

Exploring Relationships Between Goal Orientation and Conflict Management Capacity Development in Agricultural Leadership Development Program Participants

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Abstract

Motivational dispositions behind how learners approach, interpret, and respond to challenging goals can serve as beneficial foundations to conflict management training and implementation. There is a dearth of research connecting the constructs of goal orientation and conflict management and this study does so, for the first time in an agricultural leadership context. Using The Conflict Management Scale and The Work Domain Goal Orientation Instrument, 80 members of a LEAD21 agricultural leadership development cohort exhibited a 15.2% increase in conflict management capacity. Learning goal orientation was predictive of conflict management capacity prior to the start of LEAD21. Both learning goal orientation and performance goal orientation-prove were found to have predictive qualities after LEAD21 conflict management training. In addition to a discussion on future research directions, educators, as well as learners, are encouraged to incorporate goal orientation into curriculum development and planning for the enhancement of learning environments.

Keywords: goal orientation, goals, conflict, leadership development, motivation, training

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This work was supported by the University of Georgia.

The research being reported in this publication was financially supported by the LEAD21 program. Two of the authors of this publication served as consultants to LEAD21, and a third author was employed by LEAD21 at the time the data were collected. We have disclosed these interests fully to the *Journal of Agricultural Education*, and have in place a plan for managing any potential conflicts arising from this arrangement.

Introduction

“Human interaction, effective leadership, and the accomplishment of organizational goals are ubiquitous with conflict management and resolution skills” (Lamm et al., 2020b). Whether the source is connected to educational curriculum, policy challenges, or community initiatives (Roberts et al., 2016), the field of agriculture is not exempt from the natural phenomenon of conflict (Earnest & McCaslin, 1994). Thus, agricultural educators and administrators are often involved in potential or

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actual conflict associated with individual and team goals, which are commonly connected to a predetermined set of performance standards by which goal-setting and goal-accomplishment are evaluated (Vandewalle, 1997). Goal orientation theory sheds light on the motivation behind how an individual defines success and subsequently proceeds with goal attainment. Rather than prioritizing the technical components of setting and achieving goals, goal orientation explores the psychological and behavioral components of how individuals interpret, react to, and are affected by challenges associated with goals (Dweck, 1986).

Conflict management has been described as, “the skill to conduct oneself in a conflict situation that respects other individuals, resolves or manages the problems, results in a livable situation, and preserves the dignity of those involved” (Hutchison et al., 1988, p. 4). It, along with goal setting, problem-solving, negotiation skills, and motivation, has long been considered a leadership skill that should be developed through formal leadership development efforts (Hutchison et al., 1988). Criteria for excelling in negotiation skills, such as generating alternative solutions and having a win/win mindset, are considered to be the same criteria for excellence in conflict management (Hutchison et al., 1988). Conflict management relates to challenges associated with interpersonal relationships and can oftentimes be the result of conflicting goals, personalities, and ideas. Due to the interconnectedness of goal orientation and conflict management, leadership development training and practice can be enhanced with more nuanced research combining the two constructs. Exploring the combination of such constructs not only benefits leadership development participants, but also educators of leadership development and any other agricultural-related topic. When the field knows more about motivational dispositions, more intentionality can be put toward effective goal-related and conflict management techniques used during trainings and course curriculum. “A more robust set of motivational approaches provides educators a diverse set of options when developing and implementing training materials” (Lamm et al., 2020a, p. 156).

The specific program evaluated in this study is LEAD21, which builds the leadership development capacity of emerging leaders affiliated with the National Institute of Food and Agriculture (NIFA) and colleges of agricultural, environmental, and human sciences nationwide. In addition to the program having an empirically-supported proven track record of improving participants’ change leadership (Lamm et al., 2018), the program has also been shown to increase conflict management capacity in participants (Lamm et al., 2020b). The development of such capacity is related to self-awareness as well as self-regulation and behavioral, cognitive, and emotional skills (Overton & Lowry, 2013). Thus, combining the investigation of conflict management and goal orientation, which is the behavioral, cognitive, and emotional realm of goal research and theory, is of value; this will be done, for the first time in the context of agriculture, in this study. Doing so also relates to the 2016-2020 American Association for Agricultural Education (AAAE) National Research Agenda (Roberts et al., 2016). The call for a “sufficient scientific and professional workforce that addresses the challenges of the 21st century” (Roberts et al., 2016, p. 9), as outlined in priority area three, can be supported by enhanced agricultural leadership curriculum and ongoing program evaluation. Current and future challenges can be better met when students, faculty, and administrators are offered educational training that has been informed by nuanced measures that deepen our understanding of construct overlap such as that of conflict management and goal orientation. Not only can such research be implemented into specific educator practices, but it is also an example of a leadership skills which are transferable to any position an employee is promoted or moved to within the field during their career.

Conceptual and Theoretical Frameworks

Conflict Management

Avoiding, mishandling, or not seeing the opportunities in conflict can be costly, financially and relationally, on both an individual and organizational level (Lamm et al., 2020b). Though often uncomfortable (Earnest & McCaslin, 1994), conflict is vital and necessary (Berger, 2017) for diversity of thought and more effective group performance (Katz & Flynn, 2012). Due to such benefits, much literature (e.g., Zacharakis, 2006) encourages the building of conflict management skills, a process that may be even more beneficial and effective with the incorporation of goal orientation because of the dual focus on responses to challenges. It is also a process that is deemed essential for leaders due to “the inevitability of conflict as a natural occurrence in organizational life” (Katz & Flynn, 2012, p. 396). A leader’s behavior and beliefs influence the dynamics of group interaction and potential conflict (Katz & Flynn, 2012). Thus, good leaders create safe environments where conflict is expected, learned from, and handled with care (Overton & Lowry, 2013). The fundamental leadership skill of conflict management (Suarez, 2016) can be improved upon through leadership development efforts (Overton & Lowry, 2013; Robinson et al, 2014). Such efforts can be enhanced for even more personal and professional growth if goal orientation is explored in tandem with conflict management.

Task, process, status, and/or relationship discrepancies can serve as sources of conflict (Carmichael & Gallo, 2015; Mitchell, 2019; Overton & Lowry, 2013). As specific tasks may stem from specific goals, disagreement can arise about which tasks are prioritized (task conflict) and how goals are ultimately achieved (process conflict). Who is responsible for the creation and maintenance of goal attainment (status conflict) can create interpersonal friction (relationship conflict). Though context plays an important role in disagreements of all kinds, commonalities of the concept of conflict are as follows: conflict is inevitable, positive and negative results are created based on how it is handled, addressing and not avoiding conflict is more advantageous, and the cognitive, emotional, and behavioral skills needed to handle it effectively can be learned (Overton & Lowry, 2013).

Goal Orientation

Goal orientations refer to personal dispositions about one’s ability to succeed in achievement settings (e.g., a classroom or a competitive sport) (Vandewalle, 1997). Diener and Dweck (1978) introduced two cognitive natures related to perceived failure: (1) the disposition to view personal characteristics, such as intelligence and ability, as uncontrolled and unmalleable and (2) the disposition to view such attributes as learnable and adjustable with practice and effort. The former implicit theory is known as an *entity* theory, based on ability being a fixed entity, and the latter is known as an *incremental* theory, based on the developmental nature of ability (Dweck & Leggett, 1988). Both predispose an individual to preference certain goal orientations (Dweck & Leggett, 1988; Vandewalle, 1997), even if done unconsciously. Individuals who view their ability and intellectual capital through the lens of entity theory are less likely to see ability as a concept that can be developed (Dweck & Leggett, 1988). Therefore, they are more likely to focus on the ability they perceive they do have while seeking to validate it based on the judgements of, and comparison to, others (Vandewalle, 1997). On the other hand, individuals ascribing to an incremental theory view ability as something that can be constantly developed and improved through intentional effort (Dweck & Leggett, 1988). They are more likely to enjoy learning a new skill for the sake of learning, mastery, and intrinsic worth, as compared to an entity theory perspective, which focuses more on extrinsic worth.

Dweck and Leggett (1988) offer two categories: *learning goal orientation* (LGO), “in which individuals are concerned with increasing their competence” and *performance goal orientation* (PGO), “in which individuals are concerned with gaining favorable judgments of their competence” (p. 256). Vandewalle (1997) expanded this notion further by suggesting that PGO details should be represented in two sub-categories: *performance prove* (PGO-P), including actions such as demonstrating ability, seeking to gain favorable approval from others, and obtaining competence, and *performance avoid* (PGO-A), including actions such as avoiding demonstrating low ability, not wanting disapproval from

others, and avoiding incompetence. Though other scholars have conceptualized the construct in different ways, for clarity and for the purposes of this study, the Vandewalle (1997) goal orientation model will be used to frame the study's empirical information.

Related Literature

Vandewalle (1997) points out that goal orientation research has assisted in the understanding of how personal dispositions affect the emotional, behavioral, and mental responses of individuals in achievement settings. Additionally, goal orientation has been found to influence multiple organizational factors (Payne et al., 2007) such as work performance (e.g., Sujan et al., 1994) and an employee's ability to seek and handle feedback (e.g., Vandewalle & Cummings, 1997). In addition to organizational domains, goal orientation has been investigated in relation to gender, age, and to the idea that different orientations are applied depending on one's setting (Vandewalle, 1997). Specifically in agricultural higher education settings, personality has been found to be an empirical predictor of goal orientation (Lamm et al., 2017), mastery (LGO) has been positively correlated with student resiliency (Splan et al., 2011), LGO and PGO-P have been found to affect undergraduate's attitudes toward interdisciplinary education (DiBenedetto et al., 2016), and all goal orientations have been found as strategies students use to self-regulate their learning (Huff et al., 2016).

Regarding literature that specifically combines goal orientation with conflict management, Tasa et al. (2013) explored goal orientation in the context of negotiation skills using simulations. They explained that the manner of discovery in learning new knowledge and strategies (LGO) is helpful when a task is complex and/or a negotiation is vague. Attention placed on the accomplishment of a specific outcome or goal (PGO) may be beneficial for simpler tasks and/or single dimension-type situations, and focusing solely on performance may hinder the development of creative problem-solving (Tasa et al., 2013). Furthermore, Tasa et al.'s study (2017) findings showed that learning goals helped individuals extend beyond tasks that only involved or benefited them; when using LGO, research participants were more likely to develop more strategies to work with, negotiate, and compromise with their negotiation counterpart. Thus, learning goals may also have added benefits for relational, interdependent tasks that require cooperation among those involved. Additionally, positive consequences of learner goals may be increased when negotiators believe their skills are malleable (Tasa et al., 2013).

Goal orientation research has also been extended to group-level dynamics. In regard to adding the study of conflict management to goal orientation research, only a few studies offer guidance. Research shows that when there is a greater presence of team LGO (compared to team PGO), the correlation between relationship conflict and task conflict is weaker (Huang, 2010). The relationship between these two types of conflicts is also weaker when teams actively engage in a cooperative effort to manage conflict instead of avoiding it (Huang, 2010). Additionally, relationship conflict has a significantly negative association with team performance and has increased consequences when team PGO is high (Huang, 2012). Teams will react differently to task and relationship conflict depending on the collective goal disposition. Therefore, team goal orientation has been shown to have moderating effects on team interactions (Huang, 2012). While it has been found that the goal orientation of individual team members initially affect the team's goal disposition, eventually team process and outcomes influence team goal orientation (Maltarich et al., 2016).

Currently, only one study (Lamm et al., 2020a) linking goal orientation and agricultural-related leadership development programming exists. Lamm et al. (2020a) found that adult learners' goal orientation disposition may be correlated with demographics such as age and status in the organization. A statistically significant correlation was found between age and PGO-P, implying that older employees may not feel the pressure to prove themselves as much as they once did thanks to their years of

experience. It has also been shown that experience, in the form of leadership training, also increases one's conflict management capacity (Lamm et al., 2020b). Additionally, comfort with failure and risk-taking is also more significant the more advanced one becomes in an organization's hierarchy; in other words, PGO-A decreases (Lamm et al., 2020a). Job experience, and not simply age-related experience, may help employees see failure from an LGO perspective, or growth mindset (Dweck, 2016). On the other hand, someone at a different place in an organizational hierarchy is more likely to exhibit PGO-A due to fear of failure, lack of experience, and/or lack of job security (Lamm et al., 2020a); such trepidation can also relate to someone avoiding conflict. In addition to seeing the importance of experience being capitalized on in leadership development efforts for adult learners, it is also important to connect the concept of taking (or not taking) risks with conflict management. The study explained below aligns with Vandewalle's (1997) initial concern to connect such research to adult populations and will be the first study combining the constructs of goal orientation and conflict management in the United States, for a context outside of the business setting involving the field of agriculture and leadership.

Research Purpose and Objectives

The purpose of this study was to investigate potential relationships between conflict management perception and goal orientation in LEAD21 leadership training participants. This purpose was guided by the following research objectives:

1. Describe the participants' levels of conflict management prior to completing LEAD21.
2. Describe the participants' levels of conflict management after completing LEAD21 training.
3. Determine if there is a difference in level of conflict management prior to completing LEAD21 and after completing LEAD21 training.
4. Describe the participants' levels of learning goal orientation.
5. Describe the participants' levels of performance-prove goal orientation.
6. Describe the participants' levels of performance-avoid goal orientation.
7. Identify the relationship between goal orientation and conflict management prior to completing LEAD21 and after to completing LEAD21 training.
8. Identify if, and how, goal orientation predicts conflict management prior to, and following, a leadership training intervention.

Methods

A descriptive and correlational research design was applied to data collected from the 2017-2018 LEAD21 class. Each class participates in a year-long process consisting of three core curriculum sessions and an individual learning element (LEAD21, 2020). As a true pretest for conflict management values, data were collected at the start of the program using a convenience sample. Goal orientation and post-conflict management data were collected after participants completed the second session, which has a particular focus on conflict management and group dynamics.

The Conflict Management Scale (Lamm et al., 2020b) was used to measure conflict management capacity in the pretest and again in the posttest. The scale was evaluated for internal consistency, as a measure of validity, based on standards established in the social science literature (Cortina, 1993; Schmitt, 1996; Streiner, 2003). Specifically, a Cronbach's alpha value of .81 was observed for the pretest, and a Cronbach's alpha value of .76 was observed for the posttest. These values were deemed acceptable. Using a five-point Likert-type scale ranging from 1 - "strongly disagree" to 5 - "strongly agree," participants responded to the six items (e.g., "I am able to identify the root causes of conflict") that make up the scale and gauge the participant's perception of their personal conflict management capacity. Differences between conflict management data collected prior to and after the

training were compared using a paired sample *t*-test. Conflict management data analysis were conducted as a validation of previous studies (Lamm et al., 2020b).

Goal orientation data were collected for investigative purposes as recommended within the literature (Lamm et al., 2020a), with a special emphasis on an adult population (Vandewalle, 1997). The Work Domain Goal Orientation Instrument, which was designed and tested to measure adult goal orientation in organizational settings (Vandewalle, 1997), was chosen for the study. The instrument contains 14 items separated into three sections with five LGO-specific items (e.g., “I often look for opportunities to develop new skills and knowledge”), five PGO-P-specific items (e.g., “I’m concerned with showing that I can perform better than my coworkers”), and four PGO-A-specific items (e.g., “I would avoid taking on a new task if there was a chance that I would appear rather incompetent to others”). Participants’ responses were based on a five-point Likert-type scale with a choice of 1 indicating “strongly disagree” to a choice of 5 indicating “strongly agree” (Vandewalle, 1997). The three sub-scales (LGO, PGO-P, PGO-A) were evaluated for internal validity using Cronbach’s alpha. All were deemed acceptable with observed alpha values of .84 for LGO, .84 for PGO-P, and .84 for PGO-A.

Among its 80 participants, 42.5% of the 2017-2018 LEAD21 class were female and 57.5% were male. The majority of participants (81.3%) represented 1862 institutions while 13.8% represented minority-serving (including 1890, 1994, and U.S. territory) institutions. Non-Land-Grant Agricultural and Renewable Resources Universities (NARRU) were represented by 1.3% of the class and NIFA was represented by 2.5% of the class. Sixty-seven participants responded to the pretest request and 75 responded to the posttest request resulting in respective 84% and 94% response rates. The response rates were deemed acceptable for analysis (Baruch & Holtom, 2008).

All goal orientation, conflict management, and demographic data were self-reported. Data analysis involved descriptive techniques, Pearson correlations, and linear regression with the use of the Statistical Package for the Social Sciences (SPSS) version 27.

Results

The first objective related to participants’ level of conflict management prior to LEAD21 training. As shown in Table 1, results from The Conflict Management Scale show a minimum score of 2.00 and a maximum score of 4.50 ($M = 3.30$, $SD = 0.59$). The second objective, level of conflict management capacity after LEAD21 training, resulted in a minimum score of 2.83 and a maximum score of 4.83 ($M = 3.80$, $SD = 0.44$).

Table 1
Descriptive Statistics for Conflict Management Pretest and Posttest

| | <i>n</i> | <i>M</i> | <i>SD</i> | <i>Min</i> | <i>Max</i> |
|----------|----------|----------|-----------|------------|------------|
| Pretest | 67 | 3.30 | 0.59 | 2.00 | 4.50 |
| Posttest | 75 | 3.80 | 0.44 | 2.83 | 4.83 |

The third research objective involved investigating any difference in the level of conflict management prior to, and after, completing LEAD21 training. This was accomplished by analyzing the pre- and posttest scores and conducting a paired samples *t*-test analysis on 60 matched pairs as shown in Table 2. Results indicated a statistically significant difference [$t(59) = 8.05$, $p < .000$] and an observation of a 15.2% increase in conflict management capacity. According to a Cohen’s *d* calculation (Cohen, 1988), a large effect size was observed.

Table 2
t-test Results for Conflict Management Pretest and Posttest

| <i>n</i> | <i>M</i> | <i>SD</i> | 95% CI for Mean Difference | <i>t</i> | <i>p</i> | <i>df</i> | Cohen's <i>d</i> |
|----------|----------|-----------|----------------------------|----------|----------|-----------|------------------|
| 60 | 0.49 | 0.47 | 0.37, 0.61 | 8.05 | .000 | 59 | 1.04 |

Research objectives four through six all related to describing the participants' levels of goal orientation, specifically LGO, PGO-P, and PGO-A. Minimum and maximum scores for LGO were 3.00 and 5.00 respectively ($M = 4.36$, $SD = 0.50$). Minimum and maximum scores for PGO-P were 1.00 and 5.00 respectively ($M = 3.19$, $SD = 0.82$) and scores for PGO-A were 1.00 and 4.25 ($M = 2.41$, $SD = 0.77$).

Table 3
Results for Goal Orientation Analysis

| | <i>n</i> | <i>M</i> | <i>SD</i> | <i>Min</i> | <i>Max</i> |
|-------|----------|----------|-----------|------------|------------|
| LGO | 74 | 4.36 | 0.50 | 3.00 | 5.00 |
| PGO-P | 74 | 3.19 | 0.82 | 1.00 | 5.00 |
| PGO-A | 75 | 2.41 | 0.77 | 1.00 | 4.25 |

Pearson correlational analysis was completed for objective seven, which addressed the relationship between goal orientation and conflict management (CM) prior to beginning LEAD21 and after to completing LEAD21 conflict management-specific training. Correlations and statistical significance between variables are provided in Table 4. At the $p < .01$ level, LGO a positive statistically significant relationship between LGO and pretest conflict management scores ($r = 0.43$) as well as LGO and posttest conflict management scores ($r = 0.43$). A negative statistically significant relationship was observed between PGO-P and conflict management posttest conflict management scores ($r = -0.26$) at the $p < .05$ level. No statistically significant relationships between conflict management difference scores and goal orientation scores were observed, therefore conflict management difference was not analyzed further via regression. Correlations within each goal orientation construct surfaced, but were also not pursued due to them being outside the scope and purpose for the study at hand.

Table 4
Correlations Between Goal Orientation and Conflict Management

| | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------|--------|---------|-------|-------|-------|----|
| 1. CM (Post) | -- | | | | | |
| 2. CM (Pre) | 0.58** | -- | | | | |
| 3. CM Difference | 0.23 | -0.66** | -- | | | |
| 4. LGO | 0.43** | 0.43** | -0.08 | -- | | |
| 5. PGO-P | -0.26* | -0.11 | -0.06 | 0.07 | -- | |
| 6. PGO-A | -0.14 | -0.19 | 0.15 | -0.14 | 0.29* | -- |

Note: * $p < .05$, ** $p < .01$

Research objective eight was addressed by using multiple linear regression to identify if, and how, goal orientation predicts conflict management prior to, and following, a leadership training intervention. Pre- and post-scores observed from the conflict management assessment were considered dependent variables of interest while the three dimensions of goal orientation were considered independent variables. Unstandardized coefficients using variable level effects and statistical significance values for the regression analysis are provided in Table 5. LGO was the only dimension of goal orientation predictive of conflict management prior to the start of LEAD21 and accounted for approximately 16.7% of the observed variance. Both LGO and PGO-P were predictive of conflict management capacity after participants were exposed to LEAD21's conflict management training, which accounted for approximately 23.4% of the observed variance.

Table 5
Linear Regression of Conflict Management and Goal Orientation

| | R^2 | Adjusted R^2 | | B | SE | t | p |
|-----------|-------|----------------|----------|-------|------|-------|-------|
| CM (Pre) | 0.211 | 0.167 | Constant | 1.86 | 0.64 | 2.89 | 0.01 |
| | | | LGO | 0.45 | 0.13 | 3.41 | 0.00* |
| | | | PGO-P | -0.08 | 0.08 | -1.00 | 0.32 |
| | | | PGO-A | -0.09 | 0.09 | -1.05 | 0.30 |
| CM (Post) | 0.266 | 0.234 | Constant | 2.60 | 0.46 | 5.70 | 0.00 |
| | | | LGO | 0.39 | 0.09 | 4.23 | 0.00* |
| | | | PGO-P | -0.16 | 0.06 | -2.82 | 0.01* |
| | | | PGO-A | 0.01 | 0.06 | 0.12 | 0.91 |

* $p < .05$

Conclusions, Implications, and Recommendations

Results from the study at hand support and expand previous conflict management and goal orientation research. The impact of LEAD21 on the conflict management capacity of emerging leaders has been previously documented. A recent study (Lamm et al., 2020b) reported that LEAD21 increases such capacity by an average of 15.1% when four cohorts were studied together. The current study further supported that notion with the observation of a 15.2% increase in the analysis of one cohort's conflict management capacity. Likewise, mean results from this study are consistent with recent research specifically connecting goal orientation with agricultural-related leadership development programming. Average means for LGO, PGO-P, and PGO-A dispositions in 1,171 agricultural leadership development participants representing 35 various U.S. and Canadian programs have been documented as 4.10, 3.26, and 2.35 respectively (Lamm et al., 2020a). As noted by the LGO, PGO-P, and PGO-A means observed in this study (4.36, 3.19, and 2.41 respectively), research suggests that agricultural leadership development participants are more likely to exhibit PGO-P in comparison to PGO-A behavior.

Despite the novel results of the present study there are study limitations which should be considered. First, as a convenience sample the results should not be used beyond the scope of the cohort under examination. Although the replication of previous studies (DiBenedetto et al., 2016; Lamm et al. 2020a; Lamm et al., 2020b) adds to the statistical power to aid broader application of observations the current data should be considered within the scope within which it was collected. Second, with only

two variables of interest, conflict management and goal orientation, there may be additional confounding variables are mediating, moderating, or otherwise influencing observations. Therefore, a recommendation would be to replicate the study with additional statistical power and variables of interest to determine whether other factors may influence leadership capacity development. A third limitation is the potential for the pretest and posttest design to impact the observed results. Specifically, true pretest and posttest designs may differ from retrospective pretest-posttest designs where individuals are asked after an intervention to think about a time before the intervention and rate themselves retrospectively (Little et al., 2019). A recommendation for research would be to consider including a retrospective pretest-posttest design for future learning interventions and compare observed results between the differing approaches.

These comparisons, along with the observation that LGO was positively correlated to conflict management scores received prior to LEAD21 training, imply that adult learners in these settings begin, and engage with, programming already exhibiting some level of LGO. The pattern of having more dispositional LGO than PGO, and also having more PGO-P than PGO-A in particular, has also been observed undergraduate agricultural students (DiBenedetto et al., 2016). A baseline LGO pattern may help explain the significant increase in conflict management capacity after an intervention similar to LEAD21. Willingness to address, engage, and learn about and from challenging areas such as conflict are indicative of the growth that comes with LGO qualities (Dweck, 2016).

In this study, LGO and PGO-P were found to have statistically significant relationships with conflict management. This finding supports what has been observed about these two specific goal orientation dimensions in previous research. Though the statistical significance was lower, DiBenedetto et al. (2016) observed that LGO and PGO-P were the only two goal orientations to correlate with students' attitudes toward agricultural and environmental-related topics in interdisciplinary education. As was the case in the study at hand, predicative qualities of LGO and PGO-P were also observed by DiBenedetto et al. (2016); "for every one unit increase in learning goal orientation there was a 2.6 unit increase in attitude" (p. 174). Likewise, the more an adult learner approaches conflict management training from a standpoint of learning for the sake of improving, the more likely they are to grasp curriculum concepts and perceive capacity growth in that area (DiBenedetto et al., 2016; Vandewalle, 1997). This is implied from the statistically positive LGO relationship both pre- and post-conflict management training.

On the other hand, statistically negative PGO-P results imply that the more adult learners focus on the outcomes of proving themselves, gaining favor, and demonstrating competence (Vandewalle, 1997), the less likely they are to perceive increases in their ability to practice handling conflict effectively. Due to goal orientation affecting cognitive performance (Dweck (1986), this lack of implementation may be a result of a deficit in theoretically comprehending training curriculum and engaging in transformative learning. The goal orientation disposition of PGO-A was not found to be predictive of conflict management capacity. Thus, adult learners of agricultural leadership who hope to prevent disapproval and expression of low ability (Vandewalle, 1997) may not benefit from conflict management specific interventions and may not be inclined to seek out such opportunities (DiBenedetto et al., 2016).

A noteworthy, and rather unexpected, observation from the study was the lack of statistically significant relationships observed between pretest and posttest conflict management difference scores and any measure of goal orientation. Despite statistically significant observations between LGO and both pretest and posttest conflict management score observations the relationship failed to emerge at the difference level. A possible interpretation from these results is that how much an individual develops throughout a leadership training process is independent of their goal orientation disposition, instead the absolute difference may relate to an unobserved variable such as learning style or previous

experiences within the topic area. A recommendation would be to examine additional variables which may illuminate what determines growth, or decline, during training interventions.

Implications presented in this study could be expounded upon in a variety of ways. For example, future research is encouraged to use a larger sample and/or compare combined goal orientation and conflict management investigations with demographic information (Lamm et al., 2020a). Additionally, goal orientation is a useful tool to gain insight into learners and their dispositions toward motivation and change, especially as it relates to challenging tasks and topics. Due to LGO being empirically shown to increase learning, it is recommended as a contextual framework of mastery development and growth in leadership skills and competencies in future research. Such growth may occur when individuals are pushed beyond their comfort zone in learning environments. Due to high levels of PGO-P, the discomfort that may result from the “stretching” process of educational interventions may limit some individuals from fully engaging and, therefore, experiencing increased ability. Not only are learners encouraged to be self-aware about motivations guiding their behavior, but educators also benefit from insight about what may be undergirding learners’ actions. Such knowledge gives educators more opportunity to adapt and re-frame approaches to learning. Incorporating a focus on goal orientation in curriculum also gives educators an opportunity to tailor programming plans to individual perspectives (Lamm et al., 2020a). Based on the dearth of literature connecting agricultural leadership with the construct of goal orientation, further research is needed to deepen the field’s understanding of how nuances affect learner readiness, curriculum delivery, and transfer of knowledge.

References

- Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations, 61*(8), 1139-1160. <https://doi.org/10.1177/0018726708094863>
- Berger, L. (2017, June 7). *Five conflict management strategies*. Forbes. <https://www.forbes.com/sites/forbescoachescouncil/2017/06/07/five-conflict-management-strategies/#353d749d521d>
- Carmichael, S. G. (Interviewer) & Gallo, A. (Interviewee). (2015, November 25). *4 Types of conflict and how to manage them* [Interview transcript]. Harvard Business Review. <https://hbr.org/ideacast/2015/11/4-types-of-conflict-and-how-to-manage-them.html>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. Routledge Academic.
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology, 78*(1), 98-104. <https://doi.org/10.1037//0021-9010.78.1.98>
- DiBenedetto, C. A., Lamm, K. W., Lamm, A. J., & Myers, B. E. (2016). Examining undergraduate student attitude towards interdisciplinary education. *Journal of Agricultural Education, 57*(1), 167-178. <https://doi.org/10.5032/jae.2016.01167>
- Diener, C. I., & Dweck, C. S. (1978). An analysis of learned helplessness: Continuous changes in performance, strategy, and achievement cognitions following failure. *Journal of Personality and Social Psychology, 36*(5), 451-462. <http://doi.org/10.1037/0022-3514.36.5.451>
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychology, 41*(10), 1040-1048. <https://doi.org/10.1037/0003-066X.41.10.1040>
- Dweck, C. S. (2016). *Mindset: The new psychology of success*. (2nd ed.). Random House LLC.
- Dweck, C. S., & Leggett, E. (1988). A social-cognitive approach to motivation and personality. *Psychology Review, 95*(2), 256-273. <https://doi.org/10.1037/0033-295X.95.2.256>
- Earnest, G. W., & McCaslin, N. L. (1994). Extension administrators approach to conflict management: A study of relationships between conflict management styles and personality type. *Journal of Agricultural Education, 35*(3).
- Huang, J-C. (2010). Unbundling task conflict and relationship conflict: The moderating role of

- team goal orientation and conflict management. *International Journal of Conflict Management*, 21(3), 334-355. <https://doi-org.proxy-remote.galib.uga.edu/10.1108/10444061011063207>
- Huang, J-C. (2012). The relationship between conflict and team performance in Taiwan: The moderating effect of goal orientation. *The International Journal of Human Resource Management*, 23(10), 2126–2143. <https://doi.org/10.1080/09585192.2012.664961>
- Huff, S. M., Stripling, C. T., Boyer, C., & Stephens, C.A. (2016). Investigating factors that influence achievement goal orientation and educational practices in undergraduate agricultural sciences and natural resource students. *NACTA Journal*, 60(4), 423-431.
- Hutchison, C., Kirkhorn, J., Shmikler, S., Newell, K., & Wills, J. (1988). Leadership Skills. *Performance and Instruction*, 27(8), 2–5.
- Katz, N. H., & Flynn, L. T. (2012). Understanding conflict management systems and strategies in the workplace: A pilot study. *Conflict Resolution Quarterly*, 30(4), 393–410. <https://doi.org/10.1002/crq.21070>
- Lamm, K. W., Powell, A. N., & Lamm, A. J. (2020a). Examining the relationship between goal orientation and individual characteristics amongst agricultural leadership development program participants. *Journal of Agricultural Education*, 61(3), 144-163. <https://doi.org/10.5032/jae.2020.03144>
- Lamm, K. W., Sapp, L. R., & Lamm, A. J. (2018). A longitudinal evaluation of change leadership within a leadership development program context. *Journal of Leadership Education*, 17(3), 121-134. <https://doi.org/10.12806/V17/I3/R7>
- Lamm, K. W., Sapp, L. R., Lamm, A. J., & Randall, N. L. (2020b). A longitudinal evaluation of conflict management capacity building efforts in higher education. *Journal of Agricultural Education*, 61(3), 75-85. <https://doi.org/10.5032/jae.2020.03075>
- Lamm, K. W., Sheikh, E., Carter, H. S. & Lamm, A. J. (2017). Predicting undergraduate leadership student goal orientation using personality traits. *Journal of Leadership Education*, 16(1), 18–33. <https://doi.org/1012806/V16/I1/R2>
- LEAD21. (2020). *LEAD21*. <https://lead-21.org/>
- Little, T. D., Chang, R., Gorrall, B. K., Waggenpack, L., Fukuda, E., Allen, P. J., & Noam, G. G. (2020). The retrospective pretest–posttest design redux: On its validity as an alternative to traditional pretest–posttest measurement. *International Journal of Behavioral Development*, 44(2), 175-183. <https://doi.org/10.1177/0165025419877973>
- Maltarich, M. A., Greenwald, J., & Reilly, G. (2016). Team-level goal orientation: An emergent state and its relationships with team inputs, process, and outcomes. *European Journal of Work and Organizational Psychology*, 25(1), 68-88. <https://doi.org/10.1080/1359432X.2015.1004318>
- Mitchell, J. (2019, January 26). *Task conflict vs. relationship conflict*. Bizfluent. <https://bizfluent.com/about-6612188-task-conflict-vs--relationship-conflict.html>
- Overton, A. R., & Lowry, A. C. (2013). Conflict management: Difficult conversations with difficult people. *Clinics in Colon and Rectal Surgery*, 26(4), 259–264. <https://doi.org/10.1055/s-0033-1356728>
- Payne, S. C., Youngcourt, S. S. & Beaubien, J. M. (2007). A meta-analytic examination of the goal orientation nomological net. *Journal of Applied Psychology*, 92(1), 128–150. <https://doi.org/10.1037/0021-9010.92.1.128>
- Roberts, T. G., Harder, A., & Brashears, M. T. (Eds). (2016). *American Association for Agricultural Education national research agenda: 2016-2020*. Department of Agricultural Education and Communication.
- Robinson, V. M. J., Sinnema, C. E. L., & Le Fevre, D. (2014). From persuasion to learning: An intervention to improve leaders’ response to disagreement. *Leadership and Policy in Schools*, 13(3), 260–296. <https://doi.org/10.1080/15700763.2014.922997a>
- Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment*, 8(4), 350-

353. <https://doi.org/10.1037//1040-3590.8.4.350>
- Splan, R. K., Brooks, R. M., Porr, S., & Broyles, T.W. (2011). Resiliency and achievement goal orientation among agricultural students. *NACTA Journal*, 55(4), 31-38.
- Streiner, D. L. (2003). Starting at the beginning: An introduction to coefficient alpha and internal consistency. *Journal of Personality Assessment*, 80(1), 99-103. https://doi.org/10.1207/S15327752JPA8001_18
- Suarez, E. (2016, May 4). *Navigating conflict*. Inside Higher Ed. <https://www.insidehighered.com/advice/2016/05/04/how-navigate-conflict-higher-educationleader-essay>
- Sujan, H., Weitz, B. A., & Kumar, N. (1994). Learning orientation, working smart, and effective selling. *Journal of Marketing*, 58(3), 39-52. <https://doi.org/10.1177/002224299405800303>
- Tasa, K., Celani, A., & Bell, C. M. (2013). Goals in negotiation revisited: The impact of goal setting and implicit negotiation beliefs. *Negotiation and Conflict Management Research*, 6(2), 114–132. <https://doi.org/10.1111/ncmr.12006>
- Vandewalle, D. (1997). Development and validation of a work domain goal orientation instrument. *Education and Psychological Measurement*, 57(6), 995-1015. <https://doi.org/10.1177/0013164497057006009>
- Vandewalle, D. & Cummings, L.L. (1997). A test of the influence of goal orientation on the feedback-seeking process. *Journal of Applied Psychology*, 82(3), 390-400. <https://doi.org/10.1037/0021-9010.82.3.390>
- Zacharakis, J. (2006). Conflict as a form of capital in controversial community development projects. *Journal of Extension*, 44(5). <https://www.joe.org/joe/2006october/a2.php>