

Youth Motivation to Participate in Animal Science-Related Career Development Events

Abstract

The explorative study reported here describes youth participants in three animal science-related career development events from 2010. Variables included students' self-efficacy, task value motivation, career interests, and to what extent they utilized resources in preparation. It was concluded that all three groups were self-efficacious, interested in animal science-related careers, and were intrinsically task value motivated. The top five resource materials were judging workouts, invitational contests, videos/DVDs, coach-created materials, and websites.

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Introduction

Career Development Events (CDEs) are competitive out-of-school events for youth enrolled in 4-H and FFA to demonstrate their knowledge and skills in a particular career field of agriculture. The purpose of a CDE is to "motivate students and encourage leadership, personal growth, citizenship and career development" (National FFA Organization, 2006, p. 5), for the agricultural industry as well as non-agricultural careers. Therefore, the purpose of the research reported here was to describe students' motivation to participate in three animal science-related CDEs.

Conceptual & Theoretical Framework

Self-determination theory guided the researchers to study student motivation regarding CDEs. Reasons for participation often determine one's performance in a given endeavor. Extrinsic motivation is reflected in one's response to others' expectations or desire to attain an award, goal, or status; intrinsic motivation is reflected in one's self-interest and personal enjoyment and plays a role in why youth will participate and how much effort they will put into the activity (Deci & Ryan, 1985). The perception of self-competence, defined as self-efficacy, serves as a powerful source of motivation as well. How an individual judges his or her own ability to succeed in an activity affects the amount of effort exerted, time spent, and confidence with a task, directly relating these judgments to success (Bandura, 1982).

Numerous youth organizations exist in the United States today with the goal of preparing participants for future careers, including the Future Farmers of America (FFA) and 4-H programs. Several studies have identified life skills developed as a result of participating in animal science-related activities sanctioned by these groups, including decision making, increased self-esteem, and improved communication, organization, and leadership skills (Ward, 1996; Nash & Sant, 2005; Anderson & Karr-Lilienthal, 2011). Alumni of these programs have also reported that their involvement later influenced their career paths and provided them with valuable lifelong contacts in their industry (Rusk, Martin, Talbert, & Balschweid, 2002).

Studies on CDEs have identified coaches' perspectives of why students participated in CDEs (Russell, Robinson, & Kelsey, 2009), student benefits (Croom, Moore, & Armbruster, 2005), student preparation strategies (Poskey, Igo, Waliczek, Briers, & Zajicek, 2005), and demographic differences in high performers compared to low performers (Thieman, Bird, Vincent, & Terry, 2010). Although these studies have provided an exploratory understanding of why youth participate in CDEs, further studies need to look more specifically at the types of motivation that inform student participation.

Purpose & Research Questions

The purpose of the exploratory study reported here was to determine motivations of students who participated in the 2010 animal science-related CDEs in Indiana. Research questions guiding the study were: (1) What was the participants' motivation (self-efficacy, career interests, task value motivation) to participate in the CDEs? (2) To what extent did the participants use the top five most frequently used resources to prepare for the career development events? Were there differences in participants' motivation and resources used among the three CDEs?

Methods & Procedures

The study was an exploratory descriptive study of youth ($N = 620$) enrolled in 4-H and FFA in Indiana who participated in the 2010 Livestock, Horse & Pony, and Poultry CDEs. Students were asked to complete a 54-item questionnaire immediately after they completed their final set of reasons for each CDE. The questionnaire assessed the following variables, which were confirmed for construct validity and reliability using principal components and Cronbach's alpha coefficients, respectively:

1. Self-efficacy (8 items explained 62% variance; reliability = .82)
2. Interest in career activities (6 items explained 53% variance; reliability = .91)
3. Intrinsic task value (6 items explained 41% variance; reliability = .70)
4. Extrinsic task value (7 items explained 44% variance; reliability = .78)
5. Resources used to prepare for the CDEs (top five items explained 58% variance; reliability = .82)
6. Demographic information

All 620 CDE participants were given the opportunity to fill out the questionnaire, resulting in 306 fully completed questionnaires being collected for analysis (Livestock = 121; Horse & Pony = 81, Poultry = 104). For gender, 55% were female, 36% were male, and 9% did not respond. Students were in the following grades: 7.5% were 3rd - 6th; 20.5% were 7th-8th; 37.8% were 9th-10th; 34.3% were 11th-12th. This was the first time to participate in the respective CDE for about half of the participants (54.4%), and one-third did not have any experiences participating in other CDEs prior to this event. Descriptive statistics were computed and effect sizes were reported for mean differences among the three CDEs, shown below in Table 1.

Results

Participants were self-efficacious in all three CDEs (Table 1). Participants in the Livestock CDE had higher self-efficacy than their peers in the Poultry CDE. Participants were interested in animal science-related career activities in all three CDEs. However, participants in the Poultry CDE had lower career interests than their peers in the Horse & Pony and Livestock CDEs. Participants agreed they had intrinsic task value motivation to participate in each of the CDEs. However, the participants in the Poultry CDE had lower intrinsic task value motivation than those who participated in the Horse & Pony and Livestock CDEs. Participants agreed they had extrinsic task value motivation to participate in all three CDEs. Participants reported they used the top five resources some of the time to prepare for all three CDEs. The top five resources used were: (1) judging workouts; (2) invitational contests; (3) videos/DVDs; (4) coach-created materials; and (5) websites.

Table 1.
Youth Motivation and Resources Used

Variable	Horse & Pony (H&P; n = 79)	Livestock (L; n = 116)	Poultry (P; n = 101)	Effect Sizes		
				H&P - L	H&P - P	L - P
Self-efficacy	3.23 (.61)	3.36 (.74)	2.98 (.52)	.18	.46	.59
Career Interest	3.30 (.59)	3.21 (.73)	2.69 (.60)	.13	1.02	.77
Intrinsic Task Value	3.08 (.53)	3.18 (.64)	2.89 (.44)	.17	.40	.52
Extrinsic Task Value	3.12 (.57)	3.22 (.74)	3.00 (.50)	.15	.23	.34
Top Five Resources Used	3.05 (1.02)	2.94 (1.22)	2.71 (.97)	.10	.34	.21

Note. Medium & large effect sizes are bold, standard deviations in parentheses. Motivation Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree. Resources Used Scale: 1 = None, 2 = A Little, 3 = Some, 4 = A Lot, 5 = Always.

Conclusions

The study reported here adds to the body of knowledge in several ways. First, the study supported a study by Croom et al. (2005), which found that students participated in CDEs to develop career skills, compete, and have fun. However, the study expanded this finding by demonstrating students also participate in career activities because they want to learn more about an industry or content domain. The study also demonstrated that student motivation can vary by context. The study also supported findings of Poskey et al. (2005) that students prepare for CDEs using experiential learning activities and technology resources.

A limitation of the study was not linking the participants' questionnaire to their CDE performance scores. Performance, motivation, and resources used should be considered collectively to determine relationships that may exist among these constructs. Furthermore, coaches' motivation should be considered to determine if it is related to youth motivation and performances. Although the study discussed in this article is a preliminary analysis into CDEs, an important output is the development of an instrument that is grounded in contemporary motivation theories. The researchers have continued this line of inquiry and are currently collecting data for future studies.

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