

Driving Forces Shaping Parental Perceptions of AFNR Opportunities for their Children

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Introduction and Literature Review

The USDA Economic Research Service (2024) reports that 10.4% of the national workforce is employed in agriculture, food, or natural resources (AFNR), representing more than 25 million jobs - 70.1% of which are tied to product preparation, manufacturing, or processing. Additionally, the United States Bureau of Labor Statistics (2024a) projects a 6% increase in demand for agriscience-related jobs and reports a shortage of nearly 1,800 employees in the forest and conservation industry (2024b). These trends underscore the urgent need to develop a well-qualified workforce to meet growing AFNR demands. Given the considerable influence parents and guardians have on their children’s career and training decisions (Akosah-Twumasi et al., 2018; Mat Taib et al., 2019; Puad et al., 2023), it is essential to understand their perceptions of AFNR careers and post-secondary training. Despite strong labor demand, many youth remain unwilling to pursue AFNR careers (Girdziute et al., 2022), often due to the perceived low status of agricultural occupations (Consentino et al., 2023; Nandi et al., 2022) and a lack of awareness among non-farm parents (Frick et al., 1995). Still, parents believe their children should have opportunities to learn about agriculture (Miller et al., 2025). Because parents influence their children both directly—through conversations—and indirectly—through lifestyle and career modeling (Akosah-Twumasi et al., 2018; Mat Taib et al., 2019; Puad et al., 2023), access to practical tools and informational resources has proven valuable in helping them support post-secondary planning (Lukaš, 2015). Ginevra et al. (2015) further found parental encouragement is positively correlated with children’s career self-efficacy. Thus, identifying effective strategies and resources to empower parents represents a critical gap in the literature—and a promising step toward building a more robust AFNR workforce in response to ongoing labor shortages (U.S. Bureau of Labor Statistics, 2024a; 2024b).

Theoretical Framework

The Theory of Planned Behavior is “designed to predict and explain human behavior in a specific context” (Ajzen, 1991, p. 181). This research applies the theory to understand parents’ perceptions of careers—both broadly and within AFNR—and post-secondary training. We explored how these perceptions shape parents’ willingness or reluctance to promote such opportunities to their children. Ajzen’s (1991) model centers on three constructs: attitudes, subjective norms, and perceived behavioral control (PBC), each of which influences intentions and behaviors. Parents in this study shared their attitudes toward career and training pathways, which in turn informed their subjective norms—the perceived expectations surrounding their child’s career choices (Ajzen, 1991). PBC reflects how much influence parents believe they have in guiding those choices (Ajzen, 1991). Together, these components contribute to parents’ intentions to support or discourage specific pathways, and ultimately, to the actions they take—or do not take—in influencing their children’s post-secondary plans.

Purpose and Questions

This study explored factors that influence parental encouragement of AFNR-related education and careers. Three key research questions guided the study:

1. What are parents’ perceived roles in helping children navigate post-secondary planning?

2. What demographic, cultural, or social factors influence post-secondary planning?
3. What factors contribute to parents' encouragement of children pursuing AFNR careers?

Methodology

Case study research seeks to understand a specific phenomenon through the lens of specific cases, or people (Yin, 2018). Adopting this approach, this case study research utilized a pragmatist epistemology. Kaushik and Walsh (2019) share that “pragmatism is based on the proposition that researchers should use the philosophical and/or methodological approach that works best for the particular research problem that is being investigated” (p. 2). Within this research area, we acknowledge our backgrounds as former SBAE teachers and work-based learning coordinators, and aimed to represent participants to the best of our ability. An IRB-approved semi-structured interview guide was designed and aligned to the theoretical framework (Table 1). The interview guide was reviewed by a panel of experts with background in qualitative research and career exploration to ensure content validity (Thyer, 2010).

Table 1
Sample Interview Questions Aligned with Ajzen’s Framework (1991)

Question	Theory Connection
In general, is college or post-secondary education important?	Attitudes
Do you feel cultural, community, or family traditions have shaped your views on what careers are “best-suited” for your child?	Attitudes
Has your child ever expressed interest in a career related to AFNR?	Subjective Norms
Are there careers or industries you encourage your child to avoid?	PBC

Participants

The population of interest included parents of students in grades 11 and 12 attending schools within four Perkins consortia, representing 95 school districts in southern [STATE]. Work-based learning coordinators and counselors at each school were asked to promote the study. Eleven parents scheduled an interview, completed a consent form, and agreed to be recorded (Table 2). While intentional efforts were made to represent each consortia, we recognize a limitation is that most parents were female and all were engaged in service-oriented professions.

Table 2
Demographics of Study Participants

Pseudonym	Gender	Age	Level of Education	Job Title	# Children
Alice	Female	46	Some college	Community Development	2
Tori	Female	47	Graduate degree	HS Counselor	3
Sally	Female	48	Bachelor’s degree	Teacher	6
Ashley	Female	42	Bachelor’s degree	Teacher	4
Anna	Female	43	Graduate degree	HS Counselor	2
Jodi	Female	44	Some college	Nurse Supervisor	3
Cindy	Female	45	Graduate degree	School Nurse	4
Karen	Female	52	Graduate degree	City Manager	3
Bill	Male	46	Bachelor’s degree	Lead Pastor	2
Elsa	Female	46	Bachelor’s degree	Associate Director	2
Jayma	Female	38	Bachelor’s degree	Jail Social Worker	1

Data Collection and Analysis

Data were collected and transcribed via Zoom, and stored securely on a password-protected platform. To maintain privacy, each participant was assigned pseudonyms, and from that point on, no names were linked with any files or found on any transcripts. An inductive approach to coding was employed (Thomas, 2006), resulting in 93 initial codes, organized into 16 categories, and then further collapsed into four overarching themes drawn directly from participant interviews. Trustworthiness was supported by building rapport with participants (Merriam & Tisdell, 2016) and engaging in member checking, which included follow-up and clarifying questions as well as returning to participants to confirm that the emerging themes accurately reflected their views (Lincoln & Guba, 1985). To ensure transparency and rigor, we also maintained an organized codebook and audit trail (Morse et al., 2002). Peer debriefing further strengthened the consistency and credibility of data interpretation and reporting (Spall, 1998).

Findings

For many, graduating high school marks the beginning of a journey toward careers and post-secondary training, and for many parents, it is when their children—metaphorically speaking—get on the road. Parents maintained positive perceptions of career exploration and training, including AFNR fields. Similar to learning how to drive, navigating post-secondary options can feel intimidating for both children and their families. Despite this, parents were generally open to their children getting behind the wheel and exploring opportunities—whether entering the workforce, seeking further training, or enlisting in the military. Upon data analysis and inductive coding, three themes and five subthemes emerged from parents' reflections.

Theme #1: Parents as Guardrails

Tori shared, "I like to think of myself as a guardrail that's there to support my child. I ask questions without trying to take the lead." Much like guardrails ensure vehicles stay on the road and provide parameters so drivers do not endanger themselves or their passengers, parents saw themselves as supportive guides—providing structure and keeping their children safe as they explored, but not steering for them. Many perceived their role as "question-askers," particularly when children expressed interest in physically demanding or high-risk careers, such as electrical line work. Ashley, Jayma, and Cindy voiced concern about safety, worried about their child's well-being. Similarly, Elsa shared, "I help and guide him with the whole process of answering questions like, 'Is this really where I want to go to school?' or 'Is this what I want to do?'"

Subtheme #1: Letting Go—Guardrails are not Deciders

While guardrails are in place to keep drivers safe, they do not dictate a driver's decisions—and drivers can still choose to ignore them. In the same way, parents saw themselves as supportive guides who ask questions, but avoid providing answers or pushing an agenda. They do not see their role as the ultimate decision makers in their child's post-secondary pursuits. This may be easier said than done at times. Ashley shared, "It's tough to know how much you should push, and how much do you just say, 'Okay, if that's what you're choosing, go for it, and we'll help you figure something out later if that isn't what actually fits you.'" Similarly, Sally added:

I have found little success in telling the answer, but success in asking the leading questions. My job is to lead them to the actual truth of what their abilities are and what their skills are, and be like, well, if you're going to be an entrepreneur, you may need to consider the habit you have of not getting up until 11 a.m.

Theme #2: Selecting the Right Vehicle—“It Depends”

The phrase “it depends” was uttered repeatedly, especially relating to training and education. Just as there is no one-size-fits-all vehicle when learning to drive, there is no universal path for career and post-secondary training. A best fit depends on a driver’s preferences and purpose—whether it is just to get from point A to point B, to maximize fuel efficiency, or to haul trailers. Similarly, parents expressed the right path for their child depends on their goals, interests, and needs.

Subtheme #1: On the Kid

Each child has different needs, interests, and backgrounds. All participants emphasized the importance of supporting their child in pursuing opportunities aligned with their interests. Karen placed great emphasis on college visits, perhaps comparable to taking a vehicle for a test drive. Others, including Jodi and Sally, prioritized hands-on experiences such as internships, career exploration camps, or worksites visits—allowing their children to explore career opportunities first and consider college options later. Despite varied approaches, all recognized the value for education of some sort. Tori described the profound social growth that can happen through additional training, while Cindy added “It’s important to challenge your brain and your mind to new relationships and new experiences. By leaving and going to a place to learn, I just think it helps a human being grow.” However, parents also emphasized that post-secondary training does not always need to be a 2- or 4-year program. Anna mentioned, “Depending on what a child is wanting to focus on, there’s lots of pathways to get to where they want to go. Is college necessarily the right pathway for everybody? I don’t think so, there’s other ways to get there.” That’s not to say that students should be limited to exploring their initial area of interest. When reflecting on career exploration opportunities for her child, Sally shared, “The places that you go and the spaces that you learn in are really important. We have a big belief that you grow when you’re uncomfortable, and you need to get outside what you’re used to to be uncomfortable.”

Subtheme #2: On the Trade or Career

Parents also acknowledge that the need for training depends on the type of trade or career a child chooses. Jodi reflected, “I think it’s dependent on the career, but I would say, even a 2-year trade school [would be appropriate] so that you have some idea what you’re doing.” Bill spoke of his son’s interest in culinary, and expressed concern that a 4-year program might result in unnecessary debt; he encourages his son to consider other training opportunities: “For some careers, skills taught in a hands-on trades program are just as relevant and beneficial to our society as a 4-year degree.” Jayma also reflected that even in her current role, she sometimes questions the return on investment of her own 4-year degree, “I had a lot of student debt, and classes that I took that I just needed to take, but weren’t related to my career.”

Theme #3: Scarce Fuel, Time, and Knowledge—Limited Resources Limit Exploration

Learning to drive requires many inputs from children and parents alike, including fuel, time to practice, and an understanding of the rules of the road. Similarly, participants described limited resources that hinder their ability to support their children in exploring careers, including limited parental knowledge of, or exposure to, certain career areas and limited school-based resources.

Subtheme #1: Limited Parent Knowledge and Exposure

Despite living in rural areas, many parents reported limited knowledge of AFNR careers. Some attributed this to schools not adequately informing them or their children about careers, such as

those in AFNR-related areas. For example, Bill and Karen initially did not recognize their child's interests such as culinary connected to AFNR. Alice expressed that parental understanding could be enhanced through more intentional efforts to engage parents as their children are learning about careers in school, "Whether it is an email, a letter, an evening presentation, or a video, getting the parents involved would help us support our children a lot more."

Subtheme #2: Limited School Resources

With budget reductions impacting many schools, the resources available to students and families are becoming scarce. Alice shared frustration about her daughter's school lacking a dedicated counselor: "A lot of our rural schools don't have a counselor, they have a college-readiness coordinator, who does counselor responsibilities. You can only do so much; you want to touch every student, but in reality, it all depends on the school." Elsa and Karen also noted many career assessments schools use are outdated, misaligned with current workforce needs, or fail to identify students' best opportunities. Karen shared her daughter took a careers assessment the school offered, and recalled, "My daughter was told she should go be a probationary officer. I'm like, are you kidding me? You can barely talk to people!" Several parents, including Alice and Ashley, emphasized the need for schools to initiate conversations about post-graduation planning much sooner than what is currently happening. They believed the lack of timely and relevant resources contributes to their uncertainty and limits their ability to guide their children.

Conclusions and Recommendations

Regarding RQ1, parents saw themselves as guardrails, supportive figures who ask tough questions but refrain from making decisions or pushing agendas. In general, parents were open to their children pursuing any type of career or training, with a positive perception about postsecondary training, for both skill development and social growth. For RQ2, most parents had limited direct engagement with AFNR. However, all parents worked in service-oriented professions; their engagement with serving others appeared to shape how they described their children's career aspirations, and their attitudes toward them (Ajzen, 1991). Parents recalled their rural schools and communities promoting positive AFNR messages, but recognized a need for additional resources and clearer messaging to help them feel confident having these conversations at home. Findings related to RQ3 indicate parents generally hold positive perceptions of AFNR careers. Messaging which articulates the diversity of AFNR career opportunities, and inspires greater confidence in safety or job placement (USDA Economic Research Service, 2024) could further strengthen these perceptions and encourage more supportive behaviors (Ajzen, 1991). However, at the end of the day, parents emphasized the importance of helping their children find pathways aligned with their interests and passions.

Several recommendations have surfaced from this study. From a research perspective, future studies should include a larger, more diverse sample, with intentional representation of fathers and those outside service professions. Perhaps random sampling at in-person school events, or interviewing both parents at the same time, could enhance findings. Relevant to professional practice, updated career exploration resources should be developed by school staff and industry stakeholders to distribute to students and families. With the help of guidance counselors or school administrators, parents could be more prepared to support post-secondary planning at home; parents suggested conversation starter guides and workshops would be helpful, and could increase their PBC (Ajzen, 1991) connected to career exploration and AFNR careers.

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