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Opinion Leadership Development: Context And Audience Characteristics Count

Kevan W. Lamm[1], Alexa J. Lamm[2], and Hannah S. Carter[3]

Abstract

Opinion leaders have been shown to have a significant amount of influence on their peers, yet there is little research examining how individual traits of opinion leaders are related. Generally the assumption is that these individuals share characteristics consistent with the literature; specifically that leaders tend to be optimistically oriented and willing to take risks. Without specific empirical evidence to support this assumption agricultural leadership development programs may be structuring their curriculum in a manner inconsistent with the needs of their intended audience. This study examined opinion leader characteristics related to optimism and willingness to take risks in an agricultural leadership development program. The findings suggest that contrary to the assumption that an agricultural context would not influence characteristics, this context was germane and these individuals tended to exhibit a less optimistic perspective and were less willing to take risks than anticipated. Recommendations for modifying developmental and communication approaches with these individuals include framing messages in pragmatic terms (versus optimistic), and addressing items in terms of risk avoidance (versus risk taking).

Keywords: opinion leadership; leadership development; risk; optimism

For leadership development practitioners it is important to provide the most efficacious programming possible. This should include understanding the context and characteristics of an intended audience. It was within this framework that this work was based. The purpose of many agricultural leadership development programs has been to enable agricultural and natural resource (ANR) practitioners to improve their capacity to serve as leaders on issues facing the ANR industry (Whent & Leising, 1992). Evolving ANR issues require flexible and transformative leaders (Foster, 2001). From a transformational perspective ANR leadership development program graduates serve as opinion leaders by influencing and disseminating information to their networks (Chiarelli, Stedman, Carter, & Telg, 2010; Valente & Davis, 1999). There was, however, a distinct lack of available research examining whether non-ANR opinion leadership traits are transferrable to opinion leaders in ANR.

Numerous leadership theories and studies suggest universal application. For example, Yukl, Gordon, and Tabor (2002) found that risk taking was a key attribute in successful change oriented leadership. Similarly, Gardner and Schermerhorn (2004) stated the "task of the authentic leader is to raise optimism" (p. 275). When studying 48 Cincinnati business leaders Wunderley,

[1] Kevan W. Lamm is a Graduate Student in the Department of Agricultural Education and Communication at the University of Florida, 406 Rolfs Hall, PO Box 110540, Gainesville, FL, 32611, Email: kevanlamm@ufl.edu
[2] Alexa J. Lamm is an Assistant Professor in the Department of Agricultural Education and Communication and Director of the National Public Policy Evaluation Center at the University of Florida, 121F Bryant Space Science Center, PO Box 112060, Gainesville, FL, 32611, Email: alamm@ufl.edu
[3] Hannah S. Carter is an Associate Professor in the Department of Agricultural Education and Communication and Director of the Wedgworth Leadership Institute for Agriculture and Natural Resources at the University of Florida, 121B Bryant Space Science Center, PO Box 112060, Gainesville, FL, 32611, Email: hscarter@ufl.edu

Reddy, and Dember (1998) determined "optimism and pessimism are among many as yet unidentified factors that contribute directly or indirectly to effective leadership" (p. 758). However, Ludwig (1994) found that metropolitan and agricultural opinion leaders differed in their attitudes towards global issues.

Analyzing the relationship between risk, optimism, and opinion leadership within a population of ANR leadership development program participants made it possible to assess the transferability of non-ANR theories to an ANR audience. Furthermore, this research will be beneficial in better identifying the characteristics of future ANR opinion leaders. More effective ANR opinion leaders will be better able to articulate and advance the ANR agenda as it relates to critical issues.

Increasing consumer and policy maker understanding about ANR is one of the research priority areas of the National Research Agenda: American Association for Agricultural Education 2011 – 2015 (Doerfert, 2011). A study exploring how the trait characteristics of ANR opinion leaders were related to critical ANR issues will provide insights for enhancing ANR leadership development programs. Improved ANR leadership development programs will produce more effective ANR opinion leaders. More effective ANR opinion leaders will be better enabled to inform consumers and policy makers.

Theoretical Framework

The theoretical framework for this study was based on the theory of opinion leadership introduced by Lazarsfeld, Berelson, and Gaudet (1948). In this context opinion leadership is the two-step communication process whereby centrally disseminated information is processed by a group of individual opinion leaders and subsequently shared out to their followers (Lazarsfeld et al., 1948). The process by which individuals become opinion leaders includes self-selection, appointment, recruitment, nomination, or various other selection channels; however, it is clear that within a peer group "some individuals will act as role models for others. These role models act as opinion leaders within their communities and can be important determinants of rapid and sustained behavior change" (Valente & Davis, 1999, p. 57). "Opinion leaders are people whose conversations make innovations contagious for the people with whom they speak" (Burt, 1999, p. 46).

Corey (1971) conducted a study to identify opinion leader characteristics by self-report. The study determined that "opinion leaders will be significantly more involved in activities directly related to their consumer topic than non-leaders…[and] opinion leaders will be significantly more informed than non-leaders about new developments in their consumer topic" (Corey, 1971, p. 50-51). Opinion leaders tended to obtain their perceived competency by linking new ideas with the established social system as well as having a higher socioeconomic status than non-leaders. Additionally, opinion leaders were typically more innovative than their followers and may have been seen as more optimistic due to their social standing (Rogers, 2003).

One of the most common descriptions of a leader is an individual that uses influence (e.g. Ciulla, 2008; Kort, 2008). Yukl, Gordon, and Taber (2002) stated, "the essence of leadership is influence" (p. 141). Based on their exercise of influence opinion leaders are expected to share the characteristics of leadership in general (Lazarsfeld et al., 1948).

Seligman (1998) defined optimism as a cognitive process whereby positive outcomes and expectations are internally originated, permanent, and prolific, negative events are externally originated, fleeting, and situational. Tiger (1979) provided a further definition of optimism as "a mood or attitude associated with an expectation about the social or material future--one which the evaluator regards as socially desirable, to his [or her] advantage, or for his [or her] pleasure" (p. 18). Luthans and Avolio (2003) noted it is difficult to find an inspirational leader who made a positive difference in their community who is not labeled as "optimistic." According to McColl-

Kennedy and Anderson (2002), "a large body of evidence supports the contention that optimistic expectations of success play a significant role in the achievement of success" (p. 549).

Optimism and leadership have subsequently been found to have a direct link with organizational performance (McColl-Kennedy & Anderson, 2002). Optimism was juxtaposed with Seligman's (1998) ''helplessness theory'' that stated when individuals do not believe they have any influence over the outcome of a situation they will be less likely to exert the required effort to be successful. However, Thiel, Connelly, and Griffith (2012) distinguished between helplessness and pessimism in the context of leadership, by stating

> Pessimism is distinguishable from other similarly categorized emotions, such as hopelessness, by its triggers, intensity, and behavioral response. With pessimism, doubt and skepticism about the efficacy of one's own or another's actions are present, resulting in greater questioning or re-thinking of the situation…pessimism has the potential to improve cognitive performance by inducing deliberation and systematic information processing. (p. 519)

Although there is some disagreement in the literature regarding leaders and their orientation towards optimism, the general consensus seems to favor the position that leaders tend to be more optimistic (McColl-Kennedy & Anderson, 2002).

According to Wunderley et al. (1998), "leaders who model an optimistic way of construing events may very well display those behaviors of risk taking and innovation" (p. 752). Information and communication behaviors have been found to be very closely associated with the characteristics of opinion leadership (Arndt, 1972). Strong relationships have been found between risk perception and information seeking behavior, as well as risk perception being correlated with communication behaviors. Conger and Kanungo (1992) found that personal risk was positively correlated with the caretaker role, a people oriented leadership role, and a charismatic leadership role when individuals were asked to assess their supervisors.

In certain organizational contexts personal risk taking has been correlated with follower perception of leader job knowledge and strengthened relations between leader and followers (Frost, Fiedler, & Anderson, 1983). Conversely, Chan and Misra (1990) found that risk preference was not a determining characteristic of opinion leaders; however, risk preference was correlated with opinion leadership. Charismatic, transformational, and change related leadership styles all share risk-taking, or risk-proneness, characteristics (Javidan &Waldman, 2003; Yukl, et al., 2002). Based on the literature there was strong support for the position that leaders tended to be more willing to take risks (Javidan &Waldman, 2003; Yukl, et al., 2002).

Purpose and Research Questions

The purpose of this study was to examine how agricultural leadership development program participants' perceived optimism and willingness to take risks influenced their ability to serve as opinion leaders when addressing the primary issues facing the ANR industry. The study was driven by the following research questions:

1. What are agricultural leadership development program participants' perceptions of their own optimism and willingness to take risks?
2. How do agricultural leadership development program participants serve as opinion leaders when addressing the primary issues facing the ANR industry?
3. What relationships exist between agricultural leadership development program participants' perceptions of their own optimism and willingness to take risks and how they serve as opinion leaders when addressing the primary issues facing the ANR industry?

Methods

A descriptive correlational research design was employed for this study. The population of interest for this study was opinion leaders in ANR; a sample of 30 ANR leadership development program participants currently enrolled in the Wedgworth Leadership Institute for Agriculture and Natural Resources program was utilized. The sample was appropriate as ANR leadership development program participants have been identified as ANR opinion leaders by their peers (Kelsey, 2003; Whent & Leising, 1992).

Of the 30 participants 60% were male and 40% were female. Respondents ranged in age from 27 to 55. Twenty-seven of the participants were Caucasian, two were Hispanic and one was Asian. The participants represented diverse industry backgrounds including specializations in horticulture, citrus, cattle, vegetable production, and other ANR industries.

Initially, the participants engaged in an agenda setting activity where the top ANR issues facing the industry in the state of Florida were identified. The three primary issues identified were water, immigration, and agriculture regulation. The participants were then surveyed to measure their self-reported levels of optimism and willingness to take risks, in addition to their perceived level of opinion leadership within each of the three identified issue areas.

An online questionnaire was used to collect participant responses based on the target population's access to e-mail and the Internet (Dillman, Smyth, & Christian, 2008). The questionnaire included previously developed instruments with sufficient reliability. The questionnaire was reviewed by a panel of experts knowledgeable in scale development, survey design, and leadership development for internal validity.

To measure perceived level of opinion leadership Childers' (1986) opinion leadership instrument was utilized. Respondents were asked to respond to six unique questions for each of the top three issues facing the agriculture industry in their state (water, immigration, and agricultural regulation). Childers' (1986) instrument has been shown to be reliable with a reported Cronbach's α of .83 or higher. The instrument was adapted to the context of the question (either water, immigration, or agricultural regulation); however, the structure of the instrument was identical to Childers (1986). The instrument used a five-place bipolar response format. Pairs of dissimilar statements were presented, one at each end of a rating scale. A 1 (one) indicated the negative statement a 5 (five) indicated the positive statement. Items 2, 3, and 4 did not have any descriptions associated; they represented bi-directional judgment placeholders within the scale. Participant responses to the six opinion leadership questions, focused on a specific issue, were averaged to create an overall opinion leadership score for each of the three issue areas.

Perceived level of respondent optimism was captured using an instrument developed by Scheier and Carver (1985). No modifications to the instrument were made. Reported reliabilities have been .76 or higher for the instrument (Scheier & Carver, 1985). Respondents selected their inherent level of optimism according to 10 statements on a Likert-type scale. Four of the 10 statements were filler items and were not included in any subsequent calculations, "filler items were included in order to disguise (somewhat) the underlying purpose of the test" (Scheier & Carver, 1985 p. 224). The scale ranged from 1 – *Strongly Disagree*, 2 – *Disagree*, 3 – *Neutral*, 4 – *Agree*, 5 – *Strongly agree*. Three of the six included statements were posed in the negative and were reverse coded for data analysis purposes.

To measure perceived willingness to take risks Weber, Blais and Betz's (2002) instrument was utilized. No modifications to the instrument were made. Previous studies using this instrument have noted a Cronbach's α of .88 or higher (Weber et al., 2002). Participants were asked to rate 28 statements on a Likert-type scale based to their propensity to take risks. The scale ranged from 1 – *Very Unlikely*, 2 – *Unlikely*, 3 – *Undecided*, 4 – *Likely*, 5 – *Very Likely*. The responses to the 28 risk propensity statements were averaged to create an overall risk propensity index score.

Ex post facto reliability was calculated on the five constructs germane to this study. The water opinion leadership construct had a Cronbach's α= .79, the immigration opinion leadership construct had a Cronbach's α = .87, and the agricultural regulation opinion leadership construct had a Cronbach's α = .88. The perceptions of willingness to take risks construct had a Cronbach's α = .85. The perception of optimism construct had a Cronbach's α = .72. Based on accepted psychological and social science research standards, a Cronbach's α of .70 or greater was considered acceptable (Cortina, 1993; Schmitt, 1996; Streiner, 2003).

Participants were contacted by e-mail using Dillman et al.'s (2008) tailored design method and asked to respond to the online questionnaire developed in Qualtrics. All e-mail addresses were valid, and a response rate of 100% (n = 30) was obtained.

Descriptive statistics were used to address the first two research questions using Statistical Package for the Social Sciences (SPSS) version 21. Relationships between agricultural leadership program participants' perceptions of optimism, willingness to take risks, and level of opinion leadership related to ANR issues were described by calculating Pearson's product-moment correlation coefficient. Strength of the bivariate correlations were described using Davis' (1971) convention.

Results

Perceptions of Optimism

Participants responded to a list of ten statements measuring dispositional optimism related to generalized outcome expectancies (Scheier & Carver, 1985). Based on Scheier and Carver's (1985) guidelines four of the ten items were filler and subsequently not included in calculation. Table 1 displays participants' perceptions of optimism. Using a five-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*); responses to the six items were summed and averaged to create an overall perception of personal optimism composite score. Overall, the participants were slightly optimistic (M = 4.02, SD = .60).

Willingness to Take Risks

Participants responded to a list of 28 statements measuring willingness to take risks across a number of content domains (financial, health/safety, recreational, ethical and social) (Weber, et al., 2002). Table 2 displays participants' personal perceptions of willingness to take risks. Using a five-point scale (1 = *Very Unlikely*, 5 = *Very Likely*), responses to all 28 items were summed and averaged to create an overall perception of willingness to take risks composite score. Overall, participants were undecided on their willingness to take risks (M = 2.58, SD = .51).

Table 1

Participant-Perceived Level of Optimism by Percentage of ANR Leadership Development Program Participants

Statements	*n*	*Strongly Disagree %*	*Disagree*	*Neither Agree or Disagree %*	*Agree %*	*Strongly Agree %*
Overall I expect more good things to happen to me than bad.	30	0.0	0.0	6.7	50.0	43.3
I'm always optimistic about my future.	30	0.0	3.3	10.0	53.3	33.3
I rarely count on good things happening to me. (RC)	30	0.0	10.0	13.3	40.0	36.7
I hardly ever expect things to go my way. (RC)	30	0.0	6.7	10.0	56.7	26.7
If something can go wrong for me, it will. (RC)	30	0.0	13.3	16.7	50.0	20.0
In uncertain times, I usually expect the best.	30	0.0	3.3	40.0	36.7	20.0

Note. RC = Reverse Coded

Table 2

Participant-Perceived Level of Willingness to Take Risks by Percentage of ANR Leadership Development Program Participants (n = 30)

Statements	*Very Unlikely %*	*Unlikely %*	*Undecided %*	*Likely %*	*Very Likely %*
Admitting that your tastes are different from those of a friend.	0.0	0.0	0.0	63.3	36.7
Investing 10% of your annual income in a moderate growth mutual fund	0.0	13.3	6.7	36.7	43.3
Speaking your mind about an unpopular issue in a meeting at work	0.0	3.3	23.3	43.3	30.0
Going camping in the wilderness	6.7	20.0	6.7	20.0	46.7
Choosing a career that you truly enjoy over a more secure one	0.0	13.3	43.3	13.3	30.0
Disagreeing with an authority figure on a major issue	0.0	13.3	33.3	36.7	16.7
Going whitewater rafting at a high water in the spring	16.7	10.0	0.0	46.7	26.7
Starting a new career in your mid-thirties	10.0	10.0	26.7	30.0	23.3
Piloting a small plane	26.7	16.7	10.0	20.0	26.7
Investing 10% of your annual income in a new business venture	20.0	20.0	16.7	26.7	16.7
Moving to a city far away from your extended family	20.0	26.7	16.7	13.3	23.3
Sunbathing without sunscreen	23.3	33.3	6.7	30.0	6.7
Driving a car without a seatbelt	26.7	40.0	6.7	10.0	16.7
Going down a ski run that is beyond your ability	33.3	20.0	16.7	26.7	3.3
Bungee jumping off a tall bridge	46.7	16.7	3.3	20.0	13.3
Taking a skydiving class	46.7	16.7	6.7	23.3	6.7
Investing 5% of your annual income in a very speculative stock	33.3	30.0	20.0	16.7	0
Riding a motorcycle without a helmet	43.3	23.3	13.3	13.3	6.7
Walking home alone at night in an unsafe area of town	30.0	43.3	6.7	20.0	0.0
Taking some questionable deductions on your income tax return	43.3	23.3	16.7	13.3	3.3
Drinking heavily at a social function	33.3	36.7	20.0	10.0	0.0
Leaving your young children alone at home while running an errand	56.7	23.3	20.0	0.0	0.0
Revealing a friend's secret to someone else	60.0	30.0	6.7	3.3	0.0
Passing off somebody else's work as your own	70.0	23.3	0.0	3.3	3.3

(Table 2 Continues)

(Table 2 Continued)

Statements	*Very Unlikely %*	*Unlikely %*	*Undecided %*	*Likely %*	*Very Likely %*
Betting a day's income on the outcome of a sporting event	70.0	23.3	3.3	3.3	0.0
Betting a day's income at a high-stake poker game	76.7	20.0	0.0	3.3	0.0
Not returning a wallet you found that contains $200	86.7	13.3	0.0	0.0	0.0

Level of Opinion Leadership

Participants responded to a list of six questions related to opinion leadership behaviors for each of the three issues identified. Tables 3, 4, and 5 display participants' personal perceptions of their opinion leadership behaviors related to water, immigration, and agricultural regulation respectively. Using a five-point bipolar response scale (1 = *Low*, 5 = *High*), responses to all six items within a particular issue domain were summed and averaged to create an overall perception of issue opinion leadership score for each category. Table 6 displays mean level of opinion leadership within water, immigration, and agricultural regulation. Participants reported an average level of overall opinion leadership within all three issue areas.

Table 3

Participant-Perceived Level of Level of Opinion Leadership Surrounding Water Issues by Percentage of ANR Leadership Development Program Participants

Statements	*n*	*1%*	*2%*	*3%*	*4%*	*5%*
During the past six months, how many people have you told about water issues affecting Florida's agriculture and natural resources sectors? [a]	30	0.0	3.3	26.7	20.0	50.0
In general, do you talk to your friends and colleagues about water issues… [b]	30	0.0	16.7	30.0	36.7	16.7
In a discussion of water issues, which of the following happens most? [c]	30	3.3	16.7	40.0	26.7	13.3
When you talk to your friends and colleagues about water issues, do you: [d]	30	0.0	16.7	46.7	36.7	0.0
Compared with your circle of friends, how likely are you to be asked about new information relating to water issues? [e]	30	0.0	33.3	46.7	6.7	13.3
Overall, in all your discussions with friends and colleagues, regarding issues surrounding water are you: [f]	30	6.7	33.3	40.0	20.0	0.0

Scale: [a]1 – *Told no one* to 5 – *Told a number of people*; [b]1 – *Never* to 5 – *Very Often*; [c]1 – *Your friends tell you about issues including new developments* to 5 – *You tell your friends about issues including new developments;*[d]1 – *Give very little information* to 5 – *Give a great deal of information*; [e]1 – *Not at all likely to be asked* to 5 – *Very likely to be asked*; [f]1 – *Not used as a source of advice* to 5 – *Often used as a source of advice*

Table 4

Participant-Perceived Level of Level of Opinion Leadership Surrounding Immigration Issues by Percentage of ANR Leadership Development Program Participants

Statements	*n*	*1%*	*2%*	*3%*	*4%*	*5%*
During the past six months, how many people have you told about immigration issues affecting Florida's agriculture and natural resources sectors? [a]	30	0.0	6.7	16.7	26.7	50.0
In general, do you talk to your friends and colleagues about immigration issues… [b]	30	0.0	10.0	30.0	40.0	20.0
When you talk to your friends and colleagues about immigration issues, do you: [c]	30	0.0	13.3	33.3	40.0	13.3
In a discussion of immigration issues, which of the following happens most? [d]	30	0.0	13.3	30.0	56.6	0.0
Compared with your circle of friends, how likely are you to be asked about new information relating to immigration issues? [e]	30	3.3	6.7	46.7	36.7	6.7
Overall, in all your discussions with friends and colleagues, regarding issues surrounding immigration are you: [f]	30	3.3	23.3	43.3	26.7	3.3

Scale: [a]1 – *Told no one* to 5 – *Told a number of people*; [b]1 – *Never* to 5 – *Very Often*; [c]1 – *Give very little information* to 5 – *Give a great deal of information*; [d]1 – *Your friends tell you about issues including new developments* to 5 – *You tell your friends about issues including new developments;* [e]1 – *Not at all likely to be asked* to 5 – *Very likely to be asked*; [f]1 – *Not used as a source of advice* to 5 – *Often used as a source of advice*

Table 5

Participant-Perceived Level of Level of Opinion Leadership Surrounding Agricultural Regulation Issues by Percentage of ANR Leadership Development Program Participants

Statements	*n*	*1%*	*2%*	*3%*	*4%*	*5%*
During the past six months, how many people have you told about agricultural regulation issues affecting Florida's agriculture and natural resources sectors? [a]	30	0.0	20.0	20.0	20.0	40.0
In general, do you talk to your friends and colleagues about agricultural regulation issues… [b]	30	0.0	10.0	30.0	40.0	20.0
Compared with your circle of friends, how likely are you to be asked about new information relating to agricultural regulation issues? [c]	30	0.0	20.0	30.0	36.7	13.3
In a discussion of agricultural regulation issues, which of the following happens most? [d]	30	0.0	13.3	30.0	56.6	0.0
When you talk to your friends and colleagues about agricultural regulation issues, do you: [e]	30	0.0	13.3	33.3	40.0	13.3
Overall, in all your discussions with friends and colleagues, regarding issues surrounding agricultural regulation are you: [f]	30	0.0	20.0	43.3	33.3	3.3

Scale: [a]1 – *Told no one* to 5 – *Told a number of people*; [b]1 – *Never* to 5 – *Very Often*; [c]1 – *Not at all likely to be asked* to 5 – *Very likely to be asked*; [d]1 – *Your friends tell you about issues including new developments* to 5 – *You tell your friends about issues including new developments;* [e]1 – *Give very little information* to 5 – *Give a great deal of information*; [f]1 – *Not used as a source of advice* to 5 – *Often used as a source of advice*

Table 6

Descriptive Statistics of Participants' Level of Opinion Leadership Surrounding ANR Issues

Issue	*n*	*M*	*SD*
Immigration	30	3.54	.68
Agricultural Regulation	30	3.45	.75
Water	30	3.32	.64

Relationships between Perceptions of Optimism, Willingness to Take Risks, and Level of Opinion Leadership

Both optimism and willingness to take risks composite scores were negatively correlated with participants' perceptions of their level of opinion leadership within all three issues (Table 7). Correlations ranged from negligible to moderate in magnitude (Davis, 1971). Optimism had a statistically significant moderate negative correlation with opinion leadership of agricultural regulation issues (r = -.38). Optimism had a low negative correlation with opinion leadership of immigration issues (r = -.11). Willingness to take risks had low negative correlations with

participants' perceptions of their opinion leadership within all three issue areas. Perceived opinion leadership of agricultural regulation issues had the largest negative correlations with both optimism and willingness to take risks, while opinion leadership of water had the smallest correlations with optimism and willingness to take risks.

Table 7

Correlations between Optimism, Willingness to Take Risks, and Opinion Leadership of ANR Issues

	1	2	3	4	5
1. Optimism	-				
2. Willingness to Take Risks	-0.19	-			
3. Agricultural Regulation	-0.38*	-0.26	-		
4. Immigration	-0.11	-0.22	-0.24	-	
5. Water	0.05	-0.20	0.31	-0.36	-

*$p < .05$

Conclusions, Implications, and Recommendations

This study provided several interesting insights into opinion leader characteristics, especially those engaged in an ANR endeavor. This study has shown there is an overall orientation towards issue awareness and, accordingly, these individuals would typically act in an opinion leader capacity with their contemporaries. The opinion leaders also tended to be less willing to take risks, and have a slightly optimistic outlook. These overall results confirm Luthans and Avolio's (2003) statements regarding optimism being associated with leadership. However, the willingness to take risks results are slightly contradictory to Frost, Fiedler, and Anderson's (1983) positive association between willingness to take risks and leadership. Interestingly, individuals that were identified as having the most knowledge about a particular policy issue tended to have similar characteristics: they were less likely to view situations optimistically, and were less willing to take risks.

The literature indicated a leader will typically demonstrate an overall optimistic outlook (Luthens & Avolio, 2003) and will have a greater willingness to take risks (Conger & Kanungo, 1992). The results of this study contradict the expected results. Specifically, respondents that scored high on opinion leadership tended to be less willing to take risks and were less optimistic than respondents in the study. What is indeterminate from the results is whether these individuals share this common set of characteristics because of their orientation towards taking leadership roles, or being recognized as opinion leaders due to their knowledge of the subject matter. For example, Nistler, Lamm, and Stedman (2011) found that affiliation was the strongest need associated with volunteering for leadership positions. From this perspective individuals may wish to serve as opinion leaders first and then become more knowledgeable about policy related issues (information seeking behaviors and referent power to satisfy their need for affiliation). Alternately, individuals may have been elevated to the role of opinion leader by their peers because of their knowledge of the issues (expert power) (Corey, 1971).

While directionality of the correlation should be considered for future research, the results of the study do indicate a strong, consistent characteristic disposition across the ANR leadership development program that was analyzed, higher levels of opinion leadership were related to lower levels of optimism and less willingness to take risks.

It should be noted that the scope of this study serves as one of the primary limitations. Although findings were unexpected and significant, the size of the population examined was

limited. To further confirm the findings a more comprehensive examination of ANR opinion leaders in the United States, and other global locations with similar leadership development programs, should be conducted. These results should only be used to gain an understanding of the sample studied and used as a benchmark to inform programs and assist in directing future research initiatives. On the basis of this study additional conclusions, implications and recommendations are provided.

When considering the context from which the individuals in this study come perhaps these results are not that unexpected. For example, it would be uncommon to expect an agriculturalist to constantly speculate about the perfect growing conditions. Typically one would believe this group to be overly concerned about too much or too little moisture, too much or too little heat, and the lack of general control over the growing conditions so critical to the success of their endeavors. Perhaps the orientation towards a less optimistic outlook is a conditioned response from years of unpredictable crop yields (and the tendency to remember and reflect on the times when the crop did not come versus the times when a surplus was harvested). Similarly, the orientation towards not being willing to take risks may also be a context-based response. The tendency to attempt to avoid those activities that are risky, and within one's spectrum of control, may be a reaction to the reality that so much of one's livelihood is directly dependent on circumstances outside of one's control (the weather for example).

There is little research that specifically focuses on the characteristics of opinion leaders in the ANR space. Therefore, the implications of this study indicate there may be fundamental differences in the way opinion leaders function based on the context of their leadership. This could in turn have a direct impact on the manner in which these individuals can, and should be, engaged.

Having a better understanding of characteristics associated with an ANR opinion leader should inform future work with this population. Specifically, messages or communications should be crafted in a more pragmatic (less optimistic) manner. Additionally, they should be constructed to highlight how the proposed outcome would have a lower overall risk profile than the alternative. Appealing to these characteristics should in turn reduce some of the initial resistance one may expect to encounter.

ANR leadership development programs may also consider including optimism and risk taking training interventions in their curricula. The literature suggests that leaders are generally considered to be optimistic and willing to take risks. The development of these areas in ANR opinion leaders may result in a greater perception of leadership capacity to audiences outside of the ANR industry. Further research is suggested to measure the efficacy and effectiveness of such interventions, not only at an individual level but also at the broader relationship and general influence and perception level.

This study was specific to one state's agricultural leadership development program; therefore results and generalization beyond this population should be done with significant care. To confirm the results of this study replication studies should be conducted in other representative populations. Additionally, research into the directionality of the correlations between ANR opinion leaders and their characteristics should be undertaken.

The results of this study may have a significant impact on the manner in which opinion leaders are recruited (nominations versus characteristics) and the way leadership development programs are structured (appealing to a more referent versus expert power base, or vice versa). This may improve the efficacy of such programs and improve the perceived programmatic worth in the future. Finally, research should continue around the traits and characteristics of opinion leaders in the ANR field.

References

Arndt, J. (1972). Intrafamilial homogeneity for perceived risk and opinion leadership. *Journal of Advertising (Pre-1986), 1*(000001), 40.

Burt, R. S. (1999). The social capital of opinion leaders. *Annals of the American Academy of Political and Social Science, 566*, 37-54.

Chan, K. K., & Misra, S. (1990). Characteristics of the opinion leader: A new dimension. *Journal of Advertising, 19*(3), 53.

Chiarelli, C., Stedman, N., Carter, H., & Telg, R. (2010). The impact of organizational source and credibility and the factors that contribute to opinion leaders' decisions to diffuse information. *Journal of Southern Agricultural Education Research, 60*, 104-117.

Childers, T. L. (1986). Assessment of the psychometric properties of an opinion leadership scale. *Journal of Marketing Research, 23*(2), 184-188.

Ciulla, J. B. (2008). Leadership studies and "the fusion of horizons". *The Leadership Quarterly, 19*(4), 393-395. doi: 10.1016/j.leaqua.2008.05.001

Conger, J. A., & Kanungo, R. N. (1992). Perceived behavioural attributes of charismatic leadership. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement, 24*(1), 86-102. doi: 10.1037/h0078703

Corey, L. G. (1971). People who claim to be opinion leaders: Identifying their characteristics by self-report. *Journal of Marketing (Pre-1986), 35*(000004), 48.

Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology, 78*(1), 98-104. doi: 10.1037/0021-9010.78.1.98

Davis, J. A. (1971). *Elementary survey analysis*. Englewood Cliffs, NJ: Prentice-Hall.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2008). *Internet, mail, and mixed-mode surveys: The tailored design method* (2nd ed.). Hoboken, N.J.: Wiley & Sons, Inc.

Doerfert, D. (2011). *National research agenda for agricultural education, 2011-2015.* American Association of Agricultural Education.

Foster, R. (2001). Leadership for leaders in agriculture. *Symposium Conducted at the Annual Meeting of the International Association of Programs for Agriculture Leaders,* San Luis Obispo, CA.

Frost, D. E., Fiedler, F. E., & Anderson, J. W. (1983). The role of personal risk-taking in effective leadership. *Human Relations, 36*(2), 185-202. doi: 10.1177/001872678303600207

Gardner, W. L., & Schermerhorn, J. R. (2004). Unleashing individual potential: Performance gains through positive organizational behavior and authentic leadership. *Organizational Dynamics, 33*(3), 270-281. doi: 10.1016/j.orgdyn.2004.06.004

Javidan, M., & Waldman, D. A. (2003). Exploring charismatic leadership in the public sector: Measurement and consequences. *Public Administration Review, 63*(2), 229-242. doi: 10.1111/1540-6210.00282

Kelsey, K. (2003). Do agricultural leadership programs produce community leaders? A case study of the impact of an agricultural leadership program on participants' community involvement. *Journal of Agricultural Education, 44*(4), 35-46. doi: 10.5032/jae.2003.04035

Kort, E. D. (2008). What, after all, is leadership? 'Leadership' and plural action. *The Leadership Quarterly, 19*(4), 409-425. doi: 10.1016/j.leaqua.2008.05.003

Lazarsfeld, P., Berelson, B., & Gaudet, H. (1948). *The people's choice* (2nd ed.). New York: Columbia University Press.

Ludwig, B. G. (1994). Global issues: Identifying existing attitudes of agricultural and metropolitan leaders. *Journal of International Agricultural and Extension Education, 1*(1), 7-15.

Luthans, F., & Avolio, B. (2003). Authentic leadership: A positive development approach. In K. S. Cameron, J. E. Dutton & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 241-258). San Francisco, CA: Berrett-Koehler.

McColl-Kennedy, J. R., & Anderson, R. D. (2002). Impact of leadership style and emotions on subordinate performance. *The Leadership Quarterly, 13*(5), 545-559. doi: 10.1016/S1048-9843(02)00143-1

Nistler, D. L., Lamm, A. J., & Stedman, N. (2011). Evaluating the influences on extension professionals' engagement in leadership roles. *Journal of Agricultural Education, 52(3),* 110–121. doi: 10.5032/jae.2011.03110

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.

Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology, 4*(3), 219-247. doi: 10.1037/0278-6133.4.3.219

Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment, 8*(4), 350-353. doi: 10.1037/1040-3590.8.4.350

Seligman, M. E. P. (1998). *Learned optimism*. New York: Pocket Books.

Streiner, D. L. (2003). Starting at the beginning: An introduction to coefficient alpha and internal consistency. *Journal of Personality Assessment, 80*(1), 99-103. doi: 10.1207/S15327752JPA8001_18

Thiel, C. E., Connelly, S., & Griffith, J. A. (2012). Leadership and emotion management for complex tasks: Different emotions, different strategies. *The Leadership Quarterly, 23*(3), 517-533. doi: 10.1016/j.leaqua.2011.12.005

Tiger, L. (1979). *Optimism: The biology of hope*. New York: Simon & Schuster.

Valente, T. W., & Davis, R. L. (1999). Accelerating the diffusion of innovations using opinion leaders. *The Annals of the American Academy of Political and Social Science, 566*(1), 55-67. doi: 10.1177/000271629956600105

Weber, E. U., Blais, A., & Betz, N. E. (2002). A domain-specific risk-attitude scale: Measuring risk perceptions and risk behaviors. *Journal of Behavioral Decision Making, 15*(4), 263-290. doi: 10.1002/bdm.414

Whent, S., & Leising, J. (1992). A twenty-year evaluation of the California agricultural leadership program. *Journal of Agricultural Education, 15*(3), 32-39.

Wunderley, L. J., Reddy, B. W., & Dember, W. N. (1998). Optimism and pessimism in business leaders. *Journal of Applied Social Psychology, 28*(9), 751-760. doi: 10.1111/j.1559-1816.1998.tb01729.x

Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership & Organizational Studies, 9*(1), 15-32.