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The Rural Context of Illicit Substance Offers: A Study of Appalachian Rural Adolescents

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Abstract

Rural adolescents are at risk for early initiation and problematic substance use, but to date few studies have examined the rural context of substance use. To better understand substance offers in the rural context, semi-structured interviews were conducted with 118, 12-19 year old adolescents ($M = 13.68$, $SD = 1.37$) from Appalachian, rural school districts in Pennsylvania and Ohio. Interviews elicited stories about substance offer-response episodes including where offers occurred, who offered substances, and how youth gained access to illicit substances. Findings describe the settings in which substance offers and use occur for these rural adolescents and advance prevention efforts for tailoring health messages to this target population.

Keywords

Drug offers; middle school; prevention interventions; rural health; substance use

Adolescent substance abuse – the use of illicit substances such as alcohol, tobacco and marijuana – continues to be one of the most serious public health issues facing both rural and urban communities in America today (Johnston, O'Malley, Bachman, & Schulenberg, 2009; National Rural Health Research Center [NRHRC], 2001; U.S. Department of Health and Human Services [USDHHS], 2004). Adolescent alcohol and other substance use have been associated with numerous negative outcomes such as poor school performance (Bachman et al., 2008), unintentional injuries such as motor vehicle accidents (Hingson, Heeren, & Edwards, 2008; Hingson & Wenxing, 2009), the spread of sexually transmitted infections (Elkington, Bauermeister, Zimmerman, 2010), teen pregnancy (Tapert, Aarons, Sedlar, & Brown, 2001), depression and attempted suicide (Miller, Naimi, Brewer, & Jones, 2007; Trim, Meehan, King, & Chassin, 2007) criminal activity (D'Amico, Edelen, Miles, & Morral, 2008), and escalated healthcare costs (NEDS, 2002). Tobacco use is considered to be the single most preventable cause of disease and death in the United States (USDHHS, 2004). Tobacco, alcohol, and other substance use rank as three of the nine most prevalent actual causes of death in the United States, accounting for approximately 22.3% of deaths reported in 2000 (Mokdad, Marks, Stroup, & Gerberding, 2004).

Given these health costs it should come as no surprise that reducing substance use and abuse is one of society's highest public health priorities. In fact, decreasing adolescent substance use is one of the eleven objectives for adolescent health set by Healthy People 2020 (Healthy People 2020, n.d.). This national goal setting division of the Department for Health and Human Services proposes to "Decrease the proportion of adolescents who have been offered, sold, or given an illegal drug on school property." Presumably by decreasing the number of substance offers, usage rates will decrease, thereby bolstering adolescent health. In order to accomplish the goal of reducing adolescent substance use, we need to know about the contexts in which substances are available as well as the social processes surrounding adolescent substance encounters.

One of the factors is the physical context. Scholars such as Allison, Leon, and Spiro (1990) argue for a greater emphasis on the general context surrounding substance use behavior. Research shows that in both rural and urban environments the proportion of licensed alcohol retailers (e.g., bars, grocery stores, wine and spirits shops) is significantly associated with increased youth substance use and abuse (Chilenski, 2011; Connell & Ridenour, 2011; Truong & Sturm, 2009). Other studies have looked at youth perceptions of their environment and relationships with substance use. Gibbons and colleagues (2004), for example, found that 10-12 year old African American youth who reported living in high risk neighborhoods (e.g., high presence of crime, gang violence, and violent arguments) were more willing to use alcohol and tobacco than their counterparts in low risk neighborhoods. Studies like these suggest ways the neighborhood and community environments play a role in teenage substance use.

Another factor influencing adolescent substance use is the social context, such as who offers substances to adolescents (Kulis, Okamoto, Rayle, Dixon, & Sen, 2006). Previous research with both rural and urban samples demonstrates that substance offers typically come from family and friends (Hecht & Miller-Day, 2009; Miller et al., 2000; Pettigrew, Miller-Day, Krieger, & Hecht, 2011). In addition to these influences, youth receive multiple messages about substance use from school, community, and media as well as from offerers during offer-response episodes (Tobler et al., 2000). Thus, parent and other family members, peer, and regional norms and practices are crucial in understanding substance use behaviors (Cleveland, Feinberg, Bentempo, & Greenberg, 2008; Hansen, 1993; Kam, 2011; Miller-Day, 2008). These norms create a social context against which substance offers take place. One aspect of the physical and social contexts that has been under studied is the role of rural environment (Krieger et al., 2009; Smith et al., 2004; Spoth et al., 2001).

Rural youth such as those living in the Appalachian region, however, appear to be at greater risk for early onset of substance use than their more frequently studied urban counterparts (Johnston, O'Malley, Bachman, & Schulenberg, 2009; Pruitt, 2009; Spoth, Goldberg, Neppel, Trudeau, & Ramisetty-Mikler, 2001; Zollinger, Saywell, Overgaard, Przybylski, & Dutta-Bergman, 2006). Rural youth are at increased risk for using a variety of substances including tobacco (Zollinger et al., 2006), alcohol (Sussman, 2005), and methamphetamines (Johnston et al., 2009). As a result, there are significant short- and long-term consequences for rural adolescents, the people around them, and society as a whole (NRHRC, 2001; USDHHS, 2004).

There are a number of reasons for these disparities, including the fact that youth experience “rural culture,” which differs in salient ways from their urban counterparts, particularly in the risk and resiliency factors found in rural environments (Krieger, Pezalla, & Moreland, 2009; Moreland, Krieger, Hecht, & Miller-Day, 2010). According to Scaramella and Keyes (2001) rural communities may be placing their youth at greater risk for engaging in unhealthy behaviors, such as substance use, due to providing a lack of recreational opportunities. This claim was supported by a recent study by Pettigrew and colleagues (2011) where many rural youth explained their substance use by saying that “there ain't nothing [else] to do here” (p. 116). Additionally, low educational attainment and higher rates of unemployment increase the risk of substance use for rural youth and young adults (Lambert, Gale, & Hartley, 2008).

Despite these findings, rurality and adolescent substance use remains an understudied topic (Smith et al., 2004). While previous research has been conducted to understand the physical and social contexts of drug offers and use for urban youth (see Miller, Alberts, Hecht, Trost, & Krizek, 2000), it is unclear if these findings could be transferred to rural youth. Clearly, the rural context changes some of the social dynamics, particularly as they related to relationship, such as family and friends, who are often the source of substance offers (Hecht & Miller-Day, 2009; Miller et al., 2000; Pettigrew et al., 2011). In addition, social norms, which play a key role in substance use decisions, are likely to vary in rural contexts.

As a result, there has been little progress toward understanding how the rural contexts might contribute uniquely to substance use and abuse by rural adolescents. To address this gap in the literature and to better understand the impact of rurality on adolescent substance use, we sought to build on previous research of urban youth (e.g., Miller et al., 2000) and designed this study to provide a description of the contexts of drug offers and drug use situations for rural youth.

Cultural Grounding

The theoretical framework for this study is the *principle of cultural grounding* (Hecht & Krieger, 2006) which asserts that cultural context must be taken into account when attempting to understand adolescent experiences. The principle of cultural grounding argues it is necessary to gain insights into culturally contextualized experiences from members of the cultural group so that prevention messages can reflect that experience, enhance identification and empathy, and be tailored to the needs and experience of target audience (Hecht & Krieger, 2006; Miller et al., 2000). Commenting on the development of the culturally grounded *keepin' it REAL* prevention curriculum, Hecht and Miller-Day (2009) point out:

As communication scholars interested in health issues, we believed that drug prevention messages generated by adult educators were neither grounded in the actual experiences of youth nor guided by theory and, thus, were not maximally effective in teaching youth how to communicatively resist offers of drugs or deter their actual drug use. We believed that prevention messages should reflect aspects of adolescents' experience and culture. Thus, the first step in our initial endeavor was to adequately identify the communication strategies that youth reported that

they *actually used* when resisting offers of alcohol or other drugs (p. 539-540, emphasis in original).

As these researchers explain, learning from cultural insiders was believed to enhance the messages they eventually deployed with youth. An awareness of the contexts of rural adolescent substance use is important in designing intervention programs that include identification of potential triggers and high-risk situations for use or relapse of those managing addiction (Hussong, 2000). Additionally, knowledge of perceived substance use settings may also be important to preventive interventions targeting adolescents not yet involved in alcohol and drug use (Miller et al., 2000).

Given these assumptions, we conducted in-depth interviews with rural, Appalachian adolescents to address the following research questions:

RQ1: *Where* do rural youth encounter illicit substance offers?

RQ2: *Who* tends to offer illicit substances to rural youth?

RQ3: *How* do rural youth gain access to illicit substances in rural communities?

Using these questions to guide our inquiry enables us to explore rural adolescent substance use culture. This study adds to existing knowledge of the contexts of adolescent substance use by extending beyond urban populations. Moreover, the results of this inquiry provide a descriptive foundation for substance abuse preventionists, clinical practitioners, and curriculum developers who work with rural youth, better enabling these professionals to tailor messages specifically for the rural experience.

Methods

Sampling

Semi-structured qualitative interviews were conducted with 118 primarily middle school youth from rural, Appalachian schools in Pennsylvania and Ohio. Participants were recruited from schools identified as rural based on one of two main criteria: (a) the school district being located in a “rural” area as determined by the National Center for Education Statistics (NCES, n.d.), 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 identified by family income being equal to or less than 180% of the United States Department of Agricultural federal poverty guidelines (Ohio Department of Education, 2010). Students identified as disadvantaged ranged between 53% and 61% in the Ohio schools and between 20% and 65% in Pennsylvania schools. Our sample may not be representative of all rural youth; however, our findings are likely to transfer to other, similar populations of rural youth (Polit & Hungler, 1999).

Procedures

Three prevention coordinators from Pennsylvania and one from Ohio were designated as liaisons between the research personnel and schools to recruit adolescent participants in

three phases. Liaisons contacted school decision-makers (e.g., principals, guidance counselors), described the study, and asked for cooperation in recruiting student participants. Each decision-maker was informed that: (a) interviews would be audio recorded, (b) the data obtained in the interviews would remain confidential and be used to develop a rural substance abuse prevention program, (c) all researchers had governmental clearance to work with children, (d) all research activities were supervised by the universities' Institutional Review Board, and (e) each participating adolescent would receive \$5. Students were eligible to participate in the interview process once their parents returned by mail a signed parental consent form and they signed a student assent form. After receiving these items, the liaison and school decision-maker scheduled individual interview sessions.

A multiphase criterion sampling procedure (Patton, 2002) was employed in this study. The procedure entails selecting cases that meet predetermined criteria of importance and then iteratively collecting more specific information in each sampling phase. Sampling continues until saturation is reached; that is, no new information or new insights are gained (Auerbach & Silverstein, 2003). 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 recruiting rural, Appalachian adolescents who met these criteria and were identified by school liaisons as likely having experience with drug offers. These participants were purposively selected to provide more specific, in-depth personal experience about rural drug culture, drug offers, drug resistance episodes, and rural drug use scenarios than the first group of participants. In this stage, we recruited 61 participants. The third stage involved extreme case sampling with recruitment of rural adolescent key informants with in-depth experience with personal drug use and/or abuse. We recruited 7 participants who fit these criteria, 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 (NCES, n.d.) that was determined to be more suburban than rural.

The final sample included 113 participants (male = 62, 55%; female = 51, 45%), with ages ranging from 12-19 years ($M = 13.68$, $SD = 1.37$). Slightly over 81% of the interviews were conducted with students in the 7th or 8th grades. Racial demographics for our sample (White = 86%; Asian = 1%; mixed race = 6%; Latino/a = 5%; and African American = 1%) were representative of school districts in the study. 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 1 alcohol and drug service organization in Pennsylvania. Consistent with our sampling strategy, 57.5% of our participants had been directly offered an illicit substance and 65.5% had been faced with making the choice to use or not use an illicit substance.

Interviews

We employed semi-structured interviewing to allow us to maximize the depth of information obtained from each participant while maintaining a structured interview process (Rubin & Rubin, 2004). A team of 11 interviewers participated in a 4-8 hour training

process that involved reviewing guidelines for ethical research, reviewing interview protocol and procedures, and practicing interviews with feedback.

The semi-structured interview guide prompted students to discuss several topics, including the focus of this current investigation – discussion of illicit substance offer-response episodes and/or encounters with substances. At the start of the interview each participant completed a face sheet which consisted of demographic information (gender, age, grade, school, ethnicity, and residence history).

Interviews were conducted in private locations within the schools. In most cases, either the adult school contact or the study liaison brought students to their interview site to ensure that the interviewer did not know the students' names – only their unique identification number. Researchers assured all students their responses would remain confidential, in accordance with Institutional Review Board standards, and the interviewee was permitted to withdrawal from the study at any time. Interviews ranged from 18 – 91 minutes in length. This length is typical of interviews dealing with sensitive topics such as drug use in a school-based setting (Alberts, Miller-Rassulo, & Hecht, 1991; Botvin et al., 2000). Following the interviews, a research team member downloaded the audio files to a password protected computer and then sent them out for professional transcription.

Interview 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 (Cresswell, 2007).

Preliminary phase—The preliminary phase occurred during the process of conducting the interviews and lasted until all interviews were completed. 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. During this phase researchers discussed these summaries and began a preliminary codebook of emerging concepts.

Substantive phase—After interviews were completed and transcribed, each transcript was evaluated for accuracy and revised as needed. Then we began to analyze the data specifically to answer our research questions, starting with an individual case analysis followed by a cross-case analysis. The individual, within-case analysis proceeded along four main steps: (a) read each transcript through 2-3 times before reducing it for analysis; (b) inductively identify and label any comments pertaining to the context of a substance offer, presence of a substance, or use of a substance (ranging from one sentence to one paragraph) in a process of open coding; (c) organize these units into conceptually meaningful categories of codes (e.g., who offered the substance); (d) and, add to and refine code lists.

Early in the coding of individual cases, we sought to assess coding agreement. Two researchers coded 20% of the meaning units 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 renegotiated through consensual

agreement. Agreement was 95%, exceeding the 80% threshold. Next, an additional 10% of total units were analyzed using the agreed upon coding categories and employing Krippendorff's alpha (alpha = .92) (Hayes & Krippendorff, 2007) as the index of reliability between two independent observers. The intent of calculating agreement was not merely to verify that data are 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). When new codes were introduced coders met to discuss, clarify, and determine the code definition before proceeding with the analysis. These findings supported the trustworthiness of coding and allowed us to complete coding of all cases before moving on to the cross-case analyses.

The cross-case analysis required the following three steps. First, we compared and contrasted individual cases to identify discrepancies and consistencies across participants' data. Second, we reduced codes and categories to reflect emerging themes within and across cases. A theme is the thread of meaning that recurs across categories and cases (Baxter, 1991); like the dominant idea or unifying message in a poem or short story, themes link the underlying meanings across categories (Graneheim & Lundman, 2004). Third, we identified exemplars to illustrate and support each theme (Maxwell, 2005). Exemplars are specific illustrations of themes taken directly from the transcripts and used by interpretive researchers to illustrate a connection between the data and the findings. Team members met regularly to conference emerging themes as well as challenge and refine theme classifications.

Findings

In our sample, 65% of the primarily middle school participants reported explicit or implicit offers of illicit substances at the time of the interview and 39% had already smoked tobacco, 37% had consumed alcohol, and 22% had smoked marijuana. A total of 23 youth in our sample (20%) reported ongoing substance use of more than one substance. Our findings are organized according to the guiding research questions.

Where Do Offers of Illicit Substances Take Place?

The most common response to the question of where offers took place was at parties – both parties with peers and family social events. Participants also described substance offers occurring at their own or friends' homes as well as times they were “hanging out” outside. Offers at these locations are described below.

Parties—Rural participants described a variety of parties that involved substance use. They also described substance offers and use at birthday celebrations and family get-togethers. The different parties are described separately.

For rural youth, primarily in 7th and 8th grades, the most common place for offers of illicit drugs was at a “bush party.” Bush parties are a uniquely rural social practice that occurs in the woods, usually in secluded areas. In some of the mining areas of rural Pennsylvania, bush parties took place near the stripping pits of abandoned mines. One male participant (OH053)¹ described bush parties as often having a large bon fire or a fire pit. Party locations

were well-known among the youth and were ascribed specific labels. For example, one female participant (PA015) confirmed the names of three different bush party locations: “The tubes, this is a party spot [named] ‘cause there’s big pipes in the river below us. Yeah, and then there’s Dippy’s... it’s a big field. Yeah, and then there is Sixty-nine, [Laughter] ...a lot of...stuff happens there.” In many of the interviews we conducted across Pennsylvania and Ohio each region had local bush party spots with their own names and reputations.

These local gathering places were backdrops of many substance offers for youth in our sample. One specific bush party was described by a 15-year-old female (PA015) who shared with us the following description of the first one she attended.

We thought maybe it’d be a little party, here it was a beer party in the middle of the woods and we went. [An acquaintance] came and picked us up [and] there were like at least thirty people there, all older than us. ... And so, like, they offered us a beer, first we were like, no...but then they gave me more and I’m like, ooooh. It was good after a while.... And I was smashed that night. [Laughs]...I was passed out with some kid, I don’t know who his name is, don’t know who he is to this day, and I guess, I just smashed out with him...We were like laying in the middle of the field...I woke up in my bra and, you know, I didn’t have a shirt on, I was in my bra and shorts...See, the thing is that we that we go skinny dipping and the boys like to take our clothes so we have to run through the field naked.

This female participant (PA015) described both the location and the activities typical of bush parties. Often, the participants described outdoor recreation (e.g., skinny dipping, four-wheeler riding, camping) in combination with substance use. Additionally, substance use at bush parties sometimes co-occurred with listening to music and dancing.

Not all parties, however, took place outdoors. One 13-year-old female (PA011) described parties she and her teenage friends would hold in a Recreational Vehicle (RV) belonging to her friends’ family.

[It’s] usually an overnight party or like a weekend party. Like, one night, there will be the actual “party party” where you get drunk and stuff. And then you stay there for, like, the rest of the weekend so that you’re gonna get, like, so you don’t go home drunk and then they [your parents] know that you did that. That’s usually what we do; we spend the weekend at the [party] house...When I stayed at my friend’s house... we usually crash in the van, in the RV, or out in the yard...We only do the RV in the summer or in the spring.

The RV was parked beside her friend’s house and these females would host “beer parties” in the RV without any parent’s knowledge. When asked about what happened at the parties, PA011 explained.

At the parties that we throw...either it’s us that are standing there, or we have two other guys standing [at the door]...Because lots of people like to push the girls around and like to, like, try and get through...So then sometimes we’ll have, like,

¹Interview codes are included for easy reference to the interview material. OH indicates an Ohio interview, PA indicates a Pennsylvania interview, and the number indicates the number assigned to the participant.

guys that, like, really big, like, like sixteen-year-old guys come and stand there. Like security guards, basically, But, like, you go in and then you, like, we have music. And then you can, like, sit down and stuff, and then, like, we have this, like fridge, where we keep all our beer and stuff. And then, like, some kids, they'll snort pills and stuff [like, prescription pills they get out of their parents' medicine cabinet].

At this party and others like it, some substances – such as prescription pills, cocaine, or marijuana – were offered to rural youth we interviewed. In contrast, most participants agreed that alcohol and cigarettes were readily available to whoever attended most parties.

Another type of party we heard about during interviews involved situations where older family members and other adults gathered together. Birthday celebrations, New Year's parties, and other holidays and special events were the impetus for these parties. These parties sometimes brought together groups of same-aged cousins and peers but also involved non-peers and non-friends (e.g., parents, grandparents, and family friends) who engaged in substance use. Such parties exposed youth to alcohol use and substance offers. We asked OH007, a 13-year old female, if she had ever been to a place where people were drinking alcohol or using tobacco, and she said the *only* place she could recall was at birthday parties. "I go to birthday parties a lot, and [when] I'm at this place where the birthday party [is], the parents usually get drunk and stuff.... It's a kid party, but the adults go ... and do what they want." Parties not only expose youth to alcohol use but also are a context of youth alcohol use. A male youth (PA019) shared that the only time he tried alcohol was "on New Year's Eve" when his "gram makes this stuff....and I had a little cup [about the size of a shot glass] of it." Another male (PA041) admitted he also tried alcohol at New Year's party, "We have this thing that we, I, everybody has a glass of wine," whereas a 13-year old female (OH024) told us, "It was – we were at my great grandma's birthday party I think; she was, like, turning a hundred – and they had margaritas there and I took a sip of it." Parties involving family members were not associated with youth drunkenness or use of other substances, but they did expose youth to alcohol and were reported as being some youths' first experience trying alcohol. In some cases adult parties also modeled drunkenness and normalized alcohol abuse.

Home – when no parent is around—The home is a site where individuals spend much of their leisure time together. This provides a location with great potential for risky behaviors, such as substance use, for both rural and urban youth (Sussman, Stacy, Ames, & Freedman, 1998). Additionally, the home is largely secluded from the public eye, usually monitored only by family members, if at all. Participants described substance offers and substance use that took place in their own homes as well as the homes of neighbors, cousins, friends, siblings' friends, and boy/girlfriends. A male participant (PA072) shared that the first time he tried alcohol he spent the night at a friend's house, waited until the parents were sleeping, and then took "Dixie Cup shots of it because we didn't want to drink a lot." Another male participant told us that youth "just sneak down in somebody's basement" to drink alcohol. Some students informed us that the time lag between when they left school and when their parents arrived home from work gave them enough of a window to experiment with substances, especially in their home environments. We also heard that

when parents work the night shift and leave the home unmonitored it gives some youth a window of opportunity to engage in unsupervised substance use. The home, for our participants, was a common site for substance offers.

Hanging around outside—In addition to homes and parties as contexts for substance use, participants reported being offered ATOD in a variety of outdoor settings, usually while hanging out with friends. For example, one female participant (PA007) stated that she was offered a substance “just ... walking home from school.” A female participant (PA008) was walking with friends to a local store “and there was this one kid. He was um, nearby the store. He said, well let's go buy some alcohol and drink it.” Another student and her friends were offered cigarettes after they had gone out to eat at a local restaurant (PA019). One female participant (PA028) shared a story about experimenting with cigarettes, “My friend and I, we were down at the train bridge and she had stolen a cigarette off of her parent. And she wanted to try it and so did I, so we tried it and it wasn't my thing.” The common thread throughout these situations is that participants were unsupervised by adults and spending time with their peers.

This section has described the three most common locations where rural, Appalachian youth in our sample were offered substances. Parties, homes, and outdoor hang outs portray the backdrop for most encounters they had with alcohol, tobacco, and other drug offers.

Who Offered Substances?

A variety of individuals offered substances to the youth in our sample. Offerers were acquaintances, strangers, friends, and family members, including extended family members, siblings, and even some parents.

Acquaintances and Strangers—Acquaintances were people whom participants knew or knew about, but not people the participants considered to be their friends. For the most part, acquaintances were near-peers who were somehow connected with the participant in one of two ways, through sharing an activity or through the participants' social network. Acquaintances were people who participants met at a party (PA015), were in the same class at school (PA007), or were involved in the same pastime (e.g., skate boarding: OH002). In these cases, although the participants did not know the offerer, they were involved in similar activities (i.e., party, school, skateboarding park).

In other cases, acquaintances were connected through social spheres. They were typically friends' friends, neighbors, and relatives' friends. Typical of these offers, OH031 shared “One of [my cousin's] older buddies I, um, barely knew him but I knew him, he asked me if I wanted a drink.” One story told by another male (OH057) revealed that a local police officer offered marijuana to him and his stepbrother when they were in third grade.

Um, one time we were, me and my brother, was walking down the road and he, he knows everybody 'cause when I first moved here in third grade – it's my step-brother – you know, he knows the town and stuff, so a cop ask us to smoke weed with him and, you know, I thought it was like a set up or something just to like get us in trouble but we ended up getting in the car and smoking weed with him.

These examples illustrate that participants were offered substances from people somehow connected through the participants' social network – neighbors, friends of friends, relatives' friends, and even a police officer.

In only one case was a participant offered a substance by a complete stranger. We defined a stranger as someone totally removed from participants' activities and social networks, and with no history of interaction. In the stranger offer, the male participant (PA001) was walking around town with a friend when “this guy like, came out of his apartment building and asked us if we want to buy marijuana.” The stranger approached the participant unexpectedly, outside of any context of shared social setting or activity, and without any connection to his social network. The singularity of this experience in our sample is what makes it notable. Of the 65 youth who reported being explicitly offered a substance (rather than just being “available”), only this one youth received an offer from a complete stranger. This finding supports the notion that rural youth primarily encounter offers from people who share activities with them and who are connected to their social network; but, rarely with strangers.

Friends—Friends were the ones who most commonly offered substances to rural youth. A wide variety of offerers were described as friends. Friends were both same gender and cross gender, platonic and romantic. Some friends were slightly older and some slightly younger than our participants, who were mostly in the 7th or 8th grade and between 13-14 years old. Because no single factor or even group of factors defined a friend, we opted to classify an offerer as a friend if that is how the participants described the offerer. Stories of offer-response episodes often began with “my friend and I...” “I was hanging out with my friends...” or “I was over at my buddy's house...” Friends figured prominently in rural youths' lives and were equally prominent in offering substances to the rural youth in our sample.

One male (OH083) shared about an offer from friends.

Just recently I was down at the pool, like three o' my best friends, you know, came up to me and said, ‘hey, what's up.’ And I was like, ‘nothing, just chillin’,’ and they're like, ‘oh, well, well you shouldn't be here, come hang out with the friends.’ And I was like, ‘why,’ and they're like, ‘I got an eighth, she's got a dime bag’ and I was like, ‘really?’ They're like ‘yeah, yeah, you know, you should like come join, you know; it's gonna be a party down there.’

For youth in our sample, fiends offered many types of drugs including alcohol, smoking tobacco, chewing tobacco, and marijuana.

Family—Participants revealed that family members also offered them illicit substances. Offers from family members included extended family members (e.g., cousins, aunts, uncles) and also immediate family members (i.e., parents and siblings).

Extended family: When extended family members offered illicit substances to the youth in our study, the most common offerers included cousins or relatives who were the same age or slightly older than the participant. This was not surprising because kinship networks in rural

communities tend to be large, especially extended family networks (Krieger et al., 2009). For example, one male participant (OH053) described an offer from his cousin, “My [nineteen year old] cousin was, was ka-, kept telling me to drink and finally I just left after like twenty minutes of him, you know, kept bugging me.”

Parents: Most participants reported that their parents discouraged substance use. These youth stated that even many parents who smoked cigarettes or drank alcohol themselves advised their teenager to abstain from smoking and drinking. There were several youth, however, who described how their parents allowed them to sample alcohol while they were young, but within limits. For example, one female shared a representative story (PA023), “My mom gave me some [alcohol] one time because I was beggin’ her, like, ‘Can I have a drink?’ She’s like, ‘Just a little bit.’”

Some parents, however, were actively involved in procuring and offering substances to rural youth in our sample. These parents did not try to limit their child's drinking or use of drugs to “just a little bit.” At the extreme, they actively encouraged youth to drink alcohol. One participant described parties hosted by her friend's parents at their bar (PA011). She explained “Her parents don't really care if you drink...just as long as you do it in the bar. You don't just go outside, or you don't tell your parents.” These parents actively encouraged underage drinking by providing both a location where youth could party as well as alcohol for the gathering. Moreover, the rules these parents enforced were designed to keep the entire event hidden from other parents' knowledge. As for her own parents, she (PA011) said she received conflicting messages: “My mom...says ‘don't drink alcohol’ and ‘don't be an alcoholic’ and stuff – but she doesn't care if like I have a drink or two; but then my dad, like if we're at parties, he lets me have a drink.” Several participants indicated that their parents “did not care” if they used tobacco or drank alcohol. For example, one female participant (PA015) said that her mother “supplied [alcohol for] my brother a couple times, and me, a couple times.” PA015 continued “Every once in a while she'd have Uncle [Name] go buy us alcohol and we partied.... So she doesn't really care.” These cases illustrate extreme examples where rural youth's parents encouraged substance use. These cases were not typical of participants in our sample, but they are noteworthy because they describe the experiences of many of the high-risk subpopulation of rural youth in our sample (between 9-20%). In addition to extended family members and parents, siblings were also involved in offering substances to rural youth.

Siblings: In our data, siblings both encouraged and discouraged substance use. There were a number of accounts from participants where older siblings introduced them to substances. For example, one male adolescent explained:

One day I was just following [my sister] around, being the little brother annoying the crap out of the sister. And I followed her, and we went down to this little abandoned park in that neighborhood. And her and a whole bunch of her friends were down there smoking weed, and she asked me if I wanted to try it. And I'm like, “Uh, no. Mom will kill me.” (PA074)

Casting the older sibling as a risk factor for substance use is common in prevention literature (Needle et al., 1986), but less common is the description of siblings as a protective factor. In

our sample, there were several examples of older siblings actively discouraged their younger siblings from using or experimenting with certain substances, even when the older sibling used various substances him or herself. Such was the case for one female participant (PA015). She described a scenario when she was at a party with her older brother. She explained that they were both drinking alcohol, but when she was offered marijuana her brother “told them that if they gave it to me he was gonna kill ‘em.” Another female (OH056) participant shared how her sisters' experience with prescription pill abuse deterred her own use. “I...never did pills. ... I've already seen what [my sister's] gone through. I don't like it. I mean, it hurt me really bad to see my sister go through something like that.” Similarly, some participants expressed that they felt a burden of responsibility toward *their* younger siblings and consequently chose not to use substances in order to be a good role model for the younger sibling.

Overall, family members figured prominently in participants' descriptions of contexts where they were offered or made decisions about drug use. Extended family members, such as cousins, uncles, aunts, and grandparents, were mentioned in almost every participant story as impacting the decision to use or not use a substance. Many parents discouraged substance use, but some actively encouraged it. Siblings at times either encouraged substance use, discouraged it, or both.

How do Rural Youth Access Substances?

One of the topics that emerged again and again in our interviews with the adolescent participants was their seemingly easy access to alcohol, tobacco, and other drugs. Some participants were personally acquainted with how “drug deals” worked and we learned that participants had a variety of ways to procure substances. This section describes what we learned about how participants gained access to substances. Findings in this section are organized by the most commonly used substances: alcohol, tobacco, and marijuana.

Alcohol—We asked participants about who procured alcohol for bush or house parties and the answers varied. At times, older relatives, including parents (OH009) and cousins (PA011), purchased alcohol legally and provided it for youth parties. In these cases, at least one older relative was consciously and actively involved in obtaining alcohol for illegal underage drinking. This was not always the case, however. Participants sometimes reported stealing alcohol without family members' knowledge. A male participant (OH077) recounted, “I remember when I was at my friend's house and, uh, like his mom, she drinks like every day, all day, and, uh, we always like take [drinks] out of her refrigerator, without her, she won't notice.” This participant (OH077) described how he and his friends disguised their alcohol use by replacing the stolen alcohol with water. Others concurred that stealing drinks from the refrigerator created a way to taste alcohol without parents' knowledge. Sometimes participants were unsure how alcohol was obtained, but it was “just available.”

Tobacco—Participants also reported accessing cigarettes in similar ways to alcohol. A male participant (OH050) described that “My [foster] brother buys ‘em for me. ‘Cause he looks old enough, so he gets [cigarettes] for me.” Since the legal age to purchase cigarettes is 18, youth who appeared old enough sometimes were allowed to purchase cigarettes. Much

more commonly, we were told, youth purchased tobacco from specific convenience stores where their friends worked. When friends were employed at these stores, the youth could easily obtain cigarettes and chewing tobacco.

According to the participants, alcohol and tobacco products were readily available to the general public and youth had few problems accessing these substances. Other drugs, such as marijuana, are illegal regardless of age. According to the participants, substances other than alcohol and tobacco were never simply available. These substances required someone to actually offer the substance or for the youth to actively seek someone from which to purchase the substance.

Marijuana—In contrast to alcohol and tobacco, marijuana offers were more clandestine. This is typified by one male participant (PA049) who provided a great deal of insight. He and his friends devised a system for covertly procuring funds to purchase marijuana to sell or share. He recounted the following story:

Like sometimes, like me and my friends pitch in money together and stuff and then we get it [marijuana] and then like – not all the time, you know, like once in a while, like, maybe like two times a week, probably. Like we at least pitch like, like five or ten bucks each and then we get a lot and then we save it for like the next time...See, if I ask [my parents] for ten bucks every day, I think they'll suspect something. Like, I go to town and ask for five bucks like every, maybe like two times a week, and they don't like expect nothin'. But if you ask for like twenty bucks one day and like ten bucks the next day, they'll, they'll, they're definitely gonna suspect somethin'.

It was important to this participant and his friends that their drug use was kept secret from their parents.

This youth (PA049) was also concerned with keeping their marijuana use secret from his peers. He explained that he was even suspicious of those who approached him requesting that he purchase marijuana for them “because I don't know what kinda kid they are. Like you gotta like keep it low around them.” He went on to share that when it came to actually purchasing the drug, “most the time I just like stay at my buddy's house and then they, they go get it ‘cause I don't like being like seen walking around with it and stuff. Keenly aware that possession of marijuana is a crime, this male participant (PA049) kept a low profile with his peers and took precautions to avoid being caught with the substance.

For the youth participants in this study, the bottom line seemed to be that if they wanted alcohol, tobacco, or marijuana, they could find avenues to access it. Other drugs seemed slightly more difficult to access.

Discussion

This study was designed to provide a description of the contexts of drug offers and drug use situations for rural, Appalachian primarily middle-school youth. Following the *principle of cultural grounding* (Hecht & Krieger, 2006) we sought to understand adolescent experiences

of rurality and drugs by conducting in-depth interviews with rural adolescents about their drug offer and use contexts. We believe that this information is useful to advancing our understanding of substances use in general as well as to prevention specialists who wish to tailor prevention messages to the needs and experiences of adolescents in rural communities.

The *principal of cultural grounding* would suggest that contexts for drug offers and use that we found in our rural, primarily middle school sample will likely be both similar and different to contexts experienced by youth in more urban and older samples of adolescents. They would be similar because adolescents across the country share a youth culture, but they would also differ because of regional and developmental factors. As youth age, for example, they tend to use more substances and use them more frequently (Johnston et al., 2009). In our discussion, we attempt to highlight some of the ways we believe findings from our rural sample diverge from research on urban youth. So what did we learn?

Participants' descriptions of their drug offer and use contexts revealed that much of the illicit substance use reported by rural minors occurred at social gatherings such as parties, in homes where parents were not present, and hanging out with others in outdoor settings. Previous studies of urban youth also have reported parties as a context for urban drug offers and drug use (e.g., Caldwell & Darling, 1999), but the nuances of the party settings differed. Adolescent descriptions indicate that rural parties are often outdoors, are referred to as "bush" parties, and can include large groups of individuals, music for dancing, and fires for warmth and recreation. Youth often have code terms for the outdoor party places (e.g., the 69) that are understood by other youth, but not necessarily by the adults in the community. Bush parties, then, served to provide youth a leisure activity in accordance with both their rural and adolescent experiences. These parties reflect the recreational opportunities available in the rural settings (e.g., bon fires, four-wheeling) as well as with rural adolescents' relatively high degree of autonomy from parents and other adults.

More casually, rural youth were offered and used substances when they were spending leisure time hanging out with peers or wandering around their community. Hence, offers in these settings tended to come from acquaintances and friends, but rarely from strangers. Since rural communities often consist of small, close social networks (Eacott & Sonn, 2006; Slama, 2004), it makes sense that only few offers would come from strangers – there are not many strangers in these small rural communities. Additionally, in contrast to previous research findings with urban youth, rural adolescents in the present study did not mention schools as a primary setting for substance offers and use. There certainly were accounts of substance offers at school bus stops and on school busses, but offers and use on the school campus did not appear to be as common for rural youth as for urban youth in comparable studies (e.g., Hussong, 2000). Perhaps this is due to smaller school sizes and closer monitoring of school campuses in rural communities. Additional research is necessary to understand this finding.

In comparison to these public arenas, drug availability and offers in private homes are another common context for substance use for both rural and urban youth. The home is largely secluded from the public eye, usually monitored only by family members, if at all. As previous research has documented (Richardson, Radziszewska, Dent, & Flay, 1993), the

time between when school ends and parents return from work are prime hours for accessing substances in one's own home or joining friends at their homes for drug use. An earlier study by Mayer, Forster, Murray, and Wagenaar (1998) reported that there may be a relationship between age and setting for substance use, with younger adolescents more likely to drink in their own homes than in the homes of others or in open fields. This does make intuitive sense because older adolescents may drive and have greater access to a broad array of settings for use. Yet, as our participants revealed, transportation for rural youth is often restricted to bicycles, off road vehicles, and walking. When we explored this claim in our qualitative data, we found that in each location (parties, home, hanging out) almost an equal number of offers were made to youth who were 12-13 and 14-19. Perhaps 14-years-old is an age when Appalachian, rural youth are entrusted by their guardians to use available means of transportation unsupervised. Keep in mind that the present study did not have a representative sample of diverse age groups so we cannot directly test the claim, but this may be a subject for future examination.

Many parents of our participants reportedly communicated an anti-drug use message to their children, yet their own use in combination with providing easily accessible substances in their home (e.g., refrigerator, liquor cabinet, medicine cabinet, drawers) was perceived by some youth as sending mixed messages about substance use. Schroeder, Miller-Day, and Krieger (2009) discovered that adolescents who perceived mixed messages from parents about substances (e.g., I can use, but you cannot; you can drink alcohol but cannot smoke tobacco) were more likely to report substance use than adolescents who did not perceive these mixed messages from parents.

Most concerning to us is the discovery that some parents actively provided youth with substances and encouraged their use. Previous studies provide evidence that parental modeling the use of substances (even those legal for adults such as tobacco and alcohol) may place adolescent at greater risk for substance use and abuse than youth with non-using parents (Avenevoli & Merikangas, 2003; Latendresse et al, 2008) and also parental permissibility in allowing youth to use illicit substances – even under controlled conditions – increases the risk for potential substance abuse (Abar, Abar, & Turrise, 2009). Abar and colleagues reported that parents who did not allow any drinking in high school tended to have teens who, in college, had lower levels of drinking overall, less drinking on the weekends, lower frequency of drunkenness, and fewer negative consequences than teens whose parents allowed controlled levels of alcohol use. Yet, others argue that allowing adolescents to engage in substance use in the home, such as the alcohol use at family parties discussed by the adolescents in our study, may “serve a socializing function, teaching adolescents appropriate uses of alcohol, demystifying the experience of alcohol use, and providing monitored environments” (Hussong, 2000, p.117). Our anecdotal data from the present study aligns with the view supported by Schroeder and colleagues (2009) that indicates a positive association between parental permissibility of substance use in the home and youth substance use both inside and outside the home. This finding may apply more broadly to adolescent culture in both rural and urban settings.

The broader family system appeared to be central to the lives of our rural participants and the role of family seemed to be central to shaping substance use decisions for Appalachian,

rural youth (see Keefe, 1988). Some participants discussed how difficult it was to resist an offer made by a family member, especially an older family member. These offers placed them in a precarious position of being disrespectful to their family relation if they elected to refuse the offer. With only one stranger reportedly offering substances to the rural youth in our sample, and more family members making offers than has been represented in previous research with urban samples, it seems important to further understand the social processes involved in negotiating drug resistance strategies for youth living in rural contexts. Yet, for our participants, family also played an important protective role. Adolescents reported that siblings or other family members often protected them from people offering substances. Relationships with and promises to family members also influenced their decisions to use or not use substances (Pettigrew et al., 2011).

Finally, these data suggest that substances such as alcohol and tobacco are readily available to rural youth. Youth report they can easily steal substances due to availability in homes or have easy access due to friends and family members who are willing to purchase them for the youth. Somewhat concerning, given the tight knit social networks in many rural communities, is the purchasing of tobacco products from friends employed at convenience stores. This finding may not be unique to rural settings, but we suspect it might be more prevalent in rural communities than suburban and urban communities given the nature of these social networks.

Conclusion

The experiences of primarily middle school adolescents described in this paper contribute to a thorough understanding of the rural context of illicit substance offers. We used the principal of cultural grounding to guide our study, which focused our attention on the experiences of cultural insiders. Findings from this study will aid preventionists and practitioners in tailoring messages for rural, Appalachian youth populations.

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