.

Wills and Vaughn (1989) found that peer support was positively related to substance abuse. They suggest that, by feeling more support from peers, adolescents are more likely to spend more time in peer-group activities which increases the likelihood that they are exposed to situations where substance use is occurring. Reviewing the body of prevention research, it is clear that peer use is a strong predictor of adolescent substance use (Andrews, Tildesley, Hops, & Li, 2002; Mosbach & Leventhal, 1988; Wills et al, 1996).

As a result of the fact that peers play an important role in whether or not someone remains drug free, social relationships among adolescent peers should not be classified a priori as either risk-promoting or protective, but should consider factors such as emotional support provision and substance use among network members (Wills et al., 1989). The inconsistency in the literature not only suggests a need for a greater

understanding about the role of social support from peers, but also that the interaction of parental and peer support is important. It seems that adolescents with low parental support and strong peer relationships are at the greatest risk for substance use (Wills & Vaughn, Wills, 1989).

Teachers and classmates. Another important form of support outside of the family, and one that has received far less attention, is social support provided in school by teachers and classmates. Malecki & Demaray (2003) found that informational support was the most highly reported form of support from teacher and school sources, while emotional and instrumental support were highest from classmates and friends. Additionally, and perhaps most importantly, students perceived informational support from teachers as being more important and valuable than other forms of support that the teachers provide.

Research Questions

Overall, the current literature suggests that social support does indeed have the potential to serve as a protective factor against adolescent substance use, but there are still important gaps in the literature. The role of peer support remains ambiguous and, despite its potential to serve as protective factor, the majority of the literature has focused on its role as a risk rather than a protective factor. Other sources of social support outside of the family, such as teachers and classmates, remain largely understudied. And while social support from family members in general has clearly demonstrated the ability to serve as a protective factor, a greater understanding is needed about the messages of support that are conveyed to adolescents. Previous research recommends that future

studies focus on distinguishing both the type of social support provided, as well as the source of the messages (Malecki & Demaray, 2003; Wills, 1989).

In the context of supportive messages about substance use, there is virtually no existing literature to provide insight into how youth interpret and appraise messages meant to encourage and support them to avoid the use of illicit substances or who provides those messages of support. Ultimately, this information will be useful in determining if youth perceive these kinds of messages as useful—in other words, do they matter? To address these gaps in the research, the following research questions were posed:

Research Question 1: From whom do rural adolescents report receiving social support messages?

Research Question 2: What social support messages do rural adolescents report they receive from others to make healthy choices and remain drug free?

Research Question 3: To what extent to do they perceive these support messages to be effective in terms of helping them make healthy choices and remain drug free?

Contribution of the Findings

While previous literature has tested and identified social support as having a positive impact on health outcomes, including serving as a protective factor against drug use, we know little about the content of actual messages of social support that rural adolescents receive or their interpretation of those messages (Dekovic, 1999; Le Poire, 2003). And while social support from family members in general has clearly demonstrated the ability to serve as a protective factor during adolescence, a greater

understanding is needed about the messages of support that are conveyed to adolescents, from family members, friends, and others, and the extent to which those can help them avoid ATOD use (Scheer et al., 2000). Guided by an interpretive approach to the functional model of support, the findings of this thesis will ultimately provide descriptive information that will increase understanding of the sources, functions, and appraisals of social support messages that rural adolescents report they receive from others to help them make healthy choices and stay drug free.

Chapter 3: Method

This research was part of the larger Drug Resistance Strategies (DRS) Project, a research study examining rural adolescents' experience with substance use and grounding those experiences in local culture (Hecht & Miller-Day, 2009). Hecht, Miller-Day, and colleagues' DRS Project has produced a series of studies of social resistance and adolescent drug use focusing on the narrative accounts of adolescent drug offer processes with a particular emphasis on understanding the role of cultural factors in those processes (Pettigrew, Miller-Day, Krieger, & Hecht, 2011). The body of work for the DRS project has included elementary, middle school, and high school, as well as college populations, and has involved narrative interviews and survey research that has resulted in an intervention for urban youth called *keepin' it REAL* (Hecht & Miller-Day).

Sampling

Higher rates of illicit drug use among rural adolescents represent a significant problem and, as a result, a rural sample was selected for the purpose of this study (Dew et al., 2007; Spoth et al., 2001; Wilson & Donnermeyer, 2006). Semi-structured qualitative interviews were conducted with 118 youth from rural, Appalachian schools in Pennsylvania and Ohio. Participants were recruited from schools identified as rural based on two main criteria: (a) the school district being located in a "rural" area as determined by the National Center for Education Statistics (NCES, 2006), and (b) the school's location in a county being considered "Appalachian" according to the Appalachian Regional Commission (ARC). Participating schools served a large population of economically disadvantaged students. According to the National School Lunch Program, students are economically disadvantaged, and thus eligible to receive a free or reduced

cost lunch, if they have a family income equal to or less than 180% of the United States Department of Agricultural federal poverty guidelines (Ohio Department of Education, 2008). Students receiving free or reduced-cost lunch ranged between 53% and 61% in the Ohio schools and between 20% and 65% in Pennsylvania schools.

Procedures

Three prevention coordinators from Pennsylvania and one from Ohio were designated as liaisons between the research personnel and the schools to recruit adolescent participants in three phases. Liaisons contacted key school decision-makers (e.g., school principal and/or guidance counselor), described the study, and asked for cooperation in recruiting student participants. Each decision-maker was informed that (a) the data obtained in the interviews would remain confidential and would be used to develop a substance abuse prevention program, (b) all researchers had governmental clearance to work with children, (c) all research activities were supervised by the universities' Institutional Review Board, and (d) each participating adolescent would receive $5.00. The student volunteers were eligible to participate in the interview process once they returned, via standard postage-paid mail, a signed parental consent form and student assent form. Once the student returned these items, the liaison and contact within each school coordinated the individual interview sessions during school hours.

A multiphase criterion sampling procedure was employed in this study. The general rule for this sampling procedure was to select cases that met predetermined criteria of importance, then iteratively collect more specific information at each phase of sampling, and continue to sample until saturation is reached; that is, not getting any new information or no longer gaining new insights (Auerbach & Silverstein, 2003; Patton,

2002). The first stage of recruitment involved a broadly defined criterion for inclusion, recruiting key informants who were middle school adolescents attending school in a rural, Appalachian district. Fifty participants were sampled in the first stage. The second stage involved the recruitment of rural, Appalachian adolescent key informants who might provide more specific, in-depth personal experience about rural drug culture, drug offers, drug resistance episodes, and rural drug use scenarios. In this stage, we recruited 61 participants.

The third and final stage involved extreme case sampling involving the recruitment of rural adolescent key informants with in-depth experience with personal drug use and/or abuse. Based on the lack of substance use experiences in the initial sample, teens with more experience in receiving drug offers were selected and added to the purposive sample. We recruited seven participants who fit these criteria, referred to as "high-risk" participants in the results section, almost all of whom were on juvenile probation for drug related offenses.

Of the 118 interviewed adolescents, three interviews were eliminated from the sample due to technical difficulties with their recording and two were eliminated due to a NCES classification that was determined to be more suburban than rural. The final sample included 113 participants (male = 62, 55%; female = 51, 45%). Slightly over 81% of the interviews were conducted with students in the 7th or 8th grades, with ages ranging from 12-19 years (M = 13.68, SD = 1.37). The racial demographics for these school districts were representative of the area (Caucasian = 85.8%; Asian = .9%; mixed race = 6.2%; Latino/a = 5.3%; and African American = .9%). One participant did not indicate ethnicity. Forty-six participants were from Ohio and 67 from Pennsylvania, representing

9 different counties (3 Ohio and 6 Pennsylvania), 12 different schools (4 Ohio and 8 Pennsylvania) and one alcohol and drug service organization in Pennsylvania.

Interviews

Semi-structured interviewing was employed to allow for maximum depth of information to be obtained from each participant while maintaining a structured interview process (Rubin & Rubin, 2004). Through the process of interviewing, researchers interact with their participants not as authorities but as learners attempting to understand the participants' experiences and realities from their perspectives (Baxter & Babbie, 2004). In this study, a team of 7 interviewers participated in a 4-hour training process which involved reviewing protocol and procedures for the interviews, guidelines for ethical research, and participated in interview practice with feedback.

The original semi-structured interview guide prompted students to discuss several topics regarding (1) risky behaviors enacted by the interviewee and/or his or her peers, in general; (2) instances of alcohol, tobacco, and/or marijuana use; (3) parental and sibling opinions regarding substance use; and (4) social support. Regarding social support, students responded to the question, “Who in your life has the most influence over you about making *healthy* or *making good choices*?” After the first 4 interviews were conducted, it emerged that adolescent responses extended beyond “who” to include descriptions of types of support and strategies for communicating support. This emergent information on social support from the participants led interviewers to mutually discuss this finding and, through consensus discussion, elected to probe more deeply into aspects of social support beyond the question of “who” provides support in subsequent interviews. The interviewers then developed a list of follow-up questions designed to

probe more deeply into responses about support for making healthy choices and being drug free (Appendix). Those follow-up questions included:

Who in your life gives you advice?

What type of advice do they give you?

Who helps you when you are having a problem?

How do they help you with those problems?

Who is there for you when you are sad or feeling down?

How do they make you feel better?

Are there other ways that someone has helped you? How and who?

Interview procedures. When the adolescent joined the researcher for the scheduled interview, participants completed a face sheet for each interview, designed to collect information about gender, age, grade, school, ethnicity, and length of residence in rural communities. Interviews were conducted in private locations within the schools such as guidance counselor's office or an unused classroom or conference room. In most cases, either the adult school contact or the study liaison brought students to their interview site ensuring the interviewer did not know the students' names—only their unique identification number. Researchers assured all students that their responses would remain confidential, in accordance with Institutional Review Board standards, and that the interviewee was permitted to withdrawal his/her data from the study at any time. Participants were also asked if they would consent to having the interview recorded via a digital audio recorder. Each participant was paid $5 the interviews ranged from 18 – 91 minutes in length. Following the interviews, a research team member uploaded the digital

audio interview files to a password protected computer and then sent the files to the Penn State Harrisburg Survey Research Center for professional transcription.

Data Analysis

In accordance with procedures set forth by qualitative methodologists, data analysis was ongoing, continuously integrated, and consisted of two distinct phases: the preliminary phase and the substantive phase (Crabtree & Miller, 1999; Cresswell, 2007).

Preliminary phase. The preliminary phase occurred during the process of conducting the interviews and lasted until all interviews were conducted. Case memos were written for each interview, including a description of the interview, summarizing key points of interest, and identifying areas to probe for additional information in future interviews. In bi-weekly meetings, the researchers discussed these summaries and began a preliminary codebook of emerging concepts. A professional transcriptionist transcribed each interview, then each transcription was read while listening to the audio recording, making note of any errors or editorial changes. All necessary revisions were completed. The content of the interviews were analyzed based on the written transcriptions, with occasional reference to the audio recording if questions arose.

Substantive phase. After the interviews were completed and transcribed, members of the research team analyzed the data specifically to answer this studies research questions by commencing with an individual case analysis followed by a cross-case analysis. The individual, within-case analysis proceeded according to four primary stages: (1) reading each transcript through 2-3 times before reducing it for analysis; (2) inductively identifying and labeling meaningful units of thought (ranging from one sentence to one paragraph) in a process of open coding; (3) organizing these units into

meaningful categories of codes; (4) adding to and refining code lists. This analytic approach emphasizes inductive development and refinement of descriptive categories that ultimately form to create a coherent description and explanation of phenomena (Charmaz, 2000).

Early in the coding of individual cases, we sought to assess coding agreement in order to increase the reliability of the claims made from the data analysis. This not only provided a measure of coding quality, but also allowed the team to correct any coding disagreements that arose early in the process and provided consensual agreement on determining definitions of codes for the remaining analysis. A co-researcher coded 20% of the meaning units early in the process, setting an agreement level at .80 or eighty percent agreement. For the first 10% of the meaning units, a simple percent agreement was employed with any disagreements discussed and, through consensual agreement, renegotiated. Next, 20% of total units were coded using Krippendorff's alpha (Hayes & Krippendorff, 2007; Krippendorff, 2004) as the index of reliability and employing two independent observers to code the nominal data.

Assessing observer agreement is important because the more that our observers agree on the data assignments they make early on, the more comfortable we can be that the data are being consistently defined, labeled, and sorted in a logical and similar way and to determine whether or not various researchers and experts would agree with those definitional and assignment choices (Woods & Catanzaro, 1988). When new codes were introduced, coders met to discuss, clarify, and determine the definition of the code before proceeding with the analysis. These findings increased the trustworthiness of the coding

process and allowed for the coding of all cases before moving on to the cross-case analysis.

The cross-case analysis required the following three steps. First, the individual cases were compared and contrasted to identify consistencies and discrepancies across participants' data. Second, codes and categories were reduced to reflect emerging themes within and across cases (Baxter, 1991); themes link the underlying meaning across categories (Graneheim & Lundman, 2004). Finally, exemplars were identified to illustrate and support each theme that emerged (Maxwell, 2005). Exemplars are specific illustrations of themes taken verbatim from the transcripts and used by qualitative researchers to illustrate a connection between the data and the findings.

In addressing the second research question, "What are the functions of the social support messages adolescents report they receive from others to help them make health choices and remain drug free," responses from participants revealed a variety of themes, as the following exemplars demonstrate. For example, the comment "They're kinda like the same person, 'cause they listen to me, they know what I'm feelin-, they know what I'm feeling even when I don't say it," assigned to the coding category of emotional support, provides an exemplar for the theme labeled *Listen and relate.* Additionally, the comment, "Yeah, he, he tells me to learn from his mistake. He, he's my third oldest brother and I'm the only girl, so I look up to him," was assigned to the coding category of informational support and served as an exemplar for the theme *Advice from experience*, another theme that emerged during the analysis phase. Throughout the substantive phase, the primary researcher met with team members regularly to discuss emerging themes and to challenge and refine the classifications of themes.

Trustworthiness. Research findings should be as trustworthy as possible and every research study must be evaluated in relation to the procedures used to generate the findings. Trustworthiness criteria in qualitative research include credibility, dependability, and transferability (Lincoln & Guba, 1985). In this study, we employed a variety of strategies to enhance credibility; that is, confidence in how well data and processes of analysis address the intended focus (Polit and Hungler, 1999). We selected participants with various degrees of experience with substance use to increase the possibility of gaining insight into the research question from a variety of aspects (Patton, 1990). The trustworthiness of these findings (Baxter & Babbie, 2004) were also enhanced by: systematic training of interviewers to avoid leading questions, avoid providing nonverbal evaluation cues, and provide practice in managing difficult situation; a clear interview schedule and protocol for conducting the interviews; procedures for reflexivity and reporting research impressions; and searching for discrepant evidence and instances that cannot be accounted for by the particular interpretation.

Trustworthiness also includes the question of transferability, which refers to 'the extent to which the findings can be transferred to other settings or groups' (Polit & Hungler, 1999, p.717). In the end, we seek to provide a clear and distinct description of the characteristics of participants, the rural context, our data collection procedures, our process of analysis, and establish arguments for the most probable interpretations for the patterns in the data. Moreover, we sought agreement among co-researchers in the interpretations of the content areas with a co-researcher coding 20% of the meaning units early in the process, setting an agreement level at .80 or eighty percent agreement. The intent here is not merely to verify that data were labeled and sorted in exactly the same

way, but to determine whether or not various researchers and experts would agree with the way those data were labeled and sorted (Woods & Catanzaro, 1988). Any disagreements are discussed and through consensual agreement renegotiated. The interview transcriptions were imported into the NVivo 9 computer program for data management and analysis. NVivo indexes textual documents and provides tools to examine the intersection of ideas and supporting theoretical development (Fielding & Lee, 1998). Attributes for each participant were added into both NVivo and SPSS. Attribute analysis in NVivo 9 consisted of running queries relevant to the study's research questions. For example, the researcher conducted a search for what forms of support were reportedly received by adolescents who had been offered but never used a drug.

Chapter 4: Results

Analyses revealed an array of information on a number of topics related to social support messages adolescents reported having received from others in the context of making healthy choices and rural ATOD use. The presentation of findings is organized around the guiding research questions for this study, including the sources, functions, and appraisals of the support messages.

Research Question 1

RQ1: From whom do rural adolescents report receiving social support messages?

The first aim of the current study was to identify the sources of the social support messages rural adolescents report receiving from others to help them make healthy choices and stay drug free. The adolescents in this sample reported that they received social support messages pertaining to ATOD use from a variety of sources (see Table 1). The most common source of support messages was parents, in that 83 youth (73.5%) reported having received at least one social support message from their parents. The most common type of support message provided by parents was informational support, or advice. In fact, 82 of the 83 participants who reported receiving a support message from their parents received at least one informational support message.

Table 1
Number of participants who reported receiving at least one supportive message, by source of support (n = 113)

Source	Other Adult Relative	Other Youth Relative	Parent	Sibling	Adult Expert	Friend
	11 (9.7%)	5 (4.4%)	83 (73.5%)	37 (32.7%)	40 (35.4%)	28 (24.8%)

One common form of informational support provided by parents was the advice that drug use could harm their children's future. One young man shared that his parents

said, “Don’t do it or you’ll mess up your life. You won’t be able to do what you wanna do in your future (OH 010). Another common tactic involved the parent telling a story using his/her experience when giving advice. One participant described her mother’s talks when she said, “She just gives me hints or like tips on what to do. And she sometimes brings up, like, in her childhood what she would a done” (PA 012).

The next most common source of support messages was adult experts, or individuals such as teachers, presenters, police officers, or videos from health class. Forty youth (35.4%) report having received at least one social support message from an adult expert. The most common type of support message provided by adult experts was informational support, with 37 participants reporting that they received at least one information support message from this source. Many of the adolescents in the sample described the advice they had received during health class, much of which involved the health risks associated with ATOD use. When asked what the health teacher had said about alcohol and drinking, PA 040 said, “Not to do it and stuff because, um, you can wind up dying from either one, like you can, um, die from a, um, car crash from drinking, also get cancer from, um, smoking.”

Siblings were the next most common source of support message, with 37 youth (32.7%) mentioning at least one supportive message from a sibling. Of these 37 youth, 24 reported having received at least one informational support message from a sibling, while 13 reported having received at least one instrumental support message from a sibling. In terms of informational support, older siblings often discussed their own experiences when giving advice to avoid ATOD use. PA 018 provides an example of this trend when he says:

> (My brother), he says I shouldn't do it because when he was in high school he did it and he, uh, he, he like almost failed and he, it, he was lucky he was able to bring it up 'cause he had to go to summer school to bring it up because he, he just thought about drinking and drinking and drinking, not doing his homework, and not caring about school.

In terms of instrumental support, a number of participants discussed how their older siblings displayed a tendency to stick up for them when they were offered a substance by serving as a threat to anyone who offered. For example, when asked about whether he had ever been offered drugs, PA 015 responded, "Um, I was only offered once 'cause my brother told them that if they gave it to me he was gonna kill 'em."

Friends were another common source of support messages, in that 28 youth (24.8%) discussed at least one message of support they received from a friend. Instrumental support was the most common form provided by friends, with 18 individuals providing at least one example of this form of supportive message. A majority of these participants discussed how their friends helped them by providing them with an alternative to ATOD use. One participant with a history of significant ATOD use gave an example of how her friend helps her avoid the temptation of using:

> Well, my friends, like my one friend Christy, she like doesn't do anything. She's like God sent or something, I don't know. But if she goes – so whenever like they're partying around, I'm like – my other friends are like, "Come over here, do you want to go get a coffee of something," but she's always there like – (PA 078).

Less common, but nevertheless notable sources of support included other family members. Adult relatives, including aunts, uncles, grandparents, and older cousins, provided at least one supportive message to 11 youths (9.7%) in the sample, and a majority of these messages were classified as informational support. The most common form of advice given by adult relatives involved stories based on past experiences. For

example, one young woman talked about how her uncle used his troubles with steroid use to help make his point that she should stay away from drugs:

> Yes. He, he, um, personally had experiences with steroids and, I mean, he, what really hit me was the impact of how cruel someone can get on such powerful drugs. Like he would just whiplash at you; he would get angry all of a sudden and it would be about like, you know, the tiniest thing and he stopped it, thank God, and I mean, like he tells me, 'don't do 'em, they're very bad, they, they're harmful,' and it's not only the fact that you can get mean and personality difference but inside your body it'll just eat you away too (PA 056).

Youth relatives, compromised of only younger cousins in this sample, were not a very common source of support in that only five youths (4.4%) reported receiving some form of support from their younger cousins. This is understandable considering that many of the aforementioned sources relied heavily on their previous experience when discussing drug use, and younger cousins of the adolescents in this sample were unlikely to have significant experience with drug use. However, the following example of instrumental support demonstrates that younger cousins occasionally provided effective support. When asked about who in her life influences her to make healthy choices, PA 039 cited her best friend and younger cousin, saying that, "They, like, keep me away from it. They don't let me really hang out with [Name] because they know if I do, I'm gonna start doing that and I told them that I wasn't gonna because I didn't wanna start doing that."

The following section contains the results pertaining to the second *RQ*, which focuses on the function of the social support messages. As themes emerged with respect to the function of the supportive message, the sources of the messages were considered as well. As such, the results in the following section are stratified by both function and source.

Research Question 2

Research Question 2: What social support messages do rural adolescents report they receive from others to make healthy choices and remain drug free?

In an attempt to increase the understanding of the role of social support messages in the context of rural adolescent substance use prevention, the second aim of the study was to identify and describe the social support messages rural adolescents report they receive. In order to do so, the functional model of social support was used to identify and describe those messages. As such, the following sections are devoted to the themes that emerged pertaining to each of the five types of support according to the functional model: emotional, esteem, informational, instrumental, and network support (see Tables 2 and 3 for an overview of the results).

Table 2
Number of participants who reported receiving at least one supportive message, by function of support (n = 113)

Function	Emotional	Esteem	Informational	Instrumental	Network
	28 (24.8%)	4 (3.5%)	96 (85%)	37 (32.7%)	11 (9.7%)

Table 3
Number of participants who reported receiving at least one supportive message, source of message by function of support (n =113)

	Source	Other Adult Relative	Other Youth Relative	Parent	Sibling	Adult Expert	Friend
Function							
Emotional		4	0	11	5	3	11
Esteem		1	0	2	1	0	0
Informational		7	4	82	24	37	9
Instrumental		1	2	11	13	1	18
Network		0	0	3	1	1	7

Emotional support.

"I could pretty much talk to him about anything and he'll listen; he won't judge or anything. He'll sit through it all and listen." (PA 028)

Emotional support refers to a wide range of activities including listening to a person's troubles, validating his or her problems, offering encouraging words to someone who is not feeling well, and simply "being there" for someone during a time of need (Wright, Sparks, & O'Hair, 2008). It also includes efforts to acknowledge and understand how another person is feeling, and places a strong emphasis on listening (Brady & Cella, 2005). Twenty-eight (24.8%) of the 113 participants reported receiving at least one emotionally supportive message. The most common sources of emotional support were Parents (11 participants reported receiving at least one emotional support message), Friends (11), Siblings (5), Older Adult Relative (4), and Adult Expert (3). Results indicate that parents were associated with "caring and being there," and were referred to as a source to talk to about something personal or difficult. Friends were associated with being able to listen and relate. Siblings were considered "easy to talk to," while a number of the high-risk participants discussed the importance of having a counselor to whom they could talk.

Parents – "Close, care, being there." One common theme involved adolescents indicating that they felt "close" to their parents, or that their parents cared or were "there for them," and that those messages were a deterrent for ATOD use. OH 081 discussed her close relationship with her parents when she said:

> Respondent (R): My parents, um, those are probably about the two people I'm closest to in my entire life. I, like, talk to them about anything, I'm not afraid to tell 'em anything, they, um, like my mom's my best friend, so they're, they're the two closest people to me.

> Interviewer (I): How important is it to you what they think?
>
> (R): It's really important. Like I hate, my parents aren't the one to like say they're mad unless I do something really bad. They, they always look at me and say they're disappointed and I hate that. I think it's worse than saying, 'I'm really mad, you're grounded.' If they look at you and say you're disappointed it just, I don't like it at all.
>
> (I): How do you think they would react if, um, like you were using tobacco or marijuana?
>
> (R): Um, I don't even know. I think my mom would just like have a heart attack. Like, my sister, she's like eighteen and she started smokin' and she's almost twenty now and my mom still can't get over the fact that one of her kids started smokin'. She just, takes her a minute but I don't, I just, I don't like disappointing my mom.

Similarly, OH 013 mentioned that her conversations with her parents about using drugs and alcohol made her believe that they really care about her:

> (I): Um, does what they say to you or what they think, um, about situations like that, does that matter to you when you make decisions about not doing, um, drugs or using alcohol or anything like that?
>
> (R): Mm, yeah, I'd say it matters and it prob'ly matters to my parents a bunch too.
>
> (I): Why does it matter to you; what, what they say and what they think?
>
> (R): 'Cause that shows that they care a whole bunch for me, and they don't want me gettin' hurt or anything.

Another participant noted the continuous support from her parents, 'Because, like, they tell me, like, never give up and help, they help me, like, places and they're usually there for me,' (OH 032). One young woman discussed how her mom helps her to be strong and deal with peer pressure when she said, "Yeah, I feel there is pressure to have a party. My mom talked with me about what to do if there is peer pressure. That it's ok to stand up for what I want to do and not feel bad about it. She backs me up" (PA 022).

"They care" was not only a theme mentioned as a deterrent to ATOD use, as shown in the aforementioned examples, but as a theme that resonated following ATOD use. One high-risk participant discussed the role his parents played after he was admitted to rehab:

> My mother, she obviously cares, but – she cares…She had a huge impact when I got really got messed up, and I think that if it wasn't for my family, I probably wouldn't be where I'm at right now. A lot of the times, they gave me the push – they definitely gave me the push that I needed to do the right thing. Like I said, in between rehab [inaudible] go for a little while, and I thank them for that because they really gave me the push that I needed (PA 079).

Another high-risk participant, PA 076, said that, after her problems with ATOD use, her mother has made a more concerted effort to provide emotional support with her and her siblings and that it resulted in positive changes:

> (R): And my mom seemed like, knowing that, and knowing what she knows from what happened to me, she's trying like a lot harder this time.
>
> (I): Is she talking to them more, do you think?
>
> (R): Yes. And she hugs us every morning before school. 'Love you, have a good day' and before she never did that.
>
> (I): But it sounds like there's been a change in your family, right? Is it positive, looks like?
>
> (R): Oh yes.
>
> (I): It's making you smile at the thought of the change?
>
> (R): Yes.

In addition to showing that they care, parents also tended to be one of the groups that adolescents sought out when they needed to have a discussion about something personal or difficult.

Parents – Talking about something personal/difficult. A number of adolescents mentioned a parent as the one to whom they would talk regarding a difficult topic like ATOD use. OH 038 said, "I tell my mom stuff. She's the person I would come to if something would happen." Similarly, OH 013 said, "My dad. Because he's probably the one that'll mostly understand." Some mentioned that they would talk to their parents because they knew they would listen. In regards to his step-father, PA 028 said, "I could pretty much talk to him about anything and he'll listen; he won't judge or anything. He'll sit through it all and listen. Where my mom, as soon as I say anything, she's like, 'What!'" Another specifically cited her mother's ability to relate based on her similar past experiences. OH 007 said, "My mom. Um, because she's been through half the stuff I'm just now going through. And I just think I shouldn't ask my dad about stuff like that, 'cause he's never been through half this stuff. I can relate to her."

Friends – Listen and relate. Along with parents, friends were the most frequent providers of emotional support based on this sample. Throughout each of the examples, the ability of friends to listen, and to do so having gone through similar experiences, emerged as an important theme. One young woman talks about how similar her friends are to her, and that it makes it easier to talk to them. She said, "They're kinda like the same person, 'cause they listen to me, they know what I'm feelin-, they know what I'm feeling even when I don't say it" (PA 039). Another participant specifically mentioned one of her friends as someone with whom she felt close and had spoken about ATOD use. OH 004 said:

> Um, me and one of my friends actually did talk about it and we both said we would never do it and we promised each that we would never do it; and she is one of my closest friends and she always has been and I trust her and she trusts me in

> the same way; and I think if either one of us would have ever done that we would tell each other.

Some of the high-risk participants also mentioned the role of friends as helpful listeners. PA 071 said, "I have some friends at school that I'll just go talk to. I'll kind of be, "This is pissing me off," and they'll calm me down, and make sure I don't do anything stupid, like get kicked out of school or something, or end up relapsing." Others mentioned that friends they made through their support groups are there to listen to them when they need it most, and that their ability to relate is what makes them so helpful. PA 076 mentioned that, though her friends outside of her support group still support her, her support group helps her most:

> (R): Yes, I do have a very close [inaudible] friends that don't have a program, and I go to school with them. Sometimes it is very hard to maintain their friendship only because they don't have that [inaudible]. Like they, they're very proud of me because they know how different I am. They, they kind of drifted away from me and I drifted away from them whenever [inaudible] but they support me 100 percent. And but now if I have a problem, I immediately pick up the phone and I call someone from my program, from my support group.
>
> (I): Okay, so [inaudible] the people in the program who you can really depend on, it sounds like. And in what ways do they help you [inaudible] that is helpful?
>
> (R): Well, a lot of times when I'm upset, it will be something to do with a family member or something [inaudible]. They help me to see where I am wrong in the situation and not just like they're part [inaudible]. Also, someone who is in the program knows what you're going through. Because like a lot of times the feeling, like the situations and the details may be different but the feelings are all the same. So you, it's through experience, strength and hope, you know? This person has gone through it, so I'll call them and they'll tell me what they did and you take all the suggestions you can and [inaudible].

PA 079 provided another such example when he brought up a member of his support group whom he befriended years ago. He said:

> Actually, the kid in the next room right now – Johnny [inaudible] – he's in the next room, right now, with the other lady – me and him actually came here together. We've been together all day. He's part of my support group. I've known

> him for four years. I pretty much know his story. He got in trouble a few more times than me. He [inaudible] a lot longer than I have. He's always been there for me – huge influence in my life today.

Siblings – Easy to talk to. Though siblings were not a frequent provider of emotional support, a number of participants mentioned that their siblings were easiest to talk to when they needed to discuss something personal or difficult. OH 004 said:

> Um, I usually hang out (laughter) with all my friends outside of school as much as I can but, um, my stepsister that lives with my dad, we talk as much as we can through the computer and everything and we're really close. We're a year and four days apart exactly. She was born on my mom's birthday and we're really close and just 'cause, even though there's an age difference, we can talk about anything with each other.

When asked specifically about ATOD use, she went on to say that, "She would just let me know that she was there for me and try to talk me out of doing anything of that kind." Another participant mentioned that, when he has something hard to talk about or when making a difficult decision, he goes to his sister. He said, "My older sister. Well, my sister it's, the youngest sister. Like, she's twenty-three. Uh, she's the most understanding and stuff like that, about things" (OH 008).

Adult Expert – The importance of having someone to talk to. The lone theme to emerge pertaining to emotional support from adult experts came from the high-risk participants. On numerous occasions they cited the importance of being able to count on having a counselor to whom they could talk and on whom they could rely in order to avoid using again. PA 079 discussed how the emotional support from his counselor was what finally got through to him:

> The past 37 days – 39 days, actually – I've just experienced – I've never experienced before. I've never wanted to do whatever it took to, and he helps me out a lot in the guidance program. It's a sober learning environment, and you don't drink or use. There's just something – I just realized that I can't do this by myself [inaudible] and they guarantee that I'll never have to feel that way again.

> I'll do whatever they tell me to do. If [inaudible] called me, and he said come here and do this, and I said is it gonna keep me sober, and he said probably, and I said I'm there.

Another participant discussed the important role of his counselor, Jim, citing his ability to listen, calm him down, and get through to him in a way that others couldn't:

> Jim's been one of them. He'd talk to me, explain things. He really stepped in… Yeah, and the way he talked to me and calmed me down a little bit, made me understand it was my fault, not [inaudible] or even the court system. It was my fault if I screwed up. I had lost my license… It was just the way that they come down. He'd say, "I've got to go to this group." I'd come out and meet with him one-on-one every month or every other month. He was taking time out of his day to come and sit with me and talk to me and help me out (PA 077).

Counselors were not the only sources that were mentioned as someone in whom they could confide, however. PA 078 said, "Well, my youth group leader, she's like – well it's her [inaudible] and her mother, so she's always like – and she won't tell on you or anything like that, or stuff. So she's always helped me out." PA 079 also highlighted the importance of having a place to go when he needed to talk. He said:

> Yeah, one teacher. He was an English teacher, and [inaudible] remember how [inaudible] sober for 13 years. When I went to rehab for the first time, he came up [inaudible] come talk to me. [Inaudible]. It helped in high school, yeah. It definitely helped because I knew that when I had problems I had somebody to go talk to.

Each of these cases emphasize that many of the high-risk participants in the sample relied heavily on the emotional support of various adult experts.

Esteem support.

> ***With my little sister, she's, she always was telling me how she admires me and everything and how she wants to be like me when she grows up, and that stays in my head all the time. I gotta do the best I can all the time because I don't want her growin' up, messin' up (OH 005).***

Esteem support refers to expressions of confidence, respect, and validation that serve to bolster one's self-concept (Xu & Burleson, 2001). This would include, for

example, a parent letting his/her child know that he/she believes in them or pointing out their strengths. Only four (3.5%) out of 113 participants reported receiving at least one message that provided esteem support. The most common sources of this form of support were parents (2 participants reported receiving at least esteem support message), siblings (1), and adult relatives (1). Given the relative infrequency with which participants in this sample mentioned esteem support messages, the results were not stratified by emerging themes. However, the following examples illustrate that these types of messages may indeed have the potential to have a profound impact on adolescents.

One participant discussed how she knowing how much her little sister looks up to her has an impact on her behavior. She said:

> With my little sister, she's, she always was telling me how she admires me and everything and how she wants to be like me when she grows up, and that stays in my head all the time. I gotta do the best I can all the time because I don't want her growin' up, messin' up (OH 005).

In another example, when asked about who talks to her about alcohol and drugs, another young woman first mentioned what her grandparents always told her:

> 'Just don't do it.' [Laughs] That's basically how my grandma said – they did – they always told me that I have a good head on my sho-, on my shoulders and just to grow up and be proud of who you are and make people proud of you and want, you know, to talk to you, want to know you because they hear so many good things (OH 054).

However, not all of the examples demonstrated a potential ability to have a positive impact on behavior. One high-risk participant talked about how his parents would try to give him confidence in order to help him get past his addiction, but that it often wasn't enough:

> My parents had unconditional love for me, and I completely disregarded it. I didn't care (inaudible). I didn't care about anybody around me. All I cared about was me, and what I was doing (inaudible). They would constantly, constantly,

> constantly tell me that I was screwing my life up and I had so much to live for…My dad would tell me you can't do [inaudible]. It's okay to be a kid, but you're not being a good kid right now. You're out of control. He would tell me – some people can't do this – he'd tell me there's only two things in this world you can't do, and that's drinking and drugs. You can do anything else you want to do, that's so important. They would ask me how I felt inside. They would really try to get in; I just wouldn't let them in.

Though strong conclusions cannot be drawn based on this very limited sample, it appears that esteem support messages may indeed have the potential to resonate with some adolescents, particularly prior to the onset of ATOD use, but may not be as effective to already heavy users. Future research with a larger sample could further explore the potential of esteem support messages in this context.

Informational support.

"Because, my sister, she can, like, help me out and give me some advice 'cause usually stuff I have problems with she has, she's experienced before, so." (OH 002)

Informational support refers to the receipt of information or advice, as well as the provision of advice, suggestions, and information that a person can use to address problems (Geist-Martin, Berlin Ray, & Sharf, 2003; House, 1981). Ninety-six (85%) out of 113 participants reported receiving at least one message that provided informational support, making this the most commonly provided form of support reported based on this sample. The most common sources of informational support were parents (82 participants reported receiving at least one informational support message), adult experts (37), siblings (24), friends (9) and other relatives (7 adult relative; 4 youth relative). The following themes emerged: Parents and adult experts provided informational support in the form of *Basic advice about ATOD use* and *Resistance strategies;* Parents, adult experts, siblings, and other relatives provided *Advice from experience;* Siblings and friends provided *Advice from a role model;* and Siblings provided *Advice or Punishment.*

Parents – Basic advice about ATOD use. One common theme was the tendency for parents to provide their children with straightforward advice about not using drugs or alcohol. What is interesting, however, is that this basic advice was often coupled with one of the following approaches: parents would highlight the negative health effects; parents asked their children to promise them they wouldn't use; parents would threaten their children with punishment; parents would warn their children about the dangers of addiction; and parents would encourage their children to consider their future. Each of these strategies was used as a supplement to the basic advice, "don't do drugs," and are discussed in detail below.

One tendency was for parents to emphasize the deleterious health effects of ATOD use. When asked what his family said about ATOD use, OH 075 said, "Um, it can kill you and marijuana fries your brain cells, my, my mother said. Drinking can give you alcohol poisoning." PA 016 responded, "That it's bad to do. Kill you faster. My dad said if I started smoking right now, I, I'd die by age forty 'cause he has diabetes and I'll probably have it too." PA 037 said, "Because they don't want me to end up like [Tape Skip]. They don't want me to do it because of all the side effects; everything that could happen. Overdosing, going so crazy that you wanna hurt yourself, or something. OH 076 touched on a similar trend when she mentioned what her parents told her: "They said it's nasty because you can damage your lungs and stuff like that and it'll make your heart stop working." OH 082 added that his father warned him not to smoke marijuana when he told him, "Not to, not to do it 'cause it, it can destroy your brain cells." PA 048 said that his father emphasized how the health effects could impact his daily life when he said,

"Uh, don't do it, it'll slow your body down and stuff. And you won't be able to play sports."

When providing advice about ATOD use, some parents also asked their kids to promise them that they wouldn't use. When asked whom she thought most influenced her decision to avoid ATOD use, OH 002 said:

> Uh, my parents, 'cause my mom doesn't want me to smoke, like, cigarettes or become an alcoholic or a druggie or anything. So, I try to make her happy. Uh, she just sets down and tells me that I shouldn't try it and she had me promise her that I wouldn't, at least not until I'm an adult. I don't think I'm gonna try it then either.

Another participant said that her mother made her promise not to use after she caught her using the first time:

> (R): I never did it ever since, 'cause I, uh, told my mom and I promised her I wouldn't do it.
>
> (I): Okay. And, like, what did your mom say?
>
> (R): She just told me not to do… she's from, she was like, "I can't do nothing about you doing it one time, but you have to promise me that you won't do it ever again." And I promised her.
>
> (I): Um, so, was there another, so, um, since you've not done it again, was there another, um, was there ever a situation where it was presented to you, and you said…
>
> (R): I said no.
>
> (I): Okay. So what prompted you to say no?
>
> (R): 'Cause I promised my mom I wouldn't do it again.

PA 039 told a similar story when discussing her mother's advice and the promise they made to each other:

> (R): Um, when I told my mom that I smoked, she told me to quit and I did.
>
> (I): Okay, what prompted you to tell her?

> (R): Me and her made a promise that we wouldn't keep anything from each other, and she said that it's hard for her not to tell my dad. But I told her not to tell my dad, because I'm scared he's gonna like hit me or put me away or something.

Another trend was for parents to couple their advice about ATOD use with the threat of punishment. OH 013 described a discussion that he had with his mother:

> My parents, they, my mom, like a while ago, we had a talk and, uh, we've never used it or we pro'bly never will. Um, mm, my parents are pretty strict 'n stuff, so if like we would be caught we'd be in big, big trouble, so we'll just stay away from it. They just said ta, not to use 'em and if you're ever caught with 'em, uh, I'll just be in big, big trouble and I'll pro'bly go to jail or some'in', so. I don't wanna go there.

Others described the threats they received from their parents if they were ever caught using drugs. PA 014 mentioned that he would be kicked out of the house saying that, "My dad, my, both my mom and dad have stated pretty ob-, pretty obvious, if I ever, if they ever catch me smoking or smell smoke scent on me, my butt would be gone." PA 043 said, "My mom said if I ever tried smoking then she'd make me eat them. I know she would 'cause she made my brother eat them, so." When asked why he does not intend to try alcohol, PA 063 responded, "He (my dad) said if he ever saw me with a drink in my hand he'd break my hand. Yeah. I didn't think he means it literally, but I get the point."

OH 030 mentioned that her mother is quick to ground her if she suspects that she has been using any substances. She said, "She told me not to do it. Well, if she ever thinks about, hearing about me doing, didn't even come ask me did I do it, she just yells at me and grounds me. I'm like, 'Dang, I didn't do nothing.'" Another participant learned of the consequences after seeing his older brother get caught by his mother, who happens to be police officer. He said:

> (R): Well, my mom, my mom was aware that my brother did it, but he, but she, like, um, I remember one night when I, she found out that she did, she, she just went off; she went off on him. Like, she do-, 'cause she's a, um, she's a cop. She

> was, she actually works in a prison and, um, she works in a prison. And she just
>
> (I): So, you don't mess with mom, right. [26'03"]
>
> (R): Don't mess with mom, yeah. And she, she just totally, like, went off and so did, and sh-, and so did my uncles. My uncles all work in the prison, too. So, they, uh, they all went off and, like - of course, like, she couldn't keep it to herself. So she had to go tell my grandma and my, and all my uncles and stuff like that. So then they all got on my brother.

Another trend was for parents to supplement their advice with warnings to their children about the dangers of addiction and the difficulties associated with stopping once they start. OH 022 said that, "Yeah, and, like, they've told me that it's bad for ye health and it's just not a good idea to do it because once you do you eventually get addicted to it and you, i-, it's hard to stop." Similarly, OH 036 said, "They say like, 'never use drugs because it, if you use it like couple times it, you get addicted to it.'" OH 014 said, "They told me not to do it 'cause then you'll just be, like, hooked to it and then once you wanna stop you won't be able to and it could cause you to get into ta accidents an', um, they tried to tell us like, how our life would be and like how miserable." PA 007 described how his mom talk to him about the dangers of addiction when he said, "She doesn't really pressure me, but like sometimes she like, just like one of those mom talks, tells me like why it's bad for people and like once like if I start like it's going to be really hard to get out of it, and my school work is going to be like just for nothing."

Other participants mentioned similar messages from their parents, with the only difference being that their parents used their own experiences battling addiction to help make the point. OH 079 said this about a discussion he had with his dad:

> I ask 'em like, I ask 'em what it's like and they said I, it's, it's like, you'll get lung cancer and, and I asked 'em why they did it and they said because once you get started you can't' stop and I said well then I ain't never gonna try it. My dad, my dad's trying to quit. He, he asked like, I'm like 'dad, why don't you stop' and he

> said ‘I can’t’ and I said, ‘well then try chewing gum because that, that’ll most likely get you off of it’ ‘cause my, ‘cause, uh, my uncle for like three years he smoked and then I, then he had a piece a gum and like he hasn’t smoked in three years but then he started again.

Similarly, PA 039 brought up a conversation she had with her mom: “She said, ‘Don’t. Quit. It’s bad for you, it’s a bad habit.’ Because she smoked, she’s been smoking since she was fourteen and she’s like thirty-two. And she said it’s a bad habit and it’s something that you don’t wanna get addicted to.” PA 064 received a similar message from her mother, and indicated that it’s tough to see her mom battle addiction. She said, “Yeah, like she says it’s bad for you and stuff, but she said that if she -- she can’t quit though, cause she started when she was 12 and it’s like a bad addiction. It sucks.”

The final way in which parents delivered advice not to use drugs involved messages advising their children to consider their future. When asked what his parents tell him about drugs, OH 010 said, “Like, ‘Don’t do it, or you’ll mess up your life. You won’t be able to do what you wanna do in your future.’” When asked if what they say matters to him when makes his decisions, he continued, “Yeah. ‘Cause, um, if they didn’t tell me an’ stuff I’d be, end up like, if they didn’t tell me not to do it and stuff, someone offered it, I’d probably do it ‘cause I wouldn’t know what to do.” OH 012 responded very similarly to the same questions. First she said:

> They just told me that it can ruin my life and not to do it because my cousins, two of my cousins got drunk and bad trouble for it. Just really, my cousin has a car and she got it taken away for about five months and she had to walk wherever she went, and she couldn’t use any of her TV or anything. Because she, I won’t, my parents don’t want to see my life to be screwed up or anything.

When asked whether these kinds of messages matter, OH 012 said, “Yes. Because if they never told me anything about it and they didn’t care, I think I probably would have. Used took the drugs my friend offered me, and just junk and all that stuff.”

Others mentioned similar advice from their parents concerning their future. OH 031 said, “My mom and dad told me that it changes your life and…my mom never drank, but my dad has. And, he told me never to do it ’cause it’s bad for you and everything.” PA 007 discussed his mother’s reasoning behind her advice:

> She just like tells me like from her experiences that it’s not a good idea to do it, because like once you’re drunk that like, you like start doing like crazy things and like the next morning you don’t even recognize that you did ‘em. And in one of those days that you’re drunk, you might do something that might ruin the rest of your life.

OH 025 cited an example in which his college education could be affected:

> She gives you ’cause, like, you said, ’cause if you get caught, let’s say, it can ruin your driver’s license [Unintelligible] things like that…like, um, can stop you from going into where I wanna go, like, Harvard, like that; they catch you, you got something on your license, something on your card like that…bringing that, stuff like that into school so, like, just stay away from it.

Similarly, PA 018 said that his parents talked about how drugs could prevent him from reaching his career goals:

> Don’t do it or else you won’t, you won’t be able to do what like, stuff, like if I w-, if I was smoking weed and I want, and I wanted to play in the NFL, and I was like Ricky Williams, like he smoked weed when he was in the League and he got kicked out. Now if I did that and in certain jobs, wouldn’t let, wouldn’t let you work there because you smoked before.

Each of the above examples reflects patterns of the way in which parents conveyed basic advice about ATOD use to their children. However, parents also provided other forms of informational support, including messages conveying drug resistance strategies, and messages grounded in personal stories and experiences, and the results for each are presented in the subsequent sections.

Parents – Resistance strategies. Resistance strategies identified in previous studies by Hecht, Miller-Day and colleagues (e.g. Hecht & Miller-Day, 2009) were

considered as a priori codes and sensitizing concepts during this phase of the analysis when messages conveying resistance strategies arose. Sensitizing concepts provide guidance for researchers by giving them a basis for what may be expected in the data without dictating the analysis (Strauss & Corbin, 1990). As such, the previously identified resistance strategies did not present new resistance strategies from emerging. What distinguishes this approach from previous studies (Hecht & Miller-Day; Miller et al., 2000) is that instead of focusing on the resistance strategies reportedly used by adolescents, this study reports on the resistance strategies that sources told adolescents to utilize when presented with an opportunity to use drugs or alcohol. After grouping codes into categories and examining themes in the data (i.e. underlying meanings across categories; Graneheim & Lundman, 2004), messages reportedly conveyed by parents to youth concerning resistance strategies fell cleanly into the REAL typology: refuse, explain, avoid, and leave (Alberts, Miller-Rassulo, & Hecht, 1991). The following provides a description of these findings.

Youth in the sample reported receiving advice from their parents that involved using the following resistance strategies: refuse, explain, and leave. No advice that could be classified as recommending the avoid strategy was reported. The most common form of advice from parents with respect to resistance strategies was a combination of refuse and leave. PA 046 said, “Yeah, he (my dad) told me that if anybody offers me anything or if anybody like tries, like kidnappers or any, it’s just, say no and run. Similarly, PA 028 said, “He (my dad) said if anyone ever offered to say no. And if anyone ever said or s-, if I’ve ever seen anyone do it, just to walk away from it.” PA 002 described a similar

recommendation from his mother to first refuse the offer and, if that doesn't work, leave the situation. He said:

> Well she said, "If they keep pushing you to do it. You got to keep saying no, and if they keep pushing you, won't listen to you, if there's somebody around you that you can tell them, then go ahead." And so I'm like, "Okay." Though -- if there's like -- if not -- if that we were in like park or something kind of where there was nobody around when she said you run away or just say no.

Continuing the theme, OH 007 said that her parents made it very simple for her: "They said, uh, the easiest thing if someone asks you do want to drink or d-do up or do smokes or something like that, the easiest thing is fer 'em to say no and walk away."

Others reported that their parents focused solely on the leave strategy when providing advice. When asked what his parents say to him and his siblings, OH 013 responded:

> Just walk away. Don't say anything, just walk away. Just like if someone comes up to ya' and offers it, just walk away. And if they start chasin' you or some'in', just keep runnin'. And like if, mm, that's really it, like tellin' me not to use drugs and if someone offers it, just walk away.

Similarly, when asked what advice her mom gives her, PA 012 said, "Like, how to deal with it. And just if, to walk away from it or, like, go tell the teacher something." The explain strategy, defined as "providing reasons for refusing a specific offer of ATOD," also emerged (Pettigrew, Miller-Day, Krieger, & Hecht, 2011). PA 022 discussed how her mother told her to deal with peer pressure by encouraging her to tell her friends why she will not take part:

> (R): Smoking and peer pressure. I talk with my mom about it. I'm close with her. And we talk about how to deal with peer pressure.
>
> (I): Do you feel that there is peer pressure?
>
> (R): Yeah, I feel there is pressure to have a party. My mom talked with me about what to do if there is peer pressure. That it's ok to stand up for what I want to do

> and not feel bad about it. She backs me up.

In addition to resistance strategies, parents also tended to provide advice based on their previous experiences, examples of which are highlighted in the next section.

Parents – Advice from experience/Telling stories. Another common theme was for parents to talk about their experiences with ATOD use when giving their children advice. One participant described her mother's talks when she said, "She just gives me hints or like tips on what to do. And she sometimes brings up, like, in her childhood what she would a done" (PA 012). When asked why his mom doesn't want him to smoke, OH 037 said, "She made that mistake a long time ago, and she don't want me to make the mistake she made. Because it's just killing your life – just killing your life." PA 025 said this when asked about the advice her mother gave her about drinking and smoking: "She says how much she regretted it (smoking and drinking). She started it when she was littler." When asked what his family says about alcohol and cigarettes, OH 082 said:

> That it's wrong, that I should never start it 'cause my dad, he's been bad, he's been h-, he's been sick and smokin'. Like, I mean, he gets up in the morning get, uh, it's nasty. He starts hacking and. He says that it can give you cancer and that you can die from it and I don't wanna die yet.

PA 045 mentioned that his dad brought up his own struggles with alcohol when encouraging him to stay away for it: "Because he (my dad) was, like, a bad drinker and all that stuff and he has to go to rehab and all that." PA 047 talked about his mom's struggles with drinking when she was younger, including a time where she was unable to perform at a sporting event. He said she told him "not to do them 'cause they're bad. To don't get mixed up into it 'cause it's, like it could ruin your life. My mom started and every and I don't know when she started drinking but she got offered to sing the national anthem at a game and she couldn't do it."

Other participants reported hearing stories from their parents when receiving advice about ATOD use. OH 005 provides an example of one such story when he talks about the way in which her mom often gave her advice:

> I remember, like, when I was little, and every time the TV would come on and somethin' about, like, the Dare Program or somethin' like that come across TV, my mom would just turn the TV off and we'd just sit there and have a conversation why you shouldn't do drugs and alcohol and everything. And even still now, and I'm fourteen, we still every time when it comes on, she'll always remind us that you have to live your life how you want it to be when you grow up. If you want to be successful, you don't wanna get into somethin' that's gonna ruin that. Like my mom, she's a nurse, and she said that she was tempted when she was younger, and that she drank when she wasn't supposed to. But then once she realized that it was gonna mess up her career and later life, she stopped. And now she's got a wonderful job and a wonderful family that she doesn't know what she would do without.

Another participant mentioned the story that her mom told her about her uncle who died in a car accident when a drunk driver struck him. She was emotional when she said:

> Well, yeah, because they (my parents) told me a lot of stuff, like, what could happen to me if I did do that, and how it would affect my life. Well, let's say if you were drinking a lot, and then you go out, and you got in your car, and started to drive somewhere, and you got in a wreck. It could paralyze you and you wouldn't be able to do things. My mom's brother, Uncle Roger, he was in a – He was killed by a drunk driver. I'm sorry. I didn't even get to meet him, so, yeah. And then mom says I would have liked him and everything, but I don't – I'm sorry (OH 038).

PA 020 gave a similar example in which her mother told her and her sister about a close friend who died of an overdose:

> My mom. My mom grew up in a generation where, like, it was okay to smoke, it was okay to drink, so she's seen what it can do to people and all that, so that she wants it, she tries as hard as she can to keep that stuff away from us; and my sister's learned from that. So she doesn't wanna do any o' that either. She's talked to us a few times about stuff like that; something comes up in the news, like if somebody drug overdosed and died, like somebody she knew died of a drug overdose, I think a few weeks ago, and we talked about it, so. One of my mom's friends called her, told her that their friend was at a party, died of a drug overdose, so she cried a little and told me that she ever d-, never wants us to do stuff like that 'cause it can ruin our lives and kill us.

One participant talked about how her mother often tells her about all of her family members who have had health related issues because of smoking. She said:

> Well my mother absolutely hates it. When she was younger, my grandmother use to smoke, she used to take my grandmother's cigarettes and hide them from her or throw them away. Yet, her sisters ended up smoking, the one has completely stopped the another one. And they really emphasize it not to. It's not so much alcoholic kind of my family, doesn't have a big alcohol problem. And so, they don't really talk about alcohol, they talk about smoking a lot, it's not a lot about the drugs and stuff. Because a lot of my great grandparents and their grandparents and stuff have had a lot of problems from smoking (PA 009).

OH 008 mentioned that his parents often discuss a number of their friends who have had issues because of drugs and alcohol, saying that:

> Yeah, they say it's bad for you and stuff like that. Like, they say about, like, friends and stuff; like say about one's that did it and what's happened to 'em. Things like that. And, like, what happened to their friends in the past, like that. Like bad things that happened to 'em and where it's ended up in, like in jail and stuff like that. Um, like, one of my mom's friends had cancer on his lip 'cuz, uh, he's, ah, he was rubbin'snuff, and stuff like that. He had to have surgery and stuff.

Some of the participants, in addition to sharing the stories their parents told them, mentioned that the stories were effective because they demonstrated that their parents could relate. For example, PA 051 said:

> (R): Well she started when she was like 16 and she told me it's a bad habit and she, I shouldn't do it because she doesn't want me to end up like her
>
> (I): Is this cigarettes that she's talking about?
>
> (R): Yeah.
>
> (I): So did you, did that, was that effective when she because she told you about like what it was like for her.
>
> (R): Yeah.

In another example, PA 077 talks about his dad's story and how it registered more than other messages had in the past because it showed that his dad went through experiences

to which he could relate. He said:

> (R): Not so much like, "Oh, I was at this party and I got smashed." He told me that he went through [inaudible] not worth the two hours getting high over all the other stuff that comes with it.
>
> (I): Yeah, I guess, one thing that I'm curious about is did the [inaudible], you said it kind of went in one ear and out the other. I get the impression that your dad has had an influence in your life too. Does the fact that he went through some of those experiences already and he kind of knows what it's like, even those he's much older now, does that help register at all with you?
>
> (R): Sort of, yeah, because he went through it and turned his life around when he had my brother.
>
> (I): Can you give me some details on that? Has he ever talked to you about that? How having your brother –
>
> (R): When he got married before [inaudible] my brother [inaudible]. So he quit doing drugs, but he was a heavy drinker. And as soon as my brother was born, he just quit smoking cigarettes, quit drinking. Said he had a responsibility. Then my sister was born, and then I was born.

Adult experts – DARE/Health class – Basic advice about ATOD use. A number of adolescents discussed the advice they received from adult experts, including DARE officers and teachers or presenters in health class. Many said that when they received advice to not use drugs and alcohol, the harmful effects that they can have on the body were often mentioned as well. PA 040 shared the advice she received in health class when she said, “Not to do it and stuff because, um, you can wind up dying from either one, like you can, um, die from a, um, car crash from drinking, also get cancer from, um, smoking; cancer. PA 009 described an instance when a DARE officer came to speak to his class when he said, “I like that um-- he sort of got down on our level and he did not say it to us like a police officer. He did in a way that we can understand what they did to us. And he showed us diagrams and pictures of what lungs looked like before you smoked and afterwards.”

In fact, a few of the participants specifically cited the negative health effects they learned about in health class as the reason they have said no to drugs when offered. When asked why he has turned down offers, PA 021 said, “Well, I’ve know that for a while but, like, teachers, like, show us these things about, like, people get in car accidents ‘cause o’ drinking and it’s just like stupid, I’m not gonna kill myself.” PA 064 cited a similar example when she said, “Well, I’ve know that for a while but, like, teachers, like, show us these things about, like, people get in car accidents ‘cause o’ drinking and it’s just like stupid, I’m not gonna kill myself.” PA 011, who had accepted offers before, mentioned that the negative health consequences she learned about in health class do resonate with her when she is offered, but that it doesn’t necessarily guarantee that she will turn down an offer:

> Well, like, I’d taken, like, health classes. And, um, like, they always tell you not to do drugs and stuff. And they tell you all the things that happen to you. So then I’m like, when somebody asks me to do drugs with them, I immediately think of all the bad things can happen to you. Like, you can get brain damage, you can get addicted to it, like, with the money that you spent on that, you could be spending on something that you really need instead of that. It could like really make you age quicker. Stuff like that. And I immediately think all that stuff and then it’s like, it’s like, you get this rush of feelings. Like you don’t know what to do. Like, you start, like, panicking almost. But then, like, it’s either you say *Yes* or you say *No*.

Adult experts – DARE/Health class – Resistance strategies. Another common form of advice from DARE officers and health class presenters was resistance strategies. Just as with parents, these adult experts reportedly offered a number of refuse, explain, and leave strategies, but no avoid strategies. PA 012 said that health class taught him “all the side effects and, like, how to say No. It taught me a lot.” OH 010 described a lesson from his health class that emphasized the leave strategy:

> (R): Well, like school is when we had, uh, classes about it. They say, uh, peer pressure and stuff like 'at, don't do it. They'll try to talk you into it. Call you sissy an' stuff if you don' do it. You're not cool an' stuff.
>
> (I): So what do they talk to you guys about those instances when somebody starts calling you names?
>
> (R): Just walk away.

OH 006 said that his DARE officer recommended a refuse and leave strategy: "Uh, like, they had certain things that you're supposed to say, like just a big list. Um, like, just say, 'No, I'm not interested.' Or you can just walk away and stuff like that." OH 032 said that his class advised her to use a number of options, including the explain strategy: "Like, say no, walk away, make an excuse or, like, try to change the subject." Another participant mentioned advice that recommended an explain strategy in the event that the refuse strategy was unsuccessful: "Like the first thing they say, they always say like say no to it. That's like practically and then they say like ways you can tell them why not to do it like because it's dangerous and against the law" (PA 003).

Adult experts – Teacher/sponsor – Advice from experience/telling stories.

Teachers and, in the case of a few high-risk participants, sponsors were mentioned numerous times as providing advice based on their previous experiences. PA 003 gave an example of how a true story can effectively demonstrate the dangers of ADOD use:

> If you like tell them true stories about people and like show them that and it kind of like makes them understand how dangerous it really is. In science class or a student teacher was like he took LSD and he jumped off a – um a hotel thing or something and now he's in a wheelchair and he showed a video on it.

PA 072 said talked about the way that teachers typically gave advice, and how he would respect them for sharing stories from when they were younger. He said:

> Yeah, drug and alcohol teachers. I would respect teachers a lot more for doing that. But I think they just try to, like, influence you to be a more productive,

> healthy person. They don't, like, directly say, "Don't drink," and they don't indirectly say it, but they try to influence you in other ways to get you to stop in those ways. That's what I think. And, like, drug and alcohol teachers, they give you good information and they tell you what happens and other things like that.

PA 078 mentioned two teachers who gave her advice and were able to connect with her by sharing their stories. She began:

> (R): I had this one Sunday school teacher, Miss Jolie, she was like really bad throughout her teens and her twenty's, then one – then she like married, well Rick, and he, he was kind of doing the same thing. And they were like in a motor cycle gang together, and that kind of stuff, and then one day – they got married, and then one day they just woke up, and said that we really need to stop this. And then they go into church, and that kind of stuff. And then Jolie just passed away a few years ago from lung cancer, and so she was like 41, so that like that really affected you. And I was, like I think I – yeah and I was partying then, so that was why everything was [inaudible] alcohol, cigarettes that kind of thing all around.
>
> (I): Correct, so that really registered.
>
> (R): Yeah, it did definitely, and with everyone who had that Sunday school teacher, like we always like [inaudible].
>
> (I): So she would kind of like talk to you about what you –
>
> (R): She would, exactly what she went through.

She continued by talking about another teacher she had:

> Well, my science teacher, who is [inaudible], she's likes a genuine – I want to say friend, but I can't say that like about a teacher, you know what I mean, but she was like – I always go and talk to her about my stuff. And she just told me all the stuff she did in high school and stuff, but she – like that kind of stuff, so she'd just help me like relate to it and stuff.

Others, all high-risk participants, talked about the influential role of their sponsors in providing advice based on their previous experiences. PA 071 mentioned his sponsor, who had also been through AA and had hit rock bottom before turning it around, as an important source of advice for him:

> (R): Yeah. If I have a problem, I'll ask him what I should do. If I have a situation, I can ask, 'What do you think about if I do this?' and he'll just tell me, 'Well, if

> you do that, then think about what's gonna happen later on down the road.' It really had me thinking, and eventually doing the right decision.
>
> (I): That's cool, and you respect where he's going, and all that? He's been through AA too, right? Isn't that the way it goes?
>
> (R): Yeah, he's been in and out of the rooms. Most people, they just go in and out until they actually hit the rock bottom, that they call it. When you hit that, you know you're done. You've suffered so many consequences; you just can't do any more. It's either get help, or you're probably gonna kill yourself.

PA 076 listed her sponsor as the person she would listen to the most, while PA 077 explained how his sponsor's advice has been so helpful. He said:

> (R): Jim's been one of them. He'd talk to me, explain things. He really stepped in. Yeah, and the way he talked to me and calmed me down a little bit, made me understand it was my fault, not [inaudible] or even the court system. It was my fault if I screwed up. I had lost my license.
>
> (I): Anything else that Jim has done that has been helpful in any of this process?
>
> (R): Pretty much everything.

Siblings – Advice or punishment. Many participants reported receiving informational support pertaining to ATOD use from their siblings. A few recalled examples in which that the advice was accompanied by a threat of punishment in the event that they did not heed the advice of their sibling. For example, PA 008 talked about his close relationship to his brother and what was at stake if his brother caught him using when he said, "He has been telling me not to smoke and like really about it. He would really yell at me, he talks to me a lot about his stuff, and so do I he probably wouldn't talk to me anymore as much as – I think he both he'd just won't let me hang out with him anymore." PA 026 mentioned that his brother also threatened him if he ignored the

advice to stay away from drugs: “He says, ‘You ever do it and I will, um, ask mom to kick you outta the house. You ever do it and I will never talk to you again.’”

Others received a warning about a more blunt, physical threat should they ignore the advice. When asked about the advice his brother gives him about drugs and alcohol, OH 007 had this to say about what would happen if he didn’t listen: “He would probably kick my butt.” PA 074 received a similar message from his sister:

> Yeah, my sister. The relationship with me and her has changed a lot over the years because now that she has a kid and everything, she wants me to be a really good role model for her, and she told me she’s gonna kick my ass. She’s like, ‘I’m gonna kick your ass if you ever are around my kid, and you’re on drugs or anything.’ So that’s pretty much like, there’s somebody that’s gonna be looking up to me in the future, and I don’t want no one else to turn out like me.

Siblings - Advice from a role model. While some siblings supplemented their advice with a threat of punishment, others did so by practicing what they preached and modeling the behavior they expected form their younger siblings. OH 030 said, “Like, he tells me it’s not good for you, and, like he, I should try to be like, more like him than, like my other brother [Name]. ‘Cause I take after him more than I take after him – after [Name] than I take after [Name].” When asked if his brother, who often gives him advice, smokes or drinks PA 040 said, “No, he don’t do that; like, he don’t want me to do that stuff.” When asked if his brother was a good influence on him, he continued: “Yeah, he’s like uh, healthy and that.” PA 044 gave a similar example when she said, “he (my older brother) told me not to do it and stay away from it. He doesn’t do it either, so.”

Siblings – Advice from experience. A common theme that emerged was that adolescents reported receiving advice from their older siblings that was based on the sibling’s previous experiences. OH 002 provides an example when he was asked why he goes to his older sister for advice: “Because she can, like, help me out and give me some

advice ‘cause usually stuff I have problems with she has, she’s experienced before, so.” A number of these participants reported that when giving advice their older siblings would encourage them to learn from their mistakes. When asked about her older brother, OH 020 said, “He don’t want me to. He told, he, like, he tells me never to start it. And that he’d say that he don’t want me to be like him and end up doin’ it ‘n. PA 018 gave a similar example about his older brother when he said,

> He, he says I shouldn’t do it because when he was in high school he did it and he, uh, he, he like almost failed and he, it, he was lucky he was able to bring it up ‘cause he had to go to summer school to bring it up because he, he just thought about drinking and drinking and drinking, not doing his home work, and not caring about school.

PA 047’s brother also encouraged her to learn from his mistakes:

> Yeah, he, he tells me to learn from his mistake. He, he’s my third oldest brother and I’m the only girl, so I look up to him. Yeah, ‘cause I’m a girl and something can happen to me. He actually tells me that, like things that would happen if I ever (Audio skip) … we have long talks.

PA 038 shared his brother’s advice as well: “He’s like, ‘Don’t make bad decisions and stuff like that.’ ‘Cause he, like, regrets that, like what he did, like in his, like when he was in high school.” When asked why the advice from his brother stood out he talked about the unique bond that only siblings can have:

> (R): Well, since he’s my brother, like, I listen. I listen to him more than pretty much anyone else, ‘cause I
>
> (I): You, your mom included?
>
> (R): Yeah, including my mom, too.‘Cause he underst-, he’s, he’s like… he’s my older brother, so he understands, like what, like, what’s going on. He’s like, he’s only, he’s only twenty-one, so he understand, like, like, how I…‘cause he knows when he was fifteen, like, what was going on. But he still tries to get me to stay away from all of it, ‘cause he knows that he made the bad decisions too, and he doesn’t want me to, like, make the same decisions he did.

The ability of the older sibling to relate and be a credible source of advice as a result of

their previous, shared experiences with their younger siblings is an important theme that is revisited in the RQ3 section pertaining to rural adolescents' appraisals of social support messages.

It is interesting to note that, although they are primarily the recipients of supportive messages in this study, in some cases the participants themselves assumed the role of older sibling and provided advice to their younger brothers and sisters. PA 009 gave an example of some advice she recently gave her younger brother:

> Yea. And I talk to him like, he tells me about these kids and stuff and he says that he hangs out with them. I tell him to get away from them, because some of them are very bad kids, and he is wise because you don't want to be with these people. And he normally does do what I say, and he'll ask my mom and stuff, and she'll tell him the same thing…And he told me that he didn't want to hang out with them anymore and he didn't know how to get away from him and stuff. I told him that you just ignore him and stay away from him and if he bothers your friend, you tell the teacher or the principal. You don't need these people, you don't need to hang out with them.

PA 072 talked about his advice to his younger sister:

> I do have a 10-year-old sister, and my mom's caught me smoking and I told my sister never to smoke. And having an older sibling does help, and I've – Like, I told my sister – since my mom caught me smoking I told my sister not to smoke, and I've also told her not to do drugs and never, like, don't – wait until you're 21 to drink, and don't drink a lot. And she's so far listening to me. She's only 10 right now so I'm not positive, but I'm always gonna watch out for her and make sure she doesn't do anything stupid in her life. So they do, like, watch out for you, so it's really good to have an older brother or sister.

He went on to explain why having an older sibling can be helpful:

> Well, you automatically relate to your younger sibling more than your parents do because of the age difference, but sometimes parents don't have as many experiences with stuff because they were, like, really good kids, and their parents beat them if they would do anything bad. And, like, you have more experience with things that you've done, and you have more things to relate to them with. So you have a connection already to help talk to them and have them not do anything stupid, like you have – just have them learn from your mistakes."

Though these examples come from a different perspective, with the participant as the

source, they, too, emphasize the importance of receiving advice from someone to whom you can relate.

Friends – Advice from a role model. Some participants listed their friends as a helpful source of informational support, particularly those who were not ATOD users. PA 039, who stopped smoking cigarettes one month prior to the interview, talked about why she stopped when she said, "My friends, they, my friends that didn't smoke, they told me that it's ruining me and I'd have to stop and it's making me lose focus and everything. And I just listened to them." PA 072, who struggled with ATOD use, described how his friend who didn't use was able to help him using a more subtle approach:

> (R): My friend who doesn't do anything – doesn't do drugs, doesn't smoke, doesn't chew, doesn't drink – he is, like, my best friend, one of my best friends, and he's, like, really helped me with it. And he helped me realize partially, like, indirectly how stupid it was, but he didn't, like, try to push me out of it.
>
> (I): How did he do that?
>
> (R): I'm really not sure. I know he helped me with it somehow, but it was like – Yeah, if you have a friend like that, it really helps a lot, I'm not gonna lie, because they do it sneaky, too. They're like a ninja with that.
>
> (I): The ninja influence – I like that. Sweet.
>
> (R): Exactly. They just, like, hint it, kind of, so that it's not noticeable if you're not a very, like, keen person and you know what's going on around you. And, like, they'll just sneak things in there that make you realize, wow, it actually is stupid. Like I think my friend tries to tell me, like, stuff about his friends doing stupid stuff, drunk – like the pass out and they get colored on, and they're, like, doing cartwheels through the yard naked, and how stupid they look. But he doesn't try to tell me that they look stupid. He's like, "He was an idiot last night, and he –"
>
> (I): Can you believe he did this and this and this?
>
> (R): Yeah. Kinda like that, and they tell, like, stories about it, but they don't wanna, like, appear to try to get you to stop. And it does work.

PA 072 later added that he goes to his friends for advice because they can relate to him and can talk to him with respect. He said:

> Mostly my friends because they won't tell on me and I won't get in trouble for talking to them. But you have to find somebody that'll actually, like, try to help relate to you and not, like, just put it behind them. Like they won't just say something about you smoking or drinking and [inaudible] make you offensive and then you'd lose friends with them. But somebody that you trust, and somebody that is, like, respectful towards you. So then, they actually do help you with advice and stuff – like occasionally, they'd say something, like not trying to offend me in any way, but sometimes, they'd say something trying to help me or to get me to stop. Like, 'Oh, this is so unhealthy, but it's cool if you still wanna do it. I understand.'

Other Relative – Advice from experience. Though they were not reported as a common source of informational support, other relatives were occasionally mentioned and, in those cases, seemed to provide advice based on their previous experiences. PA 056 talked about her uncle's experience with steroids and, subsequently, his advice:

> He, he, um, personally had experiences with steroids and, I mean, he, what really hit me was the impact of how cruel someone can get on such powerful drugs. Like he would just whiplash at you; he would get angry all of a sudden and it would be about like, you know, the tiniest thing and he stopped it, thank God, and I mean, like he tells me, 'don't do 'em, they're very bad, they, they're harmful' and it's not only the fact that you can get mean and personality difference but inside your body it'll just eat you away too.

PA 052, when asked who has had the biggest influence on her in terms of staying away from drugs also mentioned her uncle: "Probably my uncle. Well he's um like he's only like 22 or 23, something like that. And he's always around and he watches me like he doesn't like me going up there (to a party) or anything." When asked why what her uncle tells her differs from advice she gets from other sources like her parents, she talked about the fact this his advice is based on his experiences:

> Well because he always tells me his stories when he was out and everything and I tell him like pretty much what happens with me. And he probably like, my mom always tells me if I don't want to do something don't do it or anything, but he

> always like would follow me and everything, like make sure I wouldn't be doing anything wrong. Um, he'd probably be the one giving me the good advice.

PA 032 mentioned her cousin who, despite using, asked her to learn from her mistakes. She said, "Um, my cousin, she always tells me, she's, like, '[Name],' she goes, 'I may do this stuff,' she goes, 'but you don't do it.' She goes, 'It's not good for you,' she goes, 'I wish I never would a got into it.' And she just always, like, is there to just tell me not to do it."

Instrumental support.

"Like if you're interested in, say, snowboarding in the winter instead of going out and drinking or smoking or snorting pills, just go up and snowboard and have fun. Stay active, stay fit – That's one way that could help that [inaudible] because I have more social events now. I'm always doing something. And I always have offers to hang out with girls. It's a lot better instead of doing drugs." (PA 071)

Instrumental support refers to tangible types of assistance, such as when parents give children money so that they can attend a movie with friends, or when a friend helps another friend with a school project (Wright, Sparks, & O'Hair, 2008). Thirty-seven (32.7%) of the 113 participants reported receiving at least one message that provided instrumental support, making it the second most commonly reported form of supportive message. The most common sources of instrumental support were friends (18), siblings (13), and parents (11). Friends and parents were associated with *Providing alternatives.* Friends were also associated with *Step up for me,* and *Quitting together.* Siblings were associated with *Look out for me,* while parents were associated with *Keep me away from trouble*. The following sections provide examples of these themes.

Friends – Provide alternative. Friends were reported as the most common source of instrumental support, and one commonly mentioned example was their ability to provide an alternative to ATOD use. In many of these cases, participants relied heavily

on friends who didn't have a history of ATOD use. PA 043 gave a specific example of how her friend helped her avoid an offer to smoke pot:

> And, like, we were walking down the street the one day, me and my friend who doesn't smoke pot, and we saw her and she came up to me and she was talking to me and, like, we were hanging out with her for like an hour and then, like, when she asked me to smoke pot, like I said, couldn't, my friend didn't have a hoodie, so she said 'let's go get a hoodie' and when we went to her house we told her mom to, like start yelling at me c-, so, make it so that we couldn't go outside, so that's what she did.

OH 009 talked about hanging out with a friend who doesn't use drugs instead of his other friends who have offered him to use in the past:

> I don't really hang out with them anymore. Like, I tried to, like, stop, like, avoid, like, avoid 'em or something. Like, some people call my house and, like, ask if I wanna spend the night and if I know, like, they're wanting me to that or nothing, I'll just say, I, I already told this kid I'm gonna spend the night there first, and then I'll call him and see if he wants to come over.

PA 074, a high risk adolescent, talked about how his girlfriend, who doesn't use, often talks him out of partying with his friends by getting him to come hang out with her instead:

> (R): I've known my girlfriend since I was probably three or four years old. We grew up together. She was always the best little kid ever, and she never got in trouble. I don't think she got anything less than a B on her report card. She was just the best kid. Eventually, we realized that opposites attract. She's just [inaudible] so much, and every time I think about getting in trouble, like every time I think about going out and smoking weed, I'll call her, and I'll be like, 'I'm gonna go out with my friends.' She's like, 'What are you gonna do?' 'I'm probably gonna go smoke weed.' She's like, 'No, you're not.' And I'm like, 'You know what? You're probably right. I'm not.'
>
> (I): She kind of keeps you in a reality check?
>
> (R): Yeah. And if I'm thinking about going out and getting in trouble, I'll just – if I call her and say I'm going out, she's like, 'All right, where you going?' 'I'm going out and hang out with them.' She's like, 'Why don't you come over to my house?' So I just go over to her house, and we hang out all night, instead of going out. And one time, actually, it saved my ass a lot because one night a kid got a call from another kid, and he wanted him to go to a party. So I was gonna go to the party, and the next thing you know, my friend calls me. He's like, 'Dude, I'm

> in jail.' I'm like, 'Wow, what happened?' He was like, 'Lots of drugs, lots of alcohol, lots of loud noise. Cops came, we all got arrested.' I'm like, 'Well, thanks.'
>
> (I): Glad you didn't go.
>
> (R): Yep. I was looking over at my girlfriend, smiling. I said, 'Thank you.' She's like, 'What?' I'm like, 'Don't worry about it. Just thanks.'
>
> (I): Do you think about that every time she kind of says no, and you're like, "Well, I want to"?
>
> (R): Yeah, yeah. I'm like, eventually, she's really gonna save my ass one of these days.

PA 039 talked about how her best friends know her tendencies, so they give her other things to do. She said, "They, like, keep me away from it. They don't let me really hang out with [Name] because they know if I do, I'm gonna start doing that and I told them that I wasn't gonna because I didn't wanna start doing that." PA 071, who struggled with ATOD use, talked about how his friends would help keep him from using by offering him healthier opportunities:

> But there's also, like, my friends will always wanna do stuff. Not like party; they wanna actually go out and hang out and do stuff that's fun, and – -- that's another way – yeah, that's another way to help stop getting them to do things. Like if you're interested in, say, snowboarding in the winter instead of going out and drinking or smoking or snorting pills, just go up and snowboard and have fun. Stay active, stay fit – That's one way that could help that [inaudible] because I have more social events now. I'm always doing something. And I always have offers to hang out with girls. It's a lot better instead of doing drugs.

Similarly, PA 078 gave an example of how her friend, who doesn't use drugs and knows her habits, often gives her alternatives to partying:

> Well, my friends, like my one friend Christy, she like doesn't do anything. She's like God sent or something, I don't know. But if she goes – so whenever like they're partying around, I'm like – my other friends are like, 'Come over here, do you want to go get a coffee of something,' but she's always there like –

She continued with another similar example: “Like, she doesn’t drink either, so she is in a basketball team too, and her team like parties together all night. So she’s always, just like, ‘Oh Diane and I are over at mothers house,’ totally invites me there.”

Some high-risk participants talked about friends who, though they occasionally use as well, made a concerted effort to keep them away from situations where they would be tempted to use. PA 077 said:

> They’re kind of like, even though they smoke pot, they don’t pressure me into doing it, especially when I’m on probation [inaudible]. Like, they wouldn’t smoke around me. They won’t smoke if they hang with me. If they hang out with me, and then go smoke after they drop me off. They look out for me.

PA 077 also mentioned that she no longer hangs out with her old friends who used to get her in trouble and that, although her new friends still party, they don’t do it with her. She said:

> Well, yes, I don’t talk to any of the people I used to see [inaudible]. So we quit all contact. And yes, I do have a new group of friends and they are very supportive. [Inaudible] they will drink or but they will be sure to let me know and I’ll just go and do something else.

Interestingly, each of the aforementioned examples were from adolescents who had used ATODs in the past, which demonstrates the potential for this form of support to reduce ATOD use for adolescents who have already started using a substance.

Friends – Stick up for me. The adolescents in the sample gave numerous examples of instances in which their friends intervened and stood up for them when they were presented with an ATOD offer. OH 055 described one such instance:

> (R): We were hanging out at one o’ my friend’s, um, friend’s houses, [Unintelligible] apartments and they asked me if I wanted to smoke a little bit and I said no because I’m not into that and my friend’s like, ‘yeah, she don’t do that, don’t ask her no more’ and stuff like that. So she was like on my side but she was still doing it but she knew I don’t like to do it.

(I): Okay, so she's a, she's a friend that does that but she respects your decision.

(R): Yeah.

PA 015 gave a similar example, in which she admitted that she would have definitely taken part if her friend had not intervened:

> (R): I was offered a, to smoke weed one time and I would, like I had it, like I was going to, then my friend [Name] grabbed it and gave it back.
>
> (I): She kinda looking out for you?
>
> (R): Yeah. 'Cause I was too drunk to know.
>
> (I): And you woulda done it?
>
> (R): Oh, yeah, I would, I would, who knows what I woulda done that night.

PA 038 gave an example of how his friends stick up for him at a party, a setting in which he claims that kind of instrumental support is both more common and more effective. He said:

> (R): It's a, it's more effective at the parties, you know, 'cause there's a lot more people and a lot more people stick up for each other, too. So, like, say if it was just, like, me and someone else, and they're like, 'Oh, do you wanna smoke?' I mean, just like, if they keep on asking me, like, they'll not – like just for instance, like no one keeps on asking me, but if they keep on doin' it at a party – then people'll be like, like, 'Dude, just leave 'em alone, he doesn't feel like… like, if he doesn't feel like it, then, like, don't, like, make him do it if he doesn't want to.'
>
> (I): Okay, so, at the parties, actually – when more of it's going on – it might actually be easier to
>
> (R): And – yeah, it's more effective there.

PA 032 gave another example of how her friend intervened, and went on to say that having someone stick up for you like that, in her experience, is not a very common occurrence. She said:

> (R): 'Cause, like, there is some people up here… like, my one friend that I usually play baseball with, like, his friends smoke. And like, they always be, like, I hang

> out with them and he'd, like, his friends would always be, like, 'Come on, smoke with us, smoke with us, smoke with us.' And I'd be like, 'No, I don't want to and I'm gonna' and I was like, '[Name], I'm leaving.' And he's like, 'No, don't leave.' I'm like, 'Well, then I'm not smoking.' And his friends are just, like, 'Come on, come on, come on,' and my friend goes, 'Dude,' he goes, 'don't peer pressure. If she don't wanna do it, she doesn't have to do it.' So, my friends help out in a part, too, so.
>
> (I): So, is there a lot of that, too? Like, would you say there's more peer pressure or, uh, you know, we have this amount of peer pressure going on, is there an equal amount of people who stand up to people who don't wanna do it?
>
> (R): No. You could, you could catch, maybe, one or two people out of, like, ten people that will actually say, 'Dude, she doesn't wanna do it, then don't, she doesn't have to do it.'

These examples indicate that when this form of support does occur, it has the potential to be quite effective.

Friends – Quitting together. Though it was not a common example of instrumental support, several participants mentioned that their close friends and/or significant other were helpful in terms of offering to quit ATOD use together. PA 054 talked about how she and her friend first started using pot, and how they eventually decided to stop together:

> (R): I didn't know I was going to try it. I mean, like I didn't really plan it out, but like I got there, and like was offered to me. From there it progressed, and we started doing it. But me and her both stopped.
>
> (I): Together?
>
> (R): Yeah.
>
> (I): So you started together and stopped together?
>
> (R): Yeah. Mostly do everything together. As friends I'd never do anything without her.

OH 057 also gave an example of how he and his girlfriend quit smoking pot:

> (R): I, I've a, I've actually quit now in the last, past month or so.

> (I): Why'd you quit?
>
> (R): Uh, just 'cause my girlfriend, she just decided she wants to quit so we talked, we decided to quit together I guess, so. Now she's wantin' to quit 75moking' and, which, which the ro-, main reason why she wants to quit 75moking' is because her mom don't want her 75moking' and we're not allowed to see each other if, you know, she keeps 75moking', so.

However, while they were successful in their endeavor to quit smoking pot, OH 057 admitted that quitting together doesn't work if the desire to quit isn't there. He continued with an explanation of their shared attempt to quit smoking:

> Well she don't wanna quit but if she quits, like she wants me to quit with her so she don't have to be around it and I told her I would but it's like I see her a certain amount of hours everyday and I just try not to smoke that whole time period but when I'm with her, you know, she asks me if I have cigarettes and then it's just like, 'yeah, but you're quittin', you know, and I'm not gonna smoke around ya'' but it's like she wants to quit but she don't really.

Sibling – Look out for me. The vast majority of the examples of instrumental support reportedly provided by siblings involved them looking out for their younger brother or sister. PA 005 described her brother as "protective over me" and "my motherly figure" because of the way he keeps her away from certain people. PA 018 talked about the efforts his brother makes to keep him away from drugs, including getting him into sports. He said, "My older brother does. He, he got me into football and like all that, all that, um, like the sports thing." In most cases, however, the older sibling served as a physical threat to those who made an offer to their sibling. PA 043 said her brother insisted that she stay away from drugs and that he would beat up anyone who was using with her: "He said if he finds out that, that I'm do it, who I did it with, he's gonna go beat them up." When asked if his brother's friends ever offered him anything, PA 041 responded, "Nope, 'cause they know better because my brother'd hurt them. My brother

would hurt them." PA 015 shared a similar story about her brother:

> (R): Um, I was only offered once 'cause my brother told them that if they gave it to me he was gonna kill 'em.
>
> (I): Wow. Do you think he actually would like go?
>
> (R): Oh, yeah.
>
> (I): He would really beat somebody up?
>
> (R): Oh, yeah. He did It before.
>
> (I): He beat somebody up who offered you pot? Wow, what happened?
>
> (R): Yeah, [Name], he was like, 'Do you want a joint?' and he, like he didn't even get to say the word joint and like my brother had him on the floor and his face was bloody. He's like, 'I told you, don't gi-, offer that stuff to her. She's not; she's too young to make her own decisions.' He goes, 'So I'll make 'em for her.'

Parents – Keep me away from trouble. A number of the adolescents in the sample described their parents as people who help keep them away from trouble. OH 005 said:

> Like, my mom don't let me go to the park 'cause she knows what goes on down there. But, like, they'll go down there and smoke all kinds of stuff and everything. And my mom doesn't want me part of that, so I have to stay on my side of town. Like I have to stay, like, on the good parts – that's what my mom calls it – away from everything. Mm, like, mom, just like, wants me to be around where she knows the people. Like, she doesn't want me goin' to the, like, down by the park where she doesn't know anybody. She's afraid if I go down there, then I'll get hangin' with the wrong people or someone, and she doesn't want that to happen.

PA 071 described his mom as someone who is always checking in and who tries to keep him away from his old friends who used to get him in trouble. He said:

> She'll just talk to me; try to keep me away from my old friends. She'll always call me, 'Where are you at, where are you going, who are you with?' I'm just like, 'I'm going here. Do you wanna talk to them?' I'll give the phone to a friend who's clean, and she'll just talk, and say, 'Yeah, we're going here.' She'll be like, 'All right.'

A few participants also mentioned that their parents would come pick them up in the event they were out somewhere and someone offered them drugs. OH 013 gave an example when he said, “Yeah. Like, when I go to my friends an’ stuff, they always tell me like if someone’s like drinkin’ and a whole bunch and stuff, just call my parents, tell them to come pick me up or some’in’.” Similarly, PA 046 said, “Well, I usually say no and call my mom and tell her to come pick me up.” OH 056 also gave an example in which she ended up at a party in which she was receiving offers, and that her mom helped get her out of a tough situation:

> I was at a friend’s house and she had called a big bunch o’ people over and I had no idea what was going on ‘cause I was just called to be over for a get together and they brought out I think three, twenty-four packs o’ beer and I didn’t know really what to do because I don’t really like that, you know, I just – I’m the type o’ person that if everybody else is doing it I make, uh, the opposite a, you know, I don’t like to do that stuff, I think it harms your body and it’s not good for you. Um, but we were there and they got that stuff out and I just had my mom come and pick me up because they were asking me if I wanted to do it and if I – they didn’t say if I didn’t do it they wouldn’t be my friend, they just said that, um, you’ve, they was pretty much was saying that I would fit in if I didn’t but if I didn’t do it then, you know, I didn’t know what was gonna happen if they weren’t gonna be my friends, you know, that’s their decision because I was making the right decision at the time.

Parents – Provide alternative. Others said that the way their parents kept them out of trouble was by doing something with them and keeping them busy. When asked who was the best influence on him in terms of making healthy decisions and staying away from ATOD use, PA 077 mentioned his dad: “He would be like – instead of me going out hanging out with friends, he’d take me to the shed and we’d work on bikes and we’d work on the dirt bikes, and do this and do that.” PA 079 gave a similar example about his step-dad:

> My stepdad was a big help in my life this far. Anything they can do to get me with them for the day and not out using – me and my dad would go golfing.

> [Inaudible] one Saturday, and my dad knew that I was probably gonna leave early in the afternoon, and not come home until early the next afternoon. He would say let's go golf in the afternoon, so that way he can just keep me close for a couple of extra hours, without them having to worry.

Network support.

> **"We go have a pizza party once in a while; like we're not to that level where we're like, 'oh, I wanna go drinking tonight' or something. We just, we stay away from all that…They're always saying, you know, we do the right thing, you know, always hold the door for this person, always do this, always do that, you know, but don't do this, don't do that. So, I think they really have a big impact" (PA 056)**

Network support entails generating feelings of social connection and creating a sense of belonging (Xu & Burleson, 2001). Examples of network support include a friend offering to provide another child with access to another group of people or offering to spend time with that child in order to help them through a difficult experience. Network support was not a commonly reported form of support, as only 11 (9.7%) of the 113 participants in the sample reported receiving a message that provided network support. The most common sources of network support were friends (7 participants reported receiving at least one network support message from a friend), parents (3), siblings (1), and adult experts (1). Due to the relative lack of examples of this form of support, the only theme that emerged was friends *provided a non-user network*. Examples of this theme are presented below.

Friends – Provide non-user network. The one theme that did emerge with respect to network support was that friends seemed to provide a network of non-users that helped allow participants to avoid using drugs. PA 056 talked about how her friends pride themselves on staying away from drugs and doing the right thing, and how being a part of that group has an affect on her:

> We go have a pizza party once in a while; like we're not to that level where we're like, 'oh, I wanna go drinking tonight' or something. We just, we stay away from all that. My friends usually tell me a lotta things and I think that would be one o' the things they would say like you know, 'stay away from that guy, they've been, uh.' They're always saying, you know, we do the right thing, you know, always hold the door for this person, always do this, always do that, you know, but don't do this, don't do that. So, I think they really have a big impact.

OH 030 mentioned that her friend tells her that they don't do drugs because it's not who they are or what they are about. Her friend told him it's "like, not our deal, like, we don't do it. He's, like, my best friend, and we tell each other everything." PA 043 talked about how she and her friend embrace the fact that they don't smoke marijuana: "Um, well, my one friend, when we walk down the street we scream, like, 'we're not potheads and we're proud of it' and like we make fun of people that do smoke pot." Even PA 076, a high risk participant, talked about how her non-user friends still support her despite their differences:

> Yes, I do have a very close network of friends that don't have a program, and I go to school with them. Sometimes it is very hard to maintain their friendship only because they don't have that [inaudible]. Like they, they're very proud of me because they know how different I am. They, they kind of drifted away from me and I drifted away from them whenever [inaudible] but they support me 100 percent.

Research Question 3

Research Question 3: To what extent to do they perceive these support messages to be effective in terms of helping them make healthy choices and remain drug free?

While the previous sections devoted to *RQ1* and *RQ2* focused on the source and function of the support messages rural adolescents report receiving in the context of ATOD use, this study also aimed to capture the adolescents' interpretation of these messages. As the analysis for this study utilized an interpretive approach to the functional model of support, the following section focuses on rural adolescents' appraisals of the

messages they reported receiving. This was done in order to determine the extent to which certain messages of social support have the potential to help them make healthy choices and remain drug free. Emerging themes allowed the researcher to get a clearer sense of not just what messages were being conveyed, but whether those messages were interpreted as being effective. Put differently, the following section looked across all of the themes that emerged from *RQ2* and attempted to identify what resonated most with the adolescents, and why, based on their responses. Results for this section are delineated based on the function of support, as the researcher attempted to capture adolescents' appraisals of each type of supportive message.

Emotional support interpretation. Emotional support messages were a fairly common form of support according to the rural adolescents in the sample, with 28 (24.7%) of the 113 participants reporting that they received at least one message of this variety. Based on an interpretive approach to the functional model of support, which focused on adolescents' explanations of their appraisal of these messages, a number of conclusions can be drawn from the data. First, the data indicate that having parents who "care" seems to resonate with adolescents, both before ATOD use and after. Second, having someone to talk to, most importantly someone who has been through similar experiences and will listen, was mentioned as an extremely helpful factor, particularly for youth who have a history of ATOD use. Each of these themes is discussed in more detail below.

Parents who care. While a number of themes pertaining to emotional support emerged, a few seemed to resonate the most with rural adolescents and likely have the biggest potential impact with respect to ATOD use. Results indicate that, for the rural

adolescents in this sample who mentioned they received an emotionally supportive message, messages that convey that their parents "care" seemed to resonate strongly with them. In fact, in some cases, participants indicated that knowing that their parents cared for them served as an actual deterrent to ATOD use. OH 013 cited emotionally supportive messages from her parents as a big reason why she does not use drugs or alcohol. When asked about those messages she said, "Mm, yeah, I'd say it matters and it prob'ly matters to my parents a bunch too. 'Cause that shows that they care a whole bunch for me, and they don't want me getting hurt or anything." When asked what helped her avoid ATOD use, OH 032 also cited her parents' emotional support saying, "Because, like, they tell me, like, never give up and help, they help me, like, places and they're usually there for me." PA 022 brought up the fact that her mother "backs me up" as a major reason why she has been able to overcome the peer pressure associated with using drugs.

Although the previous examples speak to the potential for emotional support messages from parents to serve as a deterrent to ATOD use, responses from other participants indicate that having parents who care can also resonate after ATOD use has occurred. OH 081, who had previously tried cigarettes and alcohol, talked about her close relationship with her parents as a reason for not using again in the future: "My parents, um, those are probably about the two people I'm closest to in my entire life. I, like, talk to them about anything, I'm not afraid to tell 'em anything, they, um, like my mom's my best friend." She continued, "If they look at you and say you're disappointed it just, I don't like it at all. I don't, I just, I don't like disappointing my mom."

High-risk participants also talked about the tremendous impact of having a parent who cares. PA 079 talked about how important his parents were to him after he was admitted to rehab when he said, “My mother, she obviously cares, but – she cares…She had a huge impact when I got really got messed up, and I think that if it wasn’t for my family, I probably wouldn’t be where I’m at right now.” PA 076, another high-risk participant, talked about how much it means to her that her mother is offering more emotional support following her problems with ATOD use. She could not hide her smile when she said, “She’s trying a lot harder this time. And she hugs us every morning before school. ‘Love you, have a good day’ and before she never did that.” These examples indicate that messages that convey that parents care can have a profound impact on a child, both in terms of helping to prevent ATOD use and in helping them to recover following use.

Someone with a shared experience who can listen and relate. Another important theme that emerged with respect to interpretations of emotional support messages was that the rural adolescents in this sample valued having someone who was there to listen to them and, most importantly, that the person had been through similar experiences and, as a result, could relate to them. Interestingly, this was a prevalent theme regardless of the source of the message, with examples including parents, siblings, friends, support groups, teachers, and counselors. For example, OH 007 talked about how she goes to her mother not just because she’ll listen, but also because she can relate to her. She said, “My mom. Um, because she’s been through half the stuff I’m just now going through. And I just think I shouldn’t ask my dad about stuff like that, ‘cause he’s never been through half this stuff. I can relate to her.” OH 008 said that he goes to his sister because she listens and

“she’s the most understanding and stuff like that, about things.” PA 039 gave a similar example, this time citing her friends, when she said, “They’re kinda like the same person, ‘cause they listen to me, they know what I’m feelin’, they know what I’m feeling even when I don’t say it.”

High-risk participants were particularly positive in their appraisals of individuals who were there to listen to them, and the sources they referenced as being most effective were often individuals who had personal experience with their history of ATOD use. PA 076 gives a particularly poignant example when she distinguishes her friends outside of her support group versus those inside:

> Also, someone who is in the program knows what you're going through. Because like a lot of times the feeling, like the situations and the details may be different but the feelings are all the same. So you, it's through experience, strength and hope, you know? This person has gone through it, so I'll call them and they'll tell me what they did and you take all the suggestions you can and [inaudible].

In another example, PA 079 talked about how helpful it was to talk with his English teacher in high school who, at the time, had been sober for 13 years. He said, “It helped in high school, yeah. It definitely helped because I knew that when I had problems I had somebody to go talk to.” PA 077 cited how much he valued being able to talk to his counselor, who had a great deal of experience with challenges and tribulations associated with ATOD use: “He’d talk to me, explain things. He really stepped in. He was taking time out of his day to come and sit with me and talk to me and help me out.” Overall, adolescents had very positive interpretations of sources of emotional support that were willing to listen to them and were able to relate to them while doing so.

Informational support interpretation. Informational support messages were by far the most common form of support reported by adolescents, with 96 (85%) of the 113

participants reporting that they received at least one of these messages. Across all of the themes that emerged for informational support messages, a number of trends stood out with respect to rural adolescents' interpretations of these messages. Using an interpretive approach to the functional model of support, it was found that: (1) advice provided by those who modeled the behavior they were advocating were seen as more effective by adolescents; and (2) advice based on previous, shared experiences to which adolescents could relate, often told using stories, received more positive appraisals by rural adolescents. In terms of the latter theme, participants noted that siblings were particularly adept at providing advice that was based on previous experiences to which the adolescents could easily relate. Each of themes is explicated in the following section.

Modeling behavior with advice. As evidenced in the section pertaining to *RQ2*, advice was delivered in many different ways and from many different sources. That said, regardless of the source, rural adolescents appraisal of advice was more positive when the person who gave the advice also modeled the behavior for which they were advocating. By the same token, the "do as I say, not as I do" approach to advice provision was not nearly as effective a messaging strategy, as evidenced by numerous examples from parents. When asked what his parents say about drinking alcohol, OH 080 talked about his parents hypocritical approach when he said, "That it's bad for ya but they do it just because they like, 'cause they wanna have fun because like they, they do it so they can like take friends out and have a good time and stuff." Similarly, PA 025 said, "My mom smokes. She just says, 'You better not do it, or I'll beat your butt.' Another word. Yeah, she's a hypocrite." PA 054, who smokes, continued the theme, explaining why her mother's advice doesn't hold water: "My mom does smoke, and she says that I – she says

that I shouldn't smoke, but she can't like yell at me because she does it, and I've been around her."

While the "do as I say, not as I do" strategy was seen as ineffective, advice provided by those who modeled their advice was perceived as a far more effective across a number of sources. PA 032 talked about her aunt's advice hits home because she lives by it, citing her career as a probation officer: "And then my Aunt [Name], she's going, like, she always there telling me too. She's like, 'Don't do it, don't do it, don't do this stuff, it's bad for you.' Like, she don't do it either, she's going to be a probation officer, too, so." When asked about the advice she gets from her older brother, OH 079 said that he talks to her about it and practices what he preaches, and that it has rubbed off on her: "Yeah, he tells me not to do it and I said 'I know, I wasn't planning on anyways.' Me and my brother's actually pretty good kids. We're healthy." Others shared nearly identical accounts. When asked if his brother, who often gives him advice, smokes or drinks PA 040 said, "No, he don't do that; like, he don't want me to do that stuff." When asked if his brother was a good influence on him, he continued: "Yeah, he's like uh, healthy and that." PA 044 gave a similar example when she said, "he (my older brother) told me not to do it and stay away from it. He doesn't do it either, so."

Friends were also mentioned as providing effective advice that coincided with their behavior. PA 039, who stopped smoking cigarettes one month prior to the interview, talked about why she stopped when she said, "My friends, they, my friends that didn't smoke, they told me that it's ruining me and I'd have to stop and it's making me lose focus and everything. And I just listened to them." PA 072, who struggled with ATOD

use, described how his friend who didn't use was able to help him using a more subtle approach:

> (R): My friend who doesn't do anything – doesn't do drugs, doesn't smoke, doesn't chew, doesn't drink – he is, like, my best friend, one of my best friends, and he's, like, really helped me with it. And he helped me realize partially, like, indirectly how stupid it was, but he didn't, like, try to push me out of it.
>
> (I): How did he do that?
>
> (R): I'm really not sure. I know he helped me with it somehow, but it was like – Yeah, if you have a friend like that, it really helps a lot, I'm not gonna lie, because they do it sneaky, too. They're like a ninja with that.
>
> (I): The ninja influence – I like that. Sweet.
>
> (R): Exactly. They just, like, hint it, kind of, so that it's not noticeable if you're not a very, like, keen person and you know what's going on around you. And, like, they'll just sneak things in there that make you realize, wow, it actually is stupid. Like I think my friend tries to tell me, like, stuff about his friends doing stupid stuff, drunk – like they pass out and they get colored on, and they're, like, doing cartwheels through the yard naked, and how stupid they look. But he doesn't try to tell me that they look stupid. He's like, "He was an idiot last night, and he –"
>
> (I): Can you believe he did this and this and this?
>
> (R): Yeah. Kinda like that, and they tell, like, stories about it, but they don't wanna, like, appear to try to get you to stop. And it does work.

In each of these examples, the primary difference in how the advice was interpreted was whether the source of the message followed their own advice. However, modeling the behavior while providing informational support was not the only strategy that received a positive interpretation from rural adolescents.

Shared experience, credibility, stories. Across the numerous ways in which informational support messages were conveyed, as well as each of the sources that conveyed the messages, it became abundantly clear that rural adolescents had a more positive appraisal of messages that were based on the past experiences of the source,

especially stories. Adolescents in the sample gave many examples of informational support messages that were ineffective because they could not relate to the message. PA 060 said:

> Well, apparently health class is not too convincing to them, like kids don't like health class because they think it's disgusting, right? And when they hear about the drugs, it's like, 'I heard this every year, the same, exact thing,' and they try to get you so convinced, and the videos that we have, they have like these people from like the '70s or '80s. They don't see themselves in the video.

PA 071 gave a similar critique of school presentations when he said:

> The whole DARE thing in elementary school is just explaining what it does, and just to stay away from it. The whole DARE thing, I think was a joke because they were just saying what it does to you. It just made probably 85 percent of the kids who were in those DARE classes do what they said not to do because just to say what it does to you and what you feel like, of course they want to try it. So, I think it was kind of pointless because it didn't really do anything.

The suggestions for improving informational support messages were incredibly consistent: have the source talk about their experiences when they dealt with similar situations so that kids can relate to the message.

PA 077 gave some advice on how to improve informational support messages in school when he said, "Get younger kids in there that went through it and have been in rehab and all that stuff for pot and alcohol and have them talk to them about their experiences and how they wronged their life." PA 071 echoed that advice saying that he would bring in someone who could talk about their experiences, someone who could "just tell them what happened, what happened to them, what changed." PA 072 continued the theme of stressing the importance of relating to adolescents. He said:

> If you don't want them to – like, if you wanna seek out something you need to, like, tell them why – or you have to, like, ask them and relate to them. Ask them why they want to try it, and then have – like, either have kids come in or tell them their stories or, like, videotape them so you could show it all around the nation, world.

PA 079 spoke to the tremendous effect that hearing real stories, from real people, that convey the unglamorous side to drug use when he said:

> The consequences – the detox – the detoxification – the lengths that people will go to to get their drugs and alcohol. Things that you thought you would never do, yet you do. If I knew, in eighth and ninth grade, some of the things I would be doing to get drugs and alcohol, I probably would have never did it in a million years.

PA 076 had very similar advice for parents. She mentioned that her mom never talked with her about ATOD use, despite the fact that she thinks that, in retrospect, her mother could have talked about things she could have related to that may have been effective. She said, "So she kept me very active and, but we never had that talk. So I think maybe, kind of like this was all in the past but I think maybe if she had talked about maybe her experience with her father and my grandfather, I would have listened more." Fortunately, there were many examples of informational support messages that were interpreted favorably because the source gave advice by using stories and past experiences to which the message receiver could relate.

Parents. Parents were the most common provider of informational support and, as evidenced in the results section for *RQ2*, they used a variety of different approaches to give advice about ATOD use to their children. Messages in which parents told stories and shared their experiences were the ones that adolescents seemed to connect with most. When asked why she values her mother's advice the most, OH 007 said, "Um, because she's been through half the stuff I'm just now going through. And I just think I shouldn't ask my dad about stuff like that, 'cause he's never been through half this stuff." OH 037 discussed the stories her mother told her about the mistakes she made when she was a kid, and conveyed the impact that those stories had on her: "She made that mistake a long

time ago, and she don't want me to make the mistake she made. Because it's just killing your life – just killing your life."

OH 005 also recounted the stories that her mother told her, and talked about how the moral of the story really stuck with her. She said, "But then once she realized that it was gonna mess up her career and later life, she stopped. And now she's got a wonderful job and a wonderful family that she doesn't know what she would do without."

PA 077 also talked about his dad's story and how it registered more than other messages had in the past because it showed that his dad went through experiences to which he could relate. He said, "Not so much like, 'Oh, I was at this party and I got smashed.' He told me that he went through [inaudible] not worth the two hours getting high over all the other stuff that comes with it." When asked if that really registered with him he said, "yeah, because he went through it and turned his life around when he had my brother."

Recounting her mom's story about her Uncle Roger's death as the result of a drunk driver, OH 038 also talked about the impact that stories like this can have on adolescents. She said:

> What happens to people. Because, a lot times, like what happened to my Uncle Roger, it's just going to happen – if they share what happens to some people, maybe they'd stop doing it. I think that would be good if you show someone who they actually look up to, and things like that, where they were in an accident too, something like that.

Siblings. Though siblings were not the most frequently reported source of informational messages, their advice was particularly well received as it was often seen as credible and relatable as they had recently gone through similar situations. When asked why he found his older sister's advice to be helpful, OH 002 said, "'cause usually stuff I have problems with she has, she's experienced before." PA 072 also highlighted the

ability for siblings to relate when giving advice because of the shared experiences. Here he talks about why having an older sibling can be helpful:

> Well, you automatically relate to your younger sibling more than your parents do because of the age difference, but sometimes parents don't have as many experiences with stuff because they were, like, really good kids, and their parents beat them if they would do anything bad. And, like, you have more experience with things that you've done, and you have more things to relate to them with. So you have a connection already to help talk to them and have them not do anything stupid, like you have – just have them learn from your mistakes.

PA 038 gave a particularly detailed account that aptly summarizes siblings' ability to convey effective informational support messages. He explained why the advice from his brother "means the most" to him when he said:

> Well, since he's my brother, like, I listen. I listen to him more than pretty much anyone else…including my mom. Cause he underst-, he's, he's like… he's my older brother, so he understands, like what, like, what's going on. He's like, he's only, he's only twenty-one, so he understand, like, like, how I…'cause he knows when he was fifteen, like, what was going on.

He then discussed the unique bond that only siblings have, and his brother's willingness to talk to him coupled with his ability to talk about relevant experiences:

> I think, so much, uh, I really don't, like, I think you d-, people say they're, they might be close to their parents and stuff like that. but I'm more, like… but like, for like me and my friend, like we're more close, close to, like, our older brothers or, like, our older sisters. Me and my older brother, 'cause, like, we, like, we've been through everything together. Me and my, like obviously, like, yeah, that might be my mom or my dad, but my brother, my brother's, like he's, he's, like, more close to me than, than anyone else is. And like I, like, he trusts me with anything, I trust him with anything. And he tells me, like, he tells me, like, not to do this and stuff like that…And I, I'm, I'm like, and he, like, gives me, like, examples, and, like, he tells me about some of, like, the parties and stuff like he used to go to.

He concluded by reiterating the importance of credibility when providing advice, the biggest difference, in his mind, between the advice he received from his mother compared to the advice he received from his brother:

> It's because he's been through it and he can relate to it; he can relate to it. And like my, like, my mom tries and tells me, like, it's bad for me. I'm like, I'm like, 'Well, how do you know? You never did it.' 'Cause, like, my mom never did, never did; like, never did it or anything. And so, he's more credible. He's more credible, like to help me out. And he, he'd know, like 'cause he's been through stuff like that. And he still actually, like, he still has friends that still do it and stuff like that.

Overall, siblings proved to be the most effective providers of informational support messages in the eyes of rural adolescents, as their advice was often based upon the same experiences with which they were currently dealing.

Other Sources. In addition to parents and siblings, other sources provided informational support messages that were deemed effective because they were based on relevant past experiences. PA 052 cited the advice from her uncle as her biggest influence in keeping her away from ATOD use. She explained how his advice is often based on his experiences:

> Well because he always tells me his stories when he was out and everything and I tell him like pretty much what happens with me. And he probably like, my mom always tells me if I don't want to do something don't do it or anything, but he always like would follow me and everything, like make sure I wouldn't be doing anything wrong. Um, he'd probably be the one giving me the good advice.

Others shared similar perspectives about adult experts. PA 072 talked about the way that teachers typically gave advice, and how he "would respect teachers a lot more for sharing stories from when they were younger." PA 078 said that she values the advice from her science teacher most because she can relate to her: "I always go and talk to her about my stuff. And she just told me all the stuff she did in high school and stuff, but she – like that kind of stuff, so she'd just help me like relate to it and stuff." Similarly, PA 071 said that he values the advice from his sponsor because he had also been through AA and had hit rock bottom before turning his life around. He said:

> Yeah. If I have a problem, I'll ask him what I should do. If I have a situation, I can ask, 'What do you think about if I do this?' and he'll just tell me, 'Well, if you do that, then think about what's gonna happen later on down the road.' It really had me thinking, and eventually doing the right decision.

Instrumental support interpretation. Instrumental support messages were the second most frequent form of support reported by adolescents, with 37 (32.7%) of the 113 participants reporting that they received at least one of these messages. Across all of the themes that emerged for instrumental support messages, a number of trends stood out with respect to adolescents' interpretations of these messages. Utilizing an interpretive approach to the functional model of support, it was found that: (1) messages in which someone sticks up for you during the point at which an offer is made, done most often by friends and siblings, is an extremely effective form of support; and (2) messages that provide alternatives is a highly valued form of support by rural adolescents, and is of particular help to those who have already used ATODs. Each of these themes is discussed below.

Having someone intervene when an offer was made. Although adolescents reported receiving a variety of instrumental support messages from multiple sources, some were interpreted as more effective than others. One particular message that was evaluated favorably was someone, in most cases either a friend or a sibling, intervened, either advocating for them or physically threatening the source, when they were being offered a substance. Friends were particularly good at taking the decision making pressure off of the adolescent being offered by intervening and making the decision for them, an approach that proved to be highly effective. PA 015 gave a great example of how her friend intervened and, most importantly, how it was the only thing between her and using pot. She said:

> (R): I was offered a, to smoke weed one time and I would, like I had it, like I was going to, then my friend [Name] grabbed it and gave it back.
>
> (I): She kinda looking out for you?
>
> (R): Yeah. 'Cause I was too drunk to know.
>
> (I): And you woulda done it?
>
> (R): Oh, yeah, I would, I would, who knows what I woulda done that night.

PA 038 gave a similar example of how his friends have proven to be helpful in sticking up for him at parties, a setting in which he claims that kind of instrumental support is both more common and more effective. He said:

> (R): It's a, it's more effective at the parties, you know, 'cause there's a lot more people and a lot more people stick up for each other, too. So, like, say if it was just, like, me and someone else, and they're like, 'Oh, do you wanna smoke?' I mean, just like, if they keep on asking me, like, they'll not – like just for instance, like no one keeps on asking me, but if they keep on doin' it at a party – then people'll be like, like, 'Dude, just leave 'em alone, he doesn't feel like… like, if he doesn't feel like it, then, like, don't, like, make him do it if he doesn't want to.'
>
> (I): Okay, so, at the parties, actually – when more of it's going on – it might actually be easier to
>
> (R): And – yeah, it's more effective there.

Friends were the not the only one to effectively intervene when an offer was made, however. Siblings proved to be a consistent and effective provider of this form of support as well, often relying on a slight different, but nevertheless effective, approach: conveying a physical threat to the person offering the substance to their younger sibling. There were numerous examples of siblings sending this type of message, as seen in the results section for *RQ2*, and most received a very favorable appraisal. For example, when asked if his brother's friends ever offered him anything, PA 041 responded, "Nope, 'cause they know better because my brother'd hurt them. My brother would hurt them."

Similarly, PA 015 said that she was offered once, and only once, based on the message her brother sent to those who made the offer. She said:

> (R): Um, I was only offered once ‘cause my brother told them that if they gave it to me he was gonna kill ‘em.
>
> (I): Wow. Do you think he actually would like go?
>
> (R): Oh, yeah.
>
> (I): He would really beat somebody up?
>
> (R): Oh, yeah. He did it before.
>
> (I): He beat somebody up who offered you pot? Wow, what happened?
>
> (R): Yeah, [Name], he was like, ‘Do you want a joint?’ and he, like he didn’t even get to say the word joint and like my brother had him on the floor and his face was bloody. He’s like, ‘I told you, don’t gi-, offer that stuff to her. She’s not; she’s too young to make her own decisions.’ He goes, ‘So I’ll make ‘em for her.’

Being provided with alternatives. Another instrumental support message strategy that was interpreted favorably by rural adolescents involved sources providing them with alternatives to ATOD use. This approach proved to be particularly effective for those who already used at least one substance before. One example that received a positive appraisal was when friends who didn’t use ATODs would provide another specific option other than going to a party. PA 074, a high risk adolescent, talked about how his girlfriend, who doesn’t use, often talks him out of partying with his friends by getting him to come hang out with her instead:

> Yeah. And if I’m thinking about going out and getting in trouble, I’ll just – if I call her and say I’m going out, she’s like, ‘All right, where you going?’ ‘I’m going out and hang out with them.’ She’s like, ‘Why don’t you come over to my house?’ So I just go over to her house, and we hang out all night, instead of going out. And one time, actually, it saved my ass a lot because one night a kid got a call from another kid, and he wanted him to go to a party. So I was gonna go to the party, and the next thing you know, my friend calls me. He’s like, ‘Dude, I’m in jail.’ I’m like, ‘Wow, what happened?’ He was like, ‘Lots of drugs, lots of

> alcohol, lots of loud noise. Cops came, we all got arrested.' I'm like, 'Well, thanks.'

Similarly, PA 078 mentioned that the most effective approach was when her friend Christy talks her our of going to a party:

> Well, my friends, like my one friend Christy, she like doesn't do anything. She's like God sent or something, I don't know. But if she goes – so whenever like they're partying around, I'm like – my other friends are like, 'Come over here, do you want to go get a coffee of something,' but she's always there like –

PA 039 also mentioned how important it is that her best friends know her tendencies, so they give her other things to do. She said, "They, like, keep me away from it. They don't let me really hang out with [Name] because they know if I do, I'm gonna start doing that and I told them that I wasn't gonna because I didn't wanna start doing that." This form of instrumental support message appeared to receive the most positive appraisal in terms of helping adolescents with a history of use avoid using substances.

Parents were also described as providing helpful instrumental support in that they, too, provided effective alternatives. One way they did this was by providing an easily accessible "out-clause" when offers were made. Many participants cited the effectiveness of having their parents remove them from tough situations. PA 046 found this method to be helpful time and time again saying that best way to handle an offer situation has been to "call my mom and tell her to come pick me up." OH 056 gave a similar example, highlighting both the inherent difficulties of turning down an offer and that being picked up allowed her to effectively avoid accepting the offer:

> I was at a friend's house and she had called a big bunch o' people over and I had no idea what was going on 'cause I was just called to be over for a get together and they brought out I think three, twenty-four packs o' beer and I didn't know really what to do because I don't really like that, you know, I just – I'm the type o' person that if everybody else is doing it I make, uh, the opposite a, you know, I don't like to do that stuff, I think it harms your body and it's not good for you.

> Um, but we were there and they got that stuff out and I just had my mom come and pick me up because they were asking me if I wanted to do it and if I – they didn't say if I didn't do it they wouldn't be my friend, they just said that, um, you've, they was pretty much was saying that I would fit in if I didn't but if I didn't do it then, you know, I didn't know what was gonna happen if they weren't gonna be my friends, you know, that's their decision because I was making the right decision at the time.

And while they did not do it as frequently as friends did, parents were also occasionally effective at providing an alternative to partying that their children valued. PA 077 talked about getting the opportunity to work on something he enjoyed with his dad when he said, "He would be like – instead of me going out hanging out with friends, he'd take me to the shed and we'd work on bikes and we'd work on the dirt bikes, and do this and do that." PA 079 gave a similar example of how his father provided him with an effective alternative to using drugs:

> My stepdad was a big help in my life this far. Anything they can do to get me with them for the day and not out using – me and my dad would go golfing. [Inaudible] one Saturday, and my dad knew that I was probably gonna leave early in the afternoon, and not come home until early the next afternoon. He would say let's go golf in the afternoon, so that way he can just keep me close for a couple of extra hours, without them having to worry.

Esteem and Network support interpretation. The researcher was unable to draw significant conclusions about adolescents' interpretations of esteem and network support messages as a result of the small sample of messages for each function. However, results from each function of support suggest that both have potential to help adolescent make healthy choices and remain drug free. With respect to esteem support, one area that warrants further exploration is the extent to which the admiration of a sibling can be a deterrent to ATOD use. OH 005, who had received multiple substance offers but never accepted, brought up the relationship she has with her sister:

> With my little sister, she's, she always was telling me how she admires me and everything and how she wants to be like me when she grows up, and that stays in my head all the time. I gotta do the best I can all the time because I don't want her growin' up, messin' up.

While this is but one example, it is a powerful one nonetheless, and it suggests that such messages from siblings can indeed play a role in helping adolescents make healthy choices.

In terms of network support, the one theme that emerged from the small sample was that messages from friends could help create a non-user network. Messages from friends such as, drugs are "not our deal, like, we don't do that" (OH 030), or examples where friends walk down the street and scream "we're not potheads and we're proud of it" (PA 043), speak to the potential that creating a positive network can have in terms of discouraging ATOD use. This is particularly important because friends are often cited in the literature as being risk factors rather than protective factors (Andrews, Tildesley, Hops, & Li, 2002; Mosbach & Leventhal, 1988; Wills et al, 1996), yet these messages provide an example of a way in which the inverse is indeed true.

Chapter 5: Discussion

Previous literature has tested and identified social support as having a positive impact on health outcomes, including serving as a protective factor against drug use. That being said, we know little about the content of actual messages of social support that adolescents report receiving, or their interpretation of those messages, particularly within the rural context (Dekovic, 1999; Le Poire, 2003). And while social support from family members in general has clearly demonstrated the ability to serve as a protective factor during adolescence, a greater understanding is needed about the messages of support that are conveyed to adolescents, from family members, friends, and others, and the extent to which those can help them avoid ATOD use (Scheer et al., 2000).

In fact, in the context of supportive messages about substance use, there is virtually no existing literature to provide insight into how youth interpret and appraise messages meant to encourage and support them to avoid the use of illicit substances or who provides those messages of support. Ultimately, this information will be useful in determining what messages, and which sources, resonate with adolescents. Using an interpretive approach to the functional model of support, this study aimed to provide descriptive information that will increase understanding of the sources, functions, and appraisal of social support messages that rural adolescents report they receive from others to help them make healthy choices and stay drug free. The themes that emerged, as well as the implications these findings have for future research, are discussed below.

Messages (and Sources) Should Utilize Shared Experiences

When considering all of the messages, sources of those messages, and the interpretations of those messages by adolescents in this study, one thing in particular

stands out: messages from sources who were able to demonstrate first-hand knowledge of experience with ATOD offers, or demonstrate a shared experience with the adolescent received the most positive appraisals. When sources were able to convey that they had lived through similar experiences as the adolescents to whom they were providing advice, the shared experience seemed to enhance the credibility of the message, as well as the perception that the supportive messages were helpful. Many of the adolescents in this study described this phenomenon of effective message provision as being able to "relate" to them. This ability of the source to relate to the message recipient was important regardless of the source, whether the supportive message came from a parent, a sibling, a friend, or an adult expert.

The importance of this shared experience or ability to relate also emerged across multiple functions of support. In terms of emotional support, rural adolescents, and particularly those who had a history of ATOD use, placed a high value on having someone who would listen to them, particularly when the person listening could understand where they were coming from as a result of a shared experience. In terms of informational support, adolescents saw advice or stories based on past experiences as more helpful because the source was able to convey that he/she had adhered to that advice themselves or, in many cases, not done so and learned from his/her mistakes. As a result, advice based on these shared experiences was perceived by the receiver as more likely to be useful in their own lives. These results provide important practical value for sources who wish to effectively reach rural adolescents with messages about ATOD use. Whether giving advice or just being there to listen, providing messages that exhibit a

shared experience or demonstrate an ability to relate can help ensure that rural adolescents appraise support messages about ATOD use more favorably.

Parents – Prominent Providers of Support

Based on the previous literature, it did not come as a surprise that parents were the most frequently discussed providers of social support. This is particularly encouraging seeing as though research has found that adolescents with supportive parents are less likely to use alcohol and drugs (Barnes & Farrell, 1992; Wills, 1990). As evidenced by this study, however, support is based more upon the quality of the message than the quantity. While not all support messages resonated with rural adolescents, parents were able to provide messages that received a positive appraisal. First, the data indicate that having parents who "care" seems to resonate with adolescents, both before ATOD use and after. In fact, in some cases, participants indicated that knowing that their parents cared for them served as an actual deterrent to ATOD use. This finding corroborates previous findings that found that parental support deters the onset of a problem behavior by acting as a "brake," making it less likely that adolescents will initiate substance use or experience any substantial increase in frequency of use (Wills, Mariani, & Filer, 1996).

Also, though not as effective as siblings, parents who gave advice using stories based upon previous experiences generally received a positive appraisal. Parents were also found to be particularly effective providers of alternatives to ATOD use, whether as an exit-strategy at a party or as a provider of an alternative healthy activity. Previous literature has concluded that parents who provide support to their children can indeed serve as a protective factor, and this study helped identify specific examples of support messages that rural adolescents perceived as being effective.

Siblings (Experienced Protectors) Matter

To date, sibling support has not been thoroughly examined despite its potential to play a significant role in the lives of adolescents (Seginer, 1998). While parental support has received a significant amount of scholarly attention with findings pointing to the importance of parental support, sibling social support has received much less attention. As a result, the findings pertaining to reported sibling support have the potential to provide valuable insight that can help fill in the knowledge gaps in the current literature. Results indicate that siblings do, indeed, have the potential to provide social support messages that their younger brothers and sisters perceive as being effective. Overall, siblings were seen as both experienced, credible advice givers who had lived through the same shared experiences, and as protectors who had the potential to intimidate those who made ATOD offers to their younger siblings.

As alluded to earlier, the perception that the message source based the supportive message on a shared experience proved to be highly important. Older siblings who had recently lived through the same experiences, and learned from them, seem to have the greatest ability to be perceived as a credible and helpful source of support. As such, these experienced older siblings have perhaps the greatest potential to provide effective supportive messages in this context. Future research should continue to examine the potential impact that siblings can have in this context, while future campaigns should strive to make siblings a more prominent part of attempts to curb adolescent ATOD use.

Friends Can Help

While some studies have demonstrated the importance of supportive interactions from peer groups in staying drug free (Clark, MacGeorge, & Robinson, 2008; Samter,

2003), many others have concluded that peers can also serve as a risk factor and support friends drug use (Andrews, Tildesley, Hops, & Li, 2002; Mosbach & Leventhal, 1988; Wills et al, 1996). The role of peer support remains ambiguous and, despite its potential to serve as protective factor, the majority of the literature has focused on its role as a risk rather than a protective factor. However, results from this study help address this gap in the literature by illuminating specific ways in which friends have the potential to serve as a protective factor through effective support messages. Friends were the most common source of instrumental support, and proved to be particularly effective at sticking up for friends when they were being offered a substance, either reinforcing their decision to not use or stepping in when they were on the verge of accepting.

Friends who did not use substances were found to be very effective providers of a number of different types of support messages. Friends were appraised as effective providers of informational support messages when they modeled their advice, as well as when they provided appealing alternative options in lieu of partaking in substances. Additionally, in some cases, friends shared messages that helped establish a non-user network that helped participants avoid risky behaviors. Wills et al (1996) stated that social relationships among adolescent peers should not be classified a priori as either risk-promoting or protective, but should consider factors such as support provision and substance use among network members. This study considered those factors and, as a result, identified specific ways in which friends could provide effective support messages and help adolescents make healthy choices.

Adult Experts With Experience Have Potential

Another important form of support outside of the family, and one that has received far less attention, is social support provided in school by teachers and classmates (Malecki & Demaray, 2003). This study addressed that gap in the literature by considering adult experts as support providers and, in doing so, identified ways in which adult experts convey support messages that are appraised positively by rural adolescents. Adult experts were actually the second most frequent provider of support messages behind parents, and they demonstrated an occasional ability to produce messages that were appraised positively by rural adolescents. For example, teachers and counselors who had personally experienced troubles with ATOD use were valued sources of advice and important sources of emotional support in terms of listening.

Resistance Strategies

As this study was part of a larger Drug Resistance Strategies (DRS) Project, it is important to consider the extent to which resistance strategies were included in the provision of social support messages. Unlike previous studies, which focused on the resistance strategies reportedly used by adolescents, this study focused on the resistance strategies that sources told adolescents to utilize when presented with an offer to use a substance. Overall, it was encouraging that resistance strategies were a fairly common example of informational support provided both by parents and adult experts. In addition, it was interesting to see that they examples given in the advice matched the REAL typology that emerged from reported strategies by the adolescents from previous studies. However, the results indicate that there is room for improvement with respect to providing advice about utilizing resistance strategies.

First, the examples provided were fairly simplistic messages, often lacking detail or relying too much on simply refusing or walking away. For instance, no examples of the avoid strategy, one of the more complex strategies, were reported from any of the sources. Additionally, parents and adult experts did not appear to rely too heavily, if at all, on past experiences or personal examples when providing advice about resistance strategies. Results from this study suggest that relying on these past experiences could vastly improve the extent to which these informational support messages pertaining to resistance strategies resonate with rural adolescents.

Limitations & Future Research Considerations

This study provides unique, and needed, insight into the role of social support as a protective factor. Though previous research has demonstrated the connection between social support and positive health factors, a greater understanding of the actual messages of social support communicated by various sources to adolescents, as well as adolescents' interpretations of those messages, is needed. While this study focused on an underserved population, addressed gaps in the literature, and utilized a large sample, it also suffered from a few limitations. First, it relied solely on self-report data and thus relied on adolescents' recollection of support messages they reportedly received as opposed to the actual verbatim messages. While relying on the recollection of adolescents can result in various biases that threaten the validity of the results, it can be argued that the examples that were provided for this study represent the messages the more influential support messages that these adolescents remember and carry with them.

Another limitation was the amount of detail provided about many of the messages that adolescents reported receiving. Because the questions designed to probe for details

pertaining to the research questions for this study were part of an interview protocol for a larger study, many examples of support messages lacked detail. Future studies in this context would do well to probe for more details about specific support messages so that more intricate comparisons can be made between the messages themselves as well as the adolescents' interpretations of the messages. Capturing these additional details in future studies would also allow researchers to test the extent to which certain models from the communication discipline, namely the *dual-process* and *optimal matching* models, can help create a better understanding of the role of supportive messages in this context. Though these models informed the study by emphasizing the importance of analyzing the receiver's interpretation of the support message, they did not serve as the theoretical framework for the analysis as the data collected for this study did not include the extent to which the receiver processed individual messages of support (*dual-process model),* nor did they capture the extent to which adolescents believed they had control over the situation (*optimal matching model).*

Finally, future studies should attempt to explore the potential of both network and esteem support messages in this context. The lack of examples in this study prevented any significant conclusions from being drawn, but the examples that were given appear to demonstrate the strong potential that each function could have on adolescents in this context. That said, the current study did identify specific aspects of emotional, informational, and instrumental support messages that made caused the message to resonate with rural adolescents. It is the sincere hope of the primary researcher that these results can further efforts, both in research and practice, to help rural adolescents make healthy choices and remain drug free.

References

Adelman, M. B., Parks, M. R., & Albrecht, T. L. (1987). Supporting friends in need. In T. L. Albrecht & M.B. Adelman (Eds.), *Communicating social support* (pp. 105-125). Newbury Park, CA: Sage.

Alberts, J. K., Hecht, M. L., Miller-Rassulo, M., & Krizek, R. L. (1992). The communicative process of drug resistance among high school students. *Adolescence*, 27, 203-226.

Albrecht, T. L. & Adelman, M. B. (1987). Communicating social support: A theoretical perspective. In T.L. Albrecht & M.B. Adelman (Eds.), *Communicating social support* (pp. 18-39). Newbury Park, CA: Sage.

Albrecht, T. L., Burleson, B. R., & Goldsmith, D. (1994). Supportive communication. In M.L. Knapp & G.R. Miller (Eds.), *Handbook of interpersonal communication* (2nd ed., pp. 419-449). Newbury Park, CA: Sage.

Albrecht, T. L., & Goldsmith, D. J. (2003). Social support, social networks, and health. In T.L. Thompson, A.M. Dorsey, K.I. Miller, & R. Parrott (Eds.), *Handbook of health communication*, (pp.263-284). Mahwah, NJ: Erlbaum.

Andrews, J. A., Tildesley, E., Hope, H., & Fuzhong, L. (2002). The influence of peers on young adult substance use. *Health Psychology*, *21*(4), 349-357.

Aneshensel, C. S., & Stone, J. D. (1982). Stress and depression: A test of the buffering model of social support. *Archives of General Psychiatry*, *39,* 1392-1396.

Antonovsky A. (1979). *Health, stress and coping.* Jossey-Bass, San Francisco.

Baumrind, D., & Moselle, K. A. (1985). A developmental perspective on adolescent drug use. *Advances in Alcohol and Substance Use, 5,* 41-67.

Barnes, M. K., & Duck, S. (1994). Everyday communicative contexts for social support. In B.R. Burleson, T.L. Albrecht, & I.G. Sarason (Eds.), *Communication of social support: Messages, interactions, relationships, and community* (pp. 175-194). Thousand Oaks, CA: Sage.

Barnes, G. M., & Farrell, M. P. (1992). Parental support and control as predictors of adolescent drinking, delinquency, and related problem behaviors. *Journal of Marriage and Family, 54,* 763-776.

Barrera, M., Chassin, L., & Rogosch, F. (1993). Effects of social support and conflict on adolescent children of alcoholic and nonalcoholic fathers. *Journal of Personality and Social Psychology, 64,* 602-612.

Barrera, M., & Li, S. A. (1996). The relation of family support to adolescents' psychological distress and behavior problems. In G. Pierce, B. Sarason, & I. Sarason (Eds.), *Handbook of social support and the family* (315-343). New York: Plenum Press.

Baxter, L. A. (1991). Content analysis. In B. M. Montgomery & S. Duck (Eds.), *Studying Interpersonal Interaction* (pp. 239-254). New York: The Guilford Press.

Becker, L., Barga, V., Sandberg, M., Stanley, M., & Clegg, D. (1999). 1999 county profile on risk and protection for substance abuse prevention planning in Ferry County. Olympia, WA: Division of Alcohol and Substance Abuse, Research and Data Analysis, Department of Social and Health Services.

Berkman, L. F., & Syme, S. L. (1979). Social networks, host resistance, and mortality: A nine-year follow-up study of Alameda County residents. *American Journal of Epidemiology, 109,* 186-204.

Berlin Ray, E., & Miller, K. I. (1994). Social support, home/work stress, and burnout: Who can help? *The Journal of Applied Behavioral Science, 30,* 357-373.

Bertillion, M. J. (1879). Les celibataires, les veufs and les divorces au point de vue du mariage. *Revue Scientifique*, 776-783.

Bodie, G. D., & Burleson, B. R. (2008). Explaining variations in the effects of supportive messages: A dual-process framework. In C. Beck (Ed.), *Communication yearbook 32* (pp. 354-398). New York: Routledge.

Bottorf, J.L., Gogag, M., & Engelberg-Lotzkar, M. (1995). Comforting: Exploring the work of cancer nurses. *Journal of Advanced Nursing, 22,* 1077-1084.

Burke, R. J., & Weir, T. (1978). Benefits to adolescents of informal helping relationship with their parents and peers. *Psychological Reports, 42*, 1175-1184.

Burke, R. J., & Weir, T. (1979). Helping responses of parents and peers and adolescent well-being. *Journal of Psychology, 102,* 49-62.

Burleson, B. R. (1985). The production of comforting messages: Social-cognitive foundations. *Journal of Language and Social Psychology, 4,* 253-273.

Burleson, B. R. (1990). Comforting as everyday social support: Relational consequences of supportive behaviors. In S. Duck (Ed.), *Personal relationships and social support* (pp. 66-82). London: Sage.

Burleson, B. R. (2003). Emotional support skills. In J. O. Greene & B. R. Burleson (Eds.), *Handbook of communication and social interaction skills* (pp. 551–594). Mahwah, NJ: Erlbaum.

Burleson, B. R. (2009). Understanding the outcomes of supportive communication: A dual-process approach. *Journal of Social and Personal Relationships, 26* (1), 21-

38.

Burleson, B. R., Albrecht, T. L., Goldsmith, D., & Sarason, I. G. (1994). The communication of social support. In B. R. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.), *Communication of social support: Messages, interactions, relationships, and community* (pp. xi-xxx). Thousand Oaks, CA: Sage.

Burleson, B. R., Bodie, G. D., Rack, J. J., Holmstrom, A. J., Hanasono, L., & Gill, J. N. (2007, November). *Good grief: Testing a dual-process model of responses to grief-management messages*. Paper presented at the annual meeting of the National Communication Association, Chicago.

Burleson, B. R., & Goldsmith, D. J. (1998). How the comforting process works: Alleviating emotional distress through conversationally induced reappraisals. In P. A. Anderson & L. K. Guerrero (Eds.), *Handbook of communication and emotion: Theory, research, application and contexts* (pp. 245-280). San Diego, CA: Academic Press.

Burleson, B. R., & Hanasono, L. K. (2010). Explaining cultural and sex differences in responses to supportive communication: A dual-process approach. In K. T. Sullivan & J. Davila (Eds.), *Support processes in intimate relationships* (pp. 291-317). Oxford Press.

Burleson, B. R., Hanasono, L. K., Bodie, G. D., Holmstrom, A. J., Rack, J. J., Rosier, J. G., McCullough, J. D. (2009). Explaining gender differences in responses to supportive messages: Two tests of a dual-process approach. *Sex Roles, 61*, 265-280.

Burleson, B. R., & Kunkel, A. (1996). Emotional support skills in childhood. In G. R. Pierce, B. R. Sarason, & I. G. Sarason (Eds.), *Handbook of social support and the family* (pp. 105–140). New York: Plenum.

Burleson, B.R., & MacGeorge, E.L. (2002). Supportive communication. In M. Knapp & J. Daly (Eds.), *Handbook of interpersonal communication* (pp. 374-424). Thousand Oaks, CA: Sage.

Burleson, B. R., McCullough, J. D., Bodie,G. D., Rack, J. J., Holmstrom, A. J., Hanasono, L. K., et al. (2008, May). *It's how you think about it: Effects of ability and motivation on recipient processing of and responses to comforting messages*. Paper presented at the annual meeting of the International Communication Association, Montreal.

Cauce, A. M., Hanna, K., & Sargeant, M. (1992). Life stress, social support, and locus of control during early adolescence: Interactive effects. *American Journal of Community Psychology*, *20*(6), 787-798.

Chaiken, S., & Trope,Y. (Eds.). (1999). *Dual-process theories in social psychology*. New York: Guilford.

Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N.K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp.509-535). Thousand Oaks, CA: Sage.

Clark, R. A., MacGeorge, E. L., & Robinson, L. (2008). Evaluation of peer comforting strategies by children and adolescents. *Human Communication Research, 34,* 319-345.

Cobb, S. (1976). Social Support as a moderator of life stresses. *Psychosomatic Medicine, 38,* 300-314.

Cohen, S. (1988). Psychosocial models of the role of social support in the etiology of physical disease. *Health Psychology, 7*(3), 269-297.

Cohen, S., & Syme, S. L. (1985). Issues in the application and study of social support. In S. Cohen, S. L., Syme (Eds.), *Social support and health*. Orlando, FL: Academic Press.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98,* 310-357.

Conger, R.D., & Elder, G.H. (2000). *Children of the land: Adversity and success in rural America.* Chicago: University of Chicago Press.

Cunningham, M. R., & Barbee, A. P. (2000). Social Support. In C. Hendrick, & S. S. Hendrick (Eds.), *Close Relationships: A sourcebook* (pp. 272-285). Thousand Oaks, CA: Sage.

Cutrona, C. E. (1990). Stress and social support: In search of optimal matching. *Journal of Social and Clinical Psychology, 9,* 3-14.

Cutrona, C. E., Cohen, B. B., & Igram, S. (1990). Contextual determinants of the perceived supportiveness of helping behaviors. *Journal of Social and Personal Relationships, 7,* 553-562.

Cutrona, C. E., & Russell, D. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In I. G. Sarason, B. R. Sarason, & G. R. Pierce (Eds.), *Social Support: An interactional view* (pp. 319-366). New York: Wiley.

Cutrona, C. E., Shaffer, P. A., Wesner, K. A., & Gardner, K. A. (2007). Optimally matching support and perceived spousal support sensitivity. *Journal of Family Psychology, 21*(4), 754-758.

Cutrona, C. E., & Suhr, J. A. (1992). Controllability of stressful events and satisfaction with spouse support behaviors. *Communication Research, 19,* 154-176.

Dekovic, M. (1999). Risk and protective factors in the development of problem behavior during adolescence. *Journal of Youth and Adolescence, 28*(6), 667-685.

Dew, B., Elifson, K., & Dozler, M. (2007). Social and environmental factors and their influence on drug use vulnerability in rural populations. *The Journal of Rural Health, 23,* 16-21.

D'Onofrio, C. N. (1997). The prevention of alcohol use by rural youth. In E. B. Robertson, Z. Sloboda, G. M. Boyd, L. Beatty, & N. J. Kozel (Eds.), *Rural substance abuse: State of knowledge and issues, NIDA research monograph 168* (pp. 250–363). Rockville, MD: National Institute on Drug Abuse.

Dunkel-Schetter, C., Blasband, D., Feinstein, L., & Herbert, T. (1992). Elements of supportive interactions: When are attempts to help effective? In S. Spacapan & S. Oskamp (Eds.), *Helping and being helped: Naturalistic studies* (pp. 83-114). Newbury Park, CA: Sage.

Fahs, P. S., Smith, B. E., Atav, S., Britten, M. X., Collins, M. S., Lake Morgan, L. C., & Spencer, G. A. (1999). Integrative research review of risk behaviors among adolescents in rural, suburban, and urban areas. *Journal of Adolescent Health, 24*, 230-243.

Farr, W. (1975). Marriage and mortality. In N. Humphreys (Ed.), *Vital statistics: A memorial volume of selections from the reports and writings of William Farr*. Metuchen, NJ: Scarecrow. (Original work published 1885).

Felts, W. M., Chenier, T., & Barnes, R. (1992). Drug use and suicide ideation and behavior among North Carolina public school students. *American Journal of Public Health, 82*, 870-872.

Ferguson, T. (1997). Health care in cyberspace: Patients lead a revolution. *The Futurist, 31*, 29-34.

Fielding, N.G., & Lee, R.M. (1998). *Computer analysis and qualitative research*. Thousand Oaks, CA: Sage.

Forney, M.A., Forney, P. D., & Ripley, W. K. (1989). Predictor variables of adolescent drinking. *Advances in Alcohol Substance Abuse, 8,* 97-117.

Franco, N., & Levitt, M. J. (1998). The social ecology of middle childhood: Family support, friendship quality, and self-esteem. *Family Relations, 47*, 315-321.

Furman, W., & Buhrmester, D. (1985). Children's perception of the personal relationships in their social networks. *Developmental Psychology, 21*(6), 1016-1024.

Gardner, K. A., & Cutrona, C. E. (2004). Social support communication in families. In A. L. Vangelisti (Ed.), *Handbook of family communication* (pp.495-512). Mahwah, NJ: Erlbaum.

Garnefski, N., & Diekstra, R. F. W. (1996). Perceived social support from family, friends, school, and peers: Relationship with emotional and behavioral problems

among adolescents. *Journal of American Academy of Child and Adolescent Psychiatry, 35,* 1657-1664.

Geist-Martin, P., Berlin Ray, E., & Sharf, B. (2003). Communicating health: Personal, cultural, and political complexities. Belmont, CA: Wadsworth Thomas.

Gfroerer, J. C., Larson, S. L., Colliver, J. D. (2007). Drug use patterns and trends in rural communities. *The Journal of Rural Health, 23,* 10-15.

Glaser, B., & Strauss, A. (1967), *Discovering grounded theory*. Chicago, IL: Aldine.

Goldsmith, D.J. (2004). *Communicating social support*. New York, NY: Cambridge University Press.

Goldstein, S. E., Davis-Kean, P. E., & Eccles, J. S. (2005). Parents, peers, and problem behavior. A longitudinal investigation of the impact of relationship perceptions and characteristics on the development of adolescent problem behavior. *Developmental Psychology, 41*, 401–413.

Graneheim, U., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today, 24,* 105-112.

Greenberg, M. T, Siegel, J. M., & Leitch, C. J. (1983). The nature and importance of attachment relationship to parents and peers during adolescent. *Journal of Youth and Adolescence, 12,* 373-386.

Haber, M. G., Cohen, J. L, Lucas, T., & Baltes, B. B. (2007). The relationship between self-reported received and perceived social support: A meta-analytic review. *American Journal Community Psychology, 39,* 133-144.

Hall, W., Room, R., & Bondy, S. (1999). Comparing the health and psychological effects of alcohol, cannabis, nicotine, and opiate use. In H. Kalant, W. Corrigall, W. Hall, & R. Smart (Eds.), *The health effects of cannabis* (pp. 477-506). Toronto: Addiction Research Foundation division, Centre for Addiction and Mental Health.

Hansen, W. B. (1993). School-based alcohol prevention programs. *Alcohol Health and Research World, 17,* 54-60.

Hayes, A. F., &Krippendorff, K. (2007). Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures*, 1(1): 77–89.

Hecht, M. L., & Miller-Day, M. (2004). The REAL way to prevent substance abuse in America, *Counselor, 5,* 33-36.

Hecht, M. L., & Miller-Day, M. (2009). The drug resistance strategies project: Using narrative theory to enhance adolescents' communication competence. In L. Frey & K. Cissna (Eds.), *Routledge handbook of applied communication* (pp. 535-557). New York: Routledge.

Helsen, M., Vollebergh, W., & Meeus, W. (2000). Social support from parents and friends and emotional problems in adolescence. *Journal of Youth and Adolescence*, *29,* 319-335.

Hobfoll, S. E., Nadler, A., & Leiberman, J. (1986). Satisfaction with social support during crisis: Intimacy and self-esteem as critical determinants. *Journal of Personality and Social Psychology, 51,* 296-304.

Hofferth, S. L., & Iceland, J. (1998). Social capital in rural and urban communities. *Rural Sociology, 63,* 574-598.

Horn, K. A., Dino, G. A., Iftekhar, D. K., & Fernandes, A. W. (2004). Appalachian teen smokers: Not on tobacco 15 months later. *American Journal of Public Health, 94* (2), 181-183.

House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley.

Jefferson, G., & Lee, J. R. E. (1992). The rejection of advice: managing the problematic convergence of "troubles-telling" and a "service encounter." In P. Drew & J. Heritage (Eds.), *Talk at work: Interaction in institutional settings* (pp. 521-548). Cambridge: Cambridge University Press.

Jessor, R. (1991). Risk behavior in adolescence: A psychological framework for understanding and action. *Adolescent Health 12,* 597-605.

Jessor, R. (1993). Successful adolescent development among youth in high-risk settings. *America Psychologist, 48*, 117-126.

Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2012). *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2011.* Ann Arbor: Institute for Social Research, The University of Michigan.

Jones, S. M. (2004). Putting the person into person-centered and immediate emotional support: Emotional change and perceived helper competence as outcomes of comforting in helping situations. *Communication Research, 31*, 338–360.

Kaltiala-Heino, R., Rimpelae, M., Rantanen, P., & Laippala, P. (2001). Adolescent depression: The role of discontinuities in life course and social support. *Journal of Affect Disorders, 64,* 155-166.

Kashani, J., Canfield, L., Borduin, C., Soltys, S., & Reid, J. (1994). Perceived family and social support: Impact on children. *Journal of the American Academy of Child and Adolescent Psychiatry, 33*(6), 819-823.

Kazdin, A. (1997). Practitioner review: Psychosocial treatments for conduct disorder in children. *Journal Child Psychology and Psychiatry*, *38*, 161-178.

King, C. A., Hill, E. M., Naylor, M., Evans, T., & Shain, B. (1993). Alcohol consumption in relation to other predictors of suicidality among adolescent inpatient girls. *Journal of the American Academy of Child and Adolescent Psychiatry, 32*, 82-88.

Kornblum, W. (1996). 'Introduction', in C.D. Smith and W. Kornblum (eds) *In the Field: Readings on the Field Research Experience* (2nd Edition), pp. 1–7. Westport, CT: Praeger.

Kraus, N. (1990). Stress, support, and well-being in later life: Focusing on salient social roles. In M.A. Stephens, J.H. Crowther, S.E. Hobfoll, & D.L. Tennenbaum (Eds.), *Stress and coping in later-life families* (pp. 71-97). New York: Hemisphere.

Krippendorff, K. (2004). *Content analysis: An introduction to its* methodology (2nd ed.). Thousand Oaks, CA: Sage.

Kunkel, A. W. (2002). Explaining sex differences in the evaluation of comforting messages: The mediating role of interaction goals. *Communication Reports, 15,* 29-42.

La Gaipa, J. J. (1990). The negative effects of informal support systems. In S. Duck (Ed.), *Personal relationships and social support* (pp.122–139). London: Sage.

Lambert, D., Gale, J. A., & Hartley, D. (2008). Substance abuse by youth and young

adults in rural America. *Journal of Rural Health, 24,* 221-228.

Larson, R. W. (1983). Adolescents' daily experience with family and friends: Contrasting opportunity system. *Journal of Marriage and the Family, 45,* 739-750.

LePoire, B. A. (2003). The influence of drugs and alcohol on family communication: The effects that substance use has on family members and the effects that family members have on substance abuse. In A.L. Vangelisti (Ed.), *Handbook of Family Communication* (pp. 609-628). Mahwah, NJ: Lawrence Erlbaum Associates.

Levitt, M. J., Guacci-Franco, N., & Levitt, J. L. (1993). Convoys of social support in childhood and early adolescence: structure and function. *Developmental Psychology, 29,* 811-818.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic Inquiry. Sage Publications Inc., Newbury Park, London, New Delhi.

MacGeorge, E. L. (2001). Support providers' interaction goals: The influence of attributions and emotions. *Communication Monographs, 68,* 72-97.

Mainous, R. O., Mainous, A. G., Martin, C. A., Oler, M. J. (2001). The importance of fulfilling unmet needs of rural and urban adolescents with substance abuse. *Journal of Child and Adolescent Psychiatric Nursing, 14*(1), 32-40.

Malecki, C. K., & Demaray, M. K. (2003). What type of support do they need? Investigating student adjustment as related to emotional, informational, appraisal, and instrumental support. *School Psychology Quarterly, 18*(3), 231-252.

Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd edition). Thousand Oaks, CA: Sage.

Menees, M. (1997). The role of coping, social support, and family communication in explaining the self-esteem of adult children of alcoholics. *Communication Reports, 10*, 9-19.

Metts, S., & Manns, H. (1996). Coping with HIV and AIDS: The social and personal challenges. In E. B. Ray (Ed.), *Communication and disenfranchisement: Social health issues and implications* (pp. 347–364). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Miles, M. B, & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed). Thousand Oaks, CA: Sage.

Miller, M. A. Alberts, J. K., Hecht, M. L., Trost, M., & Krizek, R. L. (2000). *Adolescent relationships and drug use.* Mahwah, NJ: Lawrence Erlbaum.

Mink, M., C. Moore, A. Johnson, J. Probst, & A. Martin. (2005). *Violence and Rural Teens*. Rockville, MD: South Carolina Rural Health Research Center.

Mosbach, P., & Leventhal, H. (1988). Peer group identification and smoking. *Journal of Abnormal Psychology, 97,* 238-245.

Moss, G. E. (1973). *Illness, immunity, and social interaction.* New York: John Wiley.

Newcomb, M. D. (1987). Consequences of teenage drug use: The transition from adolescence to young adulthood. *Drugs and Society, 1*(4), 25-60.

Newcomb, M. D., & Bentler, P. M. (1988). Impact of adolescent drug use and social support problems of young adults: A longitudinal study. *Journal of Abnormal Psychology, 97*(1), 64-75.

Nurco, D. N. (1987). Drug addiction and crime: A complicated issue. *Addiction, 82*(1), 7-9.

Oetting, E. R., Edwards, R. W., Kelly, K., & Beauvais, F. (1997). Risk and protective factors for drug use among rural American youth. In E. B. Robertson, Z. Sloboda, G. M. Boyd, L. Beatty, & N. J. Kozel (Eds.), *Rural substance abuse: State of knowledge and issues, NIDA research monograph 168* (pp. 90 –130). Rockville, MD: National Institute on Drug Abuse.

Patton, Q. M. (1990). *Qualitative Evaluation and Research Methods* (2nd ed.). Sage Publications Inc., Newsbury Park, London, New Dehli.

Paulson, M. J., Coombs, R. H., & Richardson, M. A. (1991). School performance, academic aspirations, and drug use among children and adolescents. *Journal of Drug Education, 20,* 289-303.

Pettigrew, J., Miller-Day, M., Krieger, J., & Hecht, M. (2011). Alcohol and other drug resistance strategies employed by rural adolescents. *Journal of Applied Communication Research, 39*(2), 103-122.

Polit, D. F., & Hungler, B. P. (1999). *Nursing Research. Principles and Methods* (6th ed.). J.B. Lippincott Company, Philadelphia, New York, Baltimore.

Quamma, J. P., & Greenberg, M. T. (1994). Children's experience life stress: The role of family social support and social problem-solving skills as protective factors. *Journal of Clinical Child Psychology, 23*, 295-305.

Pruitt, L. R. (2009). The forgotten fifth: Rural youth and substance abuse. *Stanford Law and Policy Review, 20*, 259-304.

Rubin, H., & Rubin, I. (2004). *Qualitative interviewing: The art of hearing data* (2nd ed). Thousand Oaks, CA: Sage.

Samter, W. (2003). Friendship interaction skills across the life span. In J. O. Greene & B. R. Burleson (Eds.), *Handbook of Communication and Social Interaction Skills* (pp. 637–684). Mahwah, NJ: Erlbaum.

Sarason, B. R., Sarason, I. G., & Guring, R. A. R. (1997). Close personal relationships and health outcomes: A key to the role of social support. In S. Duck (Ed.), *Handbook of personal relationships: Theory, research and interventions* (2nd edition, pp. 547-573). New York: John Wiley.

Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). *Social support: An interactional view*. New York: Wiley.

Sarvela, P. D., & Cronk, C. E. (1997). A secondary analysis of smoking among rural and urban youth using the MTF data set. *The Journal of Scholastic Health, 67*, 372 - 376.

Scaramella, L. V., & Keyes, A. W. (2001). The social contextual approach and rural adolescent substance use: Implications for prevention in rural settings. *Clinical Child and Family Psychology Review*, *4*(3), 231-251.

Scheer, S. D., Borden, L. M., & Donnermeyer, J. F. (2000). The relationship between family factors and adolescent substance use in rural, suburban, and urban settings. *Journal of Child and Family Studies*, *9*(1), 105-115.

Seginer, R. (1998). Adolescents' perceptions of relationships with older sibling in the context of other close relationships. *Journal of Research on Adolescence, 8*, 287-308.

Segrin, C., & Flora, J. (2005). *Family communication*. Mahwah, NJ. Lawrence Erlbaum Associates.

Smith, C. E., Fernengel, K., Holcroft, C., Gerald, K., & Marien, L. (1994). Meta-analysis of the associations between social support and health outcomes. *Annals of Behavioral Medicine, 16,* 352-362.

Spoth, R., Goldberg, C., Neppl, T., Trudeau, L., & Ramisetty-Mikler, S. (2001). Rural-urban differences in the distribution of parent-reported risk factors for substance use among young adolescents. *Journal of Substance Abuse, 13,* 609-623.

Stoiber, K. C., & Good, B. (1998). Risk and resilience factors linked to problem behavior among urban, culturally diverse adolescents. *School Psychological Review, 27,* 380-97.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed). Newbury Park, CA: Sage.

Stroebe, W., & Stroebe, M. (1996). The social psychology of social support. In T. E. Higgins (Ed.), *Social psychology: Handbook of basic principles* (pp. 597-621). New York, NY: Guilford Press.

Thoits, P. (1982). Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress. *Journal of Health and Social Behavior, 23,* 145-159.

Thoits, P. A. (1986). Social support as coping assistance. *Journal of Counseling and Clinical Psychology*, 54, 416–423.

Tobler, N. S., Roona, M. R., Ochshorn, P., Marshall, D. G., Streke, A. V., & Stackpole, K. M. (2000). School-based adolescent drug prevention programs: 1998 meta-analysis. *Journal of Primary Prevention, 20,* 275-336.

Toumbourou, J. W., Stockwell, T., Neighbors, C., Marlatt, G. A., Sturge, J., & Rehm, J. (2007). Interventions to reduce harm associated with adolescent substance use. *The Lancet, 369,* 1391-1401.

Van Gundy, K. (2006). Substance abuse in rural and small town america." *Reports on Rural America*, *1*(2). Durham: University of New Hampshire, Carsey Institute.

Vazsonyi, A. T., Trejos-Castillo, E., & Young, M. A. (2008). Rural and non-rural african american youth: Does context matter in the etiology of problem behaviors? *Journal of Youth Adolescence, 37,* 798-811.

Weinberg, N. Z., Rahdert, E., Coliver, J. D., & Glantz, M. D. (1998). Adolescent substance abuse: A review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry, 37,* 252-261.

Wickarama, K. A. S., Lorenz, F. O., & Conger, R. D. (1997). Parental support and adolescent physical health status: A latent growth-curve analysis. *Journal of Health and Social Behavior, 38,* 149-163.

Wills, T. A. (1985). Supportive functions of interpersonal relationships. In S. Cohen & S. L. Syme (Eds.), *Social support and health* (pp. 61-82). New York: Academic Press.

Wills, T. A. (1989). Social support and substance abuse in early adolescence. *Journal of Behavioral Medicine, 12*(4), 321-339.

Wills, T. A. (1990). Social support and the family. In E.A. Blechman (Ed.), *Emotions and the family: For better or for worse* (pp. 75-98). Hillsdale, NJ: Lawrence Erlbaum Associates.

Wills, T. A. (1991). Social support and interpersonal relationships. In M. S. Clark (Ed.), *Prosocial behavior* (pp. 265-289). Newbury Park, CA: Sage.

Wills, T. A., Blechman, E. A., & McNamara, G. (1996). Family support, coping, and competence. In E.M. Hetherington & E.A. Blechman (Eds.), *Stress, coping, and resiliency in children and families* (pp. 107-133). Mahwah, NJ: Lawrence Erlbaum Associates.

Wills, T. A., & Cleary, S. D. (1996). How are social support effects mediated? A test with parental support and adolescent substance use. *Journal of Personality and Social Psychology*, *71*(5), 937-952.

Wills, T. A., Mariani, J., & Filer, M. (1996). The role of family and peer relationships in adolescent substance use. In G. Pierce, B. Sarason, & I. Sarason (Eds.), *Handbook of social support and the family* (pp. 521-549). New York: Plenum Press.

Wills, T. A., & Vaughan, R. (1989). Social support and substance use in early adolescence. *Journal of Behavioral Medicine*, *12*(4), 321-339.

Wilson, J. M., & Donnermeyer, J. F. (2006). Urbanity, rurality, and adolescent substance use. *Criminal Justice Review*, *31*(4), 337-356.

Woods, N. F., & Catanzaro, M. (1988). *Nursing Research. Theory and Practice*. The C.V. Mosby Company, St. Louis, Washington DC, Toronto.

Wright, K. B., Sparks, L., & O'Hair, D. H. (2008). *Health communication in the 21st century*. Malde, MA: Blackwell.

Wright, P. H., & Keple, T. W. (1981). Friends and parents of a sample of high school juniors: An exploratory study of relationship intensity and interpersonal rewards. *Journal of Marriage and the Family, 43*, 559-570.

Xu, Y., & Burleson, B. R. (2001). Effects of sex, culture, and support type of perceptions of spousal social support: An assessment of the “support gap” hypothesis in early marriage. *Human Communication Research, 27*(4), 535-566.

Zollinger, T. W., Saywell, R. M., Overgaard, A. D., Przybylski, M. J., & Dutta-Bergman, M. (2006). Ant-tobacco media awareness of rural youth compared to suburban and urban youth in Indiana. *National Rural Health Association, 22*(2), 119-123.

Appendix A

BRIEF INTERVIEW GUIDE (For the entire interview)

1) Tell me about yourself. [Get them to tell a story about themselves or what interests them. Use the "I AM" descriptors if necessary.]

2) How long have you lived in this area? What is it like? What are the people like? What do students your age do for fun? Compared to living somewhere else/city? How are you the same as a kid your age who lives in the city? How are you different?

3) At your age, most kids do things that aren't necessarily "good" for them (unsafe or unhealthy). Tell me about a time when you did something like that (took a big chance/did something unsafe or made a choice that wasn't particularly healthy.) What types of unsafe/unhealthy things do other students your age do? What about kids older than you?

4) Tell me the story of your first experience with alcohol, tobacco or another drug.

5) **Right now, who in your life has most influenced you to do *unhealthy* or *unsafe* things? A friend, peer, parent, brother, sister? Explain** (probe)
Who in your life has most influenced you to make *healthy choices/avoid risky behaviors*? Explain (probe)
For each of the following probe: Parents, siblings, other family, friends, teachers, classmates
Right now:

Who in your life gives you advice?
What type of advice do they give you?

Who helps you when you are having a problem?
How do they help you with those problems?

Who is there for you when you are sad or feeling down?
How do they make you feel better?

Are there other ways that someone has helped you? How and who?

6) Tell me about how kids "hang out" around here. Where do kids your age hang out together? What kinds of things do they do? Is this what you do? What about the kids who are considered [popular? older? those who get into trouble?] What about alcohol, chew/smoke tobacco, marijuana, other drugs? Do the different groups of kids hang out differently? What do you think they do? How and where do kids gain access to alcohol around here? How and where do kids gain access to tobacco? How and where do kids gain access to marijuana? What about other drugs? Tell me what you know about gangs in the area and the role they play in drinking and drug use for kids your age or older.

7) Has there ever been a time when you had to make a choice about whether to drink alcohol, smoke/chew tobacco, smoke marijuana? Tell me about it. Who, what, where, how. Direct offer or just "there"? How did you react—what did you say and do exactly? [probe for resistance strategies such as refuse, explain, avoid, leave]

8) Has there ever been a time when you wanted to say no, but didn't? Tell me about that and why you made that choice.

9) What kind of person would you like to be or what kinds of things would you like to do next year/when you get out of school? Do you plan to live here when you are older? Why or why not?

10) Who lives with you in your household? Relationships?

11) What kinds of things do your parents/older siblings say/do about drinking alcohol, smoking/chewing tobacco, smoking marijuana? How do you know what is and isn't okay?

12) If we were to make the video representing rural schools/ kids in the country, what footage would we shoot? What would be a "typical" scene where kids your age are faced with choices to drink alcohol? Smoke? Chew?

CLOSE: All the time we have for today. Do you have any questions for me? Thank you for talking with me.

NOTES:

In substance use stories, probe for the following: who, what, where, when, how, why

In particular…

* where kids their age hang out.

* where kids hang out where there are drugs.

* what resistance strategies do they use? REFUSE, EXPLAIN, AVOID, LEAVE

* how and where do kids gain access to alcohol?

* how and where do kids gain access to tobacco?

* how and where do kids gain access to marijuana or other drugs?

* Gangs in the area

* the role of gangs in the area and access to substances, parties

Appendix B

Interview Protocol Addendum (Added segment specifically designed to obtain information about social support messages)

Negative Influence

Right now, who in your life has most influenced you to do unhealthy or unsafe things? A friend, peer, parent, brother, sister? Explain (probe)

Positive Influence and Social Support

For each of the following probe: Parents, siblings, other family, friends, teachers, classmates

Right now:

Who in your life gives you advice?
What type of advice do they give you?

Who helps you when you are having a problem?
How do they help you with those problems?

Who is there for you when you are sad or feeling down?
How do they make you feel better?

Are there other ways that someone has helped you? How and who?

Who in your life has most influenced you to make healthy choices/avoid risky behaviors? Explain (probe)

Appendix C

Recruiting Rural 7th-9th Graders

Project staff will solicit participants during in-class presentations (see below) or through student activities. Students will be given consent forms to take home. The subject pool will be constituted by students whose parents/guardians submit signed consents and who assent to participate in the interview (see attached Student Assent and Parental Consent for Formative Interviews). If more students volunteer than are needed, we will randomly select from the consented list for participation. Signed student assents and parental consents will be returned to the project staff and interviews scheduled.

Script

Good morning! We are here from Penn State University to ask you to participate in a research study of the seventh grade students in your school. The purpose of the study is to understand what you know about alcohol, tobacco, and other substances, including the use of those substances in your life. Schools from all areas of Pennsylvania, including your school, are helping us. We believe that this research will help us find out ways to help students like you to stay drug free.

As a part of this project, you will be asked to help us by participating in a private conversation with one of our team members. Each conversation will take about 50 minutes, and you will be asked about alcohol, tobacco, and drugs. The interviews are voluntary and any personal information you tell us will be kept private. We will tape record the interview so the researchers can listen to your stories, but they will not even know who you are.

To participate you need your parents' consent and to sign a form indicating your agreement to participate. If your parent consents, then please return these signed documents to [project staff] by [insert due date]. We will then contact you to schedule the interview.

Thank you.

Appendix D

Parental Consent for Formative Student Interviews

ORP USE ONLY: IRB# 23031 Doc.# 2
The Pennsylvania State University
Office for Research Protections
Approval Date: 04/16/08 T. Kahler
Expiration Date: 04/15/09 T. Kahler
Social Science Institutional Review Board

Parental Consent for Formative Student Interviews
Dear Parent,

We would like to ask your permission for your son/daughter to participate in a drug prevention study. The purpose of the study is to learn more about what middle school students know about alcohol, tobacco, and other substances and learn more about their use. **By agreeing to let your son/daughter participate, you are helping us create more effective substance use prevention programs for kids**. Your school has agreed to allow Penn State University research staff to conduct interviews of students enrolled in your child's school. The interviews will be conducted in a private location at the school and will not interfere with your child's classes. Your child will receive $5.00 for participating in the interview.

Completion of the interview will take 55 - 65 minutes. If you do not want your child to participate, he or she will engage in regular school activities. Your child may choose not to answer specific questions during the interview. The *interview is not a test and will not affect your child's grade* in the class. With the permission of your child, the interview will be digitally recorded. The digital files will be uploaded to a password protected university computer in the researcher's office. The file will be deleted when the project is over in 2013.

Information collected from children will remain strictly confidential and will not be shared with teachers or parents. Children will NOT be asked their names during the interview. The researchers will not even know who the children are, but will listen to their stories. Interviews will be identified only by code and will be seen only by the project staff. Participation in this interview is completely voluntary. There are no risks to your child by completing the interviews. As a result of participation, your child will have a better understanding of his or her own attitudes and beliefs about alcohol and other drug use.

Legal Speak

To help us protect your child's 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.

The 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. If an insurer, employer, or other person obtains your written consent to receive research information, then the researchers may not use the Certificate to withhold that information.

What do I need to do?

If you **consent to having** your child participate in this interview, please inform us of your decision by (1) completing the attached form and reply envelope and (2) having your child complete the enclosed "Student Assent" form and questionnaire --please send these back to us **within the next week**.

If your child chooses to participate, he/she may withdraw from the interview at any time. Any questions concerning your child's participation in this interview should be addressed to Dr. Michelle Miller-Day at (814) 865-3826. You may call this number collect. You can also email Dr. Miller-Day at mam32@psu.edu. If you have questions about the rights of research participants, you can contact The Penn State University Office for Research Protections at (814) 865-1775.

If you have questions, concerns, or complaints about this study or feel that this study has harmed you or your child, please contact: Dr. Michael Hecht e-mail: mlh10@psu.edu telephone: (814) 863-3545; Penn State University, 234 Sparks Building, University Park, PA, 16802.

If you **CONSENT** to allow your child to participate in the *keepin' it REAL* interview, please write your child's name and school below, check the appropriate box, and return the lower portion of this form in the enclosed postage paid envelope. **Please return the attached form within *one* week of receipt.**

If you **DO NOT** want your child to participate in the *keepin' it REAL* interview, please write your child's name and school below, check the appropriate box, and return the lower portion of this form in the enclosed postage paid envelope. **Please return the attached form within *one* week of receipt.**

YOU MAY WISH TO KEEP THESE FIRST TWO PAGES FOR YOUR RECORDS.

PLEASE FILL IN:

Child's Name (Print): _____ Child's School:_____

I am the parent or guardian of the above named child, and I am 18 years old or older.

_____I **AGREE** to have my child participate in the *keepin' it REAL* interview.
(Please mail this page back in the enclosed reply envelope.)

_____I **DO NOT** want my child to participate in the the *keepin' it REAL* interview.
(Please mail this page back in the enclosed reply envelope.)

_____ _____

Signature of Parent or Guardian **Date**

*If you **AGREE** to have your child participate in this project, please answer the following questions:*

What is the zip code of your child's current address? _____

How many years has this been your child's zip code? _____

Thank you for your help with this important research!

Appendix E

Student Assent for Formative Interviews

Student Assent for Formative Interviews

Dear Student:

I am a researcher from The Pennsylvania State University conducting a *confidential* research study at your school with middle school students. The purpose of this study is to help us understand what you know about alcohol, tobacco, and other substances, including your own use of those substances. We believe that this research will be really useful in helping us understand how kids talk about these topics and what kinds of things interest kids your age. You will receive $5.00 for participating in the study.

As a part of this project, you will be asked to participate in a confidential interview during regular school hours in a private location such as a counselor's office. Each interview takes about 50 - 65 minutes, and you will be asked questions about what you do for fun and about alcohol, tobacco, and other drugs. The interviews are voluntary. Your parent(s)/guardian(s) have agreed that you can participate in this project. Anything you say here will be strictly confidential—that is, private. You may withdraw from the study at any time and you don't have to answer any questions you don't want to. The researchers will not even know who you are, but will listen to your stories. We have a recorder here to record the interview. The tape will be kept in a locked cabinet in the researcher's office. The audio files will be destroyed when the project is over in 2013.

The Office of Human Research Protections in the U.S. Department of Health and Human Services, The Penn State University Office for Research Protections, and The Penn State University Social Science Institutional Review Board may review records related to this project for monitoring purposes.

Legal stuff
This study has been granted a Certificate of Confidentiality (COC). A COC protects you because the researchers can keep all of your information private and are not required to turn over your data, even if a judge says so. There are some limits to a COC. A researcher may have to tell someone you were in the study if you threaten to harm yourself or someone else or disclose that you are being abused. Also, a COC does not stop you from sharing your answers with other people.

How do I agree to participate?
We are asking you to participate in a confidential interview. By filling out, signing, and returning the form below, you will be giving us your permission to participate in the interview. If you choose not to participate, or if you want to withdraw at any time, there will be no penalty -- it won't affect your grade or anything. If you have questions, complaints, or concerns about this study, please contact Dr. Michelle Miller-Day at (814) 867-4975 (you may call this number collect) or mam32@psu.edu. You may also contact Dr. Miller-Day if you feel this study has harmed you. If you have questions about your rights as a research participant, please contact The Penn State University Office for Research Protections at (814) 865-1775.

If you would like to participate, please fill in the spaces on the next page and return it with your parental consent form in the postage-paid envelope within one week. You may wish to keep this page for future reference. ***Thank you!***

Sincerely,

Michelle Miller-Day, PhD.
Co-Investigator, PSU

PLEASE FILL IN:

_____I **AGREE** to participate in the *keepin' it REAL* interview.

_____I **DO NOT** want to participate in the *keepin' it REAL* interview.

Name (print): _____ Date:_____