

## **The Influence Of Agent/Client Homophily On Adult Perceptions About Extension's Quality Of Service**

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### **Abstract**

*Extension should continually ascertain clientele's satisfaction with its services. In the environment of increased accountability, it is paramount that extension's customers are satisfied with the service being delivered. According to Bonstingl (1992), an organization must first focus on their clients and providers because synergy plays a role between them. Rogers (2003) indicated when agent and client have similar characteristics, "the communication of new ideas is likely to have greater effects in terms of knowledge gain, attitudes formation and change, and overt behavior change." The purpose of this study was to determine whether agent and client homophily affect perceptions about the quality of service. Using Florida Extension clientele as the study population, we merged survey data from Extension clients who completed a customer satisfaction survey with data on agents' characteristics. A total of 1,466 clients and 157 agents were included in this study. When client's and agent's race were different, there was a small but significant decrease in satisfaction score for service than if their race was the same. Similarly, as the educational difference increased, clients were less likely to be satisfied with the service Extension provided. The findings show the need for strategies to overcome "the problem of heterophily." One strategy is to increase efforts to recruit minority agents. Another strategy is to increase attention in professional development seminars to building skills in teaching clients who differ in one or more ways from the agent.*

## Introduction

There are a number of reasons why Extension should continually ascertain clientele's satisfaction with their services. For one, the *National Research Agenda* calls for studies that "examine appropriate evaluation models to meet the needs of stakeholders" (Osborne, n.d., p. 14). Similarly, an external panel of stakeholders advised Extension to focus on reporting its achievements and associated impacts (ECOP LAC, 2005). Many state Extension programs have surveyed their constituents for input needs, service, satisfaction, awareness of Extension and funding support (Lindquist, 1987; Radhakrishna, 2002; Suvedi, Lapinski, & Campo, 2000; Verma & Burns, 1995).

In the environment of increased accountability (Ladewig, 1999), it is paramount that extension's customers are satisfied with the service being delivered. Comer, Birkenholz and Stewart (2004) indicated that Extension ought to examine itself as an industry instead of a government organization. Internally monitoring programs via performance indicators would indicate a businesslike approach in evaluating the services Extension renders. One way to collect data for accountability and to measure clients' opinions concerning the quality of services is through customer satisfaction surveys.

Customer satisfaction surveys can assist extension in identifying clientele perceptions of program quality in a specific county, region or state as well as provide stakeholders information on the impacts of Extension in these areas. ECOP (2007) recommended instruments be utilized that permit clients to communicate their value of Extension. Dissatisfaction might reduce impacts, and hinder efforts to increase awareness of the organization as the educational outreach component of the land grant university.

Seevers (2000) reported that an indicator of a strong organization is the matching of the ideals of the organization and the performance of its employees. Most agents believe their profession has a significant effect on the lives of clients they serve (Scott, Swortzel & Taylor, 2005). Consequently, these agents refer to the impact of their educational programs in terms of knowledge gain and practice change. It is important that evaluations continue in order to measure the quality and impact of Extension programming (Kistler & Briers, 2003). Radhakrishna (2002) reported that customer satisfaction surveys also have supplied a large amount of data to county agents in order to enhance program delivery and address client's needs better. Despite the usefulness of these surveys, the linkage of agents' performance and experience with clients' satisfaction levels appears to be weak (Terry & Israel, 2004), which may subvert internal drivers of quality programming.

Florida's customer satisfaction survey began in 1988 as a response to the Florida Board of Regents' recommendation that Extension measure the quality of service received by residents (Florida Board of Regents, 1988). This annual survey functions as Florida Extension's chief measure for assessing the performance of the organization (Terry & Israel, 2004). Customer satisfaction surveys also allow for better understanding of services by Extension from the clients' perspective (Radhakrishna, 2002).

Previous studies have found that the large majority of Extension clientele are satisfied with the service provided by the organization (Radhakrishna, 2002; Rennekamp et al., 2001; Terry & Israel, 2004). In Missouri, growers, producers and officers of Extension Councils were satisfied with the service Extension provided (Habeeb, Birkenholz & Weston, 1987). Florida residents, also, exhibit high levels of satisfaction with the quality of Extension services and, when they had an opportunity to use the information, a large majority had their problem solved or need met (Haile & Israel, 2005; Israel & Galindo-Gonzalez, 2009).

Although a number of studies have examined client satisfaction, little attention has been devoted to factors that might differentiate between satisfied and dissatisfied clients (cf., Terry & Israel, 2004). Agent's race, gender and education level might impact the service that Extension provides to clients (Rogers, 2003). In Texas, Hispanic participation in programs was higher when agents had a minority background (Saldaña et al., 2005). In this study, client satisfaction is evaluated across the state of Florida using a customer satisfaction instrument. The instrument included questions regarding client's experience with the quality of service Extension provides, as well as demographic items. This research can clarify the effects of gender, race and education on the service that Extension provides clientele.

### **Theoretical Framework**

Bonstingl (1992) delineates how the Total Quality Management (TQM) framework can be relevant to reform in educational programming. Bonstingl refers to his recommendations for education as the "Four Pillars of Total Quality Management" (Total Quality Management was first developed by W. Edwards Demming in the late 1940's).

The first principle was *Synergistic Relationships*. According to Bonstingl (1992), an organization must first focus on their clients and service providers because synergy plays a role between them. Productivity and accomplishments are increased when educators' experience and aptitude are combined. The second principle was *Continuous Improvement and Self-evaluation*, which focused on constantly improving the educational experience. Self-evaluation referred to the extent the organization and educator reflected on their efforts and how those efforts impacted clientele. The third principle was *A System of Ongoing Process*. Individuals and groups must see the organization as a system and the duties involved as on-going. Quality should be continually reexamined to identify and correct defective procedures that prevent clients from succeeding. The fourth principle was *Leadership*. Administrators are accountable for the success of TQM. Educators who focused on subject matter and standards instruction can offer the leadership, structure, and instruments necessary for constant progress in learning.

Customer satisfaction in Extension addresses the potential of Bonstingl's (1992) synergistic relationships occurring with agents and the clientele participating in their programs. Continuous improvement is attended to through customer satisfaction surveys that gather information on how to provide a more in-depth educational experience for users. Customer satisfaction has been an ongoing process in Extension for many years, beginning with work by Bennett (1982) and Warnock (1992). Extension administrators are accountable for customers' levels of satisfaction, and provide the tools and organization needed for learning (ECOP, 2008).

An important element of Rogers' Diffusion of Innovations (2003) framework is when the change agent and client are similar. Rogers identified homophily as the extent two or more people are similar in regards to socioeconomic status, education, values, et cetera. Individuals tend to opt for others who are similar in makeup when given the opportunity to choose their associates (Rogers). Communication is more effective for both agent and client when homophily is present. Rogers (p. 19) indicated when agent and client "are alike in personal and social characteristics the communication of new ideas is likely to have greater effects in terms of knowledge gain, attitudes formation and change, and overt behavior change." This framework underscores both the value of homophily in the transfer of information from agents to clients and the challenge facing Extension as its clientele becomes increasingly diverse.

### **Purpose and Objectives**

The purpose of this study was to determine whether agent and client homophily affect perceptions about the quality of service. Specifically, the variability of agent/client race, gender, age and educational levels were studied to assess their impact on clientele satisfaction with Extension's services.

### **Methodology**

Florida Extension clients were the population in this study. A sample of Extension clients was produced from a process of collecting the names, addresses, phone numbers, and features of the information (Israel, 2000). Sign-in sheets for visitors to the Extension office were established and provided over a 30-day period. Phone contacts were recorded in telephone logs. Lastly, agents provided registration lists for planned programs (e.g., demonstrations, field days, and workshops).

Self-administered mail surveys, using Dillman's (2007) Tailored Design Method, were used to collect data on measures of service quality, outcomes and client attributes between 2003 and 2007. The self-administered survey is sent to a sample of clients who were selected from the population that have attended a workshop or seminar, called the Extension office, or visited the office in order to solicit feedback about their experiences. The survey was implemented using a sequence of contacts – pre-letter, survey and cover letter, reminder post card, and second survey and cover letter to nonrespondents. A total of 2,808 useable surveys were pooled for the analysis and the response rate (Response Rate 1 [RR1], AAPOR, 2004) was 60.0%.

The 2-page survey instrument included questions on the following: overall customer satisfaction with the services provided by Extension, clientele's satisfaction on four dimensions of quality, outcomes of the use of Extension service, and demographic attributes of the respondents. Participants were asked to rate four items measuring dimensions of service quality based upon a five-point Likert-type scale (1 = *Very Dissatisfied*, 5 = *Very Satisfied*). These included:

1. How satisfied or dissatisfied are you that the information was up to date and accurate?
2. How satisfied or dissatisfied are you that the information was delivered in time to be useful?

3. How satisfied or dissatisfied are you that the information was relevant to your situation?
4. How satisfied or dissatisfied are you that the information was easy to understand?

The four items were combined into a service quality index (calculated as the items' mean). Based on procedures recommended by Carmines and Zeller (1978), the index met criteria for unidimensionality (a single factor was extracted from principle components analysis with an eigenvalue of 3.238) and Cronbach's alpha was .918. The instrument also included questions on participants' age, gender, race and ethnicity (white, non-Hispanic or non-white), age, level of education attained (high school or less, high school or GED, some college, college degree, and graduate or professional degree).

The researchers merged survey data from Extension clients who completed a customer satisfaction survey with data on agents' characteristics to investigate the association among level of service received by clients based upon their gender and race being equal to the agents', age and difference in education between the client and agent. Data on Extension agents was obtained from organizational records. A total of 1,466 clients and 157 agents were included in this study. Analysis of matched (i.e., both agent and client data present) and unmatched (i.e., only client data present) records showed that the matched data included more clients who attended a planned program (versus those who made an office visit or telephone call). There also were different rates of matching based on race, age, residence, employment, and the number of times Extension was used during a year. The mean for the service quality index was nearly identical, however, for the matched and unmatched data (4.540 and 4.560, respectively). Given the incomplete matching, differences in the following analysis should be treated as exploratory, rather than definitive. The data analysis used descriptive statistics, bivariate correlations, and multi-variate analysis to test for significance. Finally, agent experience (measured in years) was included as a control variable because experience can moderate the effects of differences between agents and clients this has been shown to affect client satisfaction (Terry & Israel, 2004).

## Findings

Clients had very positive opinions of the quality of their experience with Extension, as shown by the mean of 4.54 (out of 5) for the index in Table 1. This means that a large majority of clients reported that they were "satisfied" or "very satisfied" with all aspects of Extension's service delivery. Note that this constrained the potential explanatory power of the homophily variables in the following analysis because service was so highly regarded (and by implication the variance of the index was limited).

In addition, the means for same gender and same race show that 62.6% and 79.6% of clients had the same gender or race as the agent who provided educational information, respectively. The average age difference was 6.36 years because many clients were retired and, hence, older than agents who are still in the workforce. Agents also averaged 1.7 educational units more than clients. Given that Extension requires a baccalaureate degree and many agents have a masters degree, the level of heterophily is expected. Finally, agents averaged over 12 years of experience.

Table 1

*Descriptive Statistics for Same Gender, Same Race, Age and Educational Differences on Service Quality (N = 1,466)*

	<i>n</i>	<i>M</i>	<i>SD</i>
Service Quality Index	1435	4.540	.638
Same Gender	1466	.626	.484
Same Race	1379	.796	.403
Age Difference	1266	6.360	17.213
Educational Difference	1316	1.733	1.168
Agent Experience	1380	12.500	10.237

Next, the correlation between the service quality index and measures of homophily are examined. A significant association existed between clients' and agents' race. Clients were more likely to be satisfied with the service provided by Extension when the agents' and clients' race were identical (Table 2). Likewise, as the difference in educational attainment between the client and agent increased, the service quality index decreased. No statistically significant correlation existed with service for same gender, age difference, or agent experience. Additional analysis revealed that clients who were 15 years or more younger than the agent had lower service index scores than clients who were of similar age or older than the agent ( $r = -.067$ ,  $p = .018$ ).

Table 2

*Intercorrelations of Same Gender, Same Race, Age and Dissimilar Education on Service Quality*

	<i>n</i>	<i>r</i>	<i>p</i>
Same Gender	1435	-.001	.984
Same Race	1351	.089	.001
Age Difference	1238	.046	.109
Educational Difference	1289	-.068	.014
Agent Experience	1352	-.008	.779

Multiple regression was used to assess the net effect of each measure of homophily on client's perception of service quality. In addition, we used the binomial measure of age difference (where the client is 15 years or more younger than the agent = 1) in the regression model. The multiple regression model was significant, with  $F = 4.03$ ,  $p = .001$ . The model provided further support that clients were more satisfied with the level of service Extension provided when clients' race was the same as the agent's. When client's and agent's race were the same, there was a .143 increase in satisfaction score for service than if their race was different. However as their difference in education increased, clients were less likely to be satisfied with the service Extension provided. The regression model also continued to show that clients who were much younger than the agent had lower service index scores than clients who were of similar age or older than the agent. Clients differing in gender from the agent were not significant factors in assessing whether the clients were satisfied with Extension's service. Overall, the model accounted for a very modest (1.7%) portion of the variance of satisfaction of service that Extension provides.

Table 3

*Summary of Multiple Regression Analysis of Extension's Service Quality Index on Homophily Variables (n=1,197).*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>p</i>
Intercept	4.486	.062	--	
Same Gender	.019	.039	.014	.634
Same Race	.143	.047	.088	.003
Age Difference	-.126	.060	-.061	.035
Educational Difference	-.032	.016	-.059	.043
Agent Experience	.000	.002	.003	.992

Note.  $R^2 = .025$ ; Adjusted  $R^2 = .017$ .

### Conclusions/Implications/ Recommendations

This study focused on the impacts of same gender, same race, age and differing education levels of clients and agents. First, we found that Extension clients reported high ratings of service delivery, and consequently the explanatory power of the homophily variables was limited. Same gender was not significant in determining clientele satisfaction of Extension services. Our findings differed from Davis (2006) in that gender did not have an impact on perceptions about program delivery. Agent experience also was not significantly associated with ratings of Extension's services. Florida Extension appears to be accomplishing its mission of providing quality service to clientele regardless of their gender and the experience level of the particular agent. These results indicate Florida Extension was focused on the synergistic relationships (TQM) of extension agents and clients specifically on these variables. Regardless of gender and agent experience, clientele believed Florida Extension was providing quality programs.

On the other hand, we found that clients' satisfaction of the service they receive from Extension was related to their race and the agents' being the same. Also, clients' satisfaction of the service received from Extension was related to their education being similar to that of agents, as well as with the age difference between client and agent. Given that clients with a college degree are less likely to be satisfied with the service Extension provided when their agent had acquired a PhD than when the agent had only a baccalaureate degree, this indicates that educational differences could be the genesis of communication barriers among clients and agents. Likewise, age differences where clients were much younger than agents might also reflect communication difficulties. The results coincide with earlier studies on change agent and client homophily. Rogers (2003) found clients are more apt to adopt a practice change when diffused by a change agent who is similar in make-up to the client. Does this coincide with research on the discrepancy of race in adult education (Brown, Cervero, & Johnson-Bailey, 2000; Kumashiro, 2001)? Though the answer to this question is not clear, it does point to the importance of considering strategies for overcoming "the problem of heterophily."

One strategy, suggested by Saldaña et al. (2005), to address this issue is to increase efforts to recruit minority-status agents to coincide with the minority population. Given that

Hispanics account for 32%, and blacks 25% of the total population in Florida (Florida Statistical Abstract, 2007) and Extension employs relatively few Hispanic (3%) or Black agents (6%) (C. Simmons, personal communication, September 30, 2008), the current workforce has limited opportunities to “rub shoulders” with colleagues from different backgrounds and cultures. While increasing the number of minority agents makes sense as one piece in a comprehensive, long-term strategy, this logic does not extend to educational differences by which Extension should only hire agents with baccalaureate degrees to match education levels in the population; instead it reinforces Rogers’ (2003) argument to develop greater empathy among Extension agents for their clientele. In-depth professional development can address this issue.

Thus, a second strategy for Extension is to increase attention in professional development seminars to building skills in teaching clients who different in one or more ways from the agent. Likewise, Extension should train current and future agents in intercultural communication strategies. This could be accomplished by faculty orientations for new hires, and professional development seminars for current agents. This objective could be achieved via face-to-face training or distance learning modules. ECOP (2008) recommended Extension recruit the best diverse personnel possible in order to provide superior programs for all clientele. The professional training describe above can help Extension realize the continuous improvement process of Total Quality Management (Bonstingl, 1992).

In summary, we found that annual customer satisfaction surveys have proven feasible and can be administered in a sample of counties. Moreover, the cost of this accountability tool is not expensive compared to the potential impacts and benefits to the organization, as has been the case in Florida where the survey results have provided adequate information concerning how well Extension was addressing the needs of legislators’ constituents. Our advocacy for customer satisfaction surveys for measuring program quality is balanced by the recognition that Extension also must be accountable for the relevance and impact of its programs (ECOP, 2005; Ladewig, 1999).

Given that we found differences in client perceptions about Extension’s quality of services, our results support Berrio and Henderson’s (1998) recommendation that surveys be constructed to assess customer perceptions of services and outcomes provided by Extension. Administrators and program evaluation specialists in each state should join resources and construct a shared instrument for assessing customer satisfaction and appropriate procedures for every state Extension program (Radhakrishna, 2002). Further steps can be taken to insure agents have “buy-in” to the notion of customer service. Developing a client-directed focus leading to client-directed tactics may provide an increased level of satisfaction and loyalty to Extension (Berrio & Henderson, 1998).

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