
Rural After-School Programs: Meeting the Needs of At-Risk Youth and Their Families

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Abstract: Extant research has focused on out-of-school time among urban and suburban youth, yet there remains scant information on rural low-income youth and their families. This study examines the salience of after-school programs for rural youth. Using an ecological framework, we assess changes in youth behavior and skill acquisition based on reports from 47 youth attending after-school programs in two rural communities, along with their primary caregivers and teachers. Results indicate enhanced life skills and social behaviors among youth attendees. Implications for future research, programming, and policymaking are discussed.

Introduction

The salience of out-of-school time activities has been widely studied over the past 30 years (Eccles & Gootman, 2002; Eccles & Templeton, 2002; Landers & Landers, 1978) corresponding to the increase of dual-earner and single-parent families. Growing interest in extracurricular and after-school programs and their importance to youth development has been further fueled by concerns about unsupervised time experienced by youth as well as promoting school achievement and preventing school disengagement (Eccles, Barber, Stone, & Hunt, 2003; Eccles & Gootman, 2002).

Still other research concerns emanate from school achievement disparities across various social classes and ethnic groups (Eccles et al., 2003). Consistent among many studies, researchers report that youth-focused activities are an important context in which youth are producers of their own development (Larson, 2000; Silbereisen, Eyferth, & Rudinger, 1986). Moreover, youth

who have less structured leisure time (e.g., with less adult supervision or fewer activities to develop life skills) tend to have poorer relationships with parents (Mahoney & Stattin, 2000).

Most of the extant research on out-of-school activities has focused on urban or suburban youth. However, the need for after-school programs among rural families has grown as changing family structures, drought, and drops in commodity prices have forced farming and ranching families to supplement their incomes with paid employment off the farm or ranch. Many rural parents today are not at home after school as they may have been in the past. Additionally, with the high cost of living in some cities, more limited-resource and single-parent families have begun relocating to small communities to escape the high prices of housing and the negative affects of urban living (e.g., community violence, drug trafficking). (Brown, Swanson & Barton, 2003). Unfortunately, the "safe haven" of small rural communities is no longer guaranteed. Methamphetamine labs are increasing in many rural areas (Downing, 2003) and alcohol and tobacco use among youth remains an issue of concern (Johnston, O'Malley & Bachman, 2002).

The changes experienced by rural communities have resulted in calls for increased youth-based initiatives. To address the need, our western state has begun to focus on enhancing services to youth through a USDA Children Youth and Families At-Risk (CYFAR) grant. The goal of the project is to assist youth in gaining knowledge and skills that will lead to attitudes and behaviors necessary to become contributing community members. Two sites involved in this project are very rural counties. One county has a population of 11,837 with a median household income of \$28,067. The other county is even more rural with 1,360 people and a median household income of \$22,343. In each county, approximately one-third of the population lives at or below 150% of the poverty level. The economy in both counties rely on farming and ranching and the state has suffered five years of drought resulting in lost income, stress, and changes in parental employment.

The two CYFAR sites are using their funds to meet the need for out-of-school time activities. They are enhancing or expanding their after-school programs to reach more youth in the counties. Both programs offer traditional after-school programs consisting of recreational opportunities, assistance with homework, creative arts, and computer literacy. According to Kahne, Nagaoka, Brown, O'Brien, Quinn, and Theide (2001) there are two potential benefits to after-school programs. One is to reduce unsupervised time, which is related to youth engaging in risky behaviors. The other is enhancing youth development. The CYFAR sites are working toward incorporating both benefits to their after-school programs.

An ecological perspective is a useful holistic framework for understanding the salience of after-school programs for youth residing in rural communities (Bronfenbrenner, 1977). From this perspective, we can examine the individual, familial and community (i.e., school) level factors that may influence youth development and skill acquisition. We recognize that changes in youth will impact both their parent-child relationships (Ambert, 2001; Mahoney & Stattin, 2000) and their relationships within their school and community environments (e.g., with their teachers and peers).

Drawing upon multiple perspectives, we examine how after-school programs assist youth in developing basic life skills/competencies and positive behaviors, learning to make healthy choices, improving parent-child relationships, completing homework, and feeling connected to their school community. Study variables are assessed using data from three perspectives: youth, parents, and teachers.

Specifically, this study examines four research questions:

- 1) What are the relationships between youth perceptions of their life skills, their school connectedness, and their parents' caregiving practices?
- 2) How have after-school youths' behaviors and competencies changed over the school year (as reported by teachers) and do these behaviors/competencies differ as a function of gender?
- 3) What is the relationship between youth behaviors and competencies and youth and parent/caregiver perceptions of life skills, school connectedness, and caregiving practices? And finally
- 4) What are parents'/caregivers' perceptions of their child's rural after-school program and the influence of the program on their child's behavior, peer relationships and parent-child relations?

Methods

Sample and Procedure

The sample for this study consists of 47 youth participating in one of two after-school programs in rural communities located in a western state. As shown in Table 1, youth ages ranged from 6-16 with an average grade level of the fourth grade. The majority of participants were White. The youth completed pre- and post-test in-person semi-structured interviews. Youth were interviewed on-site at their after-school program by trained interviewers. After obtaining informed consent from the parents/caregivers of each youth participant, interviews commenced and lasted approximately 20 minutes. Participants received a small gift as a token of appreciation for completing the interview.

After-school teachers at each location also completed pre- and post-test pen and paper surveys about each child's progress in the program. Teachers completed pre-test surveys in October, 2003 and post-test follow-up surveys in April, 2004. Additionally, parents/caregivers of participating youth were interviewed in May, 2004 using a semi-structured telephone-interview protocol. Most caregivers of participants reported being married, having completed some post-secondary education and working an average of 39.79 hours each week (see Table 1). Of the 25 parents who agreed to be interviewed for the study, 17 were actually interviewed by phone, yielding a response rate of 68%. Six parents who agreed on paper to be interviewed later declined to be interviewed over the phone and two phone numbers had been disconnected between the time of consent and the attempted phone call.

Table 1

Demographic Characteristics of Youth and Their Primary Caregiver

	Youth Interview (N=47) M (SD) or N(%)	Parent/Caregiver Interview (N=17) M (SD) or N(%)
Youth Characteristics		
Gender		
Male	21 (44.7%)	6 (35.3%)
Female	26 (55.3%)	11 (64.7%)
Age in years	8.75 (2.1)	8.94 (1.34)
Grade Level	3.49 (1.9)	3.71 (1.5)
Race		
White	41 (87.2%)	17 (100%)
Non white	6 (12.8%)	0 (0%)
Respondent Caregiver Characteristics		
Relationship to Child		
Mother	42 (87.2%)	15 (88.2%)
Father	6 (12.8%)	0 (0%)
Marital Status		
Single	14 (29.8%)	3 (17.6%)
Married/Cohabiting	33 (70.2%)	14 (82.4%)
Education Completed in Years	13.43 (1.9)	14.06 (1.6)
High School/GED	14 (29.8%)	6 (35.3%)
Associate Degree/Technical	19 (40.4%)	7 (41.2%)
Bachelor's Degree	8 (17.0%)	4 (23.5%)
Other	6 (12.8%)	0 (0%)
Employed (% yes)	44 (93.6%)	15 (88.2%)
Hours Worked/wk	39.44 (11.0)	37.5 (10.1)

Measures

All measures used in this study were selected for their strong psychometric properties and appropriateness for use with the study population of interest (see Table 2 and Appendix). Most measures for the youth interview were adapted from the original measures to keep the total length of interview time to approximately 20 minutes to decrease burden and ensure youth attention. To facilitate the youth interviews, we chose to use the same response options throughout the interview for all Likert-type measures. Options ranged from "almost always" to "almost never" using a 3-point scale. Upon acquisition of post-test data, we assessed the measurement quality (i.e., internal consistency) of all instruments.

Table 2
Mean Ratings of Youth and Parent Measures

	M (SD)	Scale Alpha
Youth Measures*		
<u>Life Skills</u>		.73
Girl	1.47 (.20)	
Boy	1.38 (.28)	
<u>Parent Practices</u>		.77
Girl	1.37 (.35)	
Boy	1.39 (.13)	
<u>School Connectedness</u>		.55
Girl	1.55 (.24)	
Boy	1.59 (.35)	
Parent Measures		
<u>Parent Behavior**</u>		
Positive Parenting	3.62 (.36)	.71
Controlling Practices	1.96 (.63)	.72
<u>Parent Perception of Child**</u>		
Child Behavior Problems	1.62 (.55)	.68
Child Competence	3.10 (.46)	.72
<u>Parental Influence on Child Education***</u>		
Parental Pressure	3.84 (.57)	.58
Parental Psychological Support	3.78 (.48)	.41
Parental Help	3.99 (.54)	.63
Press for Intellectual Development	4.47 (.45)	.55
Monitoring and Time Management	4.22 (.73)	.78
<u>Perception of After-School Program***</u>		
Guidance and Supervision	3.90 (.64)	.80
Program and Activities	4.28 (.44)	.71
Parent, School and Community Relationships	3.31 (.94)	.82
Staffing Characteristics	4.16 (.45)	.71

NOTE: Gender comparisons on parent measures not feasible due to small sample size.

*Scale options are: 2 "Almost always," 1 "Sometimes," and 0 "Almost never"

**Scale ranges from 1 "Highly unlike me/my child" to 4 "Highly like me/my child"

***Scale ranges from 1 "Strongly Disagree" to 5 "Strongly Agree"

Youth Measures. To assess the life skills of the youth participants, we implemented the Life Skills Development Evaluation (LSDE; Bailey & Deen, 2002). This measure consists of items such as "I make decisions without much thought" and "I like to be the leader of a group." For this study we selected 24 items from the LSDE that addressed issues of decision making, leadership, time management, prosocial behaviors, conflict resolution, and risk taking. Items were summed and divided by the total number of items to compute a total life skills score ($\alpha = .73$).

To assess youth perceptions of parent involvement, we adapted the Children's Report of Parental Behavior Inventory (Schwarz & Mearns, 1989). This 14-item measure included such items as "Tell me how often your parent/guardian enjoys doing things with you" and "Tell me

how often your parent/guardian praises you." After reverse coding negative items, we summed the scale items to compute a total parent practices scale ($\alpha = .77$).

Lastly, we asked the youth about their perceptions of school connectedness using an adapted version of the School Environment Scale (National Longitudinal Survey of Youth, 1988). Ten items addressed such concerns as "You try hard to do good work in school," "Most of the teachers are willing to help you if you have a problem" and "It is easy to make friends at your school." Again, we computed a total score by summing the items and dividing by the total. Note that the internal consistency of this scale was lower than expected ($\alpha = .55$); thus caution should be used when interpreting findings based on this measure.

Parent Measures. During the telephone interviews, we asked parents or the primary caregivers to rate their child's behavior using an adaptation of the Teacher-Child Rating Scale (TRS; Hightower et al., 1986). The original TRS includes 18 items assessing competency and 18-items assessing behavior problems. To keep the parent interview brief, we included a total of 14 items split evenly between competency and problem behaviors. Using a 4-point scale with response options ranging from "highly like my child" to "not like my child," parents/caregivers considered such competency items as "overachieving," "happy," and "expresses feelings openly" and such problem items as "withdrawn," "shy, timid," and "overly aggressive." Competency and problem behavior subscales were computed, yielding Cronbach alpha's of .72 and .68 respectively.

To assess caregiving behaviors, we adapted 14 items from the Children's Report of Parent Behavior (Schwarz & Mearns, 1989) discussed above and used a 4-point Likert scale ranging from "highly like you" to "not at all like you." We then computed two subscales measuring positive parenting (e.g., "I enjoy doing things with my child" and "I am interested in what my child is learning in school;" $\alpha = .71$) and controlling parenting (e.g., "I am very strict" and "I give hard punishments;" $\alpha = .72$).

Parent/caregiver involvement in their child's education was measured using the Inventory of Parent Influence (Campbell, 1996). This 28-item measure includes five dimensions: parental pressure ($\alpha = .58$), parental psychological support ($\alpha = .41$), parent help ($\alpha = .63$), press for intellectual development ($\alpha = .55$), and monitoring and time management ($\alpha = .78$). Sample items include "I supervise my child's homework" and "I think my child can do better in school than he/she does."

Finally, parents/caregivers were asked about their perceptions of the after-school program using the Quality of School Age Child Care Checklist developed by Oregon State University's Family Policy Program (1997). This 24-item checklist includes four subscales: guidance and supervision ($\alpha = .80$), program and activities ($\alpha = .71$), parent, school and community relationships ($\alpha = .82$), and staffing characteristics ($\alpha = .71$). Sample items include "Staff consistently encourage/reward appropriate behavior" and "Children receive assistance with homework."

Teacher Measure. To assess the competency and behavior problems of youth, we also asked teachers to complete a version of the Teacher-Child Rating Scale (Hightower et al., 1986). As mentioned above, this measure consists of 36 items covering 18 competencies and 18 problem behaviors. Competency subscales include acting out, shyness/anxiety, and learning problems. Behavior problem subscales include frustration tolerance, assertiveness, and task orientation.

Using a 5-point scale anchored by “Not a problem” and “A very serious problem,” after-school teachers reported their perceptions of each child’s behavior in the program.

Study Design and Data Analysis

This study employed a one-group pre-test post-test design. Although we recognize that such a design is limited in evaluation research, our attempts to generate comparison groups were not feasible as the rural communities are so small, nearly all youth within the schools are served by the after-school programs. Some have argued, however, that one-group pre-test post-test designs can address some threats to internal validity and therefore be a suitable method in applied studies. If attention is given to situational factors (e.g., the absence of a comparison group of youth who are not attending the program), evaluators can create a design that has sufficient internal validity (Eckert, 2000).

To assess the pre-to-post test changes in youth development, skill acquisition, and behavior among youth attending after-school programs, we conducted paired *t*-tests. Dependent variables at the youth level include: assessment of life skills, feelings about their school connectedness, and perceptions of parental behavior. Post-only data from parents/caregivers allowed us to examine parental perceptions of youth behavior, their parenting style, involvement in their child’s education, and the rating of the quality of their child’s after-school program. At the teacher level, we examined changes in youth behavior, including behavioral problems and competencies. We then compared change scores on all available study variables by youth’s gender using analyses of covariance (where pretest scores served as covariates in the analyses). Correlation coefficients were then ran to examine the relationships between youth, parent, and teacher reports of the study variables.

Finally, we examined qualitative reports of parents/caregivers regarding how the after-school program influenced their child’s behavior, peer relationships, and the parent-child relationship. During the interview, parents/caregivers were asked several open-ended questions which were coded and counted to generate frequencies of responses. These data were used to inform the quantitative analyses and are presented in the next section of the paper when such responses elucidated findings.

Results

This study utilized data collected from three sources—youth, parents, and teachers—to assess the changes in youth development and child-parent-school relationships over the course of the school year. All youth participating in the study were being served by after-school programs in their respective communities. Although the study does not directly test the effect of the after-school program in “causing” changes in the youth and families served by the program, results speak to the potential salience of after-school programs in facilitating positive youth development and indirectly supporting positive child-parent-school relationships. As mentioned earlier, this study attempted to answer four broad research questions. We take each question in turn, using study findings to shed light on emergent relationships and patterns among youth, parents, and teachers engaged in after-school activities.

Youth Perceptions

The first research question assessed the youths’ perceptions of their life skills, their school connectedness, and their parents’ caregiving practices over the course of the school year. Paired *t*-tests revealed few significant pre-to-post test changes; however, youth reported that they were less likely to waste time when they should be studying at the post-test ($M = 0.63$)

than at the pre-test ($M = 1.42$; $t(23) = 3.40$, $p < .01$) and that their classes were less boring at the post-test ($M=1.19$) as compared to the pre-test ($M=1.62$; $t(25) = 2.85$, $p < .01$). Youth also reported that their parents were less willing to let them choose their own way of doing things at the post-test ($M = 1.04$) than the pre-test ($M=1.33$; $t(25) = 2.29$, $p < .05$). These data are not reported in table form. In addition, correlations revealed that life skill acquisition was related to parenting practices (see Table 5). Youth who reported that their parents employed more positive parenting practices were also more likely to report increased life skills acquisition ($r = .49$, $p < .01$).

Teachers' Perceptions

The second research question sought to examine the youths' behaviors and competencies from the teachers' perspective. Specifically, how have after-school youths' behaviors and competencies changed over the school year (as reported by teachers) and do these behaviors/competencies differ as a function of gender? As reported in Table 3, paired t-tests of teacher ratings revealed that youth participating in after-school programming showed significant decreases in behavioral problems over time and significant gains in competencies over time. Specifically, there were significant decreases in youth acting out, exhibiting shyness or anxiety, and learning problems. Over the course of the after-school year, teachers also reported significant increases in youth frustration tolerance, assertiveness, and task orientation. Comparisons by gender revealed that, overall, girls exhibited significantly fewer behavioral problems and more competencies than their male counterparts (see Table 4). Anecdotal comments from teachers further revealed that youth exhibited increased politeness in their interactions with adults and their peers and a willingness to engage in life skills activities (e.g., computer training, decision-making and communication exercises) over the course of the after-school year.

Table 3

Teacher Ratings of Chile Competence and Behavior Problems (N=36)

Means (SDs)				
	Time 1	Time 2	Paired t-test	Alphas (T1-T2)
Total Behavior Problems	2.39 (0.9)	1.87 (0.7)	5.24***	.95-.95
Acting Out	2.39 (1.1)	1.98 (0.9)	3.63***	.88-.93
Shyness/Anxiety	2.15 (1.0)	1.65 (0.7)	4.13***	.93-.88
Learning Problems	2.62 (1.2)	1.99 (1.0)	5.19***	.97-.95
Total Competence	3.54 (0.9)	4.07 (0.7)	-5.07***	.90-.97
Frustration Tolerance	3.40 (1.0)	3.83 (0.8)	-3.92***	.95-.94
Assertiveness	3.53 (1.0)	4.23 (0.7)	-6.74***	.89-.88
Task Orientation	3.73 (1.0)	4.13 (0.9)	-4.47***	.93-.93

*** $p < .001$.

Note: Lower behavior problem scores indicate fewer problems; Higher competency scores indicate better school adjustment and competencies.

Table 4

Teacher Ratings of Child Competence and Behavior Problems by Gender (N=36)

	Means (SDs)		
	Girl	Boy	F Value
Total Behavior Problems	1.69 (0.7)	2.15 (0.7)	10.88**
Acting Out	1.70 (0.7)	2.41 (1.1)	4.76*
Shyness/Anxiety	1.62 (0.7)	1.69 (0.6)	3.46†
Learning Problems	1.76 (0.9)	2.36 (1.0)	7.86**
Total Competence	4.18 (0.7)	3.90 (0.7)	5.50*
Frustration Tolerance	3.96 (0.8)	3.63 (0.9)	7.82**
Assertiveness	4.28 (0.7)	4.16 (0.6)	4.92*
Task Orientation	4.30 (0.8)	3.86 (0.9)	2.01

† p<.10. *p<.05. **p<.01.

Parents'/Caregivers' Perceptions of Youth Behaviors and Competencies

Parents/caregivers were interviewed to assess the relationship between youth behaviors and competencies and youth and parent perceptions of life skills, school connectedness and caregiving practices. As presented in Table 5, youth who felt more connected to their school community were rated by their teachers as having fewer behavior problems ($r = -.42, p < .01$) and more competencies ($r = .42, p < .05$). Parents were consistent with teachers in their ratings of youth behavior problems. As parents reported greater numbers of problem behaviors, teachers likewise reported greater problem behaviors ($r = .44, p < .10$); however this result suggests a trend only. Parent reports of child behavior problems were negatively related to teacher reports of youth competencies ($r = -.65, p < .01$), such that as parent reports of behavior problems increased, teacher reports of youth competencies decreased. Finally, parental pressure on children to perform better in school was related to teacher reports of problems and competencies. Parents reported applying increased pressure on youth who exhibited more behavior problems ($r = .47, p < .10$, trend only) and fewer competencies ($r = -.53, p < .05$) as reported by teachers.

Table 5

Correlation Coefficients of Study Variables: Teacher, Youth, and Parent Reports

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Youth Reports															
Life Skills	---	.49**	.10	-.35	.08	.32	-.11	-.09	-.21	-.01	-.01	.03	-.11	.09	
Parent Practices		---	.23	-.09	-.30	.08	.54*	-.16	-.30	-.35	-.08	.02	.01	.02	
School Connectedness			---	.32	-.04	-.42	.25	-.54*	-.18	-.22	-.04	.07	-.42*	.42*	
Parent Reports															
Positive Parenting				---	-.06	-.28	.06	.31	.59*	.22	.25	.23	.11	-.11	
Controlling Parenting					---	.41	-.35	.26	.44	.26	.15	.37	.25	-.31	
Child Behavior Problems - Parent						---	-.27	.32	-.01	.16	.13	.18	.44†	-.65**	
Child Competence-Parent							---	.21	-.09	-.52*	-.15	-.05	.03	.20	
Parental Pressure								---	.53*	.34	.37	.18	.47†	-.53*	
Parental Psychological Support									---	.26	-.08	.14	.24	-.24	
Parental Help										---	.19	.19	-.25	.04	
Parental Press for Intellectual Development											---	.72**	-.02	.02	
												---	.03	.10	
Teacher Reports															
Child Behavior Problems														---	-.93**
Child Competence															---

† p<.10. * p<.05. ** p<.01.

Parents'/Caregivers' Perception of their Child's After-School Program

Finally, parents/caregivers were asked about their perceptions of their child's rural after-school program and the influence of the program on their child's behavior, peer relationships, and parent-child relations. Respondents shared fairly positive views of the after-school program, particularly regarding the benefits of the program for their child. When asked to rate the quality of after-school program, parents/caregivers agreed that the program provided adequate guidance and supervision, appropriate program activities, and that the staff exhibited positive and professional characteristics (see Table 2 for mean rating scores). Parents were less certain about the adequacy of the after-school program to facilitate parent-school-community relationships. During telephone interviews, several parents stated feeling somewhat disconnected from the after-school program and that they would like to be more involved. The hours of operation of the program was also cited as problematic for parents and they requested more flexibility in time offerings.

Based on qualitative data gathered during telephone interviews with parents/caregivers, we found that many enjoyed a less stressful relationship with their child as a result of decreased homework demands in the evenings. The after-school program also seemed to improve communication between parent/caregiver and child. Both programs specifically focused time on teaching children manners, respect and courtesy. Reduced parent-child conflict through this after-school programming appeared to decrease family stress and enhance parental use of positive caregiving practices.

Parents reported anecdotally that they no longer had homework struggles as the youth completed their assignments during the after-school program, leaving more family time in the evening. One parent commented:

"The after-school program lessens the stress of having homework done, therefore I don't need to worry. It leaves more time for fun."

Six parents remarked how the program had assisted with homework completion and four noted that it influenced their child's study skills. As one parent noted:

"He knows when to do homework, and doesn't hurry through it. He knows he has to do it himself."

Parents also reported an improvement in their children's social skills and peer relationships. Four parents believed the program assisted their children in being more confident and outgoing as demonstrated in the following quote:

"[My child] is able to be more outgoing and more sociable with kids her age, as well as older and younger kids."

Eight parents reported that the program had given their children more diversity in their friendships.

Discussion

Taken together, these findings suggest that after-school programs in small rural communities can make a difference for youth and their families. Programs structured to have caring adult teachers who emphasize life skills such as decision making and conflict resolution strategies, positive peer relationships, and prosocial behaviors appear to be associated with positive youth outcomes. Providing youth with a safe place after school may diminish a child's likelihood to engage in risky or antisocial behaviors and present opportunities for children to complete their homework and interact with their peers and youth mentors in constructive ways (Mahoney & Stattin, 2000). After-school programs, regardless of their specific curricula, may offer a fun and creative space in which to promote positive school connections among youth.

Moreover, these programs may be important to ameliorating youth behavior problems and increasing competencies. Based on teacher reports, this study found significant gains in child competencies and prosocial behaviors during the school year. Girls appeared to make significantly more gains in their competencies and prosocial behaviors than boys. Such findings are consistent with extant research, which has found that girls often display fewer externalizing behavior problems than boys, such as aggression or acting out behaviors (Achenbach, Howell, Quay, & Conners, 1991). It is possible that teachers are more likely to focus on the outwardly negative behaviors exhibited by boys while perhaps ignoring or not having to deal with the internalizing behavior problems often exhibited by girls. In other words, internalizing behavior problems such as shyness or anxiety may be less of a distraction in after-school programs than fighting or aggressive behaviors and therefore require less of the teacher's time and attention. Teachers may then be less likely to report or recall internalizing behavior problems of some girls.

Taking the data at face value, it is suggested that after-school teachers focus their efforts on improving the competencies of boys and addressing boys' behavior problems. Given the programs in this study served youth from age six to 16, perhaps teachers could better utilize older students as mentors to younger students. It seems likely that older students could serve as positive role models to younger students, assisting with homework and providing tutorial assistance. Likewise, employing male student helpers in the after-school program may be important to male youth development over time.

One unique aspect of this study was the inclusion of parent/caregiver variables which allowed us to begin to assess the potential benefits of after-school programming for family functioning. Both the quantitative and qualitative data generated by parents/caregivers in this study suggest that the primary caregivers may feel less stressed when they do not have to focus their attention on homework completion issues or struggle with child behavior problems. Thus after-school programs may be important to the quality of parent-child relationships, especially if parents/caregivers are working full-time and lack the energy and time to negotiate homework completion issues with youth in the evenings. By using evening time to reconnect with children and engage them in pro-family activities, parents may be better able to nurture their familial relationships and promote overall family functioning. Clearly, more research is needed to establish such connections. Nonetheless, after-school programs may serve as a positive intermediary or buffer between regular school-time activities and family life.

Because this study is correlational in nature, we recognize the bi- or multi-directionality of child-parent-school relations. It is not possible to determine which relationships precede others or which factors lead to which outcomes. We acknowledge, for example, that children have an influence on the ways in which they are parented and schooled (Ambert, 2001). More positive behaviors on the part of youth may lead to improved parenting practices. Enhancements of parenting practices may improve children's school performance. These more positive relational dynamics within the family system may then result (perhaps indirectly) in enhanced school and life skill outcomes for youth. Clearly, future research with larger samples is needed to disentangle these and the many other complex relationships that emerge across individual, family, and school contexts.

Study Limitations

As with any evaluative study, this effort is not without limitations. First, we acknowledge that the study design (i.e., a one group pre-test post-test design) is limited and that we cannot infer causality without a comparison group to control for threats to internal validity or other confounds. We recognize that there may be maturation effects or multiple "causes" that contributed to the changes in youth from pre-test to post-test. Was it the after-school program alone that increased competencies and ameliorated behavior problems among the youth participants? Or was it a combination of variables—such as youth maturation, their regular school time activities, their parents' caregiving practices, and their after-school programming—that contributed to the positive youth outcomes observed over the course of the school year? Future research is needed using more complex research designs to better understand which variables account for or explain the positive changes experienced by these after-school youth.

It is also important to note that this study was limited by the diverse age ranges of the youth participants. It was challenging to develop a single interview schedule that was appropriate for young children and adolescents living in rural locales. Initial pilot-testing of our measures and interviewer training sessions likely decreased some measurement and/or interviewer error. By conducting face-to-face interviews with the youth, it is likely that we were able to decrease confusion caused by certain questions by taking the time to explain the intent of items during the interview. However, there is a need for continued development of valid and reliable youth measures.

Additionally, we acknowledge that teacher reports of youth behavior problems and competencies may have been biased as teachers were well aware that we were evaluating their after-school programs. However, by limiting teacher involvement in the evaluation effort and

encouraging their honest evaluation of their students, it is likely that we were able to decrease possible teacher reporting bias.

This study was also limited in that we were only able to interview a small group of parents/caregivers. While it is difficult to draw many conclusions from such a small sample, we note the consistency of the parent reports to teacher reports regarding child behavior problems and competencies. Such findings give us some confidence that both teacher and parent/caregiver reports were reliable and credible and that our small caregiver sample reflects the experiences of many families participating in the rural after-school programs. The qualitative data gathered from the parents/caregivers further shed light on the salience of the program for their children and provided us with a deeper understanding of the possible effects of after-school program participation on family functioning.

Implications for Future Research, Practice, and Policymaking

Although there are limitations to this study, this effort offers some insight into the after-school programming offered to youth in rural locales. It appears that the after-school program may have facilitated school connectedness among rural youth. Additionally, the program may have played a role in ameliorating behavior problems exhibited by youth and boosting their competencies and life skill acquisition. Clearly, future research is needed to further elucidate such findings.

Conducting research in the future using an experimental or quasi-experimental design will be important to control for threats to internal validity such as maturation or history effects. In order to convince families, community members, school boards, and policymakers of the benefits of after-school programming, it will be necessary to draw linkages between after-school program participation and specific changes observed in youth participants. Without such research, we can only speculate that after-school programming appears to play a role in positive youth development.

Frequently research on after-school programming takes place in urban areas; such findings do not always translate to small rural communities. Future research should continue to extend its reach to include rural locales. These efforts are necessary to better understand what works in rural areas when attempting to address the unique demands and challenges experienced in these communities. Although substance abuse issues confront most youth nationwide, the methamphetamine epidemic experienced in many rural communities is having devastating effects on entire communities (Downing, 2003). It will be important to understand how after-school programming can play a key role in increasing the likelihood of rural youth abstaining from such drugs and engaging in more positive decision making.

Regarding implications for program improvement, this study revealed important information about the possible benefits of after-school program participation for youth. It appears that these programs may influence youth development beyond regular school time activities. For example, both after-school programs included in this study spent considerable time teaching youth about civility, courtesy, and politeness, which may have resulted in diminished behavior problems. By including youth of all ages in one program, younger children may have been influenced by the mentorship provided by older students. In both after-school programs, older students were given more responsibilities in the program and were encouraged to assist younger participants with their homework and computer literacy skills, which may have resulted in enhanced competencies and life skills for all involved.

When considering parent/caregiver perceptions of the after-school program, one particular issue of note was the primary caregivers' desire to be more involved in the program. Although we cannot generalize based on parent/caregiver findings in this study, such data suggest that family-school connections can be enhanced in positive ways via after-school initiatives. Perhaps teachers and their staff could find ways to connect with parents/caregivers when they pick up their children from the program by giving parents/caregivers updates on child performance or skill enhancement, providing tips for positive parenting, or alerting caregivers about upcoming plans for programming. After-school program staff may be challenged to find creative ways in which to involve parents/caregivers in programming, particularly as many parents utilize the program while they are working. Nonetheless, it seems likely that after-school program staff can serve an important role as liaisons between parents/caregivers and the school community.

As school districts, municipalities, and state governments grapple with program offerings and funding decisions—for example, both programs included in this study are in danger of losing their funding when the CYFAR grant funding cycle ends—these data begin to shed valuable light on the salience of after-school programming. It appears to us that the fairly low financial investment needed for after-school programming is well worth the money if such programs influence youth development, enhance life skill acquisition, and increase youths' feelings of school connectedness. The fact that after-school programming may also indirectly influence parent-child relationships is also important to consider. In our study, parents felt less stress around homework completion and had more time to spend with their children just "having fun." After-school programs may then help to foster positive parent-child relationships and family well-being. With more incentives for parent involvement or more flexible program offerings, these programs may also facilitate parent-school relationships, which may ultimately foster a stronger sense of community among children, parents, and teachers alike.

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Appendix
Measures Used to Gather Data

Construct	Measure (Author)	Sample Items
Youth-Level Life Skills	Life Skills Development Evaluation (Bailey & Deen, 2002)	"I make decisions without much thought" "I ask for help if I need it"
Parent Involvement	Children's Report of Parental Behavior Inventory (Schwarz & Mearns, 1989)	"Tell me how often your parent or guardian... ...enjoys doing things with you" ...praises you"
School Environment	School Environment Scale (National Longitudinal Survey of Youth, 1988)	"You try hard to do good work in school" "It is easy to make friends at your school"
Parent-Level Parental Behavior	Adapted from Children's Report of Parental Behavior Inventory (Schwarz & Mearns, 1989)	"I am very strict" "I can be talked into things easily"
Youth Behavior	Adapted from Teacher-Child Rating Scale (Hightower et al, 1986)	"How well do these items describe your child?: ...Happy; ...Shy"
Involvement in Education	Inventory of Parental Influence (IPI) (Campbell, 1996)	"I am proud of my child" "I supervise my child's homework"
After-school Program	Quality of School Age Child Care: A checklist of Indicators—Adapted (Family Policy Program, 1997)	"Rules and expectations are clear" "There is low turnover among staff"
Teacher-Level Youth Behavior	Teacher-Child Rating Scale (Hightower et al, 1986)	"How well does this describe the child?: ...Withdrawn; ...Learning academic subjects"