

Natural Resources and Environmental Science Capstone Report:
Socio-environmental-economic Factors Contributing to Young Adult Out-migration from
Rural Kansas

Danielle Larson, Landon Ochsner, Abigail Schmidt, Mackenzie Waggoner

NRES Program, Kansas State University

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Dr. Shawn Hutchinson, Dr. Sarah Jackson

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Introduction

Many city people who drive through rural Kansas call it the middle of nowhere. Nevertheless, for many people, these grass-covered rolling hills and generationally tended farmlands are what they call home. To these individuals, the middle of nowhere is the center of everything.

Unfortunately, young adult outmigration from rural communities in Kansas is threatening the future of many of these remote communities. This is especially true of young adults seeking higher education. This study focuses on the reasons why young adults from rural Kansas choose to leave their rural hometowns by focusing on the social, environmental, and economic factors contributing to outmigration.

Literature Review

To understand the factors contributing to the outmigration of young adults from rural Kansas, a foundation of current research must first be established. By defining key concepts and theories related to this study's focus, a better understanding of its findings is available.

Outmigration

Outmigration is a migratory movement that frequently pulls young people from small rural communities to large metropolitan or regional cities. Studies have shown that outmigration from rural areas is even more likely to occur when the person receives higher education (Mills & Hazarika 2001). This migratory movement among young people is a pressing issue for rural communities across the United States and internationally, where it represents an existential threat.

In a study, Eshrati & Gibson (2021) interviewed college students at Kansas State University on their attachment to their childhood homes, their attachment to the state of Kansas, and what aspects most contributed to their perceptions of the state. Participants included lifelong residents of Kansas, out-of-state students, and international students. The researchers found that students who grew up in small towns appreciated the strong sense of community in their homes. Rural respondents noted that their community was able to come together in times of stress, such as sickness or disaster. Among all students interviewed, the majority held some attachment to their home communities. Among lifelong residents of Kansas, each participant had an attachment to the state. However, these same participants believe other Kansas residents hold less attachment to the state than they do. They cite a lack of economic opportunity and education as reasons others may lack the same attachment level. Despite the universal attachment among the surveyed Kansas residents, only 11% plan to definitely stay in Kansas after graduation. These findings reinforce the understanding that economic opportunity is a primary driver of outmigration from rural communities (Eshrati & Gibson, 2021).

These findings are shared by Drozdowski (2008), who found that education and economic opportunities are drivers of outmigration of high school seniors in Australian coastal resort communities. However, Drozdowski's (2008) also found that social opportunities, life experience, and a desire to form an independent identity are major drivers of the desire to outmigrate among the surveyed population. These findings note that, though economic and educational opportunities are involved, young people may be driven to migrate by a strong desire to build a new "socio-spatial" identity away from home (Drozdowski, 2008).

Rural Place Attachment

Place attachment is one's emotional bonds to specific, meaningful locations. This attachment forms through interaction with the social and environmental landscapes of communities and spaces. Place attachment extends beyond bonds to the physical landscape, instead relying on interactions and experiences within that landscape to provide meaning (Tuan, 1977).

Rural areas are often thought of as “non-places” or areas devoid of meaning and life. This notion is especially prevalent in attitudes regarding rural communities in the Great Plains. The term “flyover country” demonstrates the societal assumption that the region offers little value to people who seek culture and interaction. Place attachment research in the region often focuses on why people leave rural communities, frequently noting the lack of opportunity in rural areas as a driver of outmigration. However, this frames rural areas as inherently problematic, and those who choose to stay have failed or are “stuck” in their hometowns. This concept, called “involuntary immobility,” assumes that people want to leave rural areas but fails to account for people who are voluntarily immobile—those who choose to stay in their rural communities (Husa & Morse, 2022). Notably, place attachment among rural populations is stronger than that of urban populations, meaning leaving their hometowns may be more difficult for would-be rural outmigrants (Husa & Morse, 2022; Riethmuller et al., 2021). Additionally, Husa & Morse (2022) investigated this voluntarily immobile population by surveying 1,800 residents in Nebraska. The researchers found that those who chose to stay in Nebraska did so due to their proximity to family and their enjoyment of living in the state. Of the respondents, rural residents exhibited higher levels of place attachment than their urban counterparts, citing their emotional bond to the land from family heritage and their appreciation for rural culture. With

these findings, Husa & Morse (2022) demonstrate that the decision to stay in one's hometown is not necessarily a result of being "stuck" but may be a conscious decision to remain rooted in place.

That said, migratory flows from small towns and rural areas to larger cities leading to a lack of educated young people in rural communities are still an issue for rural communities. Place attachment theory argues that these outmigrants must overcome place bonds when leaving their communities. To understand place attachment, one must understand its constituent parts. No one definition of place attachment exists; however, many models recognize place dependence and place identity as primary contributing factors to the formation of place bonds.

Place Identity

Place identity is the socio-cultural attributes shared by members of a group or community that are inextricably linked to specific locations. Place identity is cultivated through repeated experiences, which lead to a "rootedness" in a particular area. Place identity is similar to social identity, in which one understands oneself through a complex set of beliefs and values that lived experiences and cultural history have molded (Raymond et al., 2010). For example, holding liberal political opinions may be an important part of a San Francisco resident's social identity due to the beliefs of those around them and their family's long-time liberal political lean. Within place identity, this same concept may apply to a family's historic occupation, such as farming, where one's place identity is formed through a long-time familial connection to the land (Scannell & Gifford, 2010).

Social identity is also influenced by group membership and association with others who share the same values. Individuals have a desire to be a part of an in-group while differentiating themselves from out-groups. Similarly, place identity is influenced by the physical

characteristics of the landscape that, for the individual, distinguish the location from other areas. These features help identify the place as unique or important and play a part in cultivating an individual's identity. Residents of towns in the High Rockies may identify as "mountain people" while residents of the Gulf Coast identify as "beach people." These identifying characteristics often include architecture, climate, the natural landscape, among others (Scannell & Gifford, 2010). In essence, place identity is the influence locations have in one's understanding of oneself.

Place Dependence

Like aspects of place identity, place dependence comes from a connection to the physical characteristics of the landscape. However, unlike place identity, place dependence is formed through attachment to the landscape's amenities and resources. These elements meet their users' needs and allow them to meet their personal and professional goals. Place dependence is a functional connection to a specific landscape, whereas place identity is a symbolic or emotional reliance (Raymond et al., 2010; Scannell & Gifford, 2010). For example, residents of Western Kansas may have strong place dependence due to the highly arable land on which they farm. Likewise, skiers may feel strong place dependence toward Vail, Colorado because it facilitates their favorite activity. These skiers may repeatedly visit Vail to ski, building a strong association between the activity and the place, thus increasing place dependence.

Climate Change

Global change reports have shown that there have been increases in global surface temperatures over the past century, while weather and climate patterns have been distinctly altered (IPCC 2023). These changes in climate will likely alter precipitation regimes, increase the chance of extreme droughts, while also creating an increase in temperature extremes (IPCC

2023). These factors will have important impacts on the function of ecosystems, but also on the functioning of the agricultural industry as well. It is also important to note that the biological impacts on agricultural production will have cascading effects on socioeconomic sectors.

Increased water stress due to drought can decrease rates of photosynthesis, alter crop reproduction, particularly seed germination and flower development, which can decrease overall crop yields (Prasad et al., 2006, Prasad, Staggenborg, and Ristic, 2008). Kansas is one of the United States' top producers of winter wheat, which is a key crop for feeding a growing population (Tack et al., 2015). Under climate change scenarios, it is likely that farmers who grow winter wheat will face greater variability within growing season temperatures, and more extreme temperatures. These changes in temperature and increased variability have been shown to reduce winter wheat yields, forcing farmers to adopt new practices, such as switching to a more resistant winter wheat variety (Obembe et al., 2021; Tack et al., 2015). Corn production, like wheat production in Kansas, also faces similar threats from changing temperatures (Anandhi, 2016).

All of these factors, environmental impacts of climate change, its influence on farmer decisions, and the beliefs farmers have about climate change, work in tandem to shape the opinions of young adults from these areas. Within the realm of environmental change, younger generations of farmers will have to face novel, harsher climate conditions or increased environmental disturbance that their predecessors did not have to deal with. They will have to face greater uncertainty if they decide to move back home and continue to work at their family farms or start a farm of their own. Current farmer beliefs about climate change and the decision-making process that farmers use could heavily impact the beliefs of young adults who could possibly move back to these rural areas. Younger generations could either maintain the attitudes of those who come before them, meaning they would continue on with similar farming practices,

or not see climate change as an issue in agriculture and won't feel motivated to return home. Conversely, many young adults might also form beliefs opposite of current farmers where they would instead recognize the importance of climate change and agriculture. This could either motivate young adults to return home to their farms in order to enact meaningful change, or it could serve as a factor that could de-motivate young adults from moving back, given that climate change is a complicated issue to mitigate. Overall, the role climate change plays in the outmigration of young adults is complicated and dependent on a complex network of factors.

Water Availability

The Ogallala High Plains Aquifer has been a valuable resource for many decades for farmers across Kansas, Oklahoma, Texas, and Nebraska. However, one of the biggest threats the aquifer faces is depletion at a rapid rate. Over the past 60 years, a volume of 330 square kilometers of groundwater has been depleted (Scanlon et al., 2012). Even more daunting, the High Plains aquifer faces extremely low recharge rates that are reliant on surface water recharge of playas – which are also threatened natural areas (Scanlon et al., 2012). Given the rapid depletion and slow recharge, the High Plains aquifer begins to reflect characteristics of a nonrenewable resource. Kansas shows high levels of groundwater depletion, and lifespan predictions of the southern region of the aquifer are limited to only 140 years (Figure 1a, Scanlon et al., 2012).

Like climate change, the depletion and limited access to the Ogallala aquifer, which covers a wide region within rural Kansas, creates difficulties when it comes to agricultural production. This looming threat of the unknown within the agricultural sector, and overall water availability for these rural areas can push people away from returning. More specifically, young adults coming out of college may view the issue of the depleting resource as a reason to move

away from rural Kansas. It can become costly and time consuming for people to mitigate these challenges that come with the aquifer, and this could ultimately fuel people to leave. Conversely, however, the depletion of this natural resource might have the opposite effect, where some young people might feel an obligation to return to rural areas in order to help solve these issues.

Economic Opportunities

There are a multitude of reasons why young adults in Kansas are not returning to their rural hometowns after graduation and one of those is the economic factors. Youth out-migration makes it difficult to stimulate economic growth of any kind. There is not one singular reason for youth choosing to leave their home community. Looking into the economic factors, many leave home to find something better, whether that be education or career opportunities. However, in doing so, they often leave behind a gap.

Entrepreneurship

Within rural communities, there is an abundance of room to start a private venture and generate economic development through entrepreneurship. After all, in rural communities, 84.8% of businesses are small businesses and 54.5% of the population is employed by these small businesses (U.S Small Business Administration, 2023). Because 84.4% of these businesses are small businesses, there are a lot of communal ties to these businesses. A lot of rural community members have a sense of pride in their community and will choose to support local businesses because not only could it support someone they know, but it also supports the economic wealth of the community by providing careers, increasing competition among other businesses, and supporting innovation.

Industry Growth

Historically, rural towns were strictly agriculture-based economies. Towns were small, sustaining small populations. This still holds true today for many rural counties in Kansas. As time goes on, these towns have started to modernize, growing their economy but not to the extent of metropolis areas. Many rural communities struggle to keep up with major cities especially as their major industry (agriculture) has changed. While rural communities used to be primarily agricultural industry-based, they have been forced to adapt. Now less than 10% of rural populations are ag producers (Ring, Peredo & Chrisman, 2010). Rural communities are the heart of our farmlands and have been for centuries. They are imperative for the success of large districts, providing local food systems to surrounding communities. Now, there is a need for rural services and help from larger communities to allow for growth to continue.

Education

One such service is education. Findings suggest that communities heavily relied on their school district. This is true of rural communities in Kansas as well. In one study, participants discuss concerns about a decline in school enrollment, desire for an increase in free lunch eligibility, and issues with lower parent involvement within the school (Sherman & Sage, (n.d.). Another issue is the lack of students returning to their rural hometowns after receiving a higher education (Mills & Hazarika 2001).

Methods

This study investigates how, if at all, social, environmental, and economic factors influence and/or interact concerning young adults' life-based choices (i.e., outmigration from their rural hometowns). This is explored through three research questions addressing each respective topic:

- How, if at all, do social factors contribute to young adult outmigration in Kansas?
- How, if at all, do environmental factors contribute to young adult outmigration in Kansas?
- How, if at all, do economic factors contribute to young adult outmigration in Kansas?

These questions are examined through qualitative description and thematic analysis of an internet-based survey.

Qualitative Approach

This study used a qualitative description and thematic analysis rooted in the naturalistic paradigm to collect and evaluate rich, complex narratives from a diverse range of individuals. The naturalistic paradigm recognizes the subjective nature of lived realities and allows for the holistic and nuanced exploration of human experiences (Guba & Lincoln, 1982). Thematic analysis, operating within this paradigm, was used to systematically identify and analyze themes as they emerged from the data (Nowell et al., 2017). A qualitative descriptive approach was used to understand and describe the observed phenomena without applying meaning or theorizing their causes. A qualitative descriptive approach coupled with thematic analysis allow data to be reported as characterized by participants and aims to accurately capture individual viewpoints and worldviews (Bradshaw et al., 2017).

Research Design

The following section describes the survey population, qualifying criteria, survey distribution, survey development, data analysis, and trustworthiness.

Survey Population and Qualifying Criteria

This study utilized purposive sampling to engage college students at Kansas State University in Manhattan, Kansas. Survey participants were recruited using marketing material distributed via email and social messaging applications. Participants voluntarily scanned a QR

code leading to the online survey tool. To participate in the survey, volunteers must have been 18 years or older, lived in a rural community of fewer than 30,000 people, and been actively pursuing an undergraduate or non-baccalaureate master's degree at K-State at the time of the survey. These qualifying criteria were asked at the beginning of the survey, and responses from participants who failed to meet these criteria were excluded from the analysis.

Survey Distribution

An internet-based survey was used for its efficient distribution and user-friendly interface. This efficient distribution allowed the survey to be shared via electronic marketing material and linked through social messaging applications. The user-friendly interface allowed respondents to access, navigate, and respond to the survey efficiently. The survey was available for 43 days and was continuously shared using marketing material and messaging apps throughout the survey period.

Survey Development

The survey was developed to evaluate the socio-environmental-economic influences of young adult outmigration from rural Kansas; therefore, survey questions probed the social, environmental, and economic factors that may shape young adults' migration decisions. Short-answer, open-ended questions were used to adequately capture participants' feelings on these complex topics. Questions were topically divided into blocks, consisting of qualifying questions, social questions, environmental questions, economic questions, closing thoughts, and demographic questions. This separation allowed participants to answer multiple questions within the same topic and for efficient analysis of the data once the data collection was complete. Responses with fewer than 50% of questions completed were excluded from the data analysis.

The number of questions varied within each topic. The social and economic blocks contained three questions, while the environmental block contained only two. The qualifying question block contained the three questions, the closing thoughts block contained two questions, and the demographic questions contained five. In total, the survey contained nine open-ended, short-answer questions investigating the research question and nine qualifying and demographic questions.

The development of the open-ended questions within their respective topics was informed by themes identified during the literature review process. Social questions probed the place attachment and place dependence respondents may feel toward their rural communities; environmental questions explored how sustainability and environmental perceptions shaped migration decisions; and economic questions investigated how economic opportunity relates to respondents' feelings toward their hometowns. A final open-ended question asked respondents to share their experiences with their personal significance and self-efficacy.

Data Analysis

Once the survey period ended, response data was downloaded, organized, and coded in Microsoft Excel. Responses were organized by topic block (social, economic, environmental, and closing thoughts) and analyzed using an inductive coding method. The inductive coding method identified commonalities and relationships across the data by reviewing each response for frequently mentioned themes and topics. These themes and topics, or codes, were initially identified by analyzing each response and noting the topics discussed. Initial codes were highly varied between questions. Like the raw responses, the initial codes were then analyzed for overarching themes and topics. These themes and topics were used to develop parent codes, under which the initial codes were organized. The initial codes were then thematically refined to

develop a cohesive set of child codes within each parent code. Frequencies for both parent codes and child codes were tabulated to allow for analysis and comparison of the data. Finally, parent codes were analyzed to identify the primary themes encapsulating the findings of each topic block.

Trustworthiness

Ensuring trustworthiness was paramount throughout the research process. Strategies suggested by Krefting (1991) were used to achieve the credibility, transferability, dependability, and confirmability necessary for trustworthy qualitative research. Credibility was gained through researcher reflexivity, which acknowledges and seeks to reduce the inherent biases through bracketing or suspension of bias. Likewise, regular peer checking was used throughout the research process to challenge assumptions and build consensus amongst the research team. Finally, thick, rich descriptions were used to report the findings as accurately and as detailed as possible (Creswell & Miller, 2000). Transferability was achieved through a purposeful sampling of the target population (i.e., college students from rural communities), a detailed description of the study process, and thick, rich descriptions of the findings (Bradshaw et al., 2017). Dependability was confirmed through a dense, auditable description of the study's methods and frequent peer checking to ensure the research process was well developed and followed closely. Confirmability was achieved through bracketing of researcher biases with triangulation and regular peer checking (Krefting, 1991).

Results

To participate in the survey, all respondents were required to be active students at Kansas State University with valid K-State email addresses. Participants were also asked to verify that they were 18 years or older before collecting their data. In addition, all respondents were

required to be from rural hometowns in Kansas towns with fewer than 30,000 people. This excluded survey responses from students who originated from urban cities such as Kansas City, Wichita, Manhattan, and Lawrence.

In total, 24 individuals participated in the study. Of those 24 students, only 18 completed the entire survey. Table 1 and Table 2 below are representative of all 24 students who participated. For each instance of a participant failing to answer a question, their response is entered as “Not Available.”

Participants in the survey included 12 cis-gendered females and 6 cis-gendered males. No respondents identified themselves as having a non-cis-gendered gender identity. As expected of traditional college students, many of the participants were born between 2001 and 2005 with two exceptions being born in 1997, as seen in Table 1 below. All participants self-reported as being white/Caucasian.

Table 1: Summary of demographic characteristics of study participants

<i>Demographics Data for Study Participants</i>			
Variable	Level	n	%
Gender			
	Cis-Female	12	50.0
	Cis-Male	6	25.0
	All other options (Non-binary, Transgender, etc.)	0	0.0
	Not Available	6	25.0
Birth Year			
	1997	2	8.3
	1998	0	0.0
	1999	0	0.0
	2000	0	0.0
	2001	3	12.5
	2002	3	12.5
	2003	5	20.8
	2004	4	16.7
	2005	1	4.2
	Not Available	6	25.0

Population of Rural Hometown			
Less than 500		3	12.5
500 < x < 1,000		4	16.7
1,000 < x < 5,000		11	45.8
5,000 < x < 10,000		3	12.5
10,000 < x < 20,000		2	8.3
20,000 < x < 30,000		1	4.2

Note. n = 24

Participants in the survey were also asked to identify the population of the rural Kansas community in which they live/lived. Almost half of the participants reported being from communities with a population between 1,000 and 5,000.

Participants were also asked about their educational background at Kansas State University. Of the 24 participants, 18 were undergraduate students and 5 were pursuing a concurrent bachelor/master's degree (1 individual did not respond). Varied degrees of student classification and college were also recorded, as seen in Table 2.

Table 2: Summary of education characteristics of study participants

<i>Education Data for Study Participants</i>			
Variable	Level	n	%
Kansas State University, College of	Agriculture	3	12.5
	Architecture, Planning and Design	1	4.2
	Arts and Sciences	3	12.5
	Business Administration	1	4.2
	Education	0	0.0
	Engineering	9	37.5
	Health and Human Sciences	1	4.2
	Not Available	6	25.0
Student Classification	Year One/Freshman	3	12.5
	Year Two/Sophomore	4	16.7
	Year Three/Junior	6	25.0
	Year Four/Senior	4	16.7
	Year Five and Above	1	4.2

	Not Available	6	25.0
Education Level			
	Undergraduate	18	75.0
	Concurrent 5-Year Bachelor/Master’s (or Non-baccalaureate Master’s Program)	5	20.8
	Graduate	0	0.0
	Not Available	1	4.2

Note. n = 24

The participants in the study were asked nine questions. These questions were broken into four categories: social, environmental, economic, and personal significance/self-efficacy. Each of the following sections reports the codes and themes that emerged from each category of questions.

Social Questions

Four parent codes emerged from analysis of the social responses. These codes, family, rural life/values, community, and aspirations encapsulated overarching themes throughout the data. Within these parent codes, varied child codes identified more granular sub-topics encountered across the responses. The frequencies of each parent and child code are shown in Table 3.

Table 3: Codes and example quotes from questions related to social factors.

Social Responses

Parent Code	Child Code	Freq	Example Quote
Family		12	"My family has lived in my rural community for seven generations. I feel enormous pride at being the seventh generation to operate my family's farm and steward the land and its resources."
	Familial Pride	2	
	Family History	5	
	Family Values	3	
	Children	2	
Rural Life/Values		36	"Much of my community is farming and manufacturing based. It's not super rural (within 1.5 hours of KC) but the majority of the population is working class. I'd say this impacts my values
	Working Class	4	
	Independence	3	
	Faith	4	
	Appreciation for Rural Life	9	

	Being Outdoors	3	the most, where my family, and most of the other families are brung up on that working class mentality. Many of my values surround integrity, work ethic, grit, and honesty, which is pretty well reflected in the community I grew up in."
	Slower Pace of Life	2	
	Political Differences	2	
	Social Differences	4	
	Hard Work	5	
<hr/>			
Community		83	"Growing up and knowing a significant part of your community is pretty huge. If you don't know someone, or need something, you're one or two people away from that. I think that's a big thing. So many people in my community have helped me out over the years, and vice versa."
	You Know Everybody	10	
	Community Support	12	
	Community Closeness	5	
	Community Groups/Events	6	
	Appreciation of Home	6	
	Strong Community	5	
	Want to Give Back	3	
	Low Income	2	
	Belonging (negative)	9	
	Belonging (positive)	5	
	Values (positive)	6	
	Values (negative)	7	
	Positive Interactions	3	
	Age Gap	2	
	Lack of Change	2	
<hr/>			
Aspirations		36	"During high school, it was a comfortable place to be and in my comfort I struggled to find opportunities to grow. When I did find such opportunities, it led me outside the community and I was left with the feeling that I have outgrown my small town."
	Personal Ambitions (Positive)	7	
	Personal Ambitions (Negative)	10	
	Work Opportunities	6	
	Primary Education	4	
	Higher Education	3	
	Vocational Opportunities	3	
	Funding	3	

Family

‘Family’ statements often note a significant effect of family on determining respondents’ life choices and/or attachment to their hometowns. Familial pride, family history, family values, and responses about children were common threads throughout the ‘family’ responses and comprised the child codes within the category. Familial pride was reflected through familial establishment within the community through statements such as, “My family has lived in my

rural community for seven generations. I feel enormous pride at being the seventh generation to operate my family's farm and steward the land and its resources."

Sentiments on family history in rural communities often accompanied statements on familial pride, as demonstrated in the previous statement. Though some respondents viewed family history as positively contributing to their feelings toward their communities, others noted the challenges of lacking family history or recognition, "The people in my hometown, believed in last names rather than individuality. What I mean by this, is that if one has a parent or grandparent, with good standing in the community, then they are automatically at a better advantage for everything" and "I'm kinda detached from my hometown. I wasn't super included because my family didn't have a generational line in town."

Family values were reflected in statements that noted the influence and importance of family on shaping respondents' values, such as "I think my values were more influenced by my family" when asked how their community represents their values and "I have very strong family values, as in I value spending time and supporting family members in their endeavors."

Responses mentioning children noted how the respondent hoped to return to their hometown to give their children the same childhood experiences they experienced. This respondent states that their small town's tight community guides children through goals and educates them on their available opportunities.

Rural Life and Values

'Rural Life/Values' statements touch on social or behavioral factors influencing respondent's feelings toward their communities. These include being working class, hard work independence, faith, appreciation for rural life, being outdoors, having a slower pace of life, political differences, and social differences. Pride in a working-class heritage was reflected in

statements such as “Much of my community is farming and manufacturing based. It’s not super rural but the majority of the population is working class. I’d say this impacts my values the most, where my family, and most of the other families are brought up on that working class mentality. Many of my values surround integrity, work ethic, grit, and honesty, which is pretty well reflected in the community I grew up in.”

Statements mentioning their community’s working-class heritage were often accompanied by mention of hard work, “[My community] represents my values of hard work and dedication. Because many of the members of the community are farmers or have blue collar jobs that require hard work and long hours, but no one ever gives up.” Similar sentiments were reflected in responses discussing independence, in which respondents noted that their communities instilled individual resiliency and personal motivation through statements such as, “A lot of people I know who are successful brought themselves up by their bootstraps, and I want to do the same.”

Faith and/or religion were also referenced as significant contributors to respondent’s feelings toward their communities. Respondents noted that the community connections based around religion and the values instilled by their faiths were essential factors associated with their feelings toward their home community. These sentiments are reflected through statements such as “I was raised in a Christian community that was very close and supportive. I definitely try to be that support system for other people and have a lot of faith based values” and “Growing up with a strong religious community, I also feel a strong connection to my religion, in how it is a part of who I am and how I present myself.”

Appreciation for rural life was noted for statements referencing the unique aspects of rural living that differ from urban settings. These included statements on the social expectations

of rural communities, the ‘small-town feel,’ and knowing where their food came from. For example, one respondent noted, “For me growing up a 40min drive for groceries or new clothes was typical. Many people I know would never dream of traveling that far for anything as basic as groceries. I also think that I put far less importance on punctuality and tardiness though that may not be so much from where I grew up but other factors. I also have noticed a substantial disparity in what I see as entertainment versus what many of my friends want in a town.”

This respondent also noted, “Growing up, it was plenty enough entertainment to hike around in the forests and fields around my house on a Friday night,” reflecting a common thread of appreciation for being outdoors among found among the responses. This sentiment was repeated through statements such as, “I live in the country outside of my town and it has made me value being outdoors and living a slower life in comparison to the fast life of doing something all the time. It’s helped me appreciate the little things.” ‘Living a slower pace of life’ was also mentioned throughout the responses, often in association with appreciation for the outdoors. One respondent noted that enjoying outdoor work was the only element they had in common with the community in their hometown.

While many of the sub-topics identified within ‘Rural Life and Values’ convey positive connotations regarding respondents’ feelings toward their communities, political and social differences highlight gaps between respondents and the prevailing ideas they recognize in their hometowns. One respondent noted that political differences affected their sense of belonging to the community, “The major factor in the feeling of belonging in my community is alignment (or the reverse) of the majority community political views. In my town, I was in the minority in terms of political values. I was able to find people that thought similarly to me and people that were neutral as well, however; the majority are a vocal majority. Anyone that doesn’t believe

similarly to the crowd, is quietly ostracized.” Similarly, another respondent noted a lack of belonging due to their sexual orientation, “I come from a predominantly ag community, and as an LGBTQ woman it’s hard to find solace around people who do not find comfort around me.”

Community

‘Community’ statements highlight the social dynamics that affect respondent’s feelings toward their communities. Sub-topics identified within this topic are knowing everybody, community support, community closeness, wanting to give back, community groups and events, strong community, appreciation of home, being low income, a lack of community connection, belonging, values, positive interactions, age gaps, and a lack of community change.

‘Knowing everybody’ was noted as an element that tied respondents to their community.

Respondents stated that these social connections helped them succeed or find assistance when needed. Statements such as “Since I lived in a rural town growing up, everyone knew each other, so they were able to recommend each other for certain jobs or clubs they knew they would like,” and “I enjoyed the feeling of knowing everyone and the fact that everyone has my back and is there for me,” exemplify the overarching sentiment throughout the findings.

Statements about ‘knowing everybody’ were often accompanied by mention of community closeness and community support. These statements note an appreciation for the strong support system and community cohesion in rural settings through statements such as “I value community a lot. Coming from a small town, there is always someone who has your back and wanting to see you succeed.” They also note a desire to support the community like the community has supported them, “[My community is] very community centered- always giving back to each other and investing in the future of the community and helping your neighbor when it’s needed.” This desire to ‘give back’ to the community was also a common theme identified

among the responses through statements such as “I have a goal to go back after graduating and give back.” Knowing everybody was often present with sentiments of being part of a strong community within cohesive and supportive social groups. Similarly, three respondents noted how they appreciated their community's positive, cordial interactions.

Community groups and events, such as clubs, school groups, and religious organizations, were often identified as significant cultivators of community connection and providers of opportunity. Respondents reported that organizations such as FFA and 4H provided educational opportunities and reinforced community connections through statements such as, “The community definitely had many opportunities for me to explore what I found interesting. For example, I studied rocketry and music in my local 4H group,” and “I love my hometown because I felt a sense of ownership and belonging. Within my school, church, and various groups, I got to know many people and find out just how many people I am related to!”

‘Appreciation of home’ was reflected through sentiments of affection, nostalgia, or ‘missing’ home, such as “My community will always be home regardless of where I go. I will always look back at my time there in a positive manner,” and “I miss the area I lived, for it was nice to know many people around.” One respondent noted that they miss the way their community used to be and that changes have made attachment to the current community more complicated- “It is an odd feeling to not really feel like you have a place anywhere. I miss the community I used to have.”

Respondents also expressed disdain for the lack of change in their communities, through statements such as “...many people in my community are apprehensive to change, and like any small town that does not adapt with the changing of the times, that will aid in economic

development then it will soon crumble. Growth requires change, but how is a community supposed to grow if its members are unwilling to change their old ways?"

Being low-income was mentioned by two respondents as a factor they associate with their community through statements such as, "In my rural community, we were not wealthy, so I am definitely working hard to be able to provide for myself and my future family." One respondent noted that both wealth and age were significant factors that could restrict personal and professional opportunity in their community: "There are very few opportunities in my rural community for personal growth and development unless they're self-initiated. Because the population is mainly over 65 years of age and low income, the one prevalent opportunity I've noticed is for volunteering." This respondent also stated that they feel the significant age gap is responsible for their values being at odds with those represented in the community. Respondent's feelings varied when discussing whether their values aligned with their communities' values. Respondents who stated that their values did align with their community noted that many previously identified aspects are shared between them and their hometowns. These include hard work, a slower pace of life, community support, and topics pertaining to children, expressed through statements like "The small community that I call my hometown represents my values well. My dream is to be able to return and raise my kids in the same place I was raised." Negative perceptions of values also touched on separately identified themes, such as social differences, family history, and personal ambitions, through statements such as "It does not [represent my values]. It is a depressing place where nothing changes over time and people have fixed mindsets."

Like their values, respondents' feelings of belonging within their communities were reflected positively and negatively, though negative feelings were expressed more frequently.

Positive feelings of belonging were accompanied by appreciation for close social networks and 'knowing everybody.' Negative feelings toward belonging were often expressed with mention of other sub-topics, such as "...my sense of belonging within my rural community is essentially nonexistent and has not significantly contributed to the love and belonging I feel for my rural area. The experiences I've had growing up on a farm with my family are the reason I feel such a strong tie to my rural area." Statements like this demonstrate how community belonging may be subject to influence from other social factors, including family, social differences, and personal ambitions.

Aspirations

'Aspirations' statements touch on the opportunities for respondents to fulfill personal, professional, or educational goals. These include personal ambitions, work opportunities, primary education, higher education, vocational opportunities, and funding.

The respondents' communities' ability to meet their personal ambitions was discussed both positively and negatively. Positive responses noted that the community could play a part in their personal goals. In contrast, negative responses noted a lack of room to grow or missing ability to advance personal goals with statements such as "I constantly felt judged just because I had high standards and big goals for myself," and "During high school, it was a comfortable place to be and in my comfort I struggled to find opportunities to grow. When I did find such opportunities, it led me outside the community and I was left with the feeling that I have outgrown my small town." Three respondents note that a lack funding is a significant driver of missing opportunity.

Like personal ambitions, the availability of work opportunities varied among respondents. Some respondents noted the availability of employment through statements like "...my town is uniquely home to many engineering and industrial companies. I was able to have an

engineering internship directly out of high school because of this. Very good and rare!” while others noted the lack of employment opportunities, “it’s hard to find opportunities in my future career goals and personal goals because it’s just small enough to have the basics but not much past the bare minimum.”

The availability of education (primary, higher, and vocational) was also frequently mentioned as a significant factor in their communities' ability to meet their personal aspirations. The availability and quality of primary education varied among respondents, with some expressing appreciation for their primary schooling due to hands-on experiences and passionate teachers, while others noted the lack of quality, class selection, and staff. Feelings on higher education was split. One respondent discussed the lack of value for higher education within their community, “A postsecondary education is something I highly value, but my community has consistently shown little regard for the value of a college education.” Others remarked that their community provided them with scholarships for college or had a community college present. Vocational opportunities were also discussed, with respondents expressing appreciation for exposure and education in trades.

Environmental Questions

The most important themes found in response to the environmental questions were concerns with water, farming practices, degree of community and aesthetics, and ecological issues. Different child codes were developed from these themes expressed across various responses. All codes and their frequencies can be seen in Table 4.

Table 4: Codes and responses for environmental responses

<i>Environmental Responses</i>			
Parent Code	Child code	Freq.	Example Quote
Water		11	"My town is situated on a lake that floods regularly and due to the location of the water filtration plant, fresh drinking water had to be trucked in at least once per year. Additionally, the town is on the flood plain of the Kansas River so we are susceptible to flooding from the river as well. There are many corn and soybean farms around town as well because of the fertile floodplain land, so allergies are horrendous during the spring and fall due to dust and pollen."
	Flooding	2	
	Water Availability	4	
	Water Quality	2	
	Clean Water	1	
	Drought	1	
	Shortages	1	
Farming practices		17	"If anything, these environmental issues encourage me to return to my rural community. I want to help reverse some of the damage heavy agricultural monoculture systems and mismanagement have caused in my area. As a landowner and farmer, I think I'm uniquely positioned to make a tangible difference."
	Agricultural Practices	3	
	Land Availability	1	
	Agricultural Prosperity	3	
	Land Management	1	
	Degraded Land	1	
	Crop Production	2	
	Management Changes	1	
	Land Stewardship	1	
	Farmer Collaboration	1	
	Communication with Farmers	1	
	Effects on Farmers	1	
Farming Loss	1		
Degree of community and aesthetics		35	"I think that contrary to many situations, my community--as well as the surrounding ones in the county--is rapidly growing. I would say that's in part due to the proximity to the KC, Topeka, Lawrence areas. I would say that prior to 2010-2015, one of the major environmental issues was due to the lack of education and resources available to younger populations. Once those became available when the community college moved in, many younger people and families were able to stay in the community. They could go to school for things that were available, and not have to migrate out." "The presence of industry and
	Economic success	2	
	Development	1	
	Urbanization	1	
	Aesthetics	2	
	Strong economy	1	
	Human health	2	
	Community growth	1	
	Education access	2	
	resource availability	3	
Infrastructure	3		
Safety	1		

	Sense of need	1	to migrate out. The presence of industry and variation in jobs has increased over the years. I think that's a big reason many of my friends and classmates stayed in the community. "
	Community	2	
	Family	1	
	Low environmental concern	2	
	Unable to help	1	
	Social Issues	2	
	Community engagement	1	
	Future outlook	1	
	Job availability	1	
	Cost of living	1	
	Essential services	1	
	Toxic environment	1	
Ecological Issues		8	
	Ecosystem issues	1	
	Biodiversity	1	
	Renewable resource effects on wildlife	1	
	Wildlife	1	
	Native ecosystems	1	
	Ecosystem loss	1	
	Wildlife protection	1	
	Climate	1	

Water

Water concerns came up in a wide range of contexts, varying from issues with water quality to water quantity. In some responses, these factors worked in tandem, creating a wide range of issues within these rural communities. One respondent expressed issues with both water quality and flooding, saying, “My town is situated on a lake that floods regularly and due to the location of the water filtration plant, fresh drinking water had to be trucked in at least once per year.”

Looking specifically at water availability, drought, and shortages, other respondents expressed concern with the future of water access with another respondent saying, “There isn’t enough water and the aquifer is running dry. Especially with irrigation, we have to be very

careful with how much water we use.” Similarly, another respondent noted that having access to water impacts their economic livelihoods, saying, “Climate... [and] lack of rain in the past two years have seriously affected the wheat production that last year it was cheaper for farmers to just let their fields go than to harvest it.”

Clean water was also an important theme that arose from respondents’ thoughts on returning to their rural communities with many respondents expressing worry about access to a quality resource. One respondent said, “The lack of reliably clean water,” influences their decision to return and that it makes them “much less likely to return.” Water in rural communities plays a key role in young adults’ decisions about returning to their rural communities, with overall negative connotations surrounding this vital resource. Water affected both individual livelihoods as well as the ability of the community to function.

Farming Practices

Farming practices were a key theme in survey responses, including agricultural practices and management, agricultural prosperity, crop production, and effects on individual farmers. Specific child codes, such as agricultural practices, land management, degraded land, land availability, and agricultural prosperity, varied in terms of positive and negative connotations. One respondent expressed concern with land management and agricultural practices saying that “Overgrazing/poor grazing habits,” were cause for concern, with “many people burn[ing] more than is likely needed for their land.” Another respondent expressed no concern towards agricultural practices saying, “We grow good crops, no environmental issues here!” This mix of positive and negative responses regarding land management and farming practices comes down to the perceptions our survey respondents have surrounding environmental issues and can play key roles in their decision-making. For example, agricultural prosperity was expressed as both

fear of loss of the ability to farm and joy that their hometown was able to be agriculturally productive. One respondent said that their hometown has “a strong agricultural economy,” and there are “not many environmental issues that face my hometown.” In contrast, a different respondent expressed opposite opinions saying that loss of land contributes to an overall loss of agricultural prosperity. They said, “There is currently a lot of development happening and it is replacing land used for agricultural.”

Other key codes that were prevalent under the farming practices parent code were land stewardship, farmer collaboration, and communication with farmers. Many respondents expressed the desire to return home to help farmers change their practices in response to environmental issues. One respondent said, “I want to help reverse some of the damage heavy agricultural monoculture systems and mismanagement have caused in my area. As a landowner and farmer, I think I’m uniquely positioned to make a tangible difference.” Others expressed similar sentiments about wanting to improve management practices and work with farmers but felt that they were unable to do so. One respondent said “I would like to work with farmers to change these habits but I don’t feel like I’m the person that could get through to them as they can’t relate to me.” Furthermore, some respondents observed farming loss and the environmental impacts on farmers as a reason to move out of the community due to fear that farmers will also move away. One respondent said that “for the people whose livelihoods depend on successful farming, I fear they will quit/ sell land/ move away. I feel like this may solidify my decision to keep my distance [from my community.]” Overall, many people recognized that environmental issues pertaining to farming practices influenced the decisions and livelihoods of the community around them. This, in turn, influenced the decisions these young adults made about leaving or staying in their rural communities.

Degree of community and aesthetics

While many survey respondents expressed specific concern with environmental issues, a big part of the overall respondents expressed concern with community, social, and economic issues related to the environment. The most prominent themes stemming from the degree of community and aesthetics were related to development, urbanization, community growth, and infrastructure and how these codes impact visual aesthetics within the community. These ideas were portrayed in both positive and negative lights, with one respondent expressing improvement within their community because of development saying, “the city council has put more of an emphasis on parks and green spaces,” but followed it with concern for the environments saying, “urban sprawl has threatened quite a bit with endless new suburbs spreading out from the city and eating up old fields and farmland.”

In a similar light, these increased development within these communities have created greater access to resources. However, there were still many respondents that expressed concern over a lack of resources. Child codes showed that education access, job access, resource availability, essential services, and economic growth/success. Some respondents noted that community growth played a key role in the ability of their community to access vital resources, therefore influencing people’s decisions to stay. One said, “Prior to 2010-2015, one of the major environmental issues was due to the lack of education and resources available to younger populations. Once those became available when the community college moved in, many younger people and families were able to stay in the community. They could go to school for things that were available, and not have to migrate out. The presence of industry and variation in jobs has increased over the years. I think that's a big reason many of my friends and classmates stayed in the community.” However, other respondents did not express similar experiences, saying that

there were important resources and opportunities lacking from their communities. One said, “The lack of local stores and other essential services would make me not return,” when asked how environmental issues would affect their return to their community. For some, despite having both resources and development, still felt that they could not stay in their communities due to lack of job opportunities. One said, “my community is lucky in that there are numerous resources available. The only issue--for me--is that there is a major lack of engineering-related jobs available in that area.”

Ecological Issues

The final theme that emerged from our environmental questions pertained to the ecological issues that some respondents faced in their community. These were related to things like ecosystem issues/loss, biodiversity, wildlife and wildlife protection, native ecosystems, climate, and renewable resources. Respondents that expressed these themes had concerns over the natural environment that they live in, with one respondent saying that “The main environmental issues my rural community faces are eutrophication, declining biodiversity, increased prevalence of invasive species (eastern red cedar, sumac, thistles, etc...), and pollinator loss.” Another had similar sentiments, saying that “Many of the forests I used to roam as a kid have been torn down for low-density housing and new farmland to replace what was taken over.” Wildlife was another important code that came up in our results. One respondent expressed concern over how renewable resources impact natural wildlife saying that, “renewable energy is better for the environment, but is damaging to the habitats of local animals and migrating birds.” In a different way, wildlife came up as an important factor that was protected within their community. One respondent said “Local legislation is heavily concerned about protecting wildlife, so I do not believe that any majorly damaging changes can be made without approval.”

Overall the results of these environmental questions expressed a dichotomy between high concern for environmental issues and little to no concern for them.

The perception in which our respondents view these issues fuels the sentiments they have for environmental issues within their community and if it affects their decision making. For example, some respondents concerned with their community's environment felt they needed to return home to remediate those problems. While others felt that they could/did not have the ability to solve these issues, and saw environmental problems as reasons to leave their hometowns. These results reflect views on individual levels, making the overall results from our study group come down to perception of environmental issues.

Economic Questions

Table 5: Codes and quotes for the economic questions

<i>Economic Responses</i>			
Parent Code	Child Code	Freq.	Example Quote
Community Impact	Socio Economic Status	4	"People are so quick to take handouts than to work build up their lives. They are more willing to settle for what is just "good enough" and not push for more. There is a lack of individuality with even students in high school that grew up economically deprived to encourage them to get out of the systems that have historically brought people down. There are a few programs in place to help, but there is always room for improvement and the students actually need to apply themselves to everything they do, or they'll be stuck in the same systems they grew up in."
	Community Size	3	
	Struggling Systems	9	
Community Opportunities	Better Opportunities Elsewhere	4	"The community cannot fulfill economic and professional ambitions. We have two gas stations, a quarry, a bar, a pizza place, and a school. With the exception of teaching at the school, there are no professional opportunities short of a 45-minute commute away. Minimum wage jobs at a gas station or pizza place can hardly be considered to fulfill economic ambitions."
	Competition with Outside Communities	6	
	No Opportunities	16	

Economic Impact		11	"People have tried to be that change... businesses come and go and in a community where it seems like everyone is trying to one up the next, people are going to begin to take note, leave, and not want to come back because only when they get out and experience healthy communities do they realize that theirs is suffering and in need of change but notice people in power that can help but don't. Seriously, who would want to go back to that?"
	Small Business	3	
	Cost of Living	6	
No Influence		2	"There is no influence from economic issues on my decision about returning home".

Community Impact

‘Community Impact’ statements often resulted in discussions about different aspects of the community that impacted much of the students’ decisions. This included socio economic status, size of community, and struggling systems that vast number of responses in the ‘community impact’ responses and are considered the child codes within the ‘community impact’ category. Socio economic was much reflected as the communities social standing and or class compared to other communities around them. Socio economic status can be reflected through statements such as “Our community is made up or two very distinct economic classes of people: those with large houses and land, and those who live in the “downtown” area. The trailer park makes up nearly all of “downtown”. School lunch debt is something that the local churches have been taking collections for over many many years. Funding for public facilities and schools is functionally nonexistent due to the low-income community”.

Another aspect in ‘community impact’ was community size. Community size has various impacts on participants, but a common theme through responses was that their community was shrinking. There were worries that there may not be a community to return to because there is an

out migration of not only those seeking higher education. This noted many challenges within the community because their community size is shrinking. “Simply [there] aren't enough people. My community grows smaller each year and the few existing economic opportunities are continually outsourced to larger towns and cities”. This is one response to the idea of a shirking community and was a common response from the rest of the participants.

The last commonality through the responses of ‘community impact’ was struggling systems. This can be described as an interconnected network that rather than working to solve a challenge. The problem is stuck in a system that continues to go through the same process and continues to produce the same outcomes. The largest struggling system that was mentioned in many different communities was the struggling school systems. “Teachers were underpaid in my rural school, causing for a quick rotation of young staff and was a difficult thing for our education system to retain staff and meet educational standards.”

Community Opportunities

‘Community opportunities’ looks into the ambitions of the participants and if their community is able to fulfill their economic ambitions. The child codes that presented themselves through the survey included better opportunities elsewhere, competition with outside communities, and no opportunities within participants community.

Better opportunities elsewhere can be seen as the participant is able to fulfill their economic ambientes elsewhere due to varying reasons. These included but are not limited to pay, career choices, or even their career choice is not prevalent in their community. “My ag-based work is not dependent on my community's population, but for many people in my community, moving away has been the most economically feasible option. There just aren't enough people to support a small business”. This is just one example of how economic issues can influence

community member decisions. Although this participant only highlights their community, this was a commonality that many of the participants shared in their differing communities.

Another aspect of 'community opportunities' includes competition with outside communities.

Much like the last parent code, participants are leaving their communities either because the competition is providing better opportunities, or their community is struggling because the competition is providing the better opportunities and taking members leading to a shrinking community size. All can go hand and hand here leading to the multitude of economic issues.

"My job would be easy to find but would not meet the economic ambitions. Working in bigger cities would provide the economic needs for me". This was a common response for many participants. They would be able to find some sort of career in their community, but it would not meet their ambitions that they would want to achieve, leading them to the metropolitan areas for those opportunities.

Lastly when discussing 'community opportunities', participants mentioned that there are no opportunities for them in their home community. Out of all the participant responses, this child code held the most responses. For many of the participants, this is a major economic issue within their community and a reason many desire not to return after graduation. "The community I grew up in is very limited in professional opportunities for my degree. There is not a business in my career field in my area, which pretty much severs any meaningful career development in my home community. I have seen opportunities in other similarly sized rural areas, but not in mine". This can be a difficult issue to find a solution for because while in larger communities industries have the opportunity to grow as time goes on, smaller rural communities, which many tend to be agriculture based as discussed by many participants, may not have the

same ability to do leading back to participants having to look for a career elsewhere rather than their home community.

Economic Influence

‘Economic Impact’ can be seen through small business and cost of living. This parent code was described this way due to the fact that small business and cost of living were other influences that participants saw pressing in regard to the economy of their community. When discussing small business in rural communities, this type of business is seen as the lifeline for rural communities. “Everyone is a small business owner, and a homeowner where I am from. Most people do not rent, and few work for companies over 20 employees. It gave me the skills to learn navigating small businesses and small teams in efficient and profitable ways as this was the main income for most households.” With the understanding of what impact small businesses hold within rural communities, it can help give a better understanding of the conversation within ‘community opportunities. This is due to the fact that many participants may be seeking opportunities in professions that are not small business leading to participants having to find those big business opportunities elsewhere.

Cost of living seemed to be another issue faced when speaking on other influences. Cost of living can be described as the cost of maintaining a certain standard of living. When thinking of rural communities, the cost of living is going to be lower than a major city majority of the time because of the fact that not many seek to live in rural areas. “I think that pay will be less competitive from the rural area I am from, and opportunities are very limited and will be very hard to earn. However, the close proximity of family and the lower cost of living may make the income more comparable and may provide important resources that would otherwise cost (ex:

childcare, cheaper groceries/rent).” That being said, this is one influence that participants have brought to light that might encourage them to move back to their rural community.

No Influence

‘No influence’ is not accompanied by any child code. There were a few responses on how the economic issues within their home community have no influence on their decisions upon graduation from college. “There is no influence from economic issues on my decision about returning home.”

Overall, these results addressing economic questions expressed high desires of not wanting to return to their home communities because of the economic issues that they would face with returning. While some outliers stated they wanted to return to address the issues their communities face, most participants remained with not returning due to the vast issues.

Personal Significance/Self-Efficacy

Before completing the survey, respondents were asked to answer a final question about how they could play a significant role in the rural community where they live/lived (see Methods section). Since only one question in the survey was relevant to this category, the results for this section had fewer responses (18 responses) compared to the social, environmental, and economic categories.

From these responses, three parent codes emerged: Contribution, Personal Efficacy Belief, and Sense of Belonging. These themes, sub-themes or “child codes,” and example quotes for this category are illustrated in Table 6.

Table 6: Codes and quotes for significant role in community

Significance of Role in Community Responses

Parent Code	Child Code	Freq.	Example Quote
Contribution		18	“I already play a significant role in my community through my volunteer efforts and administrative duties for the local grocery store. In the future, I think I could play a greater role in my community by supporting annual events that bring in visitors like Fourth of July celebrations.”
	Volunteerism	4	
	Group Activities	3	
	Critical Work/Community Role	2	
	Disinterest in Critical	3	
	Knowledge Sharing	2	
	Staying in Community	1	
	Fiscal Contribution	1	
	Low Extent of Impact	2	
Environmental Efforts	1		
Personal Efficacy Belief		9	“Everyone played a big role in the community that made me feel I could provide the same.”“I used to think I could have a much more significant role. I am not sure anymore. I think for a long time I had this idea that I had a duty to fix things, and I still do to some extent. I just feel exhausted and overwhelmed by issues that seem far beyond my ability to fix...”
	Past Experience	1	
	Observed Others Impact	1	
	Belief in the Extent of Personal	3	
	Belief in the Extent of Personal Impact (Negative)	3	
	Beyond Ability to Fix	1	
Sense of Belonging		5	“In a small community, it takes everyone to keep the town alive. Just continuing to live in the town plays a significant role in the life of the town...”
	Duty to Community	1	
	Togetherness	2	
	Misaligned	1	
	Resistance	1	

Many respondents focused on the ways that they felt they could play a significant role in their community which developed into a theme of contribution. How respondents felt they could contribute varied greatly. Quite a few focused on contributing their time to their community through volunteerism. One individual stated, “I help out wherever to support my community. I did volunteer work with cleaning up the school grounds and helped with holiday events in my town.” Engagement with community activities was also a common way venue for contribution, as illustrated in the previous quote. Quite a few respondents identified critical roles within their community such as political office, healthcare, school board positions, and small business

ownership as potential ways to positively impact their communities. For instance, one participant responded, “I will help people to worry less about their loved ones who are sick.” However, only some of the respondents who identified critical roles were also interested in filling those positions. Some individuals expressed disinterest in serving their community by filling a critical role; for example, one individual said, “I feel that the only way I could even remotely make a difference is if I got on the school board or made office, and I have no interest in putting myself in that position...”

Another common theme that arose from the results was personal efficacy belief. Self-efficacy is commonly based on Albert Bandura’s social-cognitive theory. According to Bandura, self-efficacy is defined as people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances. If individuals believe they can produce a desired result, they have more incentive to act. Varied degrees of self-efficacy were on display in the results. Some individuals demonstrated belief in their ability to play a significant role in their community. One state, “Everyone played a big role in the community that made me feel I could provide the same.” This belief seemed to stem from observing others making a positive impact on their community, having previous experiences playing a significant role, or belief in personal ability. Other respondents showed disbelief in their ability to make a positive impact. For example, “I used to think I could have a much more significant role. I am not sure anymore.” In one case extreme, the respondent expressed concern that the issues in their community were beyond their ability to fix.

There were also a few responses that talked about their sense of belonging within the community. A sense of togetherness within their rural hometown community was mentioned twice within the responses.

Discussion

Overall themes that emerged from the survey were rural social networks, presence of personal and professional growth, and perception of resource use. Within our social questions, the parent codes of family, rural life/values, community, and aspirations created the bigger theme of rural social network as an important factor in young adult decisions to migrate out of their rural communities. There was a distinct split in responses, where some respondents felt that there were strong community connections and a strong sense of place, while others, did not share these experiences and felt that they could not connect with their communities.

In our economic factors, parent codes of community impact, community opportunities, economic impact, and no economic influence gave rise to an overall theme of presence of personal and professional growth. Most responses noted a lack of economic opportunities and jobs, a competitive environment, and people. This makes it more difficult for these individuals to find and obtain opportunities, both economically and personally. However, factors like lower cost of living and access to family might offset the economic losses for some respondents.

Looking at our environmental questions, parent codes of aesthetics, water, farming practices, and ecological issues work in tandem to create an overall theme of perception of resource use. There we distinct splits in opinions on environmental issues, with some respondents expressing concerns with the effects of development in their communities, and how this would impact native ecosystems and agricultural production. While others felt that development was necessary and beneficial to the community, even if there were some costs environmentally. This split between high and low concern played key roles in respondents' decision making, and if they would return home.

Overall, these themes of rural social network, presence of personal and professional growth, and perception of resource use come down to respondents' individual beliefs and attitudes, making it difficult to generalize across the entire group. While each individual respondent may share similar experiences that come with living in a rural area, other factors outside of the social, economic, and environmental ones examined in this study could be working to shape individuals' experiences. For example, experiences that respondents have had outside of their hometown, like attending college in a new city, could be important in how they perceive the world and form their goals. On a finer scale, if we had asked more extensively about family/friend relationships, current financial situations, hobbies/interests, job aspirations or even college majors, within our study group, we could have had a better understanding of the prominent factors influencing young adult decisions. Broadly speaking, social, economic, and environmental factors are all important in shaping young adult decisions to leave their rural communities, but the ways in which they shape those decisions vary at the individual level.

By understanding the factors contributing to young adult outmigration from rural communities, it could help identify areas of improvement within communities, whether it pertains to social, economic, or environmental sectors. Rural communities are important to the overall prosperity of the state of Kansas, and maintaining these areas regardless of what young adults decide would be important to the continued growth of the state. For example, by identifying environmental problems in these areas, whether it pertains to agriculture or natural ecosystems, and ameliorating them could create a cascade of effects on the community. Having an intact environment would be beneficial economically in terms of agriculture, therefore allowing the community to support more people and provide more jobs. Further, access to green

spaces and nature can play key roles in helping people form place attachments to their community.

These social, economic, and environmental influences that these young people are facing also extend out towards the greater community. Younger generations in these communities may face a different suite or degree of influences as they reach adulthood. Similarly, older demographics are also not immune to these influences, and it would be important to understand how these factors influence their decision making and attitudes. Currently, they place more prominent roles in these rural communities, and could be key in helping to identify and fix social, economic, and environmental issues.

Limitations

Throughout the course of this research, there were several limitations that emerged. Firstly, the scope of the audience was restricted. By focusing on students from rural communities in Kansas, the number of participants that could be included was naturally limited. Additionally, another limitation of reach was the ability to include more participants. This means if more time or better resources for promotion presented themselves, the project may have been able to connect with more students from rural communities at Kansas State University.

Another limitation that presented itself was the ability to conduct interviews. This could be another limitation due to the time restraint on this project. The hope was that one researcher could interview one willing participant to gain more knowledge and depth on the participants' community. If more time presented itself, this would be one aspect that we would want to be sure of and include in our research process because it would be good for triangulation, meaning it would allow for a clearer and robust understanding of our results.

While these were two of the more prominent limitations, another that came up in discussion is research biases. The challenge is that we researchers are students asking other students from the same institution to take part in our project. Another aspect that needs to be included in research biases is the conclusions that were made based on how the researchers see the world. When choosing the codes of the project, they were chosen on what stood out to the researchers. There could be a multitude of different ways these codes could be connotated, but these were chosen on how the researchers saw fit.

Implications

Through this research, we were able to uncover what may or may not discourage young adults from not moving back to their home communities upon graduation. With these results present, communities could have a better idea on what is causing the outmigration within their communities and have discussion on what changes could be made to help alleviate the frequency of young adults out-migrating. The problem of out-migration in rural areas is nothing new and at times higher education is blamed for the issue. By understanding the social, economic, or environmental sectors of the dilemmas that young adults seem to face in the decision on where to go after graduation, communities have the chance to address some of these concerns in hopes for a reduction in out-migration of their young adults.

Conclusion

Key takeaways from this study were that social, economic, and environmental factors all play important roles in young adult decisions about migrating out from their rural communities in Kansas. However, the extent to which these factors have in those decisions vary at individual levels. Some perceived these factors as vital in their decision making, while others did not. However, the wide range of responses and contrasting views could help us understand how these

rural communities might change in the future. Furthermore, if researchers, policymakers, and the individuals in these communities can understand these implications, they can find ways to help these rural communities prosper.

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