

The Influence of Place Attachment on Farmers' Succession Plans: A Mixed Methods Study

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Abstract

A farm family's land succession plan is vital to ensure that high-value farmland continues to benefit the family for generations to come. However, many farmers have been reluctant to develop succession plans. The purpose of this study was to determine the influence of place attachment on farmers' land succession planning. This exploratory mixed methods research involved farmers within 10 years of retirement age (55 years of age or older), both with and without a land succession plan. Surveys and interviews utilized Raymond, Brown, and Weber's (2010) five dimensions of place attachment: place identity, place dependence, nature bonding, family bonding, and friend bonding. Survey results showed farmers with a succession plan had significantly higher place identity, place dependence, nature bonding, and overall place attachment than farmers without a succession plan. Seven themes emerged from the qualitative analysis of interviews of farmers with a succession plan and six themes emerged from interviews of farmers without a succession plan. Three themes: connection to family, sense of community, and enjoyment of the outdoors were held in common. This study adds to the literature exploring the complex factors affecting the transition of the family farm to the next generation.

Keywords: farmer succession planning, farm transition, multi-dimensional place relationships, place attachment

1. Introduction

The US Great Plains economy is dependent on agriculture. The value of agricultural production in the 10 Great Plains states was nearly \$118 billion in 2021, or more than 27% of US cash receipts from farm marketings (USDA-ERS, 2023). In 2017, Texas, Nebraska, Kansas, and North Dakota ranked fourth, sixth, seventh, and ninth, respectively, in US farm exports at \$22.9 billion (USDA-NASS, 2019). While the agricultural economy in the Great Plains is strong, it is also increasingly dependent on older farmers. The average age of farmers in the US is now over 57.5 (USDA-NASS, 2019).

More than 500 million acres of the 10 Great Plains states are devoted to farms, with an average farm size of more than 1,200 acres (USDA-NASS, 2022). More than 85% of the Great Plains farmland is in sole proprietorship or individual family ownership (USDA-NASS, 2019). With more than 380,000 farmers on the Great Plains 55 years or older, this data warns of a large pool of agricultural land that could change ownership in the next decade or two. Replacing retiring farmers is critically important to the economic viability of the Great Plains.

1.1 Farmer Succession Planning

Land succession planning is a process that allows landowners to pass farmland on to the next generation of farmers without incurring a potentially debilitating tax liability for the heirs or arranges how the farm is to be sold. Land succession plans play a vital role in the transition of farms to the next generation. Baker and Epley (2009) contend that "The identification of a successor is one of the most important factors in the long-term viability of the family farm" (p. 28). Nonetheless, studies consistently find that a large percentage of farmers do not have a succession plan in place (Arbuckle & Baker, 2015; Baker & Epley, 2009; Girard & Baker, 2005; Leonard & Gutman, 2006; Maule, Zhang, & Baker, 2020; Schulz, Artz, & Gunn, 2017). The reluctance of existing farmers to retire is likely connected to the succession process being fraught with financial challenges, intra-familial relationships, stress, contradictory interests, and time constraints (Baker & Epley, 2009;

Ballard-Reisch & Weigel, 1991; Boss, 2001; Kaplan et al., 2009; Pitts, Fowler, Kaplan, Nussbaum, & Becker, 2009). Intergenerational power and control issues as well as retaining one's identity and status within the community associated with being the primary operator are also impediments (Bjuggren & Lund, 2001; Conway, McDonagh, Farrell, & Kinsella, 2016; Goeller, 2007; Keating, 1996; Rogers, Barr, O'Callaghan, Brumby, & Warburton, 2013).

Despite the emotional and interpersonal issues brought on by this life change, succession planning encompasses important financial reasons for farmers to transition. They can address tax obligations to successors and help to ensure that the financial obligations of operating the farm are met. They assist with the money required for existing farmers to retire. Planning also decreases the likelihood that the farm will suffer an appreciable decline in productivity following the succession (El-Osta, Mishra, & Morehart, 2007; Errington, 1998). A succession plan can address arrangements so that family farm corporations and trusts can be utilized for large and difficult estates. Planning well before retirement and as insurance for untimely death provides farmers and their heirs more options.

1.2 Place Attachment

Place attachment is the phenomenon of being emotionally attached to a particular space and the social relationships and activities associated with that space (Lewicka, 2011; Low & Altman, 1992; Tuan, 1975). As these emotional and social connections become more salient, the bond to the place grows (Moore & Graefe, 1994; Stedman, 2002; Williams, Patterson, Roggenbuck, & Watson, 1992). Research has treated place attachment as a multi-dimensional construct integrating social-cultural elements with the physical or natural environment to explain people's relationship with a space (Brehm, Eisenhauer, & Krannich, 2004; Davenport & Anderson, 2005; Stedman, 2003; Trentelman, 2009). What ties farmers to the land is multifaceted and place attachment may play an important role in influencing succession decisions.

For farmers, agricultural land is often meaningful beyond economics and its role in business (e.g., Chouinard, Paterson, Wandschneider, & Ohler, 2008; Rogers et al., 2013; Sheeder & Lynne, 2011). The working landscape of the farm creates a unique environment to foster an attachment to place (Cross, Keske, Lacy, Hoag, & Bastien, 2011; Rajala & Sorice, 2022; Quinn & Halfacre, 2014). Daily interactions with the land allow for a greater connection to the place and more in-depth feelings toward the location (Curry, 2000; Goudy, 1982; Pred, 1983; Rowles, Oswald, & Hunter, 2003; Tuan, 1975). The decisions concerning agricultural practices can influence these emotional connections (Brady, 2006; Kuehne, 2013; Michaelidou, Decker, & Lassoie, 2002), which in turn develop meaningful relationships with the land to create a sense of place (Lewicka, 2011; Tuan, 1977). Conway et al. (2016) state, "Farming life throughout the world is characterised by the almost inseparable intimate integration of home, work, memories and family tradition" (p. 166).

While most of the place attachment literature regarding farmers has explored various conservation attitudes and behavior (e.g., Cross et al., 2011; Gosling & Williams, 2010; Lincoln & Ardoin, 2016; Mullendore, Ulrich-Schad, & Prokopy, 2015; Raymond, Brown, & Robinson, 2011; Valizadeh et al., 2020; Vorkinn & Riese, 2001; Walker & Ryan, 2008), or well-being (e.g., Rajala & Sorice, 2022), its connection with succession planning remains understudied. Downey, Threlkeld, and Warburton (2017) utilized place identity theory to explore farm couples' retirement considerations. However, their focus centered on how gendered place identities create power imbalances within couples, impacting retirement decision-making, not succession planning.

Farmers' attachment to their land is multifaceted, acquired through memories, symbols, ideas, and experiences with the place and influenced by family history, financial dependence, autonomy, self-identity, personal legacy, and community relationships, among other reasons (Rajala & Sorice, 2022; Rajala, Sorice, & Thomas, 2020; Sebastien, 2020). Place attachment may play an important part in why farmers devise a land succession plan. However, little to no research has explored this relationship. The purpose of this study is to ascertain the influence of place attachment on land succession planning by farmers in the Great Plains who have and have not developed legal plans addressing the succession of their property.

2. Research Methods

This study utilized Raymond, Brown, and Weber's (2010) five-dimensional model of place attachment to integrate the multiple dimensions of place scholarship. These five dimensions include place identity, place dependence, nature bonding, family bonding, and friend bonding. Place identity refers to a meaningful connection to a place that is definitive of a person. Place dependence is the requirement for a place's functional use. Family and friend bonding encompass the social components of a place such as a sense of belonging, attachment to community, and the familiarity a person has with that place. Nature bonding refers to a feeling of connection to nature and the ability to identify with the natural environment.

2.1 Research Design

This study utilizes a convergent mixed methods design. In convergent approaches, qualitative and quantitative research data are concurrently, but separately collected and analyzed. The results are later integrated to see how they compare/contrast (Creswell & Plano Clark, 2018). For this research, survey data helped to explain differences in place attachment measures between farmers with and without a succession plan, while interviews provided insight into these ideas. Based on the place attachment literature, it was hypothesized that farmers with a succession plan have significantly greater place attachment than farmers without.

2.2 Participants and Data Collection Procedures

Participants included in both the qualitative and quantitative components of this study owned agricultural land and were 55 years of age or older. This put them 10 years from retirement or beyond full retirement age. Participants were selected from three Farmers' Cooperatives within Nebraska and Kansas based on age and willingness to participate.

2.3 Qualitative Phase: Interview Design and Interpretation

A snowball sampling technique was used for the qualitative component of this study. Seventeen individuals who met the criteria, from the participating Farmers Cooperatives, were interviewed in person. Nine individuals had a land succession plan, and eight individuals did not. Interviews lasted approximately one hour and were completed at a location of the participants choosing. The semi-structured format allowed for the flow of conversation but followed a protocol consisting of five open-ended questions to cover each dimension of Raymond, Brown, and Weber's (2010) model of place attachment.

Interviews were audio recorded and transcribed. Transcriptions were then entered into the qualitative analysis software MAXQDA®, where they were analyzed for themes of importance that were derived from the interview statements (Creswell, 2007). The purpose of thematic analysis in this study was to draw out meaningful dimensions of a farmer's connection to agricultural land and how that may influence their land succession planning. Seven themes emerged in the analysis of farmers with a succession plan and five themes emerged in the analysis of farmers without a succession plan. Three themes overlapped both groups. Thematic analysis was validated through a review of the coding process by two researchers with an extensive background in qualitative analysis. A member check was also carried out through telephone conversations with two of the interview participants, where interview transcripts were read back to each participant verbatim. Both deemed that the transcriptions correctly detailed their answers to the qualitative questions.

2.4 Quantitative Phase: Survey Design and Collection

Surveys were distributed to farmers in Nebraska and Kansas through participating Farmers' Cooperatives. Informed consent forms accompanied surveys describing the selection criteria for the participants and details about the study. Place attachment was measured using the five-dimensional model. Survey questions utilized a 5-point Likert scale with "1 = Strongly Disagree", "3 = Neutral", and "5 = Strongly Agree". General demographic questions relating to years in residence, years in farming, number of generations in farming, years the land had been operated by their family, education level, and gender were included along with one question regarding whether they have a formal succession plan or not.

2.4.1 Quantitative Analysis

Eight hundred Nebraska and Kansas farmers were invited to take the place attachment survey and 315 completed the survey for a return rate of 39.4%. Two hundred sixty-five (83.8%) were male and 51 (16.2%) were female. One hundred eighty-five (58.7%) had a succession plan and 130 (41.3%) did not. The average age was 68 for farmers with a succession plan and 61 for farmers without. Sixty-two percent of farmers who had lived on their farm for more than 30 years had a succession plan and 82% of the farmers who were at least the fourth generation on the land had a succession plan. More than 61% of the farmers with more than a high school education had a succession plan. Independent t-test analyses were conducted to determine if there were significant differences on overall place attachment and the five dimensions of place attachment between those with a succession plan and those without a succession plan.

3. Results

3.1 Quantitative Results

3.1.1 Reliability Analyses

Internal reliability for all the scales was greater than .70 (Cronbach's alpha). Nunnally and Bernstein (1994) concluded that the minimum reliability (Cronbach's alpha) for measurement scales should be .70.

3.1.2 Significant Difference Testing Using Independent Samples *t*-Tests

An independent samples *t*-test indicated a statistically significant difference between place attachment for farmers that have a succession plan ($M = 4.2$, $SD = 0.54$) and farmers that do not have a succession plan ($M = 3.6$, $SD = 0.65$; $t(313) = 8.86$, $p < .000$, $d = 1.01$). Farmers that have a succession plan had a significantly greater place attachment than farmers that do not have a succession plan. Farmers that have a succession plan were also significantly higher in subscales place identity, place dependence, and nature bonding but not family bonding and friend bonding. Descriptive statistics and the results of the independent samples *t*-test are displayed in Table 1.

Table 1. Results of an Independent Samples *t*-Test comparing place attachment in farmers that have a succession plan to farmers without a succession plan

	N	Mean	SD	t	df	Sig.	Cohen's <i>d</i>
Total Place Attach. – Plan	185	4.19	.54	8.86	313	.000*	1.01
Total Place Attach. – No Plan	130	3.60	.65				
Place Identity – Plan	185	4.51	.67	7.60	313	.000*	0.87
Place Identity – No Plan	130	3.88	.82				
Place Dependence – Plan	185	4.22	.85	6.87	313	.000*	0.79
Place Dependence – No Plan	130	3.52	.97				
Nature Bonding – Plan	185	4.50	.63	12.00	313	.000*	1.37
Nature Bonding – No Plan	130	3.47	.90				
Family Bonding – Plan	185	4.07	.96	1.84	313	.066	0.21
Family Bonding – No Plan	130	3.89	.74				
Friend Bonding – Plan	185	3.45	1.10	1.87	313	.063	0.21
Friend Bonding – No Plan	130	3.22	1.02				

Note: * $p < .000$

3.2 Qualitative Results - Farmers with a Succession Plan

Seven themes emerged from interviews with farmers on the dimensions of place attachment and their farmlands. Themes are organized by each place attachment dimension.

3.2.1 Place Identity

3.2.1.1 Theme - Emotional Connection to the Land

The first theme expressed by participants with a succession plan was an emotional connection to the land on which they live and farm. They acknowledged feeling connected to their land--feeling proud to own and work the soil in which to grow crops. Representative of this emotional connection, one participant shared, "The land is part of me. It's my family. It pulses through you, and you are lucky for it to be a part of you because you know that while watching it and knowing it that you would be lost without it."

3.2.1.2 Theme - Being Good Stewards

As illustrated above, the emotional connection to the land includes the work that goes into its caretaking. Stewardship is therefore an important aspect of these farmers' identities. Because they love the land and hope that their children will someday take over, being a good steward is considered a responsibility to future generations. As such, they want to leave their land in a better state. One participant shared:

I want to pass it on to them, so I have to continue to take better care of it for them...I feel the need to be good stewards of the land in order to keep it good for others...Of the friendships that I have, everybody seems to want to take care of the land because it needs to be passed on to the next generation. We need to try to leave it better for them.

Many of these farm families have lived on their land for generations, so there is an understanding that "if you take care of it, it will take care of you". Owning a multi-generational business requires productivity into the future. The farmers interviewed report doing their best to utilize the land while keeping it productive for future generations. Stewarding for future generations engenders a crossover with the emotional connection to the land and the connection to family.

3.2.2 Family Bonding

3.2.2.1 Theme - Connection to Family

Comments encompassing the family bonding dimension of place attachment included the activities centered around raising and providing for a family on the farm. According to one participant, “I have an emotional connection to the land because it has helped me raise my four children.” Similarly, another shared, “My personal needs and goals would be providing and caring for my family. My land has enabled me to teach my children responsibility and to be good stewards of the land. That's what we need to be after all.”

The history of living in a place for multiple generations also connects participants to their land. One participant put forth:

The land is where we all resided and lived together. It draws me closer to it because of my family or blood relation lived there. Reminds of the good times and bad times we shared which strengthened the family ties...I think because of my family that's why I care so deeply for the land. I do it all for them. The land is for all of us.

Tied to raising a family on the farm is the desire to keep it within the family.

3.2.2.2 Theme - Preserving the Family Farm

There is a family history on the land, so it is important to those interviewed that the farm continues to stay within the family. Representative of this idea, one participant shared, “This land has been handed down for three generations already. I'm looking forward to handing it down to my children and hopefully, they will hand it down to their children.”

3.2.3 Place Dependence

3.2.3.1 Theme - Pride

Along with helping them to provide for their families, farmers felt proud of their accomplishments. Pride from their perspective refers to the successful ownership and maintenance of the land. Participants with a succession plan were proud of their farming achievements and management of their land. When discussing his farm, one participant stated, “I'm proud to be able to produce a good enough crop every year because of it.”

3.2.4 Nature Bonding

3.2.4.1 Theme - The Great Outdoors

Participants often spoke of experiences in nature; the feelings of peace and tranquility associated with being in open spaces; and being a part of the larger landscape. Interviews illuminated how these farmers felt about being outdoors, attributes of the outdoors, or how they felt when they were surrounded by the natural environment. Being on their farm was acknowledged as having a safe and calming quality they don't receive from other places. “I can go out and walk around and watch the wildlife with peace and quiet...It calms the mind, heart, and soul.”, shared one participant. This sentiment was repeated by many.

3.2.5 Friend Bonding

3.2.5.1 Theme - Sense of Community

Participants with a succession plan shared that they felt part of a community and shared an identity with those community members. It was important to them to share attitudes or similar beliefs with other community members. One shared, “I'm glad to live where my friends live. They have good values that are the same as mine. Since we have the same interests, we can talk about what is happening on our land.” Many mentioned appreciating the perspective of other farmers more than those in town or the city. For example, “Most of my friends are farmers. I like their perspective on our living better than the town people.... I like the way my friends think. It's reassuring to me.” Similar sentiments, “The people that work the soil with you give you closer ties to them...As friends, we have to work together for this.”

3.2.5.1.1 Subtheme - Disassociation from Corporate/Industrial Farmers

A subtheme to having a sense of community is the disassociation from others in their industry. Participants reported seeing themselves and their operations as distinctly different from industrial agriculture. This was despite some of them being involved with chemically intensive, monoculture production. One disassociation-related comment was, “We get disgusted with the big farmers. We get fearful that they will crowd us smaller farmers out of business. I don't like that kind of attitude.” Similarly, another participant stated, “I don't like the big farmers either. They don't care how much chemicals they put on or how much they hurt the soil. It's

not right.”

3.2.5.1.2 Subtheme 2 - Disassociation from City People

Participants see their farms and farm community as distinctly different from city/urban communities. They see living in rural areas in a positive light and urban areas as inferior in certain ways. Disassociation comments make the distinction that rural areas are set apart from urban areas with statements like: “We don't have the problems as in the city.” and “At the present we are still pretty isolated with people with high morals away from the city.”

3.3 *Qualitative Results - Farmers without a Succession Plan*

Six themes emerged from interviews with farmers not having a formal succession plan. Themes are organized by each place attachment dimension.

3.3.1 Place Identity

3.3.1.1 Theme - Disassociation from the Land

Participants without a succession plan described not feeling closely connected—or not having an emotional connection to their land. Comments centered on the dependence that they have on the land for making a living:

“The land is interesting. It's my living, but as far as emotionally attached I'm not.”

“My land is a means to an end, providing a living for me and my family.”

“I don't have any personal connection to the land.”

3.3.2 Place Dependence

3.3.2.1 Theme - Livelihood

As mentioned above, participants without a succession plan associate their land with earning a living. Specifically, the livelihood theme is derived from participants describing their land in terms of their ability to earn income or gain assets. One participant tied income and land together with: “It makes me money and that is what I need. I work it, I plant it, I water it. That's all. As long as it makes me a livelihood, I don't care beyond that. Money allows me to live and the land makes me money. They go together.”

3.3.2.2 Theme - Freedom

Participants without a succession plan see farming and living on the land connecting to their personal freedoms; especially the freedom to make management decisions. One participant stated: “I can do whatever I like out here...My goals were to earn a living and have freedom to do as I please.” Another honestly stated, “Well, my land is something I don't want to give up at this point. I like it because I can do what I feel like with it...I own it and I have the right to do what I want with it as long as the banker says it is ok.”

3.3.3 Family Bonding

3.3.3.1 Theme - Connection to Family

The next theme for farmers without a succession plan is the emotional attachment between the land and one's family. This theme refers to raising children and supporting family members through farm work. One woman shared, “Why, I think the land has allowed my kids to have freedom and learn how to be kids. They can play in mud or do chores. Both are important.” Heritage also connects these farmers to their land and family. One participant shared, “I would say the land is more important to me because of my family. I have a connection to them through the land and my kids will have the same connection to me through the land.”

3.3.3.2 Theme - The Great Outdoors

Participants without a succession plan expressed an appreciation for the outdoors. The great outdoors theme pertained to views of the larger landscape; an emotion felt by being in the natural world. Illustrative of this idea, one participant shared:

“It's nice to see the sunrise and sunset. It's nice to appreciate the beauty of the outdoors. We see pheasants in spring and different crops around. We take a lot of walks and pictures with the sun and trees. We've enjoyed doing these things. It's like we have our own campground in our backyard.”

3.3.3.2.1 Subtheme - Disassociation from Wildlife

Despite expressing an appreciation for outdoor activities, some participants saw themselves as benefiting from nature but did not acknowledge a connection between their land and wildlife or the broader ecosystem. A participant stated: “We keep putting in more farmland and wildlife is still here, so I guess I don't really care about that. That's all I have to say about wildlife.” Another participant stated: “I've never thought about it. I'm not

concerned about wildlife at all. I don't think about wildlife at all. I'm concerned about water for crops. That's it as far as that goes.”

3.3.4 Friend Bonding

3.3.4.1 Theme - Sense of Community

Being part of a community is another theme shared by both groups of farmers interviewed for this project. The social cohesion of rural communities was described as a sense of shared values and lifestyle. Two examples of this were:

“The small community here is more personable than a large city.”

“A small community equals freedom for me. We have low crime here and we know everybody.”

3.3.4.1.1 Subtheme - Disassociation between Land and Friends

While participants without a succession plan in place described a connection to their community, they see friendships with people in the community as unrelated to their physical place. Friendships are not seen as connected to their land or their place in the landscape. Participants relayed their feelings toward their friends and the land with such comments as: “My friends definitely don't alter my feelings towards the land.” Another said: “My friendships are formed on the basis of things in common. The land and where I live or what I do with my land don't influence my friendships.”

4. Discussion

4.1 Data Integration

The objective of this study was to explain the difference in place attachment between farmers that have completed land succession planning and those who have not. The survey results show that a greater sense of place attachment exists between farmers with a succession plan than those without, but not across all five dimensions. The farmers with a succession plan had a significantly higher sense of place identity, place dependence, and nature bonding as well as overall place attachment, but there was no significant difference between the two groups in family bonding and friend bonding. The next section utilizes both the overlap and the divergence of ideas found within the interview data to illuminate the survey findings.

4.1.1 Overlap

Qualitative results indicate three overlapping themes between the two study groups. In response to questions about their farmland, all participants described having a connection to family, community, and the outdoors.

Statistical analyses found no significant difference between the two groups in family bonding. Interviews supported this finding. Both those with a succession plan and those without maintained an attachment to their farm because of their family and legacy on the farm. The farm is a multifaceted place where participants both live and work. It is considered a good place to raise children, helping to foster learning and responsibility. The emotional connection to the farm is, in part, because of family bonding. The attachment to place comes from the process of living life on the farm.

Similar things can be said about the connection to the community. Both groups of farmers considered their communities an important part of their lives, which supports the lack of significant difference in friend bonding in the quantitative findings. Participants' friends and family members comprise their local community and they feel as though they are all in it together (farming and rural living). Participants also feel a sense of shared values and lifestyle with other farmers and community members, which differentiates them from city folk.

4.2.2 Divergence

Along with the overlap, there are places where the two groups diverge. The quantitative results show that farmers with a succession plan have a significantly higher sense of place identity and place dependence than those without a succession plan. While strong ties for both groups are family and community, those with a succession plan maintained an *emotional* connection to the land along with encompassing stewardship ideas. These farmers shared loving the land and feeling proud to work the soil and raise good crops. Because of their love of the land and their desire to hand it down better than it was received to the next generation, taking good care of it is required. This long-term stewardship requires forward thinking, which is the general intent of succession planning.

Those without a succession plan focused more on how farming was a way to earn a living to support their family; it provided their livelihood. Management decisions seemed to be for the present and for financial stability, not due to a connection to place. Futuristic maintenance of their land was not discussed. Those without a succession

plan also highlighted the freedom associated with farming: that the farm was theirs and they could do with it what they liked. Comments associated with freedom described how participants felt about being able to make their own decisions without consulting others or without regard for others' concerns about their actions. This sense of freedom to control may be why those without a succession plan felt less dependent upon their land; it may be viewed as a tool for security rather than a foundation to their lives.

Nature bonding was another area in which those with a succession plan and those without diverged. The survey data show those with a succession plan rate significantly higher in nature bonding. While a shared theme among the two groups was the enjoyment of the great outdoors, those without a succession plan appeared to have a lack of concern regarding wildlife. They reported enjoying the beauty provided by nature: the sunrises and sunsets, but specifically mentioned that crops were their concern, not wildlife. Enjoying the recreational opportunities of the great outdoors does not necessitate a connection to nature.

5. Conclusion

Studying farm succession in Ireland, Conway, McDonagh, Farrell, and Kinsella (2019) put forth, "The reasons why older farmers fail to plan effectively and expeditiously for the future are expansive and range from the potential loss of identity, status, and power that may occur as a result of engaging in the process to the intrinsic multi-dimensional relationship farmers have with their farms" (p. 23). This study has explored the multi-level relationship between farmers and their farms. Regarding this study's research question: do farmers with a succession plan have a greater sense of place attachment than farmers who do not have a succession plan, generally speaking, the answer is yes. However, the different dimensions of attachment give us a more nuanced explanation. Both those with a succession plan and those without, are attached to their farmland through their families and communities. But findings suggest that those with a succession plan have a stronger emotional attachment to their land, consider themselves to be more dependent on it, and have a higher attachment to the nature associated with it.

The complexity of farm transitions and embeddedness of work/life/family are factors that need to be handled carefully to smoothly transition in the next generation of farmers. Conway et al. (2019) provide recommendations for the sensitive handling of farmer retirement and succession mediation, taking the human dynamics of the process into consideration. They recommend that programs promoting succession not be focused on financial incentives and that they should incorporate the wealth of knowledge held by the older generation as it will be required for the next generation's success. This would give farmers a meaningful place to contribute/share their life's work, which would give their lives continued meaning and help them to maintain their identities. Also, due to the complexity of family/business relations, Conway et al. recommend promoting farm succession facilitation services to assist in working through the farm's financial and management details.

Farmers are attached to places at varying levels through years of intertwined work and life, family history, and through the hopefully continued legacy of their family line (Rajala & Sorice, 2022). Understanding the complexity of place attachment issues, interwoven with the emotional and interpersonal issues associated with succession planning, is critical to the successful transfer of the farm operation to the next generation. Extension educators and others involved in farmland succession should look to such research for understanding how attachment to place is made and then once established can be utilized in handing the farm down to the next generation. This complicated issue is important to the future of farmlands in the Great Plains as well as the region's economic viability in years to come.

References

- Arbuckle, J. G., & Baker, D. W. (2015). *Half of Iowa farmers haven't identified successors*. Iowa State University, College of Agriculture and Life Sciences Online. Retrieved from <https://www.cals.iastate.edu/news/agonline/issue/865>
- Baker, J. R., & Epley, E. (2009). *Iowa farmers business and transfer plans*. Iowa State Extension Publication. Retrieved from <http://www.extension.iastate.edu/bfc/sites/www.extension.iastate.edu/files/bfc/Farm%20Business%20Transfer%20Plan.pdf>
- Ballard-Reisch, D. S., & Weigel, D. J. (1991). An interaction-based model of social exchange in the two-generation farm family. *Family Relations*, 40, 225-231. <https://doi.org/10.2307/585486>
- Bjuggren, P. O., & Lund, L. G. (2001). Strategic decision making in intergenerational successions of small and medium size family businesses. *Family Business Review*, 14, 11-24. <https://doi.org/10.1111/j.1741-6248.2001.00011.x>

- Boss, P. (2001). *Losing a way of life? Ambiguous loss in farm families*. University of Minnesota Extension. Retrieved from <https://conservancy.umn.edu/handle/11299/50798>
- Brady, E. (2006). The aesthetics of agricultural landscapes and the relationship between humans and nature. *Ethics, Place and Environment*, 9, 1-19. <https://doi.org/10.1080/13668790500518024>
- Brehm, J. M., Eisenhauer, B., & Krannich, R. S. (2004). Dimensions of community attachment and their relationship to well-being in the amenity-rich rural West. *Rural Sociology*, 69, 405-429. <https://doi.org/10.1007/s10745-006-9104-3>
- Chouinard, H. H., Paterson, T., Wandschneider, P. R., & Ohler, A. M. (2008). Will farmers trade profits for stewardship? Heterogeneous motivations for farm practice selection. *Land Economics*, 84, 66-82. <https://doi.org/10.3368/le.84.1.66>
- Conway, S. F., McDonagh, J., Farrell, M., & Kinsella, A. (2016). Cease agricultural activity forever? Underestimating the importance of symbolic capital. *Journal of Rural Studies*, 44, 164-176. <https://doi.org/10.1016/j.jrurstud.2016.01.016>
- Conway, S., McDonagh, J., Farrell, M., & A. Kinsella, (2019). Human dynamics and the intergenerational farm transfer process in later life: A roadmap for future generational renewal in agriculture policy. *International Journal of Agricultural Management*, 8(1), 22-30.
- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. Thousand Oaks, CA: SAGE Publications.
- Cross, J. E., Keske, C. M., Lacy, M. G., Hoag, D. H. K., & Bastien, C. T. (2011). Adoption of conservation easements among agricultural landowners in Colorado and Wyoming: The role of economic dependence and sense of place. *Landscape and Urban Planning*, 101, 75-83. <https://doi.org/10.1016/j.landurbplan.2011.01.005>
- Curry, J. M. (2000). Community worldview and rural systems: A study of five communities in Iowa. *Annals of the Association of American Geographers*, 90, 693-712. <https://doi.org/10.1111/0004-5608.00218>
- Davenport, M. A., & Anderson, D. H. (2005). Getting from sense of place to place-based management: An interpretive investigation of place meanings and perceptions of landscape change. *Society and Natural Resources*, 18, 615-641. <https://doi.org/10.1080/08941920590959613>
- Downey, H., Threlkeld, G., & Warburton, J. (2017). What is the role of place identity in older farming couples' retirement considerations? *Journal of Rural Studies*, 50, 1-11. <https://doi.org/10.1016/j.jrurstud.2016.12.006>
- El-Osta, H., Mishra, A., & Morehart, M. (2007). Determinants of economic well-being among farm operator households. *Agricultural Economics*, 36, 291-304. <https://doi.org/10.1111/j.1574-0862.2007.00207.x>
- Errington, A. (1998). The intergenerational transfer of the farm family business: A comparative study of England, France and Canada. *The Journal of Agricultural Education and Extension*, 5, 123-36. <https://doi.org/10.1080/13892249885300241>
- Girard, D. D., & Baker, J. (2005). *Farm and ranch succession in a rural California county: Extending the farm transfer project*. Paper presented at the Annual Meeting of the Rural Sociological Society, Tampa, FL.
- Goeller, D. (2007). Barriers to farm/ranch business succession. *Cornhusker Economics*, 336 (October 3). Retrieved from https://digitalcommons.unl.edu/agecon_cornhusker/336?utm_source=digitalcommons.unl.edu%2Fagecon_cornhusker%2F336&utm_medium=PDF&utm_campaign=PDFCoverPages
- Gosling, E., & Williams, K. J. H. (2010). Connectedness to nature, place attachment and conservation behaviour: Testing connectedness theory among farmers. *Journal of Environmental Psychology*, 30, 298-304. <https://doi.org/10.1016/j.jenvp.2010.01.005>
- Goudy, W. J. (1982). Further consideration of indicators of community attachment. *Social Indicators Research*, 11, 181-192. <https://doi.org/10.1007/BF00302748>
- Gustafson, P. (2001). Meanings of place: Everyday experience and theoretical conceptualizations. *Journal of Environmental Psychology*, 21(1), 5-16. <https://doi.org/10.1006/jevp.2000.0185>
- Kaplan, M. S., Nussbaum, J. F., Becker, J. C., Fowler, C., & Pitts, M. J. (2009). Communication barriers to

- family farm succession planning. *Journal of Extension*, 47(5), 1-9.
<http://www.joe.org/joe/2009october/a8.php>.
- Keating, N. C. (1996). Legacy, aging, and succession in farm families. *Generations*, 20, 61-64.
- Kuehne, G. (2013). My decision to sell the family farm. *Agriculture and Human Values*, 30, 201-213.
<https://doi.org/10.1007/s10460-012-9393-7>
- Leonard, S. H., & Gutmann, M. P. (2006). Land use and transfer plans in the U.S. Great Plains. *Great Plains Research*, 16, 181-93.
- Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years? *Journal of Environmental Psychology*, 31, 201-230. <https://doi.org/10.1016/j.jenvp.2010.10.001>
- Lincoln, N. K., & Ardoin, N. M. (2016). Cultivating values: Environmental values and sense of place as correlates of sustainable agricultural practices. *Agriculture and Human Values*, 33, 389-401.
<https://doi.org/10.1007/s10460-015-9613-z>
- Low, S. M., & Altman, I. (1992). Place attachment: A conceptual inquiry. In I. Altman & S. M. Low, (Eds.), *Place attachment* (pp. 1-12). New York, NY: Plenum Press. https://doi.org/10.1007/978-1-4684-8753-4_1
- Maule, B., Zhang, W., & Baker, D. (2020). *Iowa farmers' business and farm transfer plans: A comparison between 2019 and 2006*. Center for Agricultural and Rural Development (CARD) Publications 20-pb30, Center for Agricultural and Rural Development (CARD) at Iowa State University.
- Michaelidou, M., Decker, D. J., & Lassoie, J. P. (2002). The interdependence of ecosystem and community viability: A theoretical framework to guide research and application. *Society and Natural Resources*, 15, 599-616. <https://doi.org/10.1080/08941920290069218>
- Moore, R. L., & Graefe, A. R. (1994). Attachments to recreation settings: The case of rail-trail users. *Leisure Sciences*, 16, 17-31. <https://doi.org/10.1080/01490409409513214>
- Mullendore, N. D., Ulrich-Schad, J. D., & Prokopy, L. S. (2015). U.S. farmers' sense of place and its relation to conservation behavior. *Landscape and Urban Planning*, 140, 67-75.
<https://doi.org/10.1016/j.landurbplan.2015.04.005>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.
- Pitts, M. J., Fowler, C., Kaplan, M., Nussbaum, J., & Becker, J. C. (2009). Dialectical tensions underpinning family farm succession planning. *Journal of Applied Communication Research*, 37(1), 59-79.
<https://doi.org/10.1080/00909880802592631>
- Pred, A. (1983). Structuration and place: On becoming of sense of place and structure of feeling. *Journal for the Theory of Social Behaviour*, 13, 45-68. <https://doi.org/10.1111/j.1468-5914.1983.tb00461.x>
- Quinn, C. E., & Halfacre, A. C. (2014). Place matters: An investigation of farmers' attachment to their land. *Human Ecology Review*, 20(2), 117-132. <https://doi.org/10.22459/HER.20.02.2014.06>
- Rajala, K., & Sorice, M. G. (2022). Sense of place on the range: Landowner place meanings, place attachment, and well-being in the southern Great Plains. *Rangelands*, 44, 353-367.
<https://doi.org/10.1016/j.rala.2021.07.004>
- Rajala, K., Sorice, M. G., & Thomas, V. A. (2020). The meaning(s) of place: Identifying the structure of sense of place across a social-ecological landscape. *People and Nature*, 2, 718-733.
<https://doi.org/10.1002/pan3.10112>
- Raymond, C. M., Brown, G., & Robinson, G. M. (2011). The influence of place attachment, and moral and normative concerns on the conservation of native vegetation: A test of two behavioural models. *Journal of Environmental Psychology*, 31, 323-335. <https://doi.org/10.1016/j.jenvp.2011.08.006>
- Raymond, C. M., Brown, G., & Weber, D. (2010). The measurement of place attachment: Personal, community, and environmental connections. *Journal of Environmental Psychology*, 30, 422-434.
<https://doi.org/10.1016/j.jenvp.2010.08.002>
- Rogers, M., Barr, N., O'Callaghan, Z., Brumby, S. & Warburton, J. (2013). Healthy ageing: Farming into the twilight. *Rural Society*, 22(3), 251-262. <https://doi.org/10.5172/rsj.2013.22.3.251>
- Rowles, G. D., Oswald, F., & Hunter, E. G. (2003). Interior living environments in old age. *Annual Review of Gerontology and Geriatrics*, 23, 167-194.

- Schulz, L. L., Artz, G. M., & Gunn, P. J. (2017). Succession planning and perceived obstacles and attractions for future generations entering beef cattle production. *Journal of Applied Farm Economics*, 1(1), Article 1. <https://doi.org/10.7771/2331-9151.1006>
- Sebastien, L. (2020). The power of place in understanding place attachments and meanings. *Geoforum*, 108, 204-216. <https://doi.org/10.1016/j.geoforum.2019.11.001>
- Sheeder, R. J., & Lynne, G. D. (2011). Empathy conditioned conservation: 'Walking-in-the-shoes-of-others' as a conservation farmer. *Land Economics*, 87, 433-452. <https://doi.org/10.3368/le.87.3.433>
- Sixsmith, J. (1986). The meaning of home: An exploratory study of environmental experience. *Journal of Environmental Psychology*, 6(4), 281-298. [https://doi.org/10.1016/S0272-4944\(86\)80002-0](https://doi.org/10.1016/S0272-4944(86)80002-0)
- Stedman, R. C. (2002). Toward a social psychology of place predicting behavior from place-based cognitions, attitude, and identity. *Environment and Behavior*, 34(5), 561-581. <https://doi.org/10.1177/0013916502034005001>
- Stedman, R. C. (2003). Is it really just a social construction?: The contribution of the physical environment to sense of place. *Society and Natural Resources*, 16, 671-685. <https://doi.org/10.1080/08941920309189>
- Trentelman, C. K. (2009). Place attachment and community attachment: A primer grounded in the lived experience of a community sociologist. *Society & Natural Resources*, 22, 191-210. <https://doi.org/10.1080/08941920802191712>
- Tuan, Y.-F. (1975). Place: An experiential perspective. *Geographical Review*, 65, 151-165. <https://doi.org/10.2307/213970>
- Tuan, Y.-F. (1977). *Space and place: The perspective of experience*. Minneapolis, MN: The University of Minnesota Press.
- United States Department of Agriculture, Economic Research Service (USDA-ERS). (2023). *Cash receipts by state*. Retrieved from <https://data.ers.usda.gov/reports.aspx?ID=17843>
- United States Department of Agriculture, National Agricultural Statistics Service (USDA-NASS). (2019). *2017 census of agriculture*. Retrieved from https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_US/usv1.pdf
- United States Department of Agriculture, National Agricultural Statistics Service (USDA-NASS). (2022). *Farms and land in farms: 2021 summary*. Retrieved from https://www.nass.usda.gov/Publications/Todays_Reports/reports/fnlo0222.pdf
- Valizadeh, N., Bijani, M., Karimi, H., Naeimi, A., Hayati, D., & Azadi, H. (2020). The effects of farmers' place attachment and identity on water conservation moral norms and intention. *Water Research*, 185, 116131. <https://doi.org/10.1016/j.watres.2020.116131>
- Vorkinn, M., & Riese, H. (2001). Environmental concern in a local context: The significance of place attachment. *Environment and Behavior*, 33(2), 249-263. <https://doi.org/10.1177/00139160121972972>
- Walker, A. J., & Ryan, R. L. (2008). Place attachment and landscape preservation in rural New England: A Maine case study. *Landscape and Urban Planning*, 86, 141-152. <https://doi.org/10.1016/j.landurbplan.2008.02.001>
- Williams, D. R., Patterson, M. E., Roggenbuck, J. W., & Watson, A. E. (1992). Beyond the commodity metaphor: Examining emotional and symbolic attachment to place. *Leisure Sciences*, 14, 29-46. <https://doi.org/10.1080/01490409209513155>

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