

## Comparing Rural Adolescents from Farm and Nonfarm Families

Kimberly Esterman and Dalva Hedlund  
Cornell University

*This study explores the unique characteristics of rural adolescents raised on farms. Interpretive analyses suggest that farm adolescents are particularly close to their families and somewhat isolated from their peers and from peer-related activities. They are less likely than their nonfarm counterparts to plan on pursuing a 4-year college degree and are very unlikely to plan on remaining on the farm. Most felt that the influence of the farm was positive, resulting in an appreciation of and closeness with nature and animals, a sense of satisfaction and personal responsibility, and appreciation for the difficult work schedule and variety of challenges involved in farming. However, several participants identified limitations that resulted from their farm rearing, such as isolation from peers, a lack of free time, and difficulty pursuing outside interests. Implications for rural education are explored.*

The rapid economic downturn of rural communities in general and of family farms in particular has forced many rural adolescents who have grown up on farms to think more globally about their plans for the future. When attempting to understand how farm adolescents adapt to these changes, it is important to recognize what their personal values are and how they come to make life decisions. A key aspect of their personal development, it seems, is the quality of the close and supportive relationships in their lives.

The purpose of this study is to better understand how adolescents from farm families perceive their support networks and how their personal values, self-identities, and future plans develop. To accomplish this, we focused our study on the exploration of four main aspects of their lives: (a) involvement in their communities and relationships with peers, (b) relationships with their families, (c) personal values and self-concepts, and (d) ideas and plans for the future.

Farm families, in general, tend to view the family unit as a central aspect of their lives. They are also somewhat isolated from their neighbors and nonfamily members (Beker, Eskovitz, & Guttman, 1987; Hedlund & Berkowitz, 1979) and are particularly reluctant to communicate with outsiders as a means of coping with stress (Weigal & Weigal, 1987). Thus, their self-reliance is evident.

Not surprisingly, youths from farm families also can be reluctant to share personal information with nonfamily members. When they do seek support, they usually go to

close friends and less frequently to adults (Van Hook, 1990). In addition, there is evidence that youths from farm families are typically more parent oriented than peer oriented (Floyd & South, 1972; Larson, 1974).

Families with failing farms have been experiencing not only a great deal of stress, but also an increasing amount of isolation from their neighbors in the community (Wright & Rosenblatt, 1987). Children and adolescents from these families often develop behavioral problems. These problems may be academic, emotional, or both (Peeks, 1989; Van Hook, 1990). Fewer farm children are choosing to remain on their farms, creating additional stress in their own lives, as well as in the lives of their families (Hedlund & Berkowitz, 1979).

### Method

The present study is part of a larger, ongoing study, "Program in Rural Youth Development" (Project PRYDe). Project PRYDe is a qualitative study that has been in progress over the past 4 years. The study seeks to understand the perceptions of rural adolescents through longitudinal interviews with 87 adolescents from four rural high schools in upstate New York. Each school represents one of four degrees of rurality, defined by the size of the largest town in the county, distance to a metropolitan center, and percentage of residents traveling outside of the county for employment (Eberts, 1984). The students in this study tend to have a higher level of academic achievement and socioeconomic status (SES) than is representative of the total student population in each school. Generalizations should take this nonrepresentativeness into account.

---

This research was supported by Hatch Grant 137410, United States Department of Agriculture.

Correspondence concerning this article should be addressed to Dalva Hedlund, Department of Education, Kennedy Hall, Cornell University, Ithaca, NY 14853-4203. (deh2@cornell.edu)

Participants were interviewed with a semi-structured protocol in each of 4 consecutive years. Interviews were designed to focus on the participants' perceptions of their communities, schools, families, social interaction, and self-identity (see Hedlund, 1993, for a more detailed description). Sample questions to introduce each focus area, when needed, included: "What is it like living in [name of town]?" "What is your school like?" "What is your family like?" "Can you tell me about your social life?" and "Can you tell me a little bit about yourself?" Interviewers were 8 advanced undergraduate and 2 graduate students; 8 were female. Interviewers received training in conducting these interviews over a 4-month period.

Of the original 87 participants, 19 (11 females and 8 males) resided on self-supporting farms. It should be noted that students from all of the family farms in the 4 school districts were originally contacted to obtain these 19 participants, reflecting the scarcity of farms in upstate New York. These adolescents were then matched with a set of nonfarm adolescents according to grade level, gender, geographic location, and, when possible, academic achievement and SES. Interviews conducted during the 1990-1991 academic year were analyzed for this study.

The analyses are interpretive and descriptive. Our coding system breaks down the narrative text into smaller segments that fall into one of the conceptual variables defined by the structure of the interview (community, school, family, social, or self). Second- and third-level codes were developed inductively by three raters reading the interviews and comparing notes (Miles & Huberman, 1994). Examples of second-level codes include general descriptions, peers, sexual relations, drugs, and alcohol. Third-level codes identify the specific attitudes, behaviors, and involvement in the second-level codes. For example, a participant describing his or her own use of drugs would be coded as self, drugs, use (@SLF %DRG %UZE). The macro facility of WordPerfect for the Macintosh was used to enter codes and move coded segments into summary documents (Reid, 1992).

Teams of two trained students coded interviews. Each interview was coded independently by one team member, then critiqued by the other team member. Disagreements in coding were discussed and resolved by both team members. Blind quality control checks three times per school by the principal investigator maintained inter-rater agreement at roughly the 90% level.

In this study, codes that related to participants' family relations, peer relations, activity involvement, future plans, and personal values were examined. In addition, all interviews were manually searched to obtain any other "hidden" information that seemed pertinent. Once the data were obtained, we conducted a content analysis to identify themes that emerged from the interviews. In addition, a quantitative comparison of responses to each theme was

calculated for farm and nonfarm respondents and for females and males. These quantitative comparisons, while not statistically tested, provide more objective measures to support the conclusions of our content analysis.

## Findings

We consider the findings within three organizing frameworks: family and peer involvement, future plans, and self-identity. In each framework, the quantitative information is presented, followed by an interpretive analysis and, in most cases, a segment of representative interview text.

### *Family and Peer Involvement*

Farm adolescents are more parent- than peer-oriented. These adolescents were much more likely to confide in their parents than were the nonfarm adolescents. Sixty-eight percent of the farm sample indicated that they were close to and confided in their parents more frequently than their peers, as opposed to 26% of the nonfarm sample. Likewise, 84% of the nonfarm sample described themselves as confiding in peers most frequently, as opposed to 52% of the farm sample. Approximately 10% of the farm and nonfarm samples each described themselves as confiding in both peers and parents with equal frequency, thus accounting for the disparity in percentages.

The farm participants were more likely to describe their sources of support as family members. They also described their family relationships as closer and more supportive than the nonfarm group. They often describe passing up social events to spend time with their families. For example, a recent female high school graduate described her relationship with her family in the following way:

I think I sort of saw myself different from other families or other people in [this community] just because of the things that I did versus the things that they did. They would go out and party whereas I would sit home on a Friday night and just be with my family. Family was important to me, whereas I think a lot of people didn't really see their family as an important part of their life. And since I've come out here so far away I've learned that my family is very important in my life, and it helps me a lot to know that they're back home and they support me in everything I do. I think in other kids' lives they don't realize that. So, I think the thing that has most influenced me as in living in [this community] is that I really had to stick to what I believed in.

A 10th grade boy described his family relationship:<sup>1</sup>

- I: How would you describe your family?  
 P: Very close. Everybody does everything together. Nobody does anything alone. Really close.  
 I: What do you think makes your family so strong and close?  
 P: My parents.  
 I: How do they help you?  
 P: They make us discuss everything. If we want to do something, we discuss it with the family first.

Within the farm sample, this was even more pronounced with males than females. Although both fit the above pattern, the males did so with an even greater frequency than females. Male farm participants were the most likely to confide in their parents and the least likely to confide in their peers (75% vs. 50%, respectively).

Nonfarm participants frequently described their patterns of confiding as just the opposite. They tended to confide most in their peers and less frequently in their parents. Additionally, there was less of a discrepancy between the males and females within the nonfarm sample. Typical of the nonfarm responses, this recently graduated female described her relationship with her family as follows:

- I: Who in the family do you confide in?  
 P: I never really confided in my family. Sometimes my parents, but not really. My sister's too much of a chance of "I'm going to blackmail you with this," and my other sister's too young. So it was my boyfriend and I really; we talked a lot. I didn't really confide in, as far as most personal things went, with my family.

The same pattern emerged for activity involvement. The farm sample had far less involvement in school and community activities than did the nonfarm sample. The activities in which they were involved tended to reflect their animal and farming interests, such as participating in 4-H groups or membership in the Future Farmers of America (FFA). The nonfarm participants were more frequently involved in sports and other school activities, such as student council. Fifty-two percent of the farm sample were involved in school and community activities as opposed to 78% of the nonfarm sample. Again, there was a discrepancy, in the proportion of females and males involved in outside activities within the farm sample. The

farm females did not differ greatly from their nonfarm counterparts with regard to activity involvement. The males in the farm group had far less involvement in activities than all other participants. Most frequent reasons given by the farm sample for not participating in activities were lack of time or interest. Another often cited reason was lack of transportation, as most farms are quite a distance from school or downtown areas.

This lack of peer activity involvement and reliance on family over peers may have an isolating effect on farm youth. However, this seems to be a sacrifice that they willingly make. This 11th-grade farm female describes her feelings about missing out on social activities:

- I: How do you feel about your involvement in the school social life?  
 P: I don't have very much involvement in it personally, but a lot of other people do. They're here every night for sports.  
 I: How do you feel about that? How do you feel about your involvement?  
 P: I like it because I have other things that I like to do at home with the farm and stuff.

Similarly, this 12th-grade male describes the effect of farming on his social life:

- I: Tell me about your farm.  
 S: Well I do most everything [on the farm] except when I'm in school.  
 I: Does that limit how much you can be involved in social activities at school?  
 S: Not really, because I'm not much of a person to be in with a group of people. I'm better off by myself, off being alone or in a small group. As I grew up, I was the only person around in the area so I learned to do things on my own.

Although these adolescents recognize that their social activities have been limited as a result of their farm upbringing, they seem to have adapted to this lifestyle and have found solitary interests, values, and a self-definition that compensates for their lack of involvement in social activities.

#### *Future Plans*

The majority of the nonfarm sample planned to immediately pursue a traditional 4-year higher education, whereas there was a variety of responses from the farm sample. Although clearly the minority (15% of the farm group), some farm children looked forward to taking over the farm

<sup>1</sup> I indicates interviewer and P indicates participant

after their parents retire. As one farm male stated when questioned about his future plans:

- I: Do you see that eventually you will be taking over the farm?  
 P: Yes, I do.  
 I: Certainly there are times when you're working on the farm when you think you don't have to really be concentrating on what you're doing. At those times what do you think about?  
 P: About things that can help us in farming. The idea of having a new barn or getting more modern.

However, there were participants in the farm sample who expressed a real concern over the future of the family farm. This male high school senior expressed the fear to which several others alluded:

- I: So it's pretty tough to keep a farm going here?  
 P: Anyplace it's tough. Yeah, a lot of farms going out around here.  
 I: So what do you think? Where do you think farming around here is going to go in, say, 10 years?  
 P: What farming? There ain't going to be no such thing as farming in 10 years. The government's gonna starve themselves. That's the way it is. Oh, we got a big surplus of this and a surplus of that. Forget it! We ain't got no surplus. Right now the milk companies are lowering prices to put the little farmer out of business and bringing the big farmer in business for mass quantity. It's working the other way around. The little farmer is digging deeper and it's putting the big farmer out. That's killing a lot of co-ops and plants. A lot of plants are going under.  
 I: Is that just around here or all over?  
 P: It's all over.  
 I: So you think that maybe in 10, 15 years that . . .  
 P: We'll have like a powdered cow or something. We'll have powdered everything.

For many of these families, the futures of their farms were uncertain, possibly accounting for the 52% of the farm participants planning on heading immediately to college (and a nonagricultural major) after graduation. They may very well fear the instability of a future career in farming and are instead preparing themselves for other

occupations. Only one female in the farm group planned on both attending college and returning to farming. A quarter of the farm sample were considering options such as entering a trade school or the military. There were no significant gender differences in plans within the farm and nonfarm group, with the exception of a slightly greater frequency of females planning to attend college than males within the farm sample. Taken together, it appears that very few of the farm adolescents plan on taking over their family farm as a future occupation.

### *Self-Identity*

The personal values of the farm participants were often directly attributed to farming. Half the sample described a sense of pride and responsibility that they experienced when working. They described themselves as being hard working and believing in a strong work ethic. In fact, many of them called themselves "workaholics" and were proud of their work-related accomplishments. Several of them stated that they felt these values were a result of being raised on a farm. This is in contrast to the nonfarm sample, where only 15% described themselves as hard working and responsible. This sense of pride and responsibility was also twice as likely to be true for farm males than farm females. The males in the farm sample were more likely than any other group to define themselves in terms of their work values and pride. Here is how a 10th-grade farm male described it:

- I: Tell me about the farm.  
 P: There's a lot of hard work.  
 I: What kind of chores do you do?  
 P: I milk cows, put the milking machines out, feed grain and hay to cows, and I do baling in the summer time and plowing. Just jobs that I can do. And whatever I can't do, Dad does.  
 I: So you help out a lot.  
 P: Yeah.  
 I: How do you think that has affected you by doing all the chores?  
 P: It makes me think I'm more responsible. He can let me out there and let me do what I think needs to be done.  
 I: And you know what to do and you'll do it yourself.  
 P: Yeah.

Another 12th-grade farm male describes it like this:

- I: You're obviously planning on staying with the farm and making that your career. What is it about farming that has value?

P: The challenge.

I: Okay, tell me about that.

P: The challenge of making it, keeping the debt collectors off the steps. Being able to see your accomplishments right away, that if you spend more time keeping the barn clean, then people come in and remark on that. Take pride in all you do and the way you do things.

For these participants, particularly the males, their farm upbringing served to foster a strong sense of determination and pride when pursuing and succeeding in their accomplishments. The nonfarm participants were much more likely to list values such as believing in school and valuing friends. A typical response from a nonfarm participant when probed about his or her values was much like this response from a 10th-grade female:

I value friendship, because without friends things would be hard. I value all of my friends. If I didn't have them, I don't think I would be the person that I am.

Another striking farming-related value was the deep feeling of closeness to nature and animals. Farm participants felt that this was largely the result of being raised on a farm. Several of the farm adolescents were planning careers in veterinary medicine and horticulture. There were no gender differences within the farm sample in their value of nature: Females and males were equally passionate when describing their feelings in this area. One female participant succinctly describes her relationship with nature and sense of environmental responsibility as it relates to farming:

I: What kind of influence has living [in this community] had on you?

P: I think that I care about nature more because I live on a farm and I've just grown up with it. I think I'm more responsible, well actually I am more responsible. Everything is more [influenced] from the farm. The community doesn't really have that big of an influence on me.

A male participant who recently left home to attend college explains how leaving farm animals has affected him:

I was just thinking about your asking what I'd like to do. I was thinking, I've always been interested in animals and living on a farm. I think it would be neat to have some animals of my own,

although I highly doubt that I will ever do it again. Large animals, not just dogs and cats. Definitely, growing up on a farm has influenced my thoughts about that. I always liked especially cows. I always liked them, been comfortable around them.

Their appreciation of nature and animals was a clear theme that emerged from the data. They were not directly questioned about their feelings regarding nature. Instead, these feelings and values were often the response to general probes exploring their perceptions of positive aspects of being raised in a rural community.

#### *Evaluating the Farm Life*

Most of the participants felt positive about being raised on a farm. They felt that they had close family relationships, closeness with animals, and a sense of accomplishment that was all a part of their farm upbringing. Approximately 60% described their relationship to farming in these positive terms. The only participants to describe their farming experience in purely negative terms were three of the young women in the farm sample. They did not elaborate on why they disliked their farming lifestyle so much, but their intensity was noticeable. Despite these individuals, the prevailing response regarding farming was a positive one. However, several of the participants (not the three women above) described disadvantages of being raised on a farm, such as being kept away from more enjoyable activities and being separated from nonfarm peers. One male high school graduate described his concerns in the following way:

I dislike that none of my friends have farms or live on farms or anything like that. So a lot of times I have to be home doing stuff when everybody else can just go out and do whatever they want to. Especially during the summer, nobody really knows just how much I do. A lot of times I feel stuck when I have to stay home and do stuff when everybody else is going somewhere.

A 12th-grade male voices a similar concern when asked if he ever resented having to work on a farm:

Especially when I was younger. When we first started, we were like six and seven and we did little things. It was nothing hard. It was just that we had to go out and do it. Instead of watching cartoons like your friends were on Saturday mornings, you're washing milking machines. I would think, "Come on, I want to do something else." There's even times now when I get . . . when I'm

in a bad mood or I can think of 100 things I'd rather be doing.

Along with the feelings of accomplishment, there is also some frustration over the responsibilities that they were "born" into. The difference in the lifestyles of farm adolescents has tended to alienate them from their non-farm peers and from the carefree lives they think these peers lead. One can understand how farm adolescents would develop closer ties to family than to peers, given the amount of time that they ultimately spend with each. This last quote from a male senior exemplifies both the positive and negative features of being raised on a farm and how it affects many of the areas discussed above:

- I: Do you think that there's a difference between the kind of people that farm families are as opposed to people who are employed by [the local large company]. Do you see similarities or differences in people?
- P: Well, I see both sometimes. They're similar in that people are interested in what other family members are doing and the differences really are the amount that people do together.
- I: Tell me about that.
- P: For my father and I, we're working together all the time and you start a different relationship from working than family. When you have somebody that's working at [the company] and their kids are going to school and working someplace else, they can't really get together on what they're doing.
- I: So you think that you and your Dad maybe have a special relationship because you know each other . . .
- P: We have your father-son relationship, then you have a working relationship where you're not really father and son, you're two people working together.
- I: And how do you like that?
- P: Well, we spend most of our time that way. As for myself, I received responsibilities early in life and it's like I grew up faster. I see things different than other students.
- I: Does that give you a feeling that you were trusted earlier to be responsible?
- P: Right.
- I: So how do you think that's affected you?
- P: Well, I got the trust of my parents and other relatives sooner, so I kind of got into my own decision making a lot sooner. Where

people in school, some of their parents are still making their major decisions for them. I grew up faster than everybody, not everybody but most everybody, and that's helped me and it's also hurt me.

- I: How?
- P: Well, it's hurt me in the ways that I have problems relating with other students my age and understanding how they're thinking because I kind of skipped that part. But it helped me in the fact that I can deal with teachers in an adult manner because I've been at that stage longer.
- I: Do you think overall that having this trust and responsibility earlier has had a good or bad influence on you?
- P: Overall I feel that there's more good come out of it than bad. I got out of it, a part of not being in with the gang of guys and going out all the time, but I also got my responsibility and I keep wanting more.

This senior recognizes both the advantages and the disadvantages to farming. From his perspective, farming is a real trade-off: You get the respect and responsibility that often adolescents have to fight for, but you also lose some of the enjoyment and protection that adolescents are usually entitled to. You get the rapport and a close relationship with your parents, but in return lose much of the camaraderie of peer friendships.

#### Closing Thoughts: Education for What?

The picture of farm adolescents that emerges from this study is unique from other rural adolescents in important ways. The inferences we draw are meant to identify some of the many characteristics of a distinctive population and should not be considered definitive.

First, farm adolescents seem to share a close relationship with their parents and other family members in a more frequent and impacting way than their nonfarm peers. These findings are consistent with the earlier findings of Floyd and South (1972) and Larson (1974) that farm adolescents are more parent- than peer-oriented. Second, they appear less involved in peer activities and seem more isolated from their peers than nonfarm adolescents. Third, they appear less likely to plan on attending a 4-year college than their nonfarm peers. They also seem unlikely to plan on continuing with farming as an occupation, a change from the past when adolescents raised on farms frequently planned on taking over the family farm in their parent's retirement. Fourth, they describe a self-identity and personal value system that accentuates hard work, independence, and responsibility. They also attach considerable

value to nature, animals, and the outdoors. This type of response was unique to the farm participants in our matched sample, but was found more generally among rural adolescents by Hedlund (1993) and Vollmer and Hedlund (1994). Fifth, they generally appreciate their experience of being raised on a farm and see the farm experience as being responsible for instilling many of their strong personal values.

Finally, there is an important gender difference within the farm sample. The males were the most likely to confide in family, the least likely to confide in friends, and the least likely to participate in school and community activities. They were also the most likely to describe themselves as having a strong work ethic. Although these patterns clearly emerged in both the males and the females within the farm sample, the intensity expressed by males was greater.

We can learn from these young people. In many ways, the young farm people in our study embody the qualities of Wendell Berry's agrarian philosophy (Thompson & Kutach, 1990). Berry is a social critic as well as an agrarian philosopher. He equates the crisis in American agriculture with a deficiency of our national character.

For an individual, Berry argues that the very stuff of being a person and realizing one's humanity is ecologically constructed from geographical space and community. "The self is defined by its association with others within a geographical space. It is both the rootedness in and the sharedness of a particular place which is the medium through which personhood is constructed" (Snauwaert, 1990, p. 119). It is how the sense of place is mediated by the community that shapes who we are individually. We can become irresponsible, environmentally exploitive, and socially violent persons, as well as responsible, compassionate, and creative persons. It depends on values we communally construct and how we relate to our geographic place and its inhabitants. Education plays a large role in this process.

We borrow from Thompson and Kutach (1990) to capture Berry's argument:

Health is the supreme value in Berry's philosophy. . . . Health is maintenance of proper connections. Proper connections in this regard can be connection between a farmer and his crops or livestock, between a man and wife, or a factory worker and his product. Being connected with the earth means one is committed to protecting the land from undue damage . . . as well as a commitment to taking food and shade from the land in order to accommodate human life. It is an organic relationship. (p. 140)

Contrary to most western philosophers, Berry proposes a circular conception of time, which places value in the process of doing and in the preservation of place.

Adherents to a philosophy of linear time, Berry believes, think of actions as means to future ends. The question "What is this good for?" arises about any proposed action, and the question can only be answered by reference to some good not yet at hand. . . . By thinking of something as worth something else, its value is depreciated, and there is nothing of sacred worth. . . . The values that Berry believes are slighted by the linear time vision are the ones he finds most valuable, the value of doing good work, respect for nature, maintaining and promoting health, respect for death, and most importantly, respect for the continuance of life. . . . Clearly, if time is not linear and life is not a journey, there is no place one needs to go. Instead, one should educate oneself about the local land and community . . . Knowledge of the local geography, geology, wildlife, and human community becomes essential for connection to the land and one's possible success in living. . . . What is important about respecting the local and present is that it is a specific and tangible tie to the earth. What Berry sees as problematic is an American culture which has no ties to the land. (p. 141)

These same sentiments are echoed by Orr (1994) in his penetrating critique of the enterprise of education and the state of American culture. He argues that schools are good at developing cleverness—how to do things, a preoccupation with the short-term, and fragmentation of the whole. Intelligence—an integrative viewpoint, consideration of the long-term, and the determination to ask "Why?"—is sadly lacking in the repetitive efforts to reform schools. Among the changes in schooling Orr calls for are breaking down the walls of schools and putting students in the outdoors, and drawing people of demonstrated ecological intelligence, courage, and creativity into education as role models and mentors. He specifically mentions farmers and ranchers among desirable mentors.

The farm adolescents in our study evidenced a sense of self and a set of personal values much like those espoused by Wendell Berry. They seem to have escaped many of the undesirable outcomes of schooling that Orr decries. Yet they are generally at the bottom of the peer-defined social structure of their high schools. We would venture to guess that neither are they particularly valued by the teachers in their schools.

If we truly value what these farm adolescents represent in our society, what can rural education do to foster its

development? Snauwaert (1990) offers suggestions for a closer integration of the community and the school. Thompson and Kutach (1990) present modest proposals for literary, historical, social science, and science curricular changes that incorporate geographical place, ecology, community, and ethics. Forecasts for the future of agricultural education (National Research Council, 1988) incorporate some useful ideas, such as agricultural literacy for all and community involvement in education. But sadly, the very first sentence of *Understanding agriculture: New dimensions for education* belies the predominant bias: "The committee's vision of what agricultural education is and should become at the secondary level *if a competitive agricultural industry is to survive* in this country . . ." (p. 1, italics added).

Rural education can be in a leadership position in restoring a sane society, if we just can develop a vision and resist the call to contribute to corporate competitiveness. Orr (1994, p. 52) has it close to right when he says "We can attempt to teach the things that the earth would teach us: silence, humility, holiness, connectedness, courtesy, beauty, celebration, giving, restoration, obligation, wildness." Perhaps we should also listen closely to those few kids in our schools that still come from a family farm.

#### References

- Beker, J., Eskovitz, Z., & Guttman, E. (1987). Economic considerations in supporting preventive services for troubled youth: The case of adolescents on the farm. *Children and Youth Services Review, 9*, 187-206.
- Eberts, P. R. (1984). *Socioeconomic trends in rural New York state: Toward the 21st century*. Albany, NY: New York State Legislative Commission on Rural Resources.
- Floyd, H. H., & South, D. R. (1972). Dilemma of youth: The choice of parents or peers as a frame of reference for behavior. *Journal of Marriage and the Family, 34*, 627-634.
- Hedlund, D. E., & Berkowitz, A. D. (1979). The incidence of social-psychological stress in farm families. *International Journal of Sociology of the Family, 2*, 233-245.
- Hedlund, D. E. (1993). Listening to rural adolescents: Views on the rural community and the importance of adult interactions. *Journal of Research in Rural Education, 9*, 150-159.
- Larson, L. E. (1974). An examination of the salience hierarchy during adolescence: The influence of the family. *Adolescence, 9*, 317-332.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Newbury Park, CA: Sage.
- National Research Council. (1988). *Understanding agriculture: New directions for education*. Washington, DC: National Academy Press.
- Orr, D. W. (1994). *Earth in mind: On education, environment, and the human prospect*. Washington, DC: Island Press.
- Peeks, B. (1989). Farm families in crisis: The school counselor's role. *The School Counselor, 36*, 384-388.
- Reid, A. O. (1992). Computer management strategies. In B. F. Crabtree & W. L. Miller (Eds.), *Doing qualitative research* (pp. 125-145). Newbury Park, CA: Sage.
- Snauwaert, D. T. (1990). Wendell Berry, liberalism, and democratic theory: Implications for the rural school. *Peabody Journal of Education, 67*(4), 118-130.
- Thompson, P. B., & Kutach, D. N. (1990). Agricultural ethics in rural education. *Peabody Journal of Education, 67*(4), 131-153.
- Van Hook, M. P. (1990). Impact of the farm crisis on youths: School responses. *Social Work in Education, 12*(3), 166-176.
- Vollmer, M. A., & Hedlund, D. E. (1994, October). *Change in the perceptions of rural adolescents after exposure to the outside world*. Paper presented at the National Rural Education Association Research Forum, Tuscaloosa, AL.
- Weigal, R. R., & Weigal, D. J. (1987). Identifying stressors and coping strategies in two generation farm families. *Family Relations, 36*, 391-395.
- Wright, S. E., & Rosenblatt, P. C. (1987). Isolation and farm loss: Why neighbors may not be supportive. *Family Relations, 36*, 391-395.