

Exploring the Social Capital of Cooperative Extension Agents in Mississippi

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The Cooperative Extension System has a high turnover rate. Studies indicate a need to improve collaboration and communication efforts between agents to improve their retention. This exploratory study used a social capital lens to investigate agents' collegial relationships and access to information. Cross-sectional data were collected from a nonrandomized sample of Extension agents from Mississippi State University (MSU) Extension. Results showed agents' engagement in professional associations depended on their programmatic responsibilities. Few agents were active members of associations that were not linked to their specific program area. Findings pointed to a low level of bridging capital and a higher level of bonding capital since agents had strong ties with colleagues in their own programmatic area. Agents mostly socialized with others in their own program area at statewide events, and most did not seek information from a district or regional director. This may adversely impact information sharing due to an overdependence on homogenous networks. This study suggested the social capital of MSU Extension agents could be more fully developed. Agents may benefit from opportunities to engage in national-level and heterogenous professional organizations to build bridging capital.

Introduction

For years, the Cooperative Extension System has searched for ways to improve the retention of agents (e.g., Kutilek, 2000; Safrit & Owen, 2010; Strong & Harder, 2009); yet, the system still struggles with employee turnover. For example, Bengé and Harder (2017) found the turnover rate for one state Extension system was more than twice the national public workforce average. A recent study by Vines et al. (2018) articulated the need to focus on communication and collaboration strategies to improve the retention of early-career agents. Similarly, past research has pointed towards the importance of collegial relationships within Extension (e.g., Bengé & Harder, 2017; Borr & Young, 2010). It is clear that agents' relationships and access to information are important components of their work experiences. Using a social capital lens to

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further explore these factors may offer Extension new information that can be used by Extension administrators and staff development professionals to better support agents.

Theoretical/Conceptual Framework

In 1973, Granovetter famously framed an argument for the “strength of weak ties” (p. 1360) which laid the foundation for future studies of social capital. Granovetter argued individuals with weak ties to people within different social networks had more opportunities and access to information than individuals with an equivalent number of strong ties with people within their own social network. Essentially, Granovetter articulated his support for the adage: it’s not what you know, it’s who you know.

Many definitions of social capital exist (Paldam, 2008). However, “the consensus is growing in the literature that social capital stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures” (Portes, 1998, p. 6). More simply, “social capital refers to our relations with one another” (Putnam, 1995, p. 665).

It is through connections with other individuals and groups that a specific actor gains social capital; having more connections is generally advantageous. Bourdieu (1986) explained:

The volume of the social capital possessed by a given agent thus depends on the size of the network of connections he can effectively mobilize and on the volume of the capital (economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected. (p. 51)

Thus, if the result of having social capital is that an individual can rely upon his or her social network to obtain benefits, then social capital facilitates “productive activity” (Coleman, 1988, p. S101).

Different types of social capital exist. Putnam (2000) described the concepts of bonding and bridging capital. Bonding social capital results from networking within a homogenous group, such as units within a company, members of a country club, or a family network. Bonding social capital tends “to reinforce exclusive identities and homogenous groups” (Putnam, 2000, p. 22) and is associated with an in-group mentality. Putnam (2000) noted that this can be positive for providing social and psychological support to members of the in-group, but can also negatively lead to antagonism towards out-group individuals.

Another potential negative effect of the homogenous nature of bonding social capital is its influence on diffusing information (Putnam, 2000). Rogers (2003) noted that “homophily can act as a barrier to the flow of innovations within a system” (p. 306) because of the tendency for individuals to share information only within the groups to which they belong, slowing the diffusion of innovation to outside groups. High degrees of homophily occur when very few

individuals within a group possess bridging social capital and instead primarily rely upon their bonding social capital. In terms of organizational impact, a high degree of homophily can stifle innovation if not managed appropriately.

In contrast, bridging social capital is “better for linkage to external assets and for information diffusion” (Putnam, 2000, p. 22). Bridging social capital is inclusive and associated with networks that are outwardly focused and comprised of individuals across diverse backgrounds. Access to assets not available within the homogenous group is the leading benefit of bridging social capital; this ties back to Granovetter’s (1973) argument for the strength of weak ties. Examples of bridging networks include civically-oriented associations and political movements.

Cohen and Prusak (2001) provided a helpful explanation of bonding and bridging social capital within the context of organizations, using examples described as communities and networks. Communities were described as focused, centered, enforcers of norms, and “typically *closed* [sic] in some sense: defined by a separation between those inside and outside the community” (Cohen & Prusak, 2001, p. 56). This description of community closely aligns with the type of setting that Putnam (2000) asserted would lead to the development of bonding social capital. In contrast, Cohen and Prusak (2001) described networks as “generally more *open*, an interlocking web of connections. Individuals in the network know the people they have direct contact with, but they do not necessarily know their contacts’ contacts” (p. 57). Networks can provide the connections necessary to develop bridging social capital.

Little research has been conducted in the United States about the social capital of Extension agents and its influence on professional roles, interpersonal communication, diffusion of information, and innovation, although much has been written about Extension’s contributions to social capital within communities (e.g., Civittolo & Davis, 2011; Fields, 2017; Prins & Ewert, 2002). The exploratory study presented here will help to address the gap in the literature, as well as provide practical recommendations for Extension.

Purpose and Objectives

“Social capital is defined by its function” (Coleman, 1988, p. S98) to facilitate certain actions within social structures that otherwise might not take place. The purpose of this study was to explore the social capital of Extension agents of Mississippi State University Extension (MSU Extension) by investigating some of these actions in the context of the agents’ professional roles. The specific objectives were to describe the agents’ (a) memberships and engagement in organizational teams and professional associations, (b) levels of engagement in professional associations, (c) information-seeking behaviors, and (d) socializing preferences.

Methods

A nonrandomized, exploratory study was conducted to investigate the study's objectives. MSU Extension is a smaller-sized organization, so a census was attempted to increase the potential number of respondents representing the different program areas. An assumption of the study was that the program area(s) in which an agent worked would influence social capital, given that a program area also influences which Extension program development team(s) an agent may join and the program priorities toward which he/she may work. Further, most Extension professional associations are linked to a specific program area.

Survey Instrument

No existing social capital instrument was found that was suitable to the context of Cooperative Extension; therefore, an instrument was developed specifically for this study. The survey instrument included questions focused on agents' engagement in professional associations and organizational teams, information-seeking behaviors, socializing preferences, and demographics.

The instrument was reviewed for face validity and contextual appropriateness by three state Extension specialists with professional experience spanning three state Extension systems, including the state of interest. Minor revisions to adjust the wording to fit the state context were made, as well as minor adjustments to the survey flow in Qualtrics.

The section of the instrument focused on agents' engagement in professional associations and organizational teams asked them to indicate if they belonged to an Extension professional association, state-level programmatic team, local-level programmatic team, regional or district team, or university governance. For each association to which they reported belonging, agents indicated their level of engagement by reporting if they served on a committee (SC), held an elected role (SE), attended state-level events (AS), or attended national-level events (AL). A statewide conference was given as an example of a state-level event, which may have influenced participants' responses. Agents also were asked to indicate their level of engagement in organizational teams, but these data were not analyzed further due to the low number who reported belonging to organizational teams.

Two questions measured information-seeking behaviors: from whom do you most often seek out information related to doing your job, and from whom do you most seek information when you want to know what is happening in the statewide Extension organization. Response options were (a) colleagues in my office, (b) colleagues in other counties, (c) my District/Regional Extension Director, (d) my Program Leader, (e) my assigned mentor, or (f) other. Respondents who picked other were asked to list from whom they sought information. An additional response option was excluded from analysis due to a clarity issue identified *ex post facto*, resulting from recent changes in staffing structure. This resulted in two responses being removed for data analysis for this question.

Socializing preferences were measured by asking agents to report with whom they spent the most time socializing at statewide events, such as the state's annual conference. Statewide events are typically the only time the entire organization will be present together and therefore provide agents with a wider variety of choices for socializing than they would experience in their day-to-day county work. Response options were (a) my county colleagues, (b) colleagues within my program area, (c) colleagues outside of my program area, (d) state specialists, (e) my assigned mentor, or (f) other. Respondents who picked other were asked to list with whom they spent the most time socializing at statewide events.

Demographic items for the survey instrument asked the respondents to report in which program area(s) they had official responsibilities (agriculture, community resource development, family and consumer sciences, natural resources, 4-H Youth Development, other), years worked in current Extension position, prior professional experience in Cooperative Extension (yes/no), and gender identification (male/female).

Data Analysis

Data analysis was conducted using descriptive frequencies relating to agents' membership to organizational teams and professional associations and level of engagement, information-seeking behaviors, and socializing preferences. In terms of interpreting the data, Cohen and Prusak's (2001) definitions of communities and networks were used to relate the findings to the concepts of bridging and bonding capital (Putnam, 2000). Programmatic teams, county colleagues, colleagues within a program area, and assigned mentors were operationally identified as fitting the criteria for a community, which is associated with bonding capital. Regional or district teams, university governance, colleagues outside of a program area, state specialists, and all levels of administration were operationally identified as fitting the criteria for a network, which is associated with bridging capital. Engagement in a professional association was interpreted based on state-level participation being associated with communities and bonding capital and national-level participation being associated with networks and bridging capital. Percentages reported are based on the number of usable responses for a particular item, which varies due to missing data.

Participant Characteristics

As a professional courtesy, permission was obtained from the Director of MSU Extension in October 2017 to survey the system's agents. An IRB exemption was received from the University of Florida in November 2017. An invitation to participate in the study and a generic link to the online Qualtrics survey instrument were emailed to 126 agents. Two reminder emails were sent before the survey was closed in December 2017 with a total of 79 usable responses received for a response rate of 62.69%. The failure to obtain a complete census means the responses are limited to the population of respondents.

In Mississippi, a family and consumer sciences (FCS) agent and an agriculture and natural resources (ANR) agent exist in each county, and counties with 8,000 or more 4-H-eligible youth sometimes support a third agent (4-H) position. Programmatically, the FCS and ANR agents in a county also share 4-H (40%) and community resource development (10%) responsibilities, in addition to their primary program area.

From the population sample, many agents self-identified as having programmatic responsibilities in 4-H youth development (77.2%, $n = 61$), community resource development (62%, $n = 49$), agriculture (45.6%, $n = 36$), family and consumer sciences (41.8%, $n = 33$), and natural resource and Sea Grant (31.6%, $n = 25$). On average, agents had approximately 12 years of work experience, and most (77.5%, $n = 55$) did not have any prior jobs in Cooperative Extension. In addition, approximately 58% ($n = 41$) of the sample was female, while 42% ($n = 30$) was male. Descriptive statistics were used to analyze the data by objective.

Findings

Objective 1: Agents' Memberships and Engagement in Organizational Teams and Professional Associations

The first objective of the study was to describe agents' membership and engagement in professional associations and organizational teams; membership and engagement trends provide an indication of agents' opportunities to build bonding and bridging capital through their communities and networks. Most Extension agents (92.4%, $n = 73$) belonged to an Extension professional association (see Table 1). Some agents were also members of local programmatic teams (19%, $n = 15$, bonding capital) and regional or district teams (15.2%, $n = 12$, bridging capital). In contrast, only one agent (1.3%) was involved in a university governance group (bridging) and five agents (6.3%) reported belonging to a state level programmatic team (bridging).

Table 1 provides a descriptive overview of agents' membership to different professional organizations. While many professional organizations exist within the context of Cooperative Extension, the program priority area of agents often influences their membership to different organizations. As shown in Table 1, most agents involved in agriculture programming were members of the National Association of County Agricultural Agents (NACAA, 80.6%). Similarly, the majority of those in community resource development and natural resources were also involved in NACAA (55.1% and 84%, respectively). Approximately half the sample of agents in 4-H youth development were also members of NACAA. In contrast, most family and consumer sciences agents belonged to the National Extension Association of Family & Consumer Sciences (NEAFCS, 72.7%). Irrespective of programmatic area, about one-third of agents were members of Epsilon Sigma Phi (ESP; ESP is open to Extension professionals regardless of program area) and the National Association of Extension 4-H Agents (NAE4-HA). However, there were no agents with membership to the National Association of Community

Development Extension Professionals (NACDEP) or the National Association of Extension Program and Staff Development Professionals (NAEPSDP).

Table 1. Extension Agents' Membership in Professional Association by Program Area

Program Area	n	Membership % (n)				
		ANREP	ESP	NACAA	NAE4-HA	NEAFCS
Agriculture	36	5.6 (2)	19.4 (7)	80.6 (29)	25.0 (9)	0 (0)
Community Resource Development	49	2.0 (1)	26.5 (13)	55.1 (27)	28.6 (14)	30.6 (15)
Family & Consumer Sciences	33	0 (0)	27.3 (9)	18.2 (6)	30.3 (10)	72.7 (24)
Natural Resources	25	8.0 (2)	16.0 (4)	84.0 (21)	28.0 (7)	4.0 (1)
4-H Youth Development	61	4.9 (3)	21.3 (13)	50.8 (31)	31.1 (19)	26.2 (16)

Note: ¹Association of Natural Resource Extension Professionals.

Objective 2: Agents' Levels of Engagement in Professional Associations

Social capital also relates to the level of engagement in professional associations. Those who are more engaged have increased opportunities to develop social capital. Table 2 shows the level of engagement for agents reporting membership in different professional associations. While only three agents of the sample had a membership to ANREP, these individuals did not serve on a committee or hold an elected role and did not regularly attend state-level or national-level events.

Those agents with membership to ESP, NACAA, NAE4-HA, and NEAFCS were more likely to regularly attend state-level events but less likely to regularly attend the national-level events of these associations. In addition, less than half the sample of agents with membership to professional associations served on a committee or held an elected role. Overall, there was a clear trend across all associations for agents' engagement to be limited to regular attendance at state-level events.

Table 2. Extension Agents' Level of Engagement in Professional Associations

Professional Association	n	Level of Engagement % (n)			
		Service on Committee	Service in Elected Role	Regularly Attend State-Level Events	Regularly Attend National-Level Events
ANREP	3	0 (0)	0 (0)	0 (0)	0 (0)
ESP	17	23.5 (4)	41.2 (7)	58.8 (10)	17.6 (3)
NACAA	34	29.4 (10)	23.5 (8)	55.9 (19)	20.6 (7)
NAE4-HA	23	34.8 (8)	21.7 (5)	65.2 (15)	13 (3)
NEAFCS	27	18.5 (5)	37 (10)	74.1 (20)	18.5 (5)

Objective 3: Agents' Information-Seeking Behaviors

Table 3 displays the sources most frequently used by the agents for job-related information and information about statewide Extension, providing insight about the agents' use of assets. Results showed that almost half the sample of agents (48.6%, $n = 35$) sought out information relating to their job from colleagues in other counties. A few agents (25%, $n = 18$) sought job-related information from the district or regional Extension director. In terms of "other" sources of information, three agents identified state specialists, and one agent said upper administration.

In contrast, many agents (48.6%, $n = 35$) sought out information about statewide Extension from the regional Extension director, while fewer agents (26.4%, $n = 19$) reached out to colleagues in other counties. Only a small number of agents asked colleagues in their own county about job-related information (12.5%, $n = 9$) and information on happenings in statewide Extension (5.6%, $n = 4$). For information about statewide Extension from "other" sources, one agent identified upper administration, one agent said 4-H specialist, and one agent reported a lack of interest in what happens at the statewide level.

Table 3. Information Source Frequently Used by Extension Agents

Information Source	Type of Information	
	% (n)	
	Job-related information ^a	Information about statewide Extension ^b
Colleagues in my office/county	12.5 (9)	5.6 (4)
Colleagues in other counties	48.6 (35)	26.4 (19)
District/Regional Extension director	25 (18)	48.6 (35)
Program leader	2.8 (2)	8.3 (6)
Assigned mentor	2.8 (2)	1.4 (1)
Other	5.6 (4)	4.2 (3)

Note: ^a $N = 70$. ^b $N = 68$.

Objective 3: Socializing Preferences

Socializing preferences were explored to describe bonding social capital within the Cooperative Extension agents participating in this study. Results shown in Table 4 indicate many agents (65.3%, $n = 47$) mostly socialized with colleagues within their own program area during statewide Extension events. A few agents (20.8%, $n = 15$) socialized most with their county colleagues, while only a small number of agents (4.2%, $n = 3$) socialized most with others outside their program area. However, no agent reported spending most of their time socializing with state specialists and mentors. Agents who chose "other" most commonly indicated they like to socialize with everyone.

Table 4. Socializing Preferences of Extension Agents

Group	<i>n</i>	With whom do you spend the most time socializing at statewide events? (%)
My county colleagues	15	20.8
Colleagues within my program area	47	65.3
Colleagues outside my program area	3	4.2
Other	7	9.7

Note: N = 72.

Discussion and Recommendations

The purpose of this study was to explore the social capital of Extension agents of MSU Extension. It is likely that an Extension agent's social capital is influenced by his or her programmatic responsibilities. Unsurprisingly, the agents' programmatic responsibilities influenced their selection of professional associations. The professional associations that are not linked to a specific program area (i.e., ESP and NAEPSDP) had few or no members from the respondents in this study. Instead, almost all agents joined professional associations with a programmatic focus, such as NACAA, NEAFCS, or NAE4-HA. Research has shown that homogenous program areas are most closely associated with bonding capital (Putnam, 2000).

As Putnam (2000) suggested, bonding capital has potential advantages and disadvantages. Recall from Putnam (2000) that one advantage of bonding capital is the provision of psychological and social support to group members. In the context of MSU Extension, this seems to be true. At statewide events, agents mostly socialized with others who shared their programmatic responsibilities, further providing support for the idea that program areas form the basis of community (Cohen & Prusak, 2001) within MSU Extension. Conversely, too much reliance upon the program area community may lead agents to view people in other program areas as outsiders (Putnam, 2000). Vines et al. (2018) reported that new agents found it difficult to partner with other agents outside of their program areas.

Further, the lack of socialization with agents whose programmatic responsibilities differ would be expected to negatively impact the diffusion of information (Putnam, 2000) and innovation (Rogers, 2003) between program areas and across the statewide Extension organization. Many possible topics of importance to agents cross Extension programmatic boundaries, such as new strategies for recruiting and managing volunteers, assessing community needs, or evaluating program impact. The influence of programmatic responsibilities on an agent's socialization preferences needs to be researched further to more deeply understand how this impacts the development of social capital and communication within the Extension organization.

Most agents in Mississippi have responsibilities in three program areas: ANR or FCS, plus 4-H and community development. However, engagement in professional associations does not match what one would expect based on MSU Extension's staffing plan. This suggests agents may view

themselves differently from their formal assignments. For example, an agent may prefer his or her agricultural program responsibilities as compared to the community development, natural resources, or 4-H responsibilities. One indication of this is the lack of agents with membership in NACDEP, despite 62% of responding agents acknowledging they had community development responsibilities. Professional associations also exist for natural resources (ANREP) and 4-H (NAE4-HA), yet they did not appear to be prioritized for membership either. More investigation is needed to determine the factors influencing how agents determine which professional association to join, the influence that has on the development of social capital, and the impacts on program quality and job performance.

Despite agents' strong ties with their programmatic colleagues, nearly half reported accessing specific information from a district/regional director. In Mississippi, this is the Regional Extension Coordinator, an administrative position with responsibility for providing programmatic direction to agents and staff. The individuals in the Regional Extension Coordinator positions are often relied upon for information about what is happening in the statewide Extension organization. Therefore, it appears Regional Extension Coordinators play a significant role in the organization's internal communication structure. State-level administration should strive to keep the Regional Extension Coordinators updated, and their accessibility to county agents should be prioritized to improve the diffusion of statewide information. Putnam (2000) and Rogers (2003) noted that an overdependence on homogenous networks stifles information sharing.

The findings from this study suggest that the social capital of MSU Extension agents could be more fully developed. Relatively low levels of engagement in the professional associations were observed, particularly at the national level. Encouraging agents to become more involved in their state-level associations through service on committees or in elected roles would be expected to strengthen their levels of bonding capital, because of the increased engagement within a homogenous group (Putnam, 2000).

Further, agents would likely benefit from the opportunity to expand their networks or access new ones to build bridging capital. Engagement at the national ESP and NAEPSPDP conferences would help an agent do this through interaction with Extension professionals across program areas. Differences in state Extension systems, from resources to organizational structure to programming priorities, means state programs are unique and not homogenous. Therefore, even attending national-level events for a programmatic association (e.g., NEAFCS, NACAA, NAE4-HA) would provide an opportunity for agents to build bridging capital. Adjustments to how agents are annually evaluated and/or increases in the amount of professional development funding available for out-of-state travel may be needed to support these changes. If prioritized, even states with limited budgets may be able to increase funding for out-of-state travel by reallocating funds from other uses, negotiating to increase county-level funding, or enabling agents to procure their own funds through program revenue (beyond cost recovery).

Further, MSU Extension should focus on increasing interaction between its employees in-state, including improving communication between agents who work within the same counties. Agents in the same county seldom sought each other out for job-related or statewide Extension information nor did most of them choose to socialize together at statewide events. Although this reported lack of interaction may be due in part to several budget-related vacancies in many Mississippi counties at the time this study was conducted, more research is needed to explore the influence of intracounty relationships on the development of social capital, why intracounty relationships were not more valued as information sources, and what barriers may prevent these types of relationships from developing.

This study offered some insight into what type of social capital an agent is most likely to possess based on his or her programmatic role(s). Future replication of this study is needed to test the validity of these early conclusions both within MSU Extension and externally in other state Extension systems. Employing qualitative research techniques would be useful to provide a deeper explanation of observed trends. With continued research, Extension will be able to make data-driven decisions that best position agents to develop the social capital they need to thrive within the organization.

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