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Analysis

Farmer identity, ethical attitudes and environmental practices

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ABSTRACT

There is increasing concern for environmental degradation caused by agricultural activity. Although large-scale agribusinesses are generally implicated, farmers themselves are often seen as culpable. We investigate whether farmer identity is an important factor affecting their attitudes toward the environment and farm management and conservation practices. Identity refers to a general outlook or perspective, whereas attitudes refer to beliefs or preferences about specific things. We investigate which identities matter most for affecting how farmers view the appropriateness of specific ethical situations relating to environmental management practices. We use a social–psychological model of ethical decision-making, and data from a survey of Missouri farmers, to examine the relationship between the identity of farmers and their attitudes toward ethical issues affecting the environment. We find that a conservation identity, in contrast to a productivist one, is most closely correlated with attitudes toward ethical environmental issues, although there is also an important interaction effect with one's view about the future.

1. Introduction

There is increasing concern for environmental degradation caused by agricultural activity (Dohonoe, 2003). Although large-scale agribusinesses are generally implicated, individual farmers themselves are often being challenged as culpable. This is especially true if farmers are aware of problems and can take action but fail to do so (Karlsson, 2007). Moreover, culpability of farmers for environmental harm can also carry legal repercussions. For example, Scanlon (2002) argues that while the law should balance environmental damage with social benefits of new agricultural technologies, an organic farmer whose crops are contaminated with GM pollen from a neighbor's fields could, under some circumstances, bring suit against the neighbor under a claim of nuisance or trespass. This focus on farmers, in addition to large-scale agribusinesses or the agricultural food sector as a whole, is based on the belief that good environmental management and sound conservational practices are key to sustainable agricultural development and that farmers are in a better position to implement these than businesses generally.

Importantly, there is growing evidence that farmers in advanced economies are becoming increasingly "conservation-oriented" (Burton and Wilson, 2006). Moreover, shifts in farmer attitudes toward "conservation-oriented thinking" are increasingly recognized as an indicator of the success of educational and policy efforts (see Wilson and Hart, 2001). To this end, some studies have investigated the role of farmers' attitudes toward best management practices for environmental conservation practices (e.g., Baumgart-Getz et al., 2012). However, what is not fully known is what drives farmers to become more "conservation oriented" in their attitudes and behaviors. Of the factors that could be at play, including economic incentives and innate desires for improving the environment, farmer identity might be an important factor (McGuire et al., 2012). For instance, Michel-Guillou and Moser (2006) examine differences between farmers who maintain traditional agricultural practices and farmers who adopt practices that preserve the environment. They find that social factors and public image were more important than a general concern for the environment in influencing farmers' commitment to pro-environmental actions, suggesting that identity matters to them. Sitko (2008) shows how Zambian farmers grow maize as a symbol of their identity as modern farmers, despite the country's inability to meet their food security needs. Moreover, a growing literature examines characteristics of what it means to be a good farmer (Burton, 2004; James and Hendrickson, 2010; Sutherland, 2013). In this context, relevant elements of identity include how farmers see or think about themselves and how they think or want others to see them.

Farmer typologies are many and varied in the literature (Darnhofer and Walder, 2013). Some of these typologies are based on farmers' perception about themselves, while others are based on their actual farming practices. Even though these typologies have been criticized on the grounds that they do not fully capture farmer behavior and are therefore limited in their usefulness for policy formulation purposes (Guillem et al., 2012), they can give researchers and policymakers useful insights into how farmers' perceptions about themselves affect their decisions regarding farming practices. As Seabrook and Higgins (1998, p. 99) state, "the images a farmer holds about him/herself significantly affect behavior and the decisions made about the farm business."

In this paper, we examine how farmer identity and farmer types affect their attitudes toward ethically-sensitive environmental issues.

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To this end we focus on the following questions: Do farmer identities matter and, if so, then what identities are most important in affecting the ethical attitudes that farmers have regarding environmental practices? Because identity is a complex concept, we focus on one specific aspect of identity: the lens or worldview they use to see themselves, others and their surrounding environment. Following James and Hendrickson (2010), we investigate three different possible identities. The first contrasts a pro-environmental or conservationist identity with a productivist identity, which are two of the most commonly examined in the agri-literature; the second considers a farmer's sense of optimism or pessimism; and the third contrasts a preference for traditional versus technological practices. Because attitudes have been shown to correlate with and/or influence actual behavior (e.g. Ajzen and Fishbein, 1977; Lynne et al., 1998), farmer attitudes toward ethical environmental issues are likely to influence their actual behavior toward these issues. And since good environmental practices are crucial for sustainable agricultural development, our paper is motivated by the fact that an understanding of the relationship(s) among farmer identities and farmer ethical attitudes can help identify alternative paths for promoting sound environmental practices among farmers.

2. Background Literature

2.1. Farmer Identity and Farmer Types

There is an extensive literature seeking to distinguish among different types and identities of farmers. For example, using a social survey approach and time-series census data on farmers in Scotland, Guillem et al. (2012) identify four heterogeneous farmer typologies: *profit oriented* farmers, *multifunctionalists*, *traditionalists*, and *hobbyists*. Studying farmer behaviors toward Nitrate Vulnerable Zones in Scotland, Barnes et al. (2011) develop an attitude- and values-based farmer typology that includes *resistors*, *apathists*, and *multifunctionalists* types. Addressing the role of farmers' beliefs and representation on their attitudes toward environmental actions, Michel-Guillou and Moser (2006) distinguish between *traditional* farmers and *pro-environmental* farmers.

Some scholars focus on the motivations farmers have toward certain forms of farming. For instance, Fairweather (1999) distinguishes between *committed* and *pragmatic*, whereas Schoon and Te Grotenhuis (2000) categorize farmers into *idealistically motivated* and *practically motivated* farmers. Darnhofer et al. (2005) develop a more extensive typology that consists of *committed conventional* farmers, *pragmatic conventional* farmers, e*nvironment-conscious but not organic* farmers, *pragmatic organic* farmers, and *committed organic* farmers.

A complication arises in these studies when scholars use labels for farmer types that other scholars or farmers themselves define differently. For example, Burton and Wilson (2006) initially categorize farmers into four types based on "four recurring typological groups" that they identify from past studies. *Traditional*, or conservative productivist, who maintains cultural notions of stewardship; *agribusiness person*, who is dominated by the profit motive; *conservationist*, who focuses on environmental and life-style concerns; and *entrepreneur*, who focuses less on standard agriculture production and more on non-agricultural sources of income. However, the authors explain that farmers from a pilot study of 13 farmers rejected two of the terms — *traditional*, because they felt it was "old-fashioned", and *entrepreneur*, because it portrayed a "wheeler-dealing" image that contravenes their sense of rurality and stability. Consequently, the authors arrived at the following farmer types: *agricultural producer*, *agribusiness person*, *conservationist*, and *diversifier*.

These and other studies demonstrate that farmer types and identities can be varied and complex, can overlap, and will not always have clear-cut boundaries among them. Thus, Burton and Wilson (2006) show that a farmer who is of one type may also have characteristics that belong to another type. Similarly, McGuire et al. (2012) argue that farmers can have a nesting of identities, with the most salient identity being the one that is most often enacted through a farmer's behavior and farm management practices. Our purpose is not to sort out these differing approaches to studies of farmer types and identities. Rather, it is to note that as complex and conflicting as these studies sometimes are, there seems to be a consistent demarcation between the conservationist identity and the economic or productivist identity. In other words, scholars generally recognize that there are farmers who see themselves or whom they identify as oriented toward an environmental or conservational type and farmers who seem to focus primarily on the business or economic side of agricultural activity. Therefore, in our study we consider conservationist and productivist as two important and relevant types of farmer identities.

However, conservationist and productivist identities are not the only ones that might be relevant, as other identities have been considered in the literature, such as optimism versus pessimism, and a preference for technology over traditional living. For example, research has found that a sense of optimism is correlated with a number of important work and life choices, such as greater work effort, a later retirement age, the decision to marry, and tendencies to save more (Puri and Robinson, 2007), as well as entrepreneurial success (Crane and Crane, 2007). We speculate that because optimism has been found to correlate with a number of work–life considerations, whether a farmer sees him or herself and circumstances optimistically or pessimistically might also correlate with their environmental attitudes and behaviors.

In addition, Wendell Berry (1997) strongly criticizes a modern, technological mindset among agricultural producers. Using the example of modern, technologically-equipped homes, Berry states:

> With its array of gadgets and machines, all powered by energies that are destructive of land or air or water, and connected to work, market, school, recreation, etc., by gasoline engines, the modern home is a veritable factor of waste and destruction. It is the mainstay of the economy of money. But within the economies of energy and nature, it is a catastrophe. It takes the world's goods and converts them into garbage, sewage, and noxious fumes — for none of which we have found a use.

Thus, in contrast to a technological orientation, identifying with a more traditional and less technologically-oriented agriculture might also be an important identity for farmers.

James and Hendrickson (2010) examine all three identities in their study to determine whether farmers of the middle – that is, farmers with annual farm sales between $100,000 and $250,000 – are better stewards and provide more important social, ecological and political benefits to society than small and large-scale farmers. Although the authors found little evidence for this, they found evidence that all three farmer identities (conservationist v. productivist, optimistic v. pessimistic, and tradition v. technology) correlate with farm size. For example, they state that "middle-scale farmers are more pessimistic and anxious about their role in the future of agriculture" (p. 571). Moreover, large-scale farmers tend to be more productivist, prefer technology over tradition and be more optimistic than small-scale farmers. Since farm size is recognized as important for environmental reasons, such as the adoption of conservation practices (see Amsalu and de Graaff, 2007; Jara-Rojas et al., 2012), then it follows that other farmer identities might affect environmental ethics. Hence, we focus our study on the conservationist v. productivist, optimist v. pessimist, and technological v, traditional farmer identities.

2.2. Identity, Attitudes, and Behavior

Identity and attitudes are related, but they are distinct constructs. A person's identity defines who they are, how they view themselves, how they view the world around them, and how they think as well as want others to perceive them. Identity therefore embraces their *general*