
Factors Affecting the Global Mindedness of Extension Agents: Implications for Building Global Awareness of Extension Agents

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Abstract

Because of the profound effect that globalization has on our society the Cooperative Extension Service of the United States has been challenged to develop programs that help people deal with the impacts of globalization. The purpose of this study was to determine the level of global mindedness among Extension agents in North Carolina and to determine whether their global mindedness varies with their demographic characteristics and international travel experience. This study found that the typical Extension agent from North Carolina has a moderate to high level of global mindedness. This study found that the level of Extension agents' global mindedness varies with their age, levels of education and gender. This study revealed that Extension agents with international experience were more globally minded compared to the Extension agents without any international experience. This study found a weak positive relationship between the length of time Extension agents have spent abroad and their global mindedness. This study is useful to determine the global mindedness of Extension agents and identify the factors associating their global mindedness.

Keywords: Extension globalization, international experience, global mindedness, professional development

Introduction

Globalization is a force that continues to unify the people of the world and make us more dependent on each other. As this trend continues, Extension systems around the world must be prepared to adapt for this change. We are all affected by what is now termed the global economy or globalization. "Globalization is a force which individuals, organizations, businesses, and governments must meet" (Lundy, Place, Irani & Telg, 2005, p. 49). Advances in communication and transportation have created this global marketplace from which we have all benefited (Betancourt, 2000). The global interdependence of international trade has been widely recognized. (Selby, Peters, Sammons, Branson, & Balschweid, 2005). Globalization is a complex idea that means different things to different people and that the term is often used but not well defined or understood (Etling, 2001). According to Etling (2001) a common thread in the definition of globalization is that it involves "rapid change". A report by the National Association of State Universities and Land Grant Colleges (NASULGC) says that "globalization of the financial services, manufacturing and agricultural sector is having a profound influence on all facets of American society" (2002, p. 3).

Increasingly, countries are becoming interconnected with the rest of the world. The future of any country rests on its ability to prepare and compete in a world which is moving rapidly toward economic, political and social interdependence. Farmers throughout the world are affected by globalization just as everyone else is. Traditional customers of Cooperative Extension such as families, rural communities and agriculture are no exception. In the US, "one out of six manufacturing jobs depends directly on foreign trade, four out of five new manufacturing jobs result from foreign commerce, and one out of every three acres of farm land produces products for export (Stitsworth, 1988, para. 2)." Developing nations are becoming the potential markets for the US agricultural products (Mricle, 1991). Foreign trade is becoming an important part of American agriculture and Extension has a significant role to play in the globalization process of American agriculture (Youmans, 2005). Some Cooperative Extension services in the US have realized this

need for the development of strong global awareness among the Extension clients and staff (Stitsworth, 1988). After conducting a staff development need assessment study with Extension educators in Indiana, Selby et al. (2005) emphasized the need for Extension leaders to be accountable for globalizing Extension. The need for globalization of national agricultural extension systems is becoming obvious in other parts of the world (Qamar, 2002). Ludwig defined the globalization of Extension as the "incorporation of global content into Extension efforts so that clientele develop an understanding of global interdependencies as they relate to the issue areas within the Extension mission" (2002a, para. 1). After conducting a study with Cooperative Extension directors in the U.S, Ludwig (2002a) concluded that the globalization of Extension is moving forward. This trend can be noticed in other parts of the world.

As the global and local issues are becoming more inter connected, Extension education programs need to be delivered within a culturally sensitive framework attuned to those changes (Ludwig, 2002a). People must be prepared to live with understanding of the global changes around them. Extension has a responsibility to prepare clientele for this task (Ludwig, 1996). Many Cooperative Extension Services have started to integrate the international arena into their staff development programs as a measure to serve the needs of their clientele (Richardson & Woods, 1991).

Farmers, the primary customer group of Extension, are especially affected by globalization. According to Patton (1984) an international dimension is a basic part of an effective Extension program because the economic prosperity of agriculture in any country is directly linked to the world economy. Not only are farmers in North Carolina affected by globalization but other clients are affected as well. Extension can play a part in helping these and other clients in North Carolina gain increased global understanding and prepare for both the ups and downs in our society. For this purpose, North Carolina Cooperative Extension made a major commitment to professional development in the international domain (Richardson & Woods, 1991). Unless Extension strengthens the international dimensions of its programs, it will not be able to fully serve the

changing needs of its local clientele. North Carolina and other state Extension Services have been challenged to develop programs to educate our citizens about the effects of the global society. According to Ludwig and McGirr (2003), the Extension Committee on Organization and Policy (ECOP) identified an international mission for Extension as early as 1984. Literature supports the notion that because of globalization, international programs are an essential part of the Cooperative Extension mission and that Extension has an obligation to its clients and stakeholders to help them develop global skills that will prepare them to operate in a global society (Acker & Scanes, 1998; Bates, 2006; Gallagher 2002; Ludwig, 1993, 1998, 1999, 2002b; Lundy, Place, Irani, & Telg, 2005). It is stated in "Global Engagement" that "Multiculturally adept Extension personnel can help serve our increasingly diverse communities and respond to the needs of domestic firms seeking business overseas" (USDA Cooperative State Research Education, and Extension Service, n.d., Overview section).

Through the use of nonformal educational activities Extension has the ability to help clients understand how the globalization will affect them. Once clients understand these effects, they are better able to deal with the problems and opportunities created by the global society. If Extension is going to continue to incorporate international and global information and training into Extension programs, Extension personnel need to gain international understanding, knowledge and skills. One way that Extension personnel can gain this knowledge and skill is through international experiences or training. By working and traveling in another country, Extension agents can gain a global perspective, new technical knowledge or new insight into other cultures. Study abroad programs change a person forever (Tritz & Martin, 1997). A country, its people and its culture all have an effect on people who study abroad. Study abroad changes perceptions, challenges thoughts and garners a more worldly perspective. A review of the literature indicates that the Extension agents who have involved in international programs appreciated their positive experience (Crago, 1998; Lev, 2001; Place, 1998, Place, Vergot, & Dragon, 2005; Richardson & Woods, 1991; Vergot, Place, & Dragon, 2006).

The basic question asked by this study is, to what extent do international experiences contribute to the employee's global mindedness? The study measured the impact of international experience on Extension agent's global mindedness using the Global Mindedness Scale developed by Jane Hett in 1993. "Global Mindedness is a world view in which one sees oneself as connected to the world community and feels a sense of responsibility for its members. This commitment is reflected in attitudes, beliefs and behaviors" (Hett 1993, p. 143). The dimensions of global mindedness include *Responsibility* which is a deep personal concern for people in all parts of the world; *Cultural Pluralism* which is an appreciation of the diversity of all the worlds cultures; *Efficacy* or a belief that an individuals' actions can make a difference; *Global Centrism* which is thinking in terms of what is good for the whole world; and *Interconnectedness* which is an awareness and appreciation of the inter relatedness of people around the world. Global mindedness can be measured using the Global Mindedness Scale. Global Mindedness Scale scores differ significantly based on gender, academic experience, political views, participation in international activities and international experience (Hett, 1993).

Literature supports the notion that one's global mindedness increases with his or her international experience (Bates, 1997; Gillian, 1995; Hett, 1993; Mahon & Crushner, 2002). In addition, some researchers reported that the longer the time a person spent abroad the higher that person scored on the Global Mindedness Scale (Gillian, 1995; Hett, 1993). This study sought to determine the factors affecting the global mindedness of Extension agents as measured by the Global Mindedness Scale.

Purpose and Objectives

The purpose of this study was to determine the level of global mindedness among Extension agents in North Carolina Cooperative Extension and to identify the factors affecting their global mindedness. The study sought to fulfill the following objectives:

1. Determine the level of global mindedness of Extension agents employed by the North Carolina Cooperative Extension Service.
2. Determine if the level of global mindedness varies with Extension agents' demographic characteristics.
3. Determine if the level of global mindedness of Extension agents varies with the type of their international experience.

Methods and Procedure

The research design of the study was a correlation study conducted with the Extension agents in the North Carolina Cooperative Extension. The scale used to measure the dependent variable of global mindedness was a 5-point Likert-type Global Mindedness Scale developed by Hett in 1993. Hett's global mindedness scale has 30 items related to someone's perception about globalization and its impacts. Of the items, 21 were positively stated and nine were negatively stated. The 5-point Likert scale ranged from 1 = *Strongly Disagree* to 5 = *Strongly Agree*. The responses to negatively stated items were reversed before adding the scores to get the overall value for the 'Global Mindedness' on this scale. The 'global mindedness' can range from 30 being very poor global mindedness to 150 being very rich global mindedness on this scale. In addition to the global mindedness scale, the survey instrument also collected demographic data and international experience of respondents. The content validity of the instrument was established by having the instrument reviewed by a panel of experts. Additionally, the instrument was pilot tested with a sample of Extension agents. The reliability alpha of the instrument was found to be .92.

The data were collected using an online survey. The survey was emailed to the 495 Extension agents on September 7, 2007 and two follow up emails were sent. The survey received 318 responses comprising a 64% return rate. Of

the 318 surveys returned, 292 were useable. Nonresponse error was controlled by using a comparison of early and late respondents (Lindner, Murphy, & Briers, 2001). An independent sample t-test was used to determine if early respondents and late respondents differed significantly on Global Mindedness Scale scores. No significant differences were found between the early respondents and late respondents on Global Mindedness Scale scores indicating that the findings can be generalized for the study population. Statistical analysis was performed using the SPSS program. Correlation and independent sample t-test analysis were conducted to achieve research objectives.

Results

Of the respondents, 55% were female and 45% were male. A majority of the respondents were white (88%) and were in the 40-59 years old age category (62%). Sixty-four percent of the Extension agents had Masters Degrees while 6% had Doctoral Degrees. Only 26% of the Extension agents were Bachelors Degree holders.

A large portion (69.5%) of Extension agents in North Carolina have traveled outside of the United States or Canada at some point indicating that they have some level of international experience. Extension agents having no international experience made up 30.5% of the population (Table 1). The highest response for length of time traveled abroad was one to two weeks (24.5%). The portion of the population that has less than one month of international experience was 52.5%. Extension agents that have two or more months of international experience make up 16.7% of the respondents. Extension agents that have more than five months of international experience make up 9.7% of the respondents while 5.7% have more than one year of international experience (Table 2).

Table 1
International Experience of Respondents

Any International Experience	<i>n</i>	%
Yes	221	69.5
No	97	30.5

Table 2
Length of International Experience of Respondents

Time Spent Outside of US or Canada	<i>n</i>	%
None	97	30.5
Less than 1 week	33	10.4
1 to 2 weeks	78	24.5
3 weeks to 1 month	57	17.9
2 to 4 months	23	7.2
5 to 7 months	6	1.9
8 months to 1 year	6	1.9
More than 1 year	18	5.7

The Global Mindedness Scale scores for Extension agents in this study ranged from 70 to 148 (the higher the number on the scale the higher the level of global mindedness) with the mean of 108.02. The Global Mindedness Scale scores of the respondents were divided into quartiles, 1st quartile (30 to 60), 2nd quartile (61

to 90), 3rd quartile (91 to 120) and 4th quartile (121 to 150). The majority (74.3%) of the respondents scored in the 3rd quartile and 16.1% of participants scored in the 4th quartile. Only 9.6% of the respondents scored in the 2nd quartile and no respondents scored in the 1st quartile (Table 3).

Table 3
Scores on the Global Mindedness Scale

Range of Global Mindedness Scale	%
4 th Quartile (121 to 150)	16.1
3 rd Quartile (91 to 120)	74.3
2 nd Quartile (61 to 90)	9.6
1 st Quartile (30 to 60)	0.0

The study compared the level of global mindedness of the respondents for various personal and professional characteristics. Those characteristics included gender, age, level of education and the international experience.

Relationships between the Global Mindedness and Other Variables (Demographic and International Experience Variables)

A correlation analysis was conducted to ascertain the relationship between the global

mindedness and other variables of interest. Pearson Correlation Coefficient (*r*) was used to assess the relationships between global mindedness and variables recorded on a scale while point biserial coefficient (*r_{pb}*) was used to assess the relationships between global mindedness and dichotomous variables such as gender. Correlation coefficients between global mindedness and other variables of interest are summarized in Table 4.

Table 4
Correlation between Global Mindedness and Other Variables (N = 292)

Variable	Correlation Coefficient
Levels of education	$r = .12^*$
Age	$r = .19^{**}$
Gender (Male = 1, Female = 2)	$r_{pb} = .26^{**}$
Whether having any international experience outside the U.S. or Canada (No = 1, Yes = 2)	$r_{pb} = .22^{**}$
Whether the experience was an international engagement (such as study abroad, Peace Corps or missionary) or just a tourist visit (No = 1, Yes = 2)	$r_{pb} = .07$
Length of international experience outside the U.S. or Canada	$r = .23^{**}$

** $p < .01$

* $p < .05$

Demographic variables and global mindedness. Respondents' global mindedness score was significantly associated with their gender, age and levels of education as summarized in Table 4. There was a positive association between age and global mindedness score. According to both Davis (1971) and Hopkins (2002) this correlation value is in the low association range. The association between

age and global mindedness was positive but low. There was a significant low association between gender and respondents' global mindedness score. Independent sample *t*-test was conducted to compare the means of respondents' global mindedness scale score for males and females. It was found that global mindedness of female respondents was significantly higher than that of male respondents as summarized in Table 5.

Table 5
Comparison of the Level of Global Mindedness Scores for Gender (N=285)

Variable	M		t	p
	Male	Female		
Global Mindedness Score	104.2	111.3	4.51	.001**

** $p < .01$

This study found that the level of Extension agents' global mindedness varies with their gender, age and levels of education. Hett (1993) found that global mindedness varied with gender but not with age. Gillian (1995) found that global mindedness varied with both gender and age.

International experience and global mindedness. There was a significant low association ($r_{pb} = .22, p < .01$) between participants' global mindedness score and whether they had any international experience as summarized in Table 4. This study sought to determine whether the global mindedness of the respondents varies with different types of international engagement programs. These international engagement programs included Extension sponsored study abroad programs, other international exchange programs (e.g., Rotary, Farmer to Farmer), student study abroad

programs, Peace Corps, and international missionary work. Correlation analysis revealed that whether the international experience was a tourist visit or an international engagement such as study abroad did not have a significant association with their global mindedness score. The length of time spent outside of the U.S. or Canada had a significant low association with respondents' global mindedness score. Similar to this finding, previous research has shown that individuals that participated in lengthier international programs or have spent more time abroad scored higher on the Global Mindedness Scale (Gillian, 1995; Hett, 1993). Independent sample *t*-test analysis indicates that the respondents with an international experience had a significantly higher level of global mindedness score compared to the respondents without any international experience as summarized in Table 6.

Table 6
Comparison of the Level of Global Mindedness Scores for Respondents With and Without Any International Experience (N=285)

Variable	<i>M</i>		<i>t</i>	<i>p</i>
	With International Experience	Without Any International Experience		
Global Mindedness Score	110.0	103.6	3.74	.001**

** $p < .01$

Conclusions and Recommendations

Extension agents in North Carolina tend to be globally minded. This study found that the average Global Mindedness Scale score for extension agents in North Carolina was 108 out of a possible 150 points. This indicates that the typical extension agent from North Carolina has a moderate to high level of global mindedness. This means that extension agents in North Carolina are concerned about people all over the world, have an appreciation for diversity, they have a belief that individual actions can make a difference, feel a sense of responsibility to others, think in terms of what is good for the community and feel connected to others. However, it was found that global mindedness did vary according to certain demographic and international travel variables. There is room for growth.

Because this study found that extension agents benefit from international experience and because these findings are supported by previous research (Crago, 1998; Lev, 2001; Place, 1998; Place, Vergot & Dragon, 2005; Richard & Woods, 1991) the Cooperative Extension Service should put additional emphasis on international professional development for agents. It should be a goal of Cooperative Extension that more extension agents gain significant international experience. This would include international experience where the individual is immersed in another culture and gains more cultural awareness and understanding.

Exchange type programs that bring persons from other countries to local extension offices, as well as send North Carolina agents abroad, would have a double benefit. Longer programs, more than two weeks, would have a greater impact. An alternative to longer programs would be to encourage agents to participate in multiple programs both inside and

outside of the organization in order to gain additional international experience.

The North Carolina Cooperative Extension Service should target those agents that would benefit most from international experience for participation in international programs. This research shows that male agents that have no international experience and graduate level education are less globally minded. The organization should encourage these agents to participate in international programs and give them preference in the selection process.

Extension agents in North Carolina are being challenged to develop international skills and cultural awareness and understanding. By developing these skills agents are better able to help traditional clients deal with globalization and the realities of the global market place. These skills are also beneficial to agents as they work with new culturally diverse audiences at home. Participation in an international professional development program is an excellent way for extension agents to gain these important international skills and cultural awareness and understanding. While this research was done in North Carolina, it is likely that similar recommendations could be made in other states in the United States.

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