

The Influence of Parental Socialization Factors on Family Farming Plans of Preadolescent Children: An Exploratory Analysis

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Previous scholarship on farm families emphasizes the importance of socializing children to become farmers. This study is the first to focus on the parental socialization factors that are associated with preadolescent children's attachment to, and plans to take over, the family farm. Forty-seven 7- to 12-year-old children and their farming parents responded to a survey regarding the child's involvement in farm work, the father's wishes concerning the child's future in farming, the children's perceptions of their relationship with parents, and the children's perceptions of parents' worry about the farm. Three of these four factors were associated with the children's plans to farm. Recommendations are provided to rural educators for supporting farm children and their families.

In every culture and time, adults must prepare children for adult functioning. This preparation occurs formally and informally in an ecologically interdependent system that includes schools and parents (Seidman, 1988; Vincent & Trickett, 1984). Like other parents, farm parents are responsible for launching their offspring, although often with a twist that is uncommon in our modern world. Because most farmers grow up on family farms, farming parents must prepare at least one child to take over the family business in adulthood. In their extensive study of Iowa farm families, Elder and Conger (2000) found that many farm children's strong family orientation is constructed within the context of frequent and meaningful work activities on the farm, most often performed jointly with parents. We argue that children's plans to farm (and by extension, their eventual decisions regarding taking over the farm as adults) are rooted in the activities and familial relationships of childhood. Rural educators, as partners in the success of rural communities, must understand the roots of farm children's decisions for the future.

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Farmers typically inherit their land or marry a person who brings land to the marriage, so farm families often depend on at least one child to take over the family business when the older generation retires (Elder & Conger, 2000; Salamon, 1992; Salamon, Gengenbacher, & Penas, 1986). The first phase in the intergenerational succession cycle of farm families is the "socialization of all children to become farmers" (Salamon & O'Reilly, 1979, p. 531). This socialization occurs in the interaction of work and family contexts on the farm and creates a unique dynamic where family activities and parent-child relationships may affect the future of the family enterprise. Although intensive economic, social, and demographic fluctuations have occurred over the past 25 years (Hobbs, 1994), farming and rural life in general does not appeal to youth as much as it did in previous generations (Strange, 1988). Many rural educational systems are experiencing crises (Beeson & Strange, 2003), and youth retention has become a pressing problem for rural communities, schools, and farm families in particular (Beale, 2000; D'Amico, Matthes, Sankar, Merchant, & Zurtia, 1996; Gibbs, 1994). It is a complex problem that inspires mixed feelings for both parents and children.

In the context of modern agricultural markets and trends toward farm corporatization, many farmers do not want their children to suffer the loss and stress they have seen in their communities. Others are eager to have a child take over a business that is as much an intergenerational heirloom as a source of revenue (Salamon, 1980). Many farm parents feel torn between these conflicting desires. For youth, the

dilemma often is seen as family, community, and tradition versus higher education, good-paying jobs, and modernity (Esterman & Hedlund, 1995; Gibbs, 1994; Hektner, 1995; Hobbs, 1994).

The youth retention literature has paid particular attention to outcomes related to postsecondary education and community attachment, usually through the assessment of the attitudes and predispositions of adolescents and young adults (Gibbs, 1994; McGrath, Swisher, & Elder, 2001; Smith, Beaulieu, & Seraphine, 1995). However, we were unable to locate research assessing preadolescent youths—children who are in the process of developing social ties, community attachments, and academic goals. While adolescence is a crucial phase, both with respect to decisions about future plans and in terms of parent-child relationships, some researchers have called on the academic community to examine younger farm children (e.g., Van Hook, 1990). This seems important in a time of upheaval in rural communities, especially given that preadolescent children are often more vulnerable to family distress than are adolescents (Smets & Hartup, 1988). Beyond the developmental arguments, it is likely that eventual decisions (which may come after high-school graduation because most farms are not completely “passed on” until the operating generation reaches retirement) are based on a gradual process with deep roots in childhood. In descriptions of the developmental cycle of land transfer, Salamon and colleagues have written about the importance of the socialization of children to become farmers (Salamon & O’Reilly, 1979) and the “process begun in early childhood that develops a farm commitment in the heir and his nonfarm siblings” (Salamon et al., 1986, p. 24).

The Decision to Farm: Context, Process, and Influences

It is likely that eventual retention decisions emerge from the context of a youth’s activities, education, and parent-child relationships, and that these “are less matters of individual choice than the product of the family socialization process” (Salamon & O’Reilly, 1979). Those decisions are likely to be made, abandoned, remade, and altered at various times throughout the course of childhood, adolescence, and young adulthood, but always in the context of current activities and relationships. The perspective of Lev Vygotsky is useful for understanding how thinking about future decisions is embedded in activities and relationships. Vygotsky argued that “[s]ocial relationships or relationships among people genetically underlie all higher functions and their relationships” (Vygotsky, 1981, p. 163). Farm children’s plans and decisions are examples of higher functions that are based on social relationships and activities.

The process of “guided participation” (Rogoff, 1990) may provide a connection between everyday activities or practices, social relationships, and children’s decision mak-

ing. In guided participation, children (novices) take part in various culturally valued activities with the guidance of parents or more skilled others (experts such as teachers). These activities usually involve shared focus, problem solving, and mutual understanding. “Children come to share the world view of their community through the arrangements and interactions in which they are involved, whether or not such arrangements are intended to instruct them” (Rogoff, 1990, p. 98).

“Mutual understanding” is a core component of Rogoff’s conception of guided participation. The “mutual understanding [that] is achieved between people in communication . . . has been termed ‘intersubjectivity,’ emphasizing that understanding happens between people” and not within the mind of one or the other (Rogoff, 1990, p. 67). Intersubjectivity or mutual understanding provides the conceptual link of activities and relationships to planning and decision making. Within activities and relationships, children and their parents create the intersubjectivity that serves as a backdrop for children’s planning and decision making.

Examples of guided participation in the life of any child might occur many times throughout a typical day. An example from another culture highlights the process of guided participation. Many Mayan children learn to use large, sharp machetes at a young age through a process of watching their parents and others use the knives and then having closely supervised sessions where the children practice the skills they have observed (Rogoff, 1990). In an example closer to home, young American children often learn to cook simple foods for themselves by helping their parents in larger and larger increments until they are able to do it alone. While these are simple examples, Rogoff argues that guided participation facilitates the development of advanced understanding and management of the intellectual and practical problems of a child’s community.

The Present Study

We are unaware of other studies that have examined precursors of intergenerational farm succession in preadolescent children’s lives. We are interested in how children’s plans to farm may be formed in the context of their lives outside of school, specifically through apprenticeship in work activities and the interpersonal context of parent-child relationships. Children who participate in labor may have deeper familiarity with and understanding of the work of the farm. An example of this process might include caring for an animal: first, under the supervision of parents; then, in partnership with the parent; and finally under the child’s direct supervision. Activities such as these may lead to a deeper attachment to the farm as well as a concrete decision to farm in the future. Children who report more positive relationships with their parents are more likely to experience frequent episodes

of intersubjectivity or mutual understanding. Such experiences might influence how children think about the family business and subsequently might affect plans to farm in the future. Children's relationships with fathers and mothers may be related in distinct ways to their plans to farm in the future. This study examined two aspects of guided participation hypothesized to affect preadolescent farm children's plans about farming: (a) children's participation in farm and household labor activities, and (b) perceived quality of parent-child relationships. Additionally, we explored two other factors that may affect children's plans: (a) children's perceptions of their parents' worry about the farm and (b) fathers' desire for their children to take over the farm.

Children's Work

Active participation in work is associated with positive developmental outcomes (Goodnow, 1988; Rachman, 1979), particularly when it is embedded in a supportive family context (McHale, Bartko, Crouter, & Perry-Jenkins, 1990). Work is particularly important in the socialization of farm children (Elder & Conger, 2000; Garkovich, Bokemeier, & Foote, 1995) and is a source of pride for many of them (Esterman & Hedlund, 1995). Family-embedded work may be important in the lives of farm youth in part because farm youth tend to be less involved in extracurricular activities outside the home compared to nonfarm adolescents (Esterman & Hedlund, 1995). On the farm, even young children are often assigned some work (Esterman & Hedlund, 1995). Farm children's work matters; it is important for the functioning of the enterprise and is often a collective effort with the father and other family members (Elder & Conger, 2000; Esterman & Hedlund, 1995; Salamon, 1992). One adolescent boy talked about how working on his family farm "is a lot of hard work" that has helped him feel more responsible (Esterman & Hedlund, 1995, p. 87). Paid work (on and off the farm) may be more significant to adolescents than the everyday drudgery of unpaid chores because it demands maturity, responsibility, and some independent decision making (Elder & Conger, 2000).

We propose that independent paid labor is less common for preadolescent children than unpaid work. Further, we propose that unpaid work represents a significant maturity demand in the context of parents' dependence on children's contributions. That is, because their unpaid labor matters (parents need them to pitch in), unpaid work is important in the life of these children. In this sense, preadolescent children's work on the farm and around the house (paid or unpaid) is a significant part of their development and may influence their plans. We expect that children's plans will be associated with the number of hours they spend in farm and housework such that those who work more hours will be more likely to aspire to farming.

Parent-Child Relationships

As Vygotskian scholars have argued, "[i]n order to understand the individual, it is necessary to understand the social relations in which the individual exists" (Wertsch, 1991, pp. 25-26). We propose that eventual decisions to farm are associated with the quality of children's relationships with their parents. Although a prominent developmental task for American children in middle childhood is the attainment of independence and self-regulation, parents are one of the most important influences in their lives (Furman & Buhrmester, 1992). Especially for children coping with normative and non-normative stress (such as the social and economic effects of the farm crisis), parents are an important source of social support (Collins, Harris, & Susman, 1995; Esterman & Hedlund, 1995). Being able to talk with someone about problems helps children cope successfully (Dubow & Tisak, 1989; Hirsch & Rapkin, 1987); in one study, 68% of farm youths reported confiding in their parents more than in their peers. Authors of this study concluded that "farm adolescents are more parent-oriented than peer-oriented" (Esterman & Hedlund, 1995, p. 85) compared to nonfarm rural adolescents.

Some have argued that farm mothers have a central role in socializing their children to farm or not farm (Elder & Conger, 2000; Salamon & Keim, 1979). In the past, consideration of maternal influence has primarily been studied in regard to adolescent and adult children. It remains to be seen whether or not younger children report this influence from their own perspective. Mothers may act as a bridge to the outside, nonfarm world for their preadolescent children; thus, maternal influence on farming aspirations, as well as retention more generally, may have its roots in these early relationships.

While mothers may have some special influence on farm children's decisions, fathers are also likely to influence their children's lives in important ways. A growing body of recent research indicates that the behaviors and characteristics of fathers matter for children in areas as diverse as better life skills, higher social and cognitive functioning, and lower levels of delinquency and behavior problems at school (Pleck, 1997). Longitudinal studies (Elder, Conger, Foster, & Ardel, 1992) and large-sample panel studies (Yeung, Duncan, & Hill, 1999) support a relationship between aspects of father-child interactions and children's later success in adulthood.

In general, children's aspirations are influenced by the support and encouragement they experience from their parents (Hossler, Schmit, & Vesper, 1999). Among farm children who work closely with their parents, positive parent-child relationships are likely to foster positive attitudes about a future in farming (Elder & Conger, 2000). In the present study, we examined three indices of the quality of

parent-child relationships from the preadolescent child's perspective: (a) global "getting along," (b) talking about topics important to the child, and (c) mutual participation in activities that the child enjoys. We expected that children's plans to farm would be associated with the quality of their parent-child relationships, so that those who report more positive relationships would be more likely to plan to farm.

Perceived Parental Worry and Enjoyment

Many farm parents try to protect their children from knowledge about family farm economic distress (Lempers, Clark-Lempers, & Simons, 1989). Most are likely to have limited success in this charade because family economic stress (as reported by parents) does not go unnoticed (Esterman & Hedlund, 1995) and is associated with adolescent depression (Clark-Lempers, Lempers, & Netusil, 1990). Children who believe that their parents are worried often respond by trying to help. Some rural adolescents manifest their distress through more responsible behavior as they try to help their families (Van Hook, 1990). In fact, 71% of the children in Van Hook's sample said they tried to help their families as a way to cope with the farm crisis. We expected that children who perceive their parents as more worried would be more likely to plan to farm in the future.

Fathers' Desires for Children to Farm

It is important to gauge the impact of parental desire on children's plans to farm because, as Salamon (1992, p. 51) wrote, "[f]amilies that want their children to carry on the family business consciously go about inculcating them in farm lore and practices." Fathers are especially influential in midwestern farm families, particularly with respect to farm transmission (Salamon, 1992) and aspects of adolescents' well-being (Elder & Conger, 2000). We expected that children's plans would be associated with their fathers' wishes in that fathers who desire their children to farm are more likely to have children who plan to do so.

Method

Participants

Participating families were members of a marketing research panel maintained by the Farm Research Institute (FRI). Founded in 1946, FRI is a private for-profit consulting company that provides agricultural survey research services to universities, nonprofit organizations, and governmental agencies. The panel includes approximately 1,700 farm families in Indiana, Illinois, Iowa, and Wisconsin. Members are recruited through agricultural publication mailing lists and referrals, and many have been panel members for many years. In a typical year, panel members are mailed five two-

to four-page surveys. Demographic information is collected each year (e.g., value of products sold, number of acres operated, crop and livestock operations, type of ownership structure, age of primary operator, children at home, future plans). Panel members are compensated through a system of points that can be redeemed for tools or items from a gift catalog. While the panel serves as the population of interest, the present study focuses on a subset with children between age 7 and age 12 ($n = 47$). These participants were recruited by a random call procedure to eligible panel members (those with children between 7 and 12). Fifty of the first 65 panel members contacted agreed to participate (77% participation rate). The 15 who refused cited reasons such as recent divorce and lack of time (due to unexpected problems on the farm or off-farm jobs). Of those 50, 47 returned the survey (a 95% return rate); 44 provided complete data. The 3 who did not return the survey cited unexpected time demands as the reason they did not participate.

Instruments

This study is part of a larger research project on operator characteristics, parenting, parent-child relationships, future plans, and stresses (Wiley, Bogg, & Ho, 2001). A subset of data was analyzed and, in the interest of brevity, the larger project is not described here. Relevant questions from two measures, the farm operator survey and the youth survey, will be described below. An expert panel of three university researchers and three farm couples reviewed all measures for content and face validity. The edited farm operator survey was piloted with a focus group of six farmers; three farm preadolescents served in a focus group to review the youth survey. Their feedback was used to further refine the constructs and questions for the population. The two-page farm operator survey asked about farm demographics and operator characteristics, plans, and stresses. Families were instructed to have the primary operator, the person most responsible for running the farm and making operational decisions, fill out this survey. In all cases, the father/husband chose to respond. The focal preadolescent child in the family was asked to complete the youth survey. A separate envelope was provided for the youth survey. Parents were asked to allow their children to fill out the youth survey privately and seal it in the return envelope without parental inspection. The study questions were organized by the variables of interest.

Preadolescent plans to farm. Youth were asked "What do you think you would like to do after high school?" Respondents could check all that applied from a list that included "farm," "college," and "I don't know yet." They could also write in their own responses in a blank line beside "other."

Children's work. Reported work around the house and the farm was assessed using a 9-point scale ranging from "less than 1 hour per day" to "more than 7 hours per day."

House and farm work were assessed separately so that analyses could determine if there is any relevant difference between the effects of house and farm work. Two separate items assessed in-season and off-season farm work because there may be a cyclic difference in the need for such labor. We did not ask about off-farm paid labor given that most children under the age of 13 are unlikely to be engaged in paid employment outside the home or farm.

Parent-child relationship. Perceived quality of parent-child relationships was assessed by asking children to indicate the frequency of three indicators: “How often do you get along with X?,” “How often do you talk about things that are important to you with X?,” and “How often do you do things together with X that you enjoy?” Questions were asked separately for father and mother, and items for each relationship were rated on a 3-point scale (with 1 being never, 2 a little, and 3 a lot).

Perceived parental worry and enjoyment. Children were asked to provide their impressions of parental farm stress by answering yes or no to “Are your parents stressed about the farm?”

Fathers' desires for children to farm. Operators (all fathers) were asked, “How important is it for you that your child [the focal one answering our youth survey] take over the farm later?” Response options were “not important at all,” “somewhat important,” and “very important.”

Additional data gathered. Demographic information was also gathered such as the gender, age, and grade of the focal child. Operators were asked to indicate the average number of hours per week they worked off-farm, if any, and the number of hours worked on- and off-farm by their spouse. As a proxy for family income (a sensitive question that farming families are often reluctant to answer), we used FRI records about the value of products sold from the farm in the previous year. FRI provided the number of acres operated as a proxy for the size of the farming operation. The company also collects some limited information related to farm type by asking members to indicate the source of their major income from the following choices: field crops, livestock, dairy, poultry, fruits and vegetables, custom farm work, nonfarm work, and other farm operations. While respondents could only choose one category and these categories are not mutually exclusive, the data do give some sense of the primary activities that are necessary for farm functioning. We combined livestock, dairy, and poultry into one variable to allow general comparison of these farms with their potentially greater needs for children's labor with operations that were primarily field-crop farms.

Procedure

A database query performed by FRI generated a list of panel members with children in the desired age range. FRI contacted these members by phone or e-mail, and assured

confidentiality of information with a letter. Upon consent, they were mailed the two surveys described above. If there was more than one preadolescent child in the family, parents were asked to choose one as the “focal child” for purposes of this study and to answer all questions about that child only. Instructions were that the primary operator of the farm should fill out the farm operator survey instrument. In all cases, the father chose to answer this portion of the survey. Two postage-paid return envelopes were provided. Parents were asked to allow their children to fill out the youth survey privately and seal it in one return envelope without parental inspection. Reminder cards were mailed if surveys were not returned in 3 weeks; if a response was still not forthcoming, FRI called to remind the panel member.

Data Analysis

Preliminary analyses were planned to look at descriptive characteristics and the interrelationships of child gender, farm type, mother and father hours worked off the farm, parent-child relationships, children's work hours, and children's plans to farm. These variables are described below. An overall logistic regression analysis was used to look at all factors simultaneously and determine the best predictors of children's plans to farm.

Preadolescent plans to farm. This variable was converted to a dichotomy for the purpose of analysis. If youth checked “farming” in answer to “What do you think you would like to do after high school?,” they were credited with “yes.” If they did not, they were assigned “no.” They could check more than one of several choices, and if farming was one of the checked responses, children were assigned “yes.”

Children's work. Percentages for reported work-hour categories were computed to describe children's reports of their weekly work patterns on and off the farm during the in- and off-seasons and around the house. Chi-square tests were utilized to test for gender differences in response distributions. Point-biserial correlations were used to examine the association between the dichotomous plans-to-farm variable and the quantitative hours-worked variable.

Parent-child relationships. The response scale for the parent-child relationship variables is ordinal. There were three possible categories; however, respondents only used two of those categories, so the variable is effectively dichotomous for purpose of analysis. To see if parent gender was associated with children's perceptions of their parent-child relationships, we tested the difference in response category proportions for each relationship variable using *Z*-tests. We used the same analytic strategy to see if gender of child mattered in children's perceptions of their parent-child relationships. The relationships between the parent-child relationship binary variables and children's plans to farm (also binary) were evaluated using chi-square tests. Point-biserial correlations were used to examine the association

between the dichotomous parent-child relationship variables and the quantitative hours-worked variable.

Perceived parental worry and enjoyment. The association between perceived parental worry and children's plans to farm, both dichotomous variables, was evaluated by the chi-square test.

Fathers' desires for children to farm. Although this variable had three response categories, only 6.4% of fathers responded that it was "very important" for their child to farm later. Consequently, so these responses were combined with "somewhat important," creating a dichotomous variable. The association between these two dichotomous variables (fathers' desires and children's plans to farm) was evaluated using a chi-square test.

Best predictor of plans to farm. A logistic regression procedure was used because the outcome variable, "plans to farm," is binary.

Results

For the youth survey, there were 43% ($n = 20$) female and 57% male respondents ($n = 27$). Nearly 27% of the children indicated that they planned to farm after high school. There were no differences between boys and girls on this response, and type of farm was not associated with children's plans to farm. On the farm operator survey, fathers reported an average of 50.2 hours per week of on-farm work ($SD = 24.4$, range 4-120), compared to an average of 15.17 off-farm work hours ($SD = 18.34$, range 0-50). Fathers reported that mothers worked on the farm 12.9 hours per week ($SD = 16.9$, range 0-70) and off the farm 29.11 hours per week ($SD = 17.71$, range 0-60). Of the farm families in this sample, 49% reported that the majority of their income came from field crops, whereas 40% claimed livestock as their primary source of income.

Children's Work

There were no significant correlations between children's hours working around the house and on the farm (during or not during the farm season) and their parents' hours working on and off the farm. Farm type did not make a significant difference in the amount of children's farm work or housework either during or not during the farm season.

Sixty-eight percent of the children reported working on the farm at least 2 hours per day during the farm season. Nearly three quarters reported working 1 or fewer hours per day on the farm during the off-season. When asked about working around the house, only 21% of children reported doing less than 1 hour per day, 40% reported regularly spending at least 1 hour per day, and another 23% said they work around the house on average of 3 hours per day. While boys estimated their hours slightly higher in all categories, there were no significant differences in girls' and boys' estimation

of how much they work. Those children who worked more on the farm off-season were more likely to plan to farm after high school ($r = .28$, $p < .05$). Those who worked around the house more also were more likely to plan to farm ($r = .36$, $p < .01$). Finally, there was a tendency for those who worked more on the farm in season to plan to farm when they were older ($r = .27$, $p < .06$).

Parent-Child Relationships

For each parent-child relationship variable, the response scale was 0 ("never"), 1 ("a little"), and 2 ("a lot"). Over 90% of the surveyed children reported they get along "a lot" with their parents. There was no difference between relationship with mother and relationship with father. No correlation between a parent-child relationship variable and children's hours worked per week was statistically significant. Three correlations between a parent-child relationship variable and parents' hours worked per week were significant. Youth reports of getting along with their fathers correlated negatively with fathers' off-farm work hours ($r = -0.33$, $p < .03$) and positively with fathers' off-farm work hours ($r = 0.32$, $p < .03$). Youth reports of doing enjoyable things with their mothers were correlated with mothers' off-farm work hours ($r = 0.35$, $p < .03$).

Half of the children reported spending "a lot" of time talking with their parents about important things. About 57% of children reported talking about important things with their mom "a lot," which was not significantly greater than the 47% who reported such talking "a lot" with their dad.

Children also were asked how much time they spent doing things with their parents that they enjoy. About 73% of them reported doing enjoyable things "a lot" with their mom, which is not significantly different from the 66% who reported doing enjoyable things "a lot" with their dad. Nor were significant differences obtained between girls' and boys' reports of their relationships with parents.

Tests of association revealed significant relationships between children's plans to farm after high school and reports of doing things that they enjoy with their fathers ($\chi^2 = 6.59$, $p < .01$), and for talking about things that are important to them with their mothers ($\chi^2 = 3.38$, $p < .06$).

Perceived Parental Worry and Enjoyment

While over 95% of the children thought their parents enjoy farming, about 26% ($n = 12$ of total 47) reported that their parents were worried about the farm. Of children who reported that their parents were not worried about the farm, only 20% planned to farm. In contrast, when children reported their parents were worried about the farm, 50% planned to farm. Youth who perceived their parents to be worried about the farm were more likely to plan to farm later ($\chi^2 = 4.02$, $p < .05$).

Table 1
Best Predictors of Children's Plans to Farm

Variable	Beta	S.E.	Wald Test	odds ratio
Hours worked around the house	0.62	0.27	5.17*	1.85
Talking with Mom	2.41	1.09	4.89*	11.10
Perceived parental worry about farm	2.13	1.02	4.39*	8.46

Cox & Snell $R^2 = .29$

Nagelkerke $R^2 = .42$

* $p < .05$.

Fathers' Desires for Children to Farm

About half of the fathers (49%) thought it was important (42.6% for “somewhat important” and 6.4% for “very important”) that the child who responded to the youth survey go into farming when he or she is older. Fathers’ responses were not associated with the gender of the child ($\chi^2 = 2.71, p = .10$). When fathers desired their children to farm, 54% of children planned to farm later; the figure was 46% where fathers felt it was not important for children to farm (a difference that was not statistically significantly). Youths’ plans to farm were not associated with their fathers’ wishes for them to farm ($\chi^2 = 0.06, p = .81$).

Best Predictors of Children's Plans to Farm

Stepwise logistic regression was employed to predict children’s intention to farm after high school using the variables that were significantly associated with plans to farm: talking with mother, doing things with father, hours worked on the farm in-season, hours worked on the farm off-season, hours worked around the house, and perceived parental worry about the farm. In the final model, talking with mother, hours worked around the house, and the child’s perception of parental worry about the farm emerged as significant predictors (see Table 1).

Discussion

We found that a minority of farm preadolescents plan to farm after high school and, further, we identified a set of factors within the home context that influences those early plans.

Many farm families are highly conflicted about their children’s involvement in the uncertain agriculture business, so concern about the future of the family farm as a way of life is warranted. Without a strong commitment to land succession on the part of the future generation, most family farms will not survive. We have argued, based on

developmental principles, that such a commitment is rooted earlier in childhood than most past studies have considered. The sociocultural notion of guided participation provides a process for how members of the younger generation decide whether or not to farm (Rogoff, 1990). The genesis of such an important life decision is in the early activities, education, and relationships of farm children. Rural educators may consider ways to support farm children and parents during the critical foundational time for these decisions.

Children's Work

While there was a great deal of variation, a sizable proportion of preadolescent children in this study estimated their involvement in the work of the family farm to be quite extensive. For example, during the farm planting or harvest season, more than two thirds of the youth reported working on the farm at least 2 hours per day, and nearly as many reported at least 1 hour of housework per day. These estimates are higher than those of the older adolescents in the Elder and Conger (2000) study, where the youngest averaged less than 1.5 hours of work per day. While it may seem counterintuitive that younger children work more than older adolescents, perhaps it should not be surprising. Elder and Conger (2000) also noted that younger adolescents in their study reported more work around the farm than older adolescents, a finding they attributed to the latter having off-farm jobs and more extensive school and community activities. While it is possible that younger children cannot provide precise accounts of their working time, it is not necessary for their estimates to be completely accurate given the circumspection of our present interpretations. It may be that the findings are really more about children’s perceived work involvement rather than the precise number of hours they actually work.

In this sample, those children who report working more are more likely to plan to farm later; however, the findings also reveal a somewhat more complicated story. There was a marginal association of farm work in-season with plans to

farm and a significant association of farm work off-season with plans to farm. However, the strongest association was with “work around the house.” Somewhat surprisingly, hours worked around the house was one of the three best predictors of children’s plans to farm using the logistic regression procedure. And this was true regardless of gender. Housework is generally characterized as drudgery and is not associated with as many positive outcomes as other types of work (Elder & Conger, 2000). This type of labor is likely to occur year round and is performed in addition to any work associated with the agricultural activity of the farm. Most children reported between 1 and 3 hours per day, making this work a stable part of the way they spent their nonschool hours each day. The common activities are likely to include laundry, vacuuming, cooking, cleaning up, and so forth.

The ubiquitous nature of such work (relative to the more sporadic nature of seasonal work) might contribute to its importance for children’s later plans, even though these plans may be more intensive. It also may be that most able family members are pressed into contributing during the busy season, so farm work in-season (and, to a lesser extent, off-season) may be a less sensitive barometer of children’s interest and commitment than work around the house. Elder and Conger (2000) suggest that older children who do more work around the house and not as much paid off-farm labor are more likely to continue in farming, but they are less mature, and more dependent on their parents. It is possible that housework has a different, more positive function with these younger children. It may promote maturity at this early age when there are fewer opportunities for off-farm paid work.

Although we found no relationship between children’s work around the house and how much they talk with their mothers about important things, there may be a link between work around the house and children’s relationships with their mothers that we were not able to capture in the present study. Working around the house may provide children with opportunities to develop deep relationships with their mothers wherein they may not talk more about important things; instead, perhaps the nature of the conversations differ. The conversations may not be as important as other imperceptible qualities of the relationships, such as improved intersubjectivity or mutual understanding as a result of shared housework. In any case, the amount of work, on the farm and in the home, reported by these children appears to have some implications for their future plans in farming.

Parent-Child Relationships

As reported in past research (Esterman & Hedlund, 1995), these farm children seem to have good relationships with their parents. Almost all reported high levels of “getting along” with their parents. This positive perception is encouraging, given the current difficulties in many agricul-

tural communities. It may indicate that parents are, for the most part, handling farm-related stress without allowing the relationships with their children to dissolve into negativity. There was a positive correlation between youth’s reports of getting along with fathers and fathers’ on-farm work hours, and a negative correlation between getting along with fathers and fathers’ off-farm work hours. This pattern suggests that fathers who are on the farm more have children who appraise the general quality of their relationships more positively. Fathers who work a significant number of hours off the farm may be more stressed and less able to “get along” with their preadolescent children.

Somewhat fewer children reported doing things that they enjoy “a lot” with parents. This is likely related to the extremely busy lives that many farm families have, especially those with off-farm jobs, when hours in the evenings and on weekends are filled with farm work. In one interesting counterexample, a positive association surfaced between youth doing fun things with their mothers and the number of hours mothers work off the farm. This is somewhat counterintuitive, particularly given the negative association between global getting along and fathers’ off-farm work hours discussed above. Mothers who work off the farm appear to devote time to doing things with their children, perhaps because they have more money for activities given their off-farm income. The number of maternal hours of off-farm work was not associated with youth’s report’s of global “getting along,” suggesting that the overall relationship between children and their working mothers was not affected by off-farm work. Future studies should include qualitative components to map the content and quality of experiences between farm mothers and youth.

Even fewer (but still about one-half) of the children claim they talk with parents “a lot” about things that are important to them. This finding is likely a developmental artifact as many preadolescent children may not talk with their parents about many issues that are important to them. These data did not measure children’s satisfaction with these aspects of their relationships with parents, so we cannot address this issue beyond speculation.

The findings of Elder and Conger (2000) led to the expectation that those children who have a better relationship with parents are more likely to plan to farm later. In spite of the general positive nature of the relationships in this study (and therefore lack of impressive variation), the data give some support to this expectation. Children’s reports of doing things they enjoy with their fathers and talking about important things with their mothers were positively and significantly associated with plans to farm later. These findings provide further support for the argument that parental support and encouragement influence children’s future aspirations (Hossler et al., 1999). In spite of the tremendously busy lives they lead, farm fathers appear to be doing fun things with their children reasonably often. These

data cannot reveal the frequency or nature of these activities (which may be as simple as “hanging out,” watching movies, or possibly going to children’s sports or church activities). However, the implication of this finding does not depend on the nature of the activities; instead, it lies in the suggestion that when children engage in enjoyable activities with their fathers, it affects children’s aspirations.

Half of the children in this study reported talking with their parents “a lot” about things they consider important. In this sample, talking with mothers was important for children’s future plans; those who talk about things that are important to them with their mothers “a lot” are more than 11 times more likely to plan to farm as those who do this only “a little.” In the logistic regression analyses, talking with mothers was retained as one of the three best predictors of children’s plans to farm. We agree with the conclusion of Elder and Conger (2000) that mother-child relationships are critical for children’s futures in farming. Given the traditional understanding that farming is male-dominated, this may be a curious finding. However, the power of maternal influence on children’s plans to farm can be interpreted within the context of kinship work that is traditionally dominated by women (Di Leonardo, 1987). In most cases, farming is as much about tradition and family history as it is about work and career choice. It may be that some mothers talk with their children to provide them with a fertile kin-ground in which to root their future aspirations about farming.

While the father-child relationship variables did not emerge among the most important predictors of plans to farm, these are likely to be important to children’s future success in many other ways (see Pleck, 1997). It may also be that we did not tap important relevant aspects of father-child relationship in this farm sample. There may be other ways in which fathers are influential in the future farm decisions of their preadolescent children. For example, children may be less influenced by their conversations or activities with fathers and more by their admiration for or identification with them (which we did not evaluate). It is also possible that the importance of father-child relationships for the children’s aspirations may not emerge until a later point in these children’s development.

Clearly, work activities and parent-child relationships, as understood by preadolescents, matter as predictors of a child’s future in farming. We also examined two other factors that may potentially influence children’s decisions: perceived parental worry and fathers’ desires for children to farm.

Perceived Parental Worry and Enjoyment

Past research has indicated that parental worry can negatively affect the well-being of adolescents (Clark-Lempers et al., 1990). Even as preadolescents, youth in this study recognized and had empathy for their parents’ struggles. In this sample, the logistic regression results suggest that

those who think their parents worry about the farm are more than eight times more likely to plan to farm as those who do not think their parents worry. Their plans to farm later, whether spoken or not, may be an attempt to ease their parents’ worries and assure the continuance of the family enterprise. Helping, or planning to help, also may be a way of gaining mastery over their own feelings of helplessness (Van Hook, 1990).

While the present data cannot resolve these competing hypotheses, it is possible that this “let-me-make-it-better” effect would not be seen for children of doctors, factory workers, teachers, or clerks. Instead, this effect might appear for children of the self-employed, especially those who have a business that has been in the family for more than a generation.

Fathers’ Desires for Children to Farm

Counter to our hypothesis, paternal desire for children to farm was not associated with their children’s plans to farm. It is possible that children were unaware of their fathers’ preferences. Past research has shown that children’s ability to accurately perceive their parents’ beliefs about them increases over middle childhood into adolescence (Alessandri & Wozniak, 1989). Many children in this sample may not accurately perceive their fathers’ wishes. It is also possible that fathers’ hopes may not yet have been expressed to many of these preadolescent children. Fathers may be waiting until children have passed some milestone, such as a 16th birthday, to convey their hopes. Perhaps many fathers “want” their children to farm while not wanting to pressure them to commit to such a hard life. That ambivalence could result in unexpressed paternal desires. Conversely, these data cannot rule out that fathers do make their desires clear and that these wishes are simply not influencing children’s plans at this early point. It also may be that mothers’ wishes are more important. In spite of the widespread tendency to view the transfer of the farm as an example of primogeniture (Salamon, 1992), the importance of children’s talking with their mothers in this study and the similar findings of Elder and Conger (2000) with adolescents may indicate the need for future studies to assess the impact of mothers’ wishes on children’s plans.

Parental Off-Farm Work Hours

Other studies have noted the importance of the number of hours mothers work outside the home for a variety of outcomes (Elder & Conger, 2000; McHale et al., 1990). In this study, there were no significant negative impacts of the hours worked off-farm by either parent for children’s estimates of their work activities or for the parent-child relationship variables. The single exception was a negative association of fathers’ off-farm work hours and the index

of global getting along with children. These data do not permit analysis of the actual hours that parents work. It may be that most mothers work during the hours that these children are in school much of the year, limiting the impact of their absence on the responding children. Alternatively, Galinsky (1999) may be correct when she suggests that it is not parents' working that is detrimental to parent-child relationships but the stress that parents may bring home from work. In the case of these farm families, fathers may be bringing some of their stress home when they work off-farm whereas family financial stress may be relieved when mothers work off-farm, thus improving relationships. The lack of significant impact of mothers' work hours on children may suggest that youth are not merely filling in for their off-farm mothers but are engaging in work that they would otherwise do. Fathers, other siblings, or extended kin may help disperse the workload when mothers work off the farm. Future studies should specify the kinds of work activities undertaken by preadolescent youth and the ways that farm families manage to accomplish necessary work when members engage in significant off-farm labor.

Implications for Rural Educators

Our study, while the first to focus on farm succession and retention issues relevant to preadolescents, is limited by its modest sample size. This constrains both the statistical power and generalizability of the findings. Additionally, longitudinal studies are necessary to determine the significance of the identified factors for the eventual decisions that children will make. Without longitudinal studies, we have no way of knowing how important these early socialization experiences are for children and for the future of family farms. Additional studies should consider how parental socialization factors might influence other aspects of pre-adolescent children's lives (for example, their motivation and achievement in school and their participation in extracurricular activities). Future studies might also examine preadolescent children's work and parent-child relationships from both parents' and children's perspectives. This would give a fuller picture of the family context in which children are developing their future plans. The larger picture of children's aspirations to farm could be further illuminated by an extensive qualitative research effort to elicit their voices and perspectives.

Educators, as part of an interrelated system, work with children who live and develop in the context of their families and communities. A sociocultural framework acknowledges the importance of social activities and relationships, but it does not imply that children will be copies of their parents. It is not surprising that not all farm children want to farm later and that the variables examined do not account for all the variance in children's future plans. Certainly, as children develop and age, many other factors will influence their decisions. Thus, it is important to understand the roots of

children's decisions to farm, given that farming parents must continue to prepare at least one child to take over the family business in adulthood if family farms are to survive.

With these limitations in mind, some cautious implications for educators can be advanced. It is important to recognize that future plans among preadolescents are only one piece of a complicated problem (Rojewski, 1999). Children who do not develop a desire and commitment to farm are unlikely to do so, even if later economic conditions and planning permit. Likewise, a child who strongly desires to farm will not be able to do so without adequate opportunity. This study addresses only one piece of this problem, but perhaps it is the piece most amenable to intervention by educators and parents. We are not suggesting that all farm children can or should want to farm later. Rather, when early interest is evident, it can be nurtured in the nexus of family activities and relationships.

Some families may worry about encouraging or requiring their children to participate in the work activities of the farm and household. Our study adds to a growing body of work suggesting that children may benefit from doing work that matters, work that is part of the family enterprise. Our research further supports the value of work, including unpaid work, for preadolescent children. Rural educators may help families understand the value of children's work as part of a balanced schedule that includes school, family time, modest involvement in extracurricular interests and community activities, and some relaxed "down time" with no agenda.

The young respondents in our study lead us to conclude that many farm children are happy with their relationships with their parents. Despite stresses and worries, farm parents are finding time to talk and be with their children. Rural educators can inform parents that this investment is likely to pay off in many ways, both in terms of children's development and adjustment and in terms of the viability of family farms.

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