

Rural Community Context and Early Adolescent Problem Behaviors

Current research suggests that small community environments proximal, or near in location, to an adolescent's residence are most important to coalitions serving rural communities covering large geographic areas. However, much of the prior research concentrated on understanding adolescent problem behaviors at the individual-level in rural settings or community-level factors in urban settings. A recent study conducted by the Prevention Research Center at Pennsylvania State University, which investigated the association between tobacco and alcohol retailers, youth-serving organizations, and problem behaviors in rural communities, suggests that characteristics of the proximal community environment predict youth problem behavior.

In rural areas, there exist two levels of community context most likely associated with early adolescent problem behaviors. In the broad community context, rural districts typically only have one middle school and one high school. Youth living in all areas of the district often share a common institutional and peer group culture, which identifies the whole district as an important source of influence. The second level of community context associated with early adolescent problem behaviors occurs in the proximal area around an adolescent's home. Youth spend more time alone or with friends in early adolescence, typically in areas near their residence, since they are too young to drive and have limited public transportation in rural areas. The proximal area around home is therefore a critical source of influence in their lives.

What did they do?

To determine the association between adolescent problem behaviors and youth's proximal experience of community risks and resources, researcher Sarah M. Chilenski hypothesized: (1) the number of tobacco and alcohol retailers within a one mile radius of adolescents' residences will significantly and positively be related to problem behaviors; and (2) the number of youth-serving organizations within a one mile radius of adolescents' residences will significantly and negatively be related to problem behaviors. This study targeted alcohol use, tobacco use, fighting, and property destruction, the four most common problem behaviors among early adolescents.

To test the hypotheses and predict the problem behaviors, Chilenski utilized data from 28 non-metropolitan school districts in the PROSPER project, which promotes the development of sustainable partnerships

to facilitate the delivery of evidence-based interventions to reduce adolescent substance use and problem behaviors and promote youth competence. The youth sample in this current study includes 4,509 out of the possible 5,003 eighth grade students that participated in a 45-minute survey during the 2004-2005 school year. Additionally, the researcher used Geographic Information Systems (GIS) software to geocode the address locations of student residential addresses, alcohol retail locations, tobacco retail locations, and youth activity locations.

What did they find?

On average, there were 16.93 alcohol and tobacco retail locations and 1.81 youth-serving organizations within one mile radius of each student's home. 931 of the students (20.7%) had zero alcohol and tobacco retail locations and 1,952 of the students (43.3%) had zero youth-serving organizations within a one-mile radius of their homes. The average student participated in 1.27 of the common problem behaviors with 1,802 of the students (40%) reporting participating in zero of the problem behaviors.

The outcomes indicate that characteristics of the proximal community context predict youth problem behavior. Similar to prior research, early adolescents' proximity to alcohol and tobacco retailers is positively associated with their level of problem behaviors in rural areas, with students reporting participating in one or more problem behaviors. This association possibly occurs due to a number of factors unique to the rural environment, such as average commute time increasing as much as 20% over the last two decades for residents in rural areas, leaving adolescent youth unsupervised or under the care of an older sibling.

The relationship between the proximity to youth-serving organizations and adolescent problem behaviors is in the expected direction, but not statistically significant. In comparison to many cities in the United States, every community in the study had many more alcohol and tobacco retailers than youth-serving organizations, but this discrepancy is probably larger in rural areas due to less service from nonprofit human and social service organizations. The data indicates that the influences of alcohol and tobacco outlets may be stronger in rural communities since there are fewer youth-serving organizations to serve as a buffer.

What Coalitions Can Do

- ✓ **Conduct a needs assessment of the communities within your community** In the study, the school districts covered multiple boroughs, townships, small towns and/or incorporated areas. Coalitions should assess and address the variety of needs of these smaller geographic contexts when making decisions and implementing policies and programs. This will not only improve the effectiveness of prevention efforts, but also advance the usefulness of community collaborations.
- ✓ **Regulate alcohol and tobacco outlet density in your community** The findings suggest coalitions need to implement community prevention policies and environmental strategies that limit the number of alcohol and tobacco retailers in a community, such as alcohol outlet density. Even a small reduction in the number of alcohol and tobacco retail locations would not only have an effect on adolescent problem behaviors, but also on adult consumption and related problems.
- ✓ **Integrate visual tools into your coalition processes** In planning and implementing community change efforts, coalitions ought to consider characteristics of the built environment by utilizing visual tools, such as GIS mapping. Through the use of GIS mapping, coalitions increase their communication efforts by creating maps of critical community risks and resources across the distribution of the population. This activity would assist coalitions in understanding the differences among their communities varying small geographic areas.

To review the original source, please refer to:

Chilenski, S.M. (2011). From the macro to the micro: a geographic examination of the community context and early adolescent problem behaviors. *American Journal of Community Psychology*. 48:352-364.