

CHALLENGES FACING THE OKLAHOMA 4-H
PROGRAM IN THE NEXT FIVE YEARS: A DELPHI
STUDY

By

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Abstract:

The 4-H program has “evolved into a complex and forward-thinking system that was unimaginable more than 100 years ago” (Borden, Perkins, & Hawkey, 2014, para. 3). Borden et al. (2014) noted an increasingly large need for accountability in youth development programs. As the 4-H program has continued to evolve and grow, Extension professionals are faced with the challenges to address the ever-changing needs of their clientele. Moreover, Astroth (2007) indicated working in youth development organizations has become more complex and presents numerous difficulties to professionals. In order to maintain the longevity of the Oklahoma 4-H program, Extension professionals must address challenges prohibiting, discouraging, or discontinuing participation of youth, families, and volunteers in the program. Additionally, state administrators should examine the challenges their staff face in efforts to execute the mission of Oklahoma 4-H. A modified Delphi technique was employed in this study to determine the challenges facing Oklahoma 4-H. Two expert panels were used in this study: Extension educators and 4-H volunteers (panel one) and 4-H parents (panel two). After three rounds of the Delphi technique, the educator and volunteer panel identified 11 challenges and the parent panel identified nine challenges facing Oklahoma 4-H in the next five years. Eight identical challenges were identified by both panels. These eight challenges represent priorities for Oklahoma 4-H to address. Findings of this study should be shared with Extension stakeholders and professionals to promote discussion and identification of potential solutions.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.....	1
Statement of the Problem.....	3
Purpose.....	3
Objectives	3
Significance of the Study	4
Scope of the Study	4
Assumptions.....	4
Limitations of the Study.....	5
Definitions.....	5
II. REVIEW OF LITERATURE.....	7
History of 4-H.....	7
Benefits of Youth Participation in 4-H.....	8
Challenges Related to 4-H Members	9
Recruiting and Retaining Members	9
Commitment of Youth	10
Youth Experiences in 4-H.....	11
Appealing to Youth.....	11
Parental Involvement and Perceptions of 4-H.....	12
Parental Perceptions.....	12
Challenges Related to Extension Professionals	13
Perceived Challenges	14
Challenges to Programming.....	14
Educator Burnout.....	15
Challenges Related to 4-H Volunteers.....	16
Volunteer Retention	16
Volunteer Motivation.....	16
Budgetary State of Extension.....	17
Process Model for Organizational Change	18
The Delphi Technique.....	20
Summary	20

Chapter	Page
III. METHODOLOGY	23
Institutional Review Board	23
Research Design.....	23
Selection of Panels.....	24
Panel One, Extension Educators and Volunteers.....	25
Panel Two, Parents.....	26
Instrumentation	26
Validity	27
Reliability.....	28
Data Collection	29
Round One	29
Round Two.....	30
Round Three.....	31
Data Analysis.....	32
IV. FINDINGS.....	33
Source of Data: Delphi Panelists	33
Findings Related to Objective One.....	33
Characteristics of Panelists: Extension Educators and Volunteers.....	33
Characteristics of Panelists: Parents	36
Findings Related to Objective Two	39
Delphi Panel, Round One Findings: Extension Educators and Volunteers	39
Delphi Panel, Round Two Findings: Extension Educators and Volunteers	41
Delphi Panel, Round Three Findings: Extension Educators and Volunteers	47
Findings Related to Objective Three	51
Delphi Panel, Round One Findings: Parents.....	51
Delphi Panel, Round Two Findings: Parents.....	52
Delphi Panel, Round Three Findings: Parents.....	60
Findings Related to Objective Four	64
Summary	66
Delphi Summary: Extension Educators and Volunteers.....	66
Delphi Summary: Parents	68
V. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS	70
Conclusions and Implications Related to Objective One	70
Conclusions and Implications Related to Objective Two.....	71
Conclusions and Implications Related to Objective Three.....	74
Conclusions and Implications Related to Objective Four.....	76
Recommendations for Future Research	77

Chapter	Page
Recommendations for Future Practice.....	78
REFERENCES	82
APPENDICES	95
APPENDIX A: Institutional Review Board Approval Form Round One	96
APPENDIX B: Institutional Review Board Approval Form Round Two	98
APPENDIX C: Institutional Review Board Approval Form Round Three...	100
APPENDIX D: Email Scripts – Round One.....	102
APPENDIX E: Participant Information Sheet.....	107
APPENDIX F: Round One Instruments	109
APPENDIX G: Email Reminder – Round One	114
APPENDIX H: Email Scripts – Round Two	117
APPENDIX I: Round Two Instruments	120
APPENDIX J: Email Reminder – Round Two.....	130
APPENDIX K: Email Scripts – Round Three	132
APPENDIX L: Round Three Instruments	134
APPENDIX M: Email Reminder – Round Three.....	139

LIST OF TABLES

Table	Page
1. Selected Personal and Professional Characteristics: Extension Educator and Volunteer Panel.....	34
2. Selected Personal and Professional Characteristics: Parent Panel.....	37
3. Challenges Facing Oklahoma 4-H” Identified by Extension Educators and Volunteers	39
4. Frequencies and Percentages Presented in Round Two: Extension Educator and Volunteer Panel.....	41
5. Challenges that Met Consensus of Agreement in Round Two: Educator and Volunteer Panel.....	42
6. Challenges that Received More than 51% but Lower than 75% Agreement in Round Two: Educator and Volunteer Panel	45
7. Challenges that Received Less than 51% Agreement in Round Two: Educator and Volunteer Panel.....	47
8. Frequencies and Percentages Presented in Round Three: Extension Educator and Volunteer Panel.....	48
9. Challenges that Met Consensus of Agreement in Round Three: Extension Educator and Volunteer Panel	49
10. Challenges that Did Not Receive 75% or More Agreement in Round Three: Extension Educator and Volunteer Panel	50
11. Challenges Identified by Extension Educators and Volunteers in All Rounds of the Delphi Study Regarding Challenges Facing the Oklahoma 4-H Program in the Next Five Years.....	51

Table	Page
12. Challenges facing Oklahoma 4-H in the Next Five Years Identified by 4-H Parents.....	53
13. Frequencies and Percentages Presented in Round Two: Parent Panel	55
14. Challenges that Met Consensus of Agreement in Round Two: Parent Panel	56
15. Challenges that Received More than 51% but Lower than 75% Agreement in Round Two: Parent Panel	59
16. Challenges that Received Less than 51% Agreement in Round Two: Parent Panel	61
17. Frequencies and Percentages Presented in Round Three: Parent Panel	63
18. Challenges that Met Consensus of Agreement in Round Three: Parent Panel	64
19. Challenges that Did Not Receive 75% or More Agreement in Round Three: Parent Panel	65
20. Challenges Identified by 4-H Parents in All Rounds of the Delphi Study Regarding Challenges Facing the Oklahoma 4-H Program in the Next Five Years	67
21. Comparison of the Challenge Statements Identified by the Extension Educator and Volunteer Panel and the Parent Panel that Reached Consensus After Three Rounds.....	68
22. Comparison of the Challenge Statements Identified by the Extension Educator and Volunteer Panel and the Parent Panel that Did Not Reach Consensus After Three Rounds.....	69

CHAPTER I

INTRODUCTION

In 1909, the first 4-H club in Oklahoma was organized, establishing the foundation for more than 100 years of positive youth development through the Oklahoma 4-H program (Stewart & Scheihing, 2010). Existing as the educational youth program of the Oklahoma Cooperative Extension Service (OCES), Oklahoma 4-H is rooted in agriculture. From its early beginnings of corn, tomato, and canning clubs, the Oklahoma 4-H program has since expanded beyond its agricultural groundwork (Stewart & Scheihing, 2010). "...4-H activities don't simply teach youth skills in agriculture and home economics, but include non-formal, experiential educational programs that teach youth valuable life skills" (Boyd, Herring, & Briers, 1992). 4-H members now have opportunities to pursue interests in areas such as science and technology, leadership, and health and fitness (Oklahoma 4-H, 2017).

The literature reflects vast findings reporting the difference 4-H makes in the lives of youth. Youth involved in 4-H are more likely to succeed in school, serve in leadership roles within their communities, and are held in high regard by others (Astroth & Haynes, 2002). Moreover, Fox, Schroeder, & Lodl (2003) found 4-H plays an instrumental role in the development of social, technical, communication, and leadership skills among its members.

The 4-H program has "evolved into a complex and forward-thinking system that was unimaginable more than 100 years ago" (Borden, Perkins, & Hawkey, 2014, para. 3). Today,

nearly six million youth in rural, urban, and suburban communities are enrolled in 4-H (National 4-H Council, 2017). Nationwide, more than 500,000 volunteers and 3,500 4-H professionals work to provide life skills-building opportunities and supportive mentoring to 4-H members (National 4-H Council, 2017). Specifically, more than 150,000 youth participate in Oklahoma 4-H activities and more than 8,000 volunteers devote their time to assist the program in executing its mission (Oklahoma 4-H, 2016).

Borden et al. (2014) noted an increasingly large need for accountability in youth development programs. As the 4-H program has continued to evolve and grow, Extension professionals are faced with the challenges to address the ever-changing needs of their clientele. Reck (1951, p. 299) stated, “Changes in Extension youth programs necessarily reflect the changing needs of young people and the changing times in which they live.” Further, Borden et al. (2014) reported the encompassing challenge to 4-H programs is staying true to its founding mission while addressing the needs of youth in the 21st century.

Meeting the needs of youth and families are not the only concerns 4-H programs should address. Astroth (2007) purposed working in youth development organizations has become more complex and presents numerous difficulties to professionals. Extension educators reported feeling over-committed and dissatisfied with their profession, resulting in increased turnovers of staff (Feldhues & Tanner, 2017; Harder, Gouldthorpe, & Goodwin, 2015; Rousan & Henderson, 1996; Strong & Harder, 2009). Moreover, volunteers, who assist educators in implementing positive youth development, experience their own set of challenges such as maintaining satisfaction and motivation (Arnold, Dolenc, & Rennekamp, 2009). The demand for volunteers to support 4-H continues to rise. Concomitantly, Borden et al. (2014) asserted volunteer recruitment and training are considerable challenges to address in 4-H programs.

“...4-H needs to lead the way in evaluating its efforts in terms of outcomes and program quality” (Borden et al., 2014). As Oklahoma 4-H continues as a leading youth development organization, it is imperative to identify opportunities that could support the growth of the 4-H

program and address the challenges faced by families, volunteers, and Extension educators. Van Horn, Flanagan, and Thomson (1999) concluded meeting challenges is crucial to solidify 4-H's future.

Statement of the Problem

In order to maintain the longevity of the Oklahoma 4-H program, Extension professionals must address challenges prohibiting, discouraging, or discontinuing participation of youth, families, and volunteers in the program. Additionally, state administrators should examine the challenges their staff face in efforts to execute the mission of the Oklahoma 4-H program.

Purpose

The purpose of this study was to determine expert Oklahoma 4-H Extension educators', volunteers', and parents' perceptions of challenges facing the Oklahoma 4-H program in the next five years.

Objectives

Four objectives guided this study:

1. Identify the personal and professional characteristics of the jury of experts who served on the two panels: Extension educators and volunteers (Panel 1) and 4-H parents (Panel 2).
2. Determine challenges facing the Oklahoma 4-H program in the next five years as perceived by selected Extension educators and volunteers
3. Determine challenges facing the Oklahoma 4-H program in the next five years as perceived by selected parents.
4. Compare the perceptions of Extension educators and 4-H volunteers and

4-H parents regarding the challenges facing the Oklahoma 4-H program in the next five years.

Significance of the Study

While there is extensive literature about the benefits of youth participation in 4-H and a moderate amount of research about youth's reasons for leaving 4-H, little research has been conducted to determine why parents choose not to participate in 4-H or terminate their children's involvement in the program. Additionally, little research exists to determine what Extension professionals and tenured 4-H volunteers perceive as challenges inhibiting the growth and success of 4-H programs. As 4-H continues to serve youth across the nation, 4-H programs should demonstrate the value and impact of this youth development organization (Goodwin, Barnett, Pike, Peutz, Lanting, & Ward, 2005). However, to effectively present the value of 4-H, current and future challenges of the program must be addressed.

Scope of the Study

This study utilized two expert panels. One panel was comprised of Extension educators who were nominated by their respective 4-H district program specialist and 4-H volunteers who have served for at least five years and were named a county 4-H Volunteer of the Year in 2015-2016. The second panel was comprised of 4-H parents whose child has been or had been in Oklahoma 4-H for at least five years and was a state project winner in 2015-2016.

Assumptions

This study is based on the following assumptions:

1. All panelists were familiar with the Oklahoma 4-H program.
2. All panelists provided information that they perceived was accurate and appropriate to each item to which they were asked to respond.

Limitations of the Study

The following limitation was identified for this study:

1. This study was limited to selected Extension educators, volunteers, and parents and may not be representative of all educators, volunteers, and parents involved in the Oklahoma 4-H program.

Definitions

The following terms were defined for use in this study:

4-H – The nation’s largest youth organization that provides research-based experiences, life skill development, and positive mentoring while engaging youth to reach their fullest potential (National 4-H Council, 2017).

4-H Member – Youth ages 8-19 can enroll in the Oklahoma 4-H program. 4-H members are actively engaged in project work, partake in 4-H activities, and are a member of a 4-H club (Oklahoma 4-H, 2017).

4-H Parent – A parent whose child/children currently are active members of the 4-H program. According to the Kansas 4-H program (2017), 4-H parents have a variety of responsibilities including assist youth with their project work, attend and help at club meetings and activities, and stay current on 4-H events. By fulfilling these responsibilities, 4-H parents contribute to a successful 4-H experience for their children.

Tenured 4-H Volunteer – 4-H volunteers provide leadership and service to their communities by assisting youth in developing life skills and civic responsibility (Oklahoma 4-H, 2017). These volunteers have completed certification within the Oklahoma 4-H program to work directly with 4-H members. To be categorized as a tenured volunteer, one must have demonstrated five or more years of service (Culp & Swartz, 1999).

Extension Educator – Extension educators implement science-based educational programs in the areas of agriculture, family and consumer sciences, and 4-H youth development (OCES, 2017). Herein, the term “Extension educator” will be defined as an Extension professional whose primary responsibility is 4-H programming.

CHAPTER II

REVIEW OF LITERATURE

History of 4-H

Throughout the past century, 4-H has grown from a small group of agricultural after-school clubs to the largest youth development organization in the United States (National 4-H Council, 2017). The 4-H program was shaped by many influences and evolved from small beginnings (Reck, 1951). The initial idea of “learning by doing,” one of 4-H’s founding principles, was thought to spark youth interest in agriculture by giving them hands-on opportunities to solve agricultural challenges in their communities (National 4-H Council, 2017). In the mid 19th century, farmers identified a need to incorporate agricultural education within local school systems in an effort to maintain rural prosperity within their communities (Wessel & Wessel, 1982). Agricultural education had continued to evolve in universities through the passage of the Morrill Act in 1862, which established the land-grant college system (Roberts, 1972). However, the applied education of agricultural and mechanical arts had yet to seep into public school systems (Wessel & Wessel, 1982). To address this need, Albert B. Graham established an out-of-school experimental club in Clark County, Ohio, noted as the first organized 4-H club, focusing on training youth in agriculture. With help from the Ohio Agricultural Experiment Station and the dean of agriculture at Ohio State University, Graham’s club continued to flourish. Information from the experiment station was disseminated throughout the community as youth

shared their club work with family and friends (Wessel & Wessel, 1982). It was not long until similar organized clubs were created in other states, as “Graham had shown how well young people would respond to an organized club that introduced them to agricultural science and technology” (Wessel & Wessel, 1982, p. 6).

Similar educational trends evolved across the country as the idea of the Cooperative Extension Service came into fruition. Dr. Seamon Knapp, known as the “Father of Extension Work,” noticed a need for education outside university settings to assist farmers with their everyday challenges (Roberts, 1972, p. 1). Knapp created an innovative educational campaign of farm practices by field demonstrations, sparking training and sharing of new farming methods from farmer to farmer (Roberts, 1972). In 1904, W. D. Bentley, known as Oklahoma’s “Father of Extension,” was invited by Knapp to serve as a lecturer on his demonstration train, traveling to surrounding territories to generate interest in Knapp’s educational campaigns (Roberts, 1972). Demonstration work in Oklahoma had a strong influence on youth, and organized club work grew immeasurably. Although the 4-H name and four-leaf clover already had been used to represent boys’ and girls’ clubs, the passing of the Smith-Lever Act in 1914 established Extension as a nationwide entity and provided a permanent home for the 4-H organization (Wessel & Wessel, 1982).

Benefits of Youth Participation in 4-H

In a longitudinal study conducted by Lerner and Lerner (2013), 4-H members were found to excel in areas of civic engagement, academics, and healthy living. 4-H members are nearly four times more likely to contribute to their communities, nearly twice as likely to participate in science extra-curricular activities, and nearly twice as likely to adopt healthier lifestyles (Lerner & Lerner, 2013). The youth/adult partnerships, structured learning, and leadership opportunities through the 4-H program create an environment for 4-H members to reach their fullest potential and achieve success (Lerner & Lerner, 2013). 4-H members are less likely to participate in risky

behaviors and more likely to have positive relationships with their parents and report higher levels of self-confidence (Seevers, Hodnett, & Van Leeuwen, 2011). Through the 4-H program, youth are molded into capable, competent adults (Fox et al., 2003). After leaving the program, 4-H alumni positively reflected on their 4-H experiences and believed 4-H stood out among other youth organizations in assisting in personal and leadership development (Radhakrishna & Sinasky, 2005). Additionally, alumni stated 4-H helped improve self-efficacy and their ability to work cooperatively with others. 4-H also helped alumni identify their passions and influenced them to pursue higher education (Ratkos & Knollenberg, 2015). Although there are numerous benefits of the 4-H program, many challenges exist that hinder its growth in relation to members, parents, volunteers, and educators.

Challenges Related to 4-H Members

In order for youth to reap the benefits of 4-H programing, youth must stay involved in 4-H (Albright & Ferrari, 2010). Understanding the factors that cause youth participation to decline is vital (Albright & Ferrari, 2010).

Recruiting and Retaining Members

Youth join 4-H for a variety of reasons, ranging from wanting to have fun, trying new things, and participating in projects and activities (Harrington, Sheehan, & Blyth, 2011). Youth who enroll in 4-H at an earlier age are more likely to remain in the program throughout adolescence (Harder, Lamm, Lamm, Rose, & Rask, 2005). A study conducted by Wingenbach, Meighan, Lawrence, Gartin, and Woloshuk (1999) found club leaders experienced increased membership enrollment when they hosted exciting and interactive club meetings. 4-H programs with strong partnerships with public school systems result in reaching a broader audience of youth from all walks of life (Van Horn et al., 1999). "...School-based programming has made

4-H more effective in drawing in those students who are otherwise difficult to recruit” (Van Horn et al., 1999, para. 7). Harder et al. (2005) noted current members are effective recruiters for 4-H. Additionally, Wingenbach et al. (1999) concluded club leaders whose members tell their friends about 4-H will continue to recruit new members and see growth in their programs.

Member retention has been a long-standing issue for the 4-H program (Wingenbach et al., 1999). Families new to 4-H are more likely to leave the program within the first two years of enrollment (Astroth, 1985). In a study conducted by Astroth (1985), families left 4-H due to a variety of reasons. New families indicated they never felt part of the group when joining a new club and did not understand how to get the most out of their child’s involvement in 4-H (Astroth, 1985). Harrington et al. (2011) discovered youth chose to stay in 4-H because they enjoyed interacting with their peers, having fun, and learning new things. Additionally, youth stayed because they liked their club leaders and the awards and recognition aspect of the program (Harrington et al., 2011).

Harder et al. (2005) indicated 4-H continues to struggle with recruiting and retaining older 4-H members. Older youth are more apt to make their own decisions regarding the organizations in which they are involved and continued involvement in 4-H may prevent them from exploring other activities that better suit their interests (Harder et al., 2005).

Commitment of Youth

Conflicting time commitments with outside activities also was found as a reason youth leave the 4-H program (Astroth, 1985). The demands of extra-curricular activities place pressure on youth to make a choice regarding their activity of focus (Albright & Ferrari, 2010). Albright and Ferrari (2010) found older 4-H members thought 4-H to be time consuming and interfered with other extra-curricular and school activities. Older youth feel pressured to make choices between 4-H and other activities such as jobs, athletics, and academics (Albright & Ferrari,

2010). Similarly, Ritchie and Resler (1993) found the top three reasons youth leave 4-H are boring club meetings, sports, and jobs.

Youth Experiences in 4-H

Negative experiences in 4-H can be a deterrent to youth participation. Youth identified personal and interpersonal conflicts as another reason to leave youth programs (McGuire, Dworkin, Borden, Perkins, & Russell, 2016). Social difficulties with other youth and adults within the program give youth a reason to cease program participation (Albright & Ferrari, 2010; Harrington, et al., 2011; McGuire, et al., 2016). Specifically, older 4-H members need to feel like an important contributor to the success of their 4-H clubs (Wingenbach et al., 1999). Youth choose to stay in 4-H when clubs offer a welcoming environment that promotes friendship-building and their club leaders are supportive (Harrington, et al., 2011). Club leaders play an important role in the overall satisfaction of a youth's 4-H experience (Wingenbach et al., 1999). Youth who identify club leaders as unsupportive or uninvolved with members are more inclined to leave the 4-H program (Albright & Ferrari, 2010). Similarly, the primary reason youth indicated leaving Indiana 4-H was displeasure with the club and the club leader (Ritchie & Resler, 1993). Youth also choose to leave youth organizations if their needs are not met, they are not presented with new challenges, or if personal growth is not encouraged (Albright & Ferrari, 2010).

Appealing to Youth

The overall success of the 4-H program depends on its ability to retain and meet the needs of its members (Albright & Ferrari, 2010). As more urban youth enroll in 4-H, 4-H is met with the challenge of providing relevant experiences to these members (Van Horn et al., 1999). 4-H is rich in agricultural traditions and many clubs and programs do not represent the modernization of the organization (Van Horn et al., 1999). 4-H members were found to choose

how they participate in 4-H based on the development of leadership and public speaking skills in the project area (Gill, Ewing, & Bruce, 2010). Meeting the needs of today's youth should be a top consideration when planning 4-H programming (Van Horn et al., 1999). "Varied interests within the clubs must be catered to for membership to remain strong or increase" (Gill et al., 2010, para.19). Further, incorporating age-appropriate activities that appeal to all members is recommended to aid in retention (Gill et al., 2010).

Parental Involvement and Perceptions of 4-H

Parents' perceptions of the organizations in which their children take part play a crucial role in the participation of their children (Griffith & Larson, 2014), and their involvement with their children in 4-H influences overall youth experiences within the program (Radhakrishna, Foley, Ingram, & Ewing, 2013; Wingenbach et al., 1999). Cano and Bankston (1992) found youth were more influenced to join 4-H through a parent or family member. Youth with little to no parental support are not as successful in the program as youth with committed parents (McKee, Talbert, & Barkman, 2002; Ritchie & Resler, 1993).

Parental Perceptions

Parental assessments of the 4-H program help determine if the program is meeting the needs of their children and "prompt action to improve the program if necessary" (Radhakrishna et al., 2013, para. 5). Although parents of 4-H members have a positive perception of the 4-H program (Boleman, Cummings, & Briers, 2004; Ferrari, Hogue, & Scheer, 2004; Scheer & Lafontaine, 1999), there are several areas in which they perceive 4-H can improve. In a study conducted by Radhakrishna et al. (2013), parents of youth enrolled in the Pennsylvania 4-H program perceived 4-H was effective in developing life skills, providing a safe place for their children to learn and grow, and making a positive impact on their home life. However, parents of

Pennsylvania 4-H members also indicated 4-H could improve in attracting diverse children and marketing its programs (Radhakrishna et al., 2013).

Minority parents perceived 4-H advertisements did not typically include minority youth and were not written in a manner in which urban parents could understand the program (Cano & Bankston, 1992). Similarly, parents of Ohio 4-H Cloverbuds expressed concerns about the lack of diversity in their program (Ferrari et al., 2004). An Ohio study focused on identifying the factors that influence minority youth participation in 4-H found “Many parents viewed the program as something for rural white kids that involved farm animals” (Cano & Bankston, 1992, p. 27). This common stereotype continues to encompass the 4-H program despite educators’ efforts to provide an environment where all youth feel welcome (Van Horn et al., 1999).

Unorganized clubs and a need to strengthen health programs and activities also were indicated as gaps in the Ohio 4-H Cloverbud program (Ferrari et al., 2004). Parents also addressed those without prior knowledge of the 4-H program are unaware of its existence (Ferrari et al., 2004). In a study conducted by McKee et al. (2002), 4-H volunteers perceived parents’ lack of knowledge and understanding of 4-H inhibited new youth from enrolling in 4-H. Cano and Bankston (1992) reported Ohio 4-H parents of minority youth had limited knowledge of 4-H before hearing about the program through club leaders or Extension educators. Once parents learned about the variety of opportunities provided by the program, they were disappointed they did not hear about 4-H when they were young (Cano & Bankston, 1992). Overall, 4-H is still viewed as a traditional agriculture program, which causes those outside the organization to be unaware of all 4-H has to offer outside the agricultural realm (McKee et al., 2002).

Challenges Related to Extension Professionals

“4-H has one of the most extensive professional networks of any youth-serving organization in the nation” (Astroth, 2007). 4-H educators work directly with youth, parents, and volunteers to deliver 4-H programming (Bowen, Radhakrishna, & Keyser, 1994). As Extension

professionals' needs evolve, their responsibilities as professionals also evolve, resulting in a harmonious existence between "the employee and the position" (Safrit & Owen, 2010, para. 10).

Perceived Challenges

In a study conducted by Astroth (2007), 17 state 4-H administrators indicated lack of adequate funding, including state budget cuts, was one of the main challenges regarding 4-H staffing. Insufficient funds inhibit state 4-H leaders from hiring new positions or offering competitive salaries to new candidates. Budget challenges are found to cause stress among Extension professionals, especially among those who work at the county level (Feldhues & Tanner, 2017). An Ohio study conducted by Feldhues & Tanner (2017) found that staff turnover increased as the budgetary state of Extension declined. Additionally, lack of administrative support and little career advancement were also identified as challenges among 4-H staff across the nation (Astroth, 2007). Extension staff identified time management and lack of training and available resources as barriers to programming (Rennekamp & Gerhard, 1992). Harder et al. (2015) asserted that educators need continuing professional development in time management, as educators reported feeling overstretched in their responsibilities. Safrit & Owen (2010) found that to excel in their professional capacities, new educators need moral support and professional education resources. Supervisors can play an instrumental role in supporting educators by providing personal and professional mentorship (Harder et al., 2015). "... Training should be sustained, if not increased, during times of organizational change and upheaval" (Safrit & Owen, 2010).

Challenges to Programming

Technological barriers are found to inhibit programming efforts in youth organizations such as 4-H. Although integrating technology into learning programs offers flexibility and convenience and appeals to youth audiences, many educators experience some anxiety when it

comes to modernizing programming (McClure, Buquoi, Kotrlik, Machtmes, & Bunch, 2014). Some county Extension offices lack updated technology such as wireless internet or have outdated computers (Harder, Moore, Mazurkewicz, & Benge, 2013). Similarly, rural communities with limited connection to the internet cause a barrier for Extension educators to disseminate information and market their programs and web-based communication can pose a challenge in rural areas (Harder, et al., 2013; Robideau & Santl, 2011). McClure et al. (2014) found that Extension educators indicated availability of technology for the number of youth engaged in programs and availability of technological support as the two most prominent barriers of using technology in their programs. Additionally, Harder et al. (2013) and Bowen, Stephens, Childers, Avery, and Stripling (2013) identified a need for social media training among Extension educators to increase effective marketing efforts. Extension professionals also identified a need for training and support to maximize effectiveness of using technology in programming (Harder et al., 2013).

Educator Burnout

“The Extension organization has a long tradition of professional service to clientele, often at a cost of sacrifice to family and self” (Kutilek, Conklin, & Gunderson, 2002). To that end, Extension professionals indicated heavy workloads were a challenge in their profession (Kutilek et al. 2002), Extension educators often are required to work hours outside the average work day, including nights and weekends (Strong & Harder, 2009). The extended work hours distance educators from their families, contributing to educator burn out (Harder et al., 2015). Educators’ job satisfaction is related to organizational commitment (Bowen et al., 1994).

High levels of turnover among Extension educators have consequences, including low morale among existing Extension educators and wasted financial investment into educators who leave (Safrit & Owen, 2010). Perhaps one of the most detrimental results of the high turnover of

Extension educators is the disruption of educational programs, such as the ones provided through 4-H (Safrit & Owen, 2010).

Challenges Related to 4-H Volunteers

Volunteers are an integral component of the 4-H program, and the 4-H program has depended on volunteers since its inception (Van Horn et al., 1999). Each Oklahoma 4-H volunteer preforms approximately 220 hours of service and donates more than \$1.9 billion in resources each year (Oklahoma 4-H, 2017).

Volunteer Retention

“...The need to recruit, train, and retrain volunteers represents a major challenge to be addressed” (Borden et al., 2014, para. 4). Attracting, retaining, and training volunteers will help drive 4-H’s success over the next several decades (Borden, et al., 2014). Volunteers who discontinue service in the 4-H program after three years or less indicated a lack of adult and parental support, time conflicts, and lack of club member involvement as reasons for volunteer separation (Culp, 1997). Rouse and Clawson (1992) found volunteers are interested in training opportunities, but are not receiving adequate training. Extension educators need to focus volunteers’ skills and interests (Culp, 2009). Extension professionals should focus on volunteer involvement in the areas in which the volunteers are most invested (Hutchins, Seevers, & Van Leeuwen, 2002).

Volunteer Motivation

It is important to understand that volunteers prefer different motivational techniques. Schrock and Kelsey (2013) proposed affiliation and achievement are the two predominate motivators for 4-H volunteers. Clup and Schwartz (1999) found recognition to be the most favorable form of motivation among volunteers. Recognition ranges from a formal recognition

banquet to a small gesture such as a thank you note or pat on the back. Recognition directly from 4-H members helps volunteers feel more connected with the program and strengthens bonds with youth (Fritz, Barbuto, Marx, & Etling, 2000; Fritz, Karmazin, Barbuto, & Burrow, 2003). Culp and Schwartz (1999) noted extrinsic forms of recognition should prompt intrinsic motivation, generate personal feelings of accomplishment and self-worth, and result in stronger affiliation with the 4-H program.

Budgetary State of Extension

Federal, state, and county monetary resources support Extension programs (Feldhues & Tanner, 2017). In the last seven years, the OCES's total tax-based funding has declined from about \$41 million to \$34 million (Trapp, 2017). This continued decline, paired with unfunded salary programs, amounts to a 27% budget decrease since 2010 (Trapp, 2017). The reduced funding has decreased the monetary support available for the implementation of Oklahoma 4-H programs (Oklahoma 4-H, 2017). To maintain Oklahoma 4-H's quality of positive youth development programming, an annual \$20 program fee was instated in August 2016 (Oklahoma 4-H, 2017).

The lack of adequate state funding also has prompted OCES administration to make shifts within the structure of OCES. OCES's traditional funding model provided two educators in each county within the areas of agriculture, family and consumer sciences, and 4-H youth development (Trapp, 2017). However, to relieve financial stress, a reduction in county Extension educators will take place in Oklahoma by 2018, resulting in one state funded educator in each county (Trapp, 2017). With limited educators, 4-H will be hindered, as one educator cannot provide adequate programming across all areas of agriculture, family and consumer sciences, and 4-H youth development. Additionally, select educators will be required to provide programming in multiple counties (Trapp, 2017). Consequently, multicounty staffing is perceived to be ineffective by clientele (Bartholomew & Smith, 1990). In times of economic crisis, the positive

impact of the 4-H program should be communicated to legislators and stakeholders (Radhakrishna & Sinasky, 2005). “Demonstrating the significance of successful youth development programs like 4-H should be a priority in the minds of administrators, educators, and legislators” (Seevers et al., 2011, para. 24).

Process Model for Organizational Change

Kurt Lewin is credited as a significant contributor in the field of organizational development. A humanitarian who believed group conflict resolution improved the human condition, Lewin was interested in changing human systems by involving others in understanding the change process (Coghlan & Brannick, 2003). Lewin piloted his research with the Harwood Manufacturing Corporation, a pajama factory, in 1939 (Burnes, 2007; Burnes & Cooke, 2012). Lewin and his research team sought to implement technological change into the company which was resistant to change (Coghlan & Brannick, 2003). Lewin discovered when the entire company was included in the decision-making of the forthcoming changes, the group was accepting of the changes (Burnes, 2007). The result of the Harwood project was that productivity of the factory increased (Coghlan & Brannick, 2003).

He further explored the importance of group decision-making by implementing a study directed toward changing the meat-buying habits of American housewives (Burnes, 2007; Coghlan & Brannick, 2003). Experiencing a meat shortage after the recent war, the U.S. government’s Committee on Food Habits tasked Lewin to change the kinds of meat housewives served their families. Similar to the Harwood study, Lewin concluded that when the housewives decided to change as a group, they maintained the outcome of the implemented change (Burnes, 2007; Coghlan & Brannick, 2003). Lewin’s research led him to the notion that “human systems could only be understood and changed if one involved the members of the system in the inquiry process itself” (Coghlan & Brannick, 2003, p. 32). Therefore, the inclusion of members in an

organization's change processes is the framework of organizational development (Coghlan & Brannick, 2003).

Organizational development is an approach to change within an organization based on applied behavioral science (Burke, 2014). It focuses on the planned change of human systems (Porras & Robertson, 1991). Moran and Brightman (2001) defined this change process as "the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs to external and internal customers." One of Lewin's most significant contributions to organizational development is his idea of planned change, based on his earlier studies (Burnes, 2007; Burnes & Cooke, 2012). Lewin concluded a successful change process within an organization happens in three phases (Burnes, 2007). Lewin's process model for organizational change demonstrates the three phases: Unfreezing, Moving, and Refreezing (Burnes, 2007). Each stage of the model reflects the change implementation process (Hussain et al., 2016). The "Unfreezing" phase includes identifying a need for change and a need to operate differently. An organization changes when it experiences a need for change (Coughlan & Brannick, 2003). An organization "must be thawed from its present way of doing things so that in a new...condition, the system is accessible and amendable to change interventions" (Burke, 2014, p. 124). The "Moving" phase indicates the changing of the organization in the way it operates. The organization cannot change in a meaningful manner unless it has been unfrozen (Burke, 2014, p.124). The last phase, "Refreezing," occurs when change is underway. The changed condition must be reinforced. Refreezing seeks to stabilize the organization at a new quasi-equilibrium, ensuring behaviors will not regress (Burnes, 2004). However, the "Refreezing" phase is not permanent, and an organization may cycle through the change process model again (Burned, 2007). Lewin's model is based on the idea that an organization must prepare for, initiate, and accept necessary changes (Reinardy, 2010). Upon an organization's acceptance of implemented changes, the organization will return to its pre-change comfort levels (Reinardy, 2010).

The Delphi Technique

The Delphi technique is an effective method of group communication, allowing panelists with extensive knowledge on a certain topic to solve problems (Linstone & Turoff, 1975). The Delphi technique has been widely used in agricultural education research in areas such as curriculum planning, identifying research priorities, and identifying barriers to progression (Martin & Frick, 1998). Specifically, the Delphi technique also has proved to be an efficient methodology in a variety of 4-H-related studies. Franck, Donaldson, Toman, and Moody (2014) sought to improve 4-H healthy living programs by using the Delphi technique to identify the training and professional development needs of 4-H professionals and volunteers. Rennekamp and Gerhard (1992) compiled a Delphi panel of 4-H state leaders, state specialists, and county educators to identify the barriers to youth-at-risk programming, as the Delphi technique promoted individual thinking while guiding participants toward consensus. Similarly, researchers have employed the Delphi technique to determine the challenges of service-learning projects in the 4-H program (Mantooth & Fritz, 2006).

Summary

4-H is the nation's largest youth development organization (National 4-H Council, 2017). Youth involved in 4-H are found to excel beyond their peers in areas such as academics, healthy living, and civic engagement (Lerner & Lerner, 2013). Further, 4-H also provides an environment for youth to develop leadership, communication, and social skills (Fox et al., 2003). The literature review presents numerous challenges in 4-H. Pertaining to members, 4-H continues to struggle with recruiting and retaining youth (Wingenbach et al., 1999). Factors that influence youth participation in 4-H include commitments with other activities, negative interactions with club leaders and other youth, and uninteresting programs offered (Albright & Ferrari, 2010; Astroth, 1985; Van Horn et al., 1999). Parents expressed concerns with the 4-H organization. Parents

indicated 4-H programs could do a better job attracting diverse audiences, as the agricultural connotation of 4-H deterred minority participation (Cano & Bankston, 1992; Ferrari et al., 2004; Radhakrishna et al., 2013). Studies also found parents did not involve their children in 4-H if they were unfamiliar with the program or unaware of the variety of opportunities 4-H provides (Cano & Bankston, 1999; McKee et al., 2002).

Extension educators implement 4-H programming and work closely with youth and adults (Bowen et al., 1994). Educator turnover is a challenge many Extension programs experience (Safrit & Owen, 2010). Educators identified challenges associated with their professions. Educators perceived an imperative need for continuous professional development and administrative support to boost morale (Astroth, 2007; Feldhues & Tanner, 2017; Safrit & Owen, 2010). Educators also experience frustrations with incorporating technology to modernize their programming efforts (McClure et al., 2014). Trainings to assist educators with adapting to technological innovations, such as social media, were identified as a necessity (Bowen et al., 2013; Harder et al., 2013).

Borden et al. (2014) asserted volunteer recruitment, training, and retention are challenges 4-H programs should consider. In order to retain volunteers, Extension professionals should focus on meeting the needs of volunteers by involving them in areas in which they will make the greatest impact (Hutchins et al., 2002). Moreover, volunteers need to be properly motivated to continue their involvement with 4-H (Culp & Schwartz, 1999).

OCES's tax-based funding has steadily declined since 2010 (Trapp, 2017). As a component of OCES, Oklahoma 4-H has experienced the consequences of reduced funding. To compensate this, an annual \$20 program fee was introduced in 2016 to support and continue the high-quality programming to which Oklahoma 4-H clientele are accustomed (Oklahoma 4-H, 2017). The decrease of state funding also has prompted a reduction in county Extension staff (Trapp, 2017). In 2018, one state funded educator responsible for programming in the areas of

agriculture, family and consumer sciences, and 4-H youth development will be present in each county.

Kurt Lewin's process model for organizational change describes a three-phase process in which an organization experiences change. In the first phase, the organization identifies a need for change. Phase two includes the implementation of the change. The changed condition is reinforced and normalized in the third phase. This model served as the conceptual framework of this study.

The Delphi technique provides an organized method to gather input from a group of experts on a particular subject (Linstone & Turoff, 1975). Researchers successfully have adopted the Delphi technique to address research questions pertaining to the 4-H program.

CHAPTER III

METHODOLOGY

This chapter details the methods and procedures adopted by the researcher to conduct this study. Items addressed include Oklahoma State University Institutional Review Board approval, research design, selection of panels, instrumentation, data collection, and data analysis.

Institutional Review Board

To conduct human subjects research, necessary review and approval must be sought. In order to carry out the present research, review and approval was requested by the Oklahoma State University Office of University Research Services and the Institutional Review Board. Approval was granted in June 2017 (Appendix A). Two modification applications also were approved by the Institutional Review Board to administer the second and third questionnaires (Appendices B and C).

Research Design

Developed by Norman Dalkey and Olaf Helmer at the Rand Cooperation in the 1950s (Franklin & Hart, 2007; Hsu & Sandford, 2007; Mayfield, Wingenbach, & Chalmers, 2005), the Delphi technique was first used in technology forecasting for military use (Hanafin, 2004; Martin & Frick, 1998). The Delphi technique provides an organized method to gather perspectives from people with proficiency on a certain topic (Dalkey & Helmer, 1963). An advantage of the Delphi technique is that panelists are not required to gather for in-person discussions. Therefore,

proximity of the panelists is not a concern for researchers intending to employ the Delphi technique.

Three features of the Delphi method include anonymity, controlled feedback, and statistical group response (Dalkey, Rourke, Lewis, & Snyder, 1972). The Delphi technique aims to reach consensus concerning a specific topic through rounds of questionnaires (Hanafin, 2004; Hsu & Sandford, 2007). The outcome of the three-round technique begins with the initial round generating a variety of answers, generally by asking panelists to answer one or two open-ended questions (Ludwig, 1997). Panelists provide information they believe will successfully address the question at hand (Linstone & Turoff, 1975). In the second round, panelists are asked to “review the items summarized by the investigators based on information provided in the first round (Hsu & Sandford, 2007, p. 2). As the second and third round follow, individual responses converge, resulting in a more accurate and defined group response of the initial question (Dalkey et al., 1972).

Selection of Panels

Using the Delphi technique offers numerous benefits such as promoting strong participation from groups who are often left out of research (Brady, 2015). One advantage of the Delphi technique is that it acknowledges the unique contribution of each panelist (Hanafin, 2004). “The Delphi method is not concerned with having a generalizable sample but instead seeks input from a purposive sample or individuals with specific expertise on a topic” (Brady, 2016, para. 2). Panel selection is an important component of a successful Delphi study. Panel members must be knowledgeable on the subject in question (Brooks, 1979). Random selection is not an appropriate tool to generate a Delphi panel, and the researcher should carefully consider the knowledge of the potential participants and define the participants’ expertise, characteristics, and qualifications before identifying a sample from which to recruit (Brady, 2016; Ludwig, 1997). A differing trend

from traditional focus groups is that panelists in a Delphi study remain anonymous to each other (Fletcher & Childon, 2014). In the present study, 25 Extension educators and 25 4-H volunteers, totaling 50 panelists, were recruited to serve on panel one. Fifty 4-H parents were recruited to serve on panel two.

Panel One, Extension Educators and Volunteers

The target population for panel one included Extension educators and 4-H volunteers. In some Delphi studies, “gatekeepers” help identify potential participants with a level of expertise sought after by the researcher (Brady, 2016). Therefore, Extension educators were recruited based on the recommendation of their respective district 4-H program specialists in each of the four OCES districts (Northwest, Southwest, Northeast, and Southeast). District 4-H program specialists work closely with educators in their districts and are familiar with the knowledge and experience of the educators regarding the Oklahoma 4-H program.

4-H volunteers also were included in panel one, as they, similar to Extension educators, often implement programming and conduct 4-H activities. 4-H volunteers were recruited based on their tenured status of serving at least five years in the Oklahoma 4-H program (Culp & Schwartz, 1999) and their recognition as a county 4-H Volunteer of the Year in the past two years (2015-2016). The defined criteria for educators and volunteers ensured adequate levels of expertise about and experience in the Oklahoma 4-H program to participate in the study. Volunteers’ contact information was gathered from the 4HOnline enrollment database by the researcher.

In total, 25 educators and 25 4-H volunteers were asked electronically via email to participate and were informed of the nature of the study (Appendices D and E). After a panel of experts is identified, it is important to seek the compliance of the potential panelists (Brooks, 1979). Further, when panelists feel they are a valued member of the Delphi process, they are

more inclined to assist the researcher in achieving the goal of the study (Stitt-Gohdes & Crews, 2004). Of the 50 potential panelists, 23 agreed to participate (46% response rate).

Panel Two, Parents

The second panel's population included 4-H parents. Determining 4-H parents' expertise in the Oklahoma 4-H program, parents were selected if their child has been or had been in the Oklahoma 4-H program for at least five years and was a state project area winner in the last two years (2015-2016). These parents understand the structure of the organization and the demands of the 4-H program in order to raise successful 4-H youth. Parents' information was accessed through the 4HOnline enrollment database by the researcher.

An email describing the nature of the study was sent to 50 potential panelists inviting them to take part in the study (Appendices D and E). Brooks (1979) indicated the significance of confirming panel members' willingness to participate before the study begins. In conjunction with being a part of a group, panelists also must "believe they are able to contribute valuable judgment and help examine the problem via discussion with their peers" (Stitt-Gohdes & Crews, 2004, p. 61). Twenty-one parents indicated their willingness to participate (40.38% response rate).

Instrumentation

The Delphi technique is rooted in two traditional approaches: Conventional and Conference (Linstone & Turoff, 1975). The Conventional, or the paper-pencil, approach involves administering a questionnaire with a series of questions to the selected panel. The Delphi Conference approach utilizes computer technology to administer questionnaires and gather panelists' responses (Linstone & Turoff, 1975). Stitt-Gohdes & Crews (2004) noted a benefit to the Delphi Conference is that it promotes faster response times as there is less delay in sending the rounds of questionnaires.

After the panelists provide answers to the solicited questions, a second questionnaire is developed based on their responses and administered to the same panel (Stitt-Gohdes & Crews, 2004). The rounds of questionnaires and feedback are continued until consensus is met on the statements in question (Stitt-Gohdes & Crews, 2004).

A review of literature conducted by Martin & Frick (1998) found a majority of research studies employing the Delphi technique used modifications. Guided by Ramsey (2009), the present study used a modified Delphi technique of three rounds instead of the traditional four. According to Brooks (1979), Custer, Scarcella, and Stewart (1999), and Ludwig (1997), administering three rounds of questionnaires often is satisfactory to reach consensus among panelists. Using two panels of experts instead of one was another modification implemented by the researcher. “Using two panels allowed the researcher to compare the items that reached ‘consensus agreement’ within the two panels” (Ramesy, 2009, p. 54). Appropriately, a modified Delphi technique was used in this study.

The researcher sent emails to potential panelists inviting them to serve on as experts in this study. Panelists who agreed to participate then received an additional email containing instructions for completing the first questionnaires and a hyperlink to the online instrument. The first round’s questionnaires for the educator and volunteer panel and the parent panel initially were developed by the researcher in Microsoft Word® 2016 and then transferred into Qualtrics, an online surveying software. After collecting responses from the first questionnaires, the second round’s questionnaires were sent to panelists asking them to rank their level of agreement with challenge statements found in the first round. Final third-round questionnaires were sent to panelists to address challenge statements that did not meet consensus in the second round.

Validity

Ensuring face and content validity of the instruments used in the present study was a priority to the researcher. According to Creswell (2005), validity is concerned with assuring

conclusions drawn from the instruments are accurate and represent what the instruments intend to measure. Privitera (2017) defined face validity as a judgement of which an instrument appears to measure what it intends to measure. Content validity determines whether the instrument can successfully represent and measure the construct in question (Privitera, 2017).

Questionnaires for each round were examined for face and content validity by a panel of experts. This panel consisted of faculty members from the Oklahoma State University Department of Agricultural Education, Communications, and Leadership and Oklahoma 4-H state staff. The researcher consulted with the expert panel to enhance the validity of each questionnaire administered in this study. Expert panelists provided constructive feedback, suggesting minor revisions on the instruments before the researcher disseminated them to the participants. The researcher used the feedback to clarify the wording of the introduction and ensure there was uniformity in the scales in each instrument.

Reliability

Reliability of an instrument is determined by the consistency and stability of the constructs it measures (Creswell, 2005). Although no consensus regarding an optimal Delphi panel size exists in the literature (Hsu & Sandford, 2007), Dalkey et al. (1972) reported an increase in reliability of group responses as the panel size increased. However, Sutphin and Camp (1990) stated panels should include an adequate number of participants to achieve intended results, but advised against including an overabundance of panelists as it results in excess data not beneficial to the study. A correlation coefficient of .9 was found with a group size of at least 13 panelists (Dalkey et al., 1972). To that end, 13 panelists remained in the final panels, solidifying the reliability of .9 outlined by Dalkey et al. (1972).

Data Collection

Using a series of questionnaires, the Delphi technique collects data from a selected panel in attempt to build consensus (Dalkey & Helmer, 1963; Linstone & Turoff, 1975). This study sought to determine expert Extension educators,' volunteers,' and parents' perceptions of challenges facing the Oklahoma 4-H program in the next five years. Throughout the duration of this study, both panels remained separate from each other and were administered instruments specific to each panel. Before each round, the researcher sent emails to panelists containing instructions for completion and hyperlinks to access each questionnaire. Questionnaires were administered and data collection was executed through Qualtrics. Panelists were given three weeks to complete the questionnaires in each round. The researcher made the decision to eliminate panelists from the study who did not complete the instrument to which they were provided in rounds one and two. Procedures employed in each round of the study are described below.

Round One

The first questionnaires (Appendix F) were sent electronically to panelists serving on both panels on June 16, 2017. A reminder email (Appendix G) was sent on June 23, 2017 to combat attrition of the panel sizes. The first questionnaires solicited personal and professional characteristics of each panel. Such characteristics included sex, ethnicity/race, residence, and age. Additional questions in the first questionnaire for panel one examined the 4-H alumnus status of panelists, the 4-H district in which they reside, and the number of years served as an Extension educator or 4-H volunteer. Similarly, the first questionnaire for panel two examined panelists 4-H alumnus status, the 4-H district in which they reside, the number of children and children involved in 4-H, and the number of years involved in 4-H as a parent. Both questionnaires for

each panel included the open-ended question: “What challenges will the Oklahoma 4-H program face in the next five years?”

Round Two

Panelists who completed round one were asked electronically to participate in round two (Appendix H). Round two questionnaires (Appendix I) were generated based on the responses gathered from the first questionnaires and included 13 items identified by the educator and volunteer panel and 15 items identified by the parent panel. The second questionnaires were sent electronically on August 11, 2017, to the panelists who completed the first round (Panel one: $n=16$; Panel two: $n=17$). A reminder email was sent to panelist who had not yet completed the second questionnaires on August 18, 2017 (Appendix J).

Panelists were asked to rank their level of agreement with each challenge to the Oklahoma 4-H program in the next five years. A five-point summated scale was used (Franklin & Hart, 2007; Smalley & Retallick, 2011): 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Neither Agree or Disagree, 4 = Somewhat Agree, 5 = Strongly Agree. Harnessing the controlled feedback characteristic of the Delphi technique, summaries of the first round’s interactions were distributed to the panelists (Hsu & Sandford, 2007). To assist the panelists, documents containing anonymous responses from the open-ended question in round one were attached to the respective second questionnaires, providing “an opportunity for the experts to respond and revise their answer in light of the group members’ previous responses” (Fletcher & Childon, 2014; Ludwig, 1997). Further, Ludwig (1997) stated utilizing a feedback process helps Delphi panelists become aware of the variety of opinions among the rest of the panel. Comment boxes were included alongside each item for panelists to request clarification or share additional thoughts regarding the challenge statement (Ludwig, 1997). Challenge statements that received scores of “4” and “5” by at least 75% of each panel met consensus and were identified as challenges facing the Oklahoma 4-H program in the next five years (Ramsey, 2009; Shinn, Wingenbach, Linder,

Briers, & Baker, 2009). Challenge statements that received scores of “4” and “5” by 51%-74% of the panels were included in the third questionnaires. Items that did not receive scores of “4” and “5” by 51% of the panels were removed from further consideration as a challenge to the Oklahoma 4-H program. Thirteen panelists (81.25% response rate) on the educator and volunteer panel and 14 panelists (87.5%) on the parent panel completed round two.

Round Three

Panelists who completed the second round were asked electronically to participate in round three (Appendix K). The third and final round of questionnaires (Appendix L) were sent electronically to 13 panelists on panel one and 14 panelists on panel two on September 12, 2017. The third-round questionnaires sought to reach consensus on the remaining challenge statements among the two panels. Three remaining items were presented to the educator and volunteer panel and five items were presented to the parent panel. These remaining items received between 51% and 74% agreement in the second round. Summaries of the rankings for items that did and did not meet consensus in round two were included in the respective questionnaires. Summaries of anonymous comments gathered from round two also were included to assist panelists in their final rankings (Fletcher & Childon, 2014; Ludwig, 1997). Comment boxes were incorporated with the remaining challenge statements, prompting panelists to provide additional thoughts regarding the statements (Ludwig, 1997). The questionnaires also contained a final opportunity for panelists to provide any additional thoughts or concerns regarding challenges facing the Oklahoma 4-H program (Ramsey, 2009). A reminder email was sent on September 19, 2017, to panelists who had not completed the questionnaires (Appendix M). In total, 13 educators and volunteers (100% response rate) serving on panel one and 13 parents (92.85%) serving on panel two completed the third-round questionnaires.

Data Analysis

Several analytic approaches in the Delphi method exist, and adoption of each approach is determined by the objective of the study (Brady, 2015). Data were analyzed through Qualtrics. Panelists' personal and professional characteristics were examined using percentages and frequencies. In the second and third rounds, the frequency distribution value percentage approach was employed to determine the status of agreement on each challenge statement (Buriak & Shinn, 1989).

Brady's (2015) thematic analysis process, advised by Bazeley (2009), served as the guiding framework of the qualitative analysis in the present study. Thematic analysis was used to develop reoccurring themes present in the qualitative portion of the first questionnaires. Utilizing the thematic analysis process, qualitative data were examined by identifying concepts and categories, which were then compiled into themes (Brady, 2016). Concepts closely reflect the original data provided by the panelists while the broader, more generalized categories present exceeding explanation of data (Brady, 2015). Brady (2015) noted researchers must possess extensive knowledge of literature regarding the subjects at hand to organize data into appropriate concepts and categories.

Throughout the Delphi process, it is crucial to ensure measures are taken to eliminate research bias (Ludwig, 1997). Thematic analysis relies on the researcher's interpretation of the data provided by the panelists. Inadvertently, the researcher may insert their own bias into the analysis of the panelists' responses (Brooks, 1979). To ensure correct and definite representation of the panelists' responses, a spreadsheet detailing the researcher's thematic analysis was distributed along with the second and third questionnaires (Brady, 2016). This panelist-check process was used to solidify the accuracy of the researcher's analysis (Brady, 2016). Panelists were given the option to comment on or clarify the validity of the thematic analysis, however, none chose to do so through the duration of the study.

CHAPTER IV

FINDINGS

This chapter discusses the findings of this study and reports the personal and professional characteristics of the panels and the analysis of each round of the Delphi technique.

Source of Data: Delphi Panelists

The findings presented in this chapter represent data gathered from the panelist who served on the two Delphi panels. Panel one consisted of Extension educators and 4-H volunteers and panel two consisted of 4-H parents.

Findings Related to Objective One

Objective one identified the personal and professional characteristics of the jury of experts who served on the two panels: Extension educators and volunteers (Panel 1) and 4-H parents (Panel 2).

Characteristics of Panelists: Extension Educators and Volunteers

Extension educators who were nominated by their respective district 4-H program specialist and tenured 4-H volunteers who have served in their roles for at least five years (Culp & Schwartz, 1999) and were named a county 4-H Volunteer of the Year in 2015-2016 were asked questions to describe personal and professional characteristics of the panel.

Of the 20 Extension educators and volunteers who participated in round one, four panelists did not provide statements to the open-ended question. The four panelists who did not complete the questionnaire were removed from the study. Of the 16 Extension educators and 4-H volunteers who participated in round one, 25% were male and 75% were female (see Table 1). Thirteen (81.25%) panelists stated they were Caucasian, one panelist (6.25%) reported he/she was Hispanic, one (6.25%) stated he/she was American Indian or Alaskan Native, and one panelist (6.25%) reported he/she was Asian. Two panelists (12.50%) said they were between 22 and 34 years of age and two panelists (12.50%) were between 35 and 44 years of age. The majority of the panel (62.50%) indicated they were between 45 and 54 years of age and two panelists (12.50%) said they were between 55 and 65 years of age.

Table 1

Selected Personal and Professional Characteristics: Extension Educator and Volunteer Panel

Characteristics	Frequency	%
Gender		
Male	4	25.00
Female	12	75.00
Ethnicity/Race		
Caucasian	13	81.25
Hispanic	1	6.25
African American	0	0.00
American Indian or Alaskan Native	1	6.25
Asian	1	6.25
Other	0	0.00
Age Range		
22-34	2	12.50
35-44	2	12.50
45-54	10	62.50
55-64	2	12.50
65 and Older	0	0.00

Characteristics	Frequency	%
Place of Residence		
Farm	7	43.75
Rural Community	3	18.75
Town	3	18.75
Suburban Community	2	12.50
City	1	6.25
Survey Taker: Are you a 4-H alumnus?		
Yes	9	56.25
No	7	43.75
Survey Taker: In which 4-H district do you live?		
Northwest	4	25.00
Southwest	4	25.00
Northeast	4	25.00
Southeast	4	25.00
Survey Taker: Which role best defines yourself?		
Extension Educator	9	56.25
4-H Volunteer	7	43.75
Extension Educators: How many years have you served as an Extension educator?		
0-5	1	11.11
6-10	1	11.11
11-15	2	22.22
16-20	2	22.22
21-25	1	11.11
26+	2	22.22
4-H Volunteers: How many years have you served as a 4-H volunteer?		
0-5	1	14.28
6-10	5	71.43
11-15	0	0.00
16-20	0	0.00
21-25	0	0.00
26+	1	14.29

Seven panelists (43.75%) stated they lived on a farm, three (18.75%) lived in rural communities, and three (18.75%) lived in towns. Suburban communities were noted as the place of residence for 12.50% of the panel and 6.26% of the panel lived in cities. The researcher also was interested in determining the 4-H alumnus status of the panel as well as understanding their professional roles in the Oklahoma 4-H program. Nine panelists (56.25%) indicated they were 4-H alumni and 43.75% said they were not 4-H alumni. Regarding the 4-H district in which the panelists live, 25% reported they lived in the Northwest District, 25% lived in the Southwest District, 25% lived in the Northeast District, and 25% said they live in the Southeast District.

Nine panelists (65%) reported they were Extension educators. One panelist (11.11%) has been employed as an Extension educator between zero and five years, one panelist (11.11%) has been employed between six and 10 years, and two (22.22%) have been employed between 11 and 15 years. Two panelists (22.22%) indicated they have been employed as an Extension educator between 16 and 20 years, one panelist (11.11%) has been employed between 21 and 25 years, and two panelists (22.22%) have been employed for 26 or more years.

Seven (43.75%) panelists indicated they were 4-H volunteers. One panelist (14.29%) reported they served as a 4-H volunteer between zero and five years, five panelists (71.43%) served between six and 10 years, and one panelist (14.29%) served 26 or more years.

Characteristics of Panelists: Parents

4-H parents whose child has been or had been in 4-H for at least five years and was a state 4-H project winner in 2015 or 2016 were asked to answer a series of questions to determine the personal and professional characteristics of the panel.

Seventeen parents participated in round one. Of those participants, 11.76% were male and 88.24% were female (see Table 2). Fifteen (93.75%) of the panelists reported they were Caucasian, one panelist (6.25%) reported "Other," and one panelist did not provide a response in regard to ethnicity and race. The majority of the panel (64.71%) indicated they fell between the

age range of 45 and 54 years of age. Two panelists (11.76%) said they were between 35 and 44 years of age and four panelists (23.53%) were between 55 and 64 years of age. Regarding place of residence, three panelists (17.65%) reported they live on a farm, 11 (64.71%) live in rural communities, and three (17.65%) live in suburban communities.

Table 2

Selected Personal and Professional Characteristics: Parent Panel

Characteristics	Frequency	%
Gender		
Male	2	11.76
Female	15	88.24
Ethnicity/Race		
Caucasian	15	88.24
Hispanic	0	0.00
African American	0	0.00
American Indian or Alaskan Native	0	0.00
Asian	0	0.00
Other	1	5.88
No Response	1	5.88
Age Range		
22-34	0	0.00
35-44	2	11.76
45-54	11	64.71
55-64	4	23.53
65 and Older	0	0.00
Place of Residence		
Farm	3	17.65
Rural Community	11	64.71
Town	0	0.00
Suburban Community	3	17.65
City	0	0.00
Survey Taker: Are you a 4-H alumnus?		
Yes	10	58.82
No	7	41.18

Characteristics	Frequency	%
Survey Taker: In which 4-H district do you live?		
Northwest	1	5.88
Southwest	9	52.94
Northeast	5	29.41
Southeast	2	11.76
Survey Taker: How many children do you have?		
1	1	5.88
2	8	47.06
3	7	41.18
4	1	5.88
Survey Taker: How many of your children participated in 4-H?		
1	1	5.88
2	9	52.94
3	7	41.18
Survey Taker: How many years have you been/were involved in 4-H as a parent?		
0-2	0	0.00
3-5	0	0.00
6-8	6	35.29
8-10	6	35.29
More than 11	5	29.41

Additional questions also were included in the first questionnaire to determine characteristics describing the panel's 4-H involvement. Ten panelists (58.82%) stated they were 4-H alumni and seven (40%) said they were not 4-H alumni. Regarding the 4-H district in which the panelists live, 5.88% indicated they live in the Northwest District, 52.94% live in the Southwest District, 29.41% live in the Northeast District, and 11.76% reported they live in the Southeast District. One parent (5.88%) reported having one child, 47.05% have two children, 41.18% have three children, and one parent (5.88%) has four children. Moreover, one panelist (5.88%) reported having one child involved in 4-H, nine panelists (52.94%) indicated having two

children involved in 4-H, and seven panelists (41.18%) said three of their children participated in 4-H.

The researcher also was interested in the number of years the panelists were involved in 4-H as parents. Six panelists (35.29%) have been 4-H parents between six and eight years, six panelists (35.29%) stated between eight and 10 years as 4-H parents, and five panelists (29.41%) indicated they have been 4-H parents for more than 11 years.

Findings Related to Objective Two

Objective two determined the selected Extension educators' and volunteers' perceptions of challenges facing the Oklahoma 4-H program in the next five years.

Delphi Panel, Round One Findings: Extension Educators and Volunteers

The intent of the first round of this study was to understand the perceived challenges of Oklahoma 4-H by 4-H educators and volunteers. Along with answering questions about their personal and professional characteristics, panelists responded to the open-ended question: "What challenges will the Oklahoma 4-H program face in the next five years?"

Sixteen panelists completed round one. Forty-one statements were analyzed by the researcher, combining comparable comments and separating compound statements (Shinn et al., 2009). Through detailed thematic analysis, concepts and categories were developed, leading the researcher to identify 13 challenge statements representing challenges facing Oklahoma 4-H in the next five years (See Table 3). These 13 challenge statements were included in the questionnaire sent to panelists in round two.

Table 3

Challenges Facing Oklahoma 4-H: Identified by Extension Educators and Volunteers

Challenges Facing the Oklahoma 4-H Program in the Next Five Years
Volunteer Recruitment
Volunteer Retention
Professional Development of Early-Career Educators
Increased Workload on Educators
Marketing and Promotion
Budget Challenges
Enrollment Barriers
Rural vs. Urban Opportunities for Youth
Member Retention
Time Commitment of Youth
Competition with Other Activities
Lack of 4-H/School Partnerships
Lack of Adult Engagement in Youth's 4-H Involvement

The challenges panelists stated varied in areas such as volunteerism, member retention, and youth's involvement in the 4-H program. Panelists indicated "the rapid turnover rates of new hires" and "finding new ways to motivate teens to be a part of the 4-H program" as just a few of the challenges the Oklahoma 4-H program must overcome. One panelist said, "The 4-H program will face growth issues due to the lack of understanding the benefit of 4-H." Additionally, another

panelist stated a concern for the Oklahoma 4-H program is “the continual downturn of federal, state and county budgets.”

Delphi Panel, Round Two Findings: Extension Educators and Volunteers

In the second round of the study, a questionnaire was administered to the 16 panelists who completed round one. Thirteen panelists completed the second questionnaire, resulting in an 81.25% response rate. The questionnaire prompted panelists to rank their level of agreement with the 13 challenge statements established in round one (See Table 4).

Table 4

Frequencies and Percentages Presented in Round Two: Extension Educator and Volunteer Panel

Item	Strongly Disagree		Somewhat Disagree		Neither Agree or Disagree		Somewhat Agree		Strongly Agree	
	%	f	%	f	%	f	%	f	%	f
Volunteer Recruitment	0.00	0	7.69	1	0.00	0	23.08	3	69.32	9
Volunteer Retention	0.00	0	15.38	2	15.38	2	23.08	3	46.15	6
Professional Development of Early-Career Educators	0.00	0	0.00	0	46.15	6	30.77	4	23.08	3
Increased Workload on Educators	7.69	1	0.00	0	23.08	3	15.38	2	53.85	7
Marketing and Promotion	0.00	0	0.00	0	7.69	1	53.85	7	38.46	5
Budget Challenges	0.00	0	0.00	0	7.69	1	7.69	1	84.62	11
Enrollment Barriers	0.00	0	0.00	0	7.69	1	30.77	4	61.54	8
Rural vs. Urban Opportunities	0.00	0	7.69	1	46.15	6	15.38	2	30.77	4
Member Retention	0.00	0	0.00	0	7.69	1	46.15	6	46.15	6
Time Commitment of Youth	0.00	0	0.00	0	23.08	3	30.77	4	46.15	6
Competition with other Activities	0.00	0	0.00	0	7.69	1	30.77	4	61.54	8
Lack of 4-H/School Partnerships	0.00	0	7.69	1	7.69	1	38.46	5	46.15	6

Item	Strongly Disagree		Somewhat Disagree		Neither Agree or Disagree		Somewhat Agree		Strongly Agree	
	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>
Lack of Adult Engagement in Youth's 4-H Involvement	7.69	1	0.00	0	0.00	0	38.46	5	53.85	7

The panelists ranked their level of agreement on a five-point summated scale (Franklin & Hart, 2007; Smalley & Retallick, 201): 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Neither Agree or Disagree, 4 = Somewhat Agree, 5 = Strongly Agree. Comment boxes were paired with each challenge statement for panelists who were inclined to provide additional explanations for their agreement choices.

Nine challenge statements received scores of “4” and “5” by at least 75% of the panel and met the criteria to reach consensus (Shinn et al., 2009). These nine challenges are listed in Table 5.

Table 5

Challenges that Met Consensus of Agreement in Round Two: Extension Educator and Volunteer Panel

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Volunteer Recruitment	92.31
Marketing and Promotion	92.31
Budget Challenges	92.31
Enrollment Barriers	92.31
Member Retention	92.31
Competition with Other Activities	92.31
Lack of Adult Engagement in Youth's 4-H Involvement	92.31
Lack of 4-H/School Partnerships	84.61

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Time Commitment of Youth	76.92

Volunteer recruitment (92.31%).

Panelists agreed volunteer recruitment is a challenge facing the Oklahoma 4-H program. Panelists perceived prospective volunteers are difficult to recruit as they are “helping in other places already in within the community and they usually have full-time jobs.” One panelist agreed, stating the increasing requirements of 4-H volunteers is a deterrent for prospective volunteers. Recruiting 4-H parents to take on additional responsibilities as volunteers also is a struggle, said one panelist.

Marketing and promotion (92.31%).

Panelists agreed marketing and promotion is a challenge. “With heavy workloads and lessening staff, it is hard to find time to market and promote programs,” said one panelist. Another panelist indicated a priority in reaching older youth and urban audiences through improved marketing efforts.

Budget challenges (92.31%).

Budget challenges reached agreement by the panel. One panelist stated the continued decrease in budgets will result in a reduction in Extension staff. Another panelist noted when Extension funding is reduced, many of 4-H’s benefits are compromised. One panelist did not express much concern about budget challenges, saying “It is what it is.”

Enrollment barriers (92.31%).

The majority of the panelists agreed enrollment barriers pose a challenge to the Oklahoma 4-H program. 4HOnline, the online Oklahoma 4-H enrollment system, serves as a

complex tool for 4-H enrollment. “The 4HOnline system is a good tool, but it has proven to be a nightmare for counties,” one panelist said. Other panelists indicated a need for a simpler enrollment process.

Member retention (92.31%).

Panelists agreed member retention is a challenge facing the Oklahoma 4-H program. “You have to provide quality experiences and teach life skills over and over to get people to see what their kids can get from 4-H,” one panelist said. Another panelist said Oklahoma 4-H must continue to “offer lots of activities with strong support so we don’t lose these children to nothing or other activities.” Another panelist stated that the decrease in staff and volunteers is a reflection of the decreasing 4-H membership.

Competition with other activities (92.31%).

Panelists agreed that 4-H’s competition with other activities is an ongoing challenge. Two comments were made regarding this challenge. One panelist indicated more selection of out-of-school activities hinders youth involvement in 4-H while another panelist indicated youth can be involved in multiple activities as long as 4-H remains a priority.

Lack of adult engagement in youth’s 4-H involvement (92.31%).

The majority of the panel agreed with the challenge of lack of adult engagement in youth’s 4-H involvement. Two panelists commented that although adult volunteers are willing to provide support, getting parents more involved is a challenge. Another panelist said, “Kids are dropped off a lot for my activities. Parents get upset when they can’t just drop them off with you.” Another panelist noted that youth whose parents are engaged in the 4-H program continue to stay involved. “It takes good adults to have good kids and a good program,” said one panelist.

Lack of 4-H/school partnerships (84.61%).

The majority of the panel agreed the lack of partnerships between schools and the Oklahoma 4-H program is a challenge. “Get 4-H back into our schools... We can accomplish so much more with a partnership with the schools versus no relationship at all or only having a meeting in a classroom at the local school,” one panelist said. “Enrollment needs to happen in elementary school,” another panelist said. One panelist stated youth may not seek 4-H participation if 4-H is not a part of school systems. However, one panelist said “the schools have enough to worry about besides 4-H,” but also noted 4-H would improve the schools.

Time commitment of youth (76.92%).

Time commitment of youth reached agreement by the panel. One panelist said 4-H youth who commit “get so much more from the program.” Self-motivation is an important factor for youth’s commitment, stated one panelist. Another panelist noted families’ time constraints also impact youth involvement in 4-H, and 4-H may not be a priority for busy families.

Three challenge statements received scores of “4” and “5” by 51%-74% of the panel (See Table 6). These challenges were included in the final round of the study for further consideration by the panel.

Table 6

Challenges that Received More than 51% but Lower than 75% Agreement in Round Two: Extension Educator and Volunteer Panel

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Volunteer Retention	69.23
Increased Workload on Educators	69.23
Professional Development of Early-Career Educators	53.85

Volunteer retention (69.23%).

Panelists somewhat agreed that volunteer retention was a challenge facing the Oklahoma 4-H program. One panelist said time availability is a primary factor in retaining volunteers. Volunteers are often busy volunteering in other organizations, maintain full-time jobs, and have their own families, leaving not much time to spend in the 4-H program, said one panelist. Additionally, another panelist indicated the Oklahoma 4-H program should utilize volunteers where their expertise is needed and get them involved with the program instead of simply asking them to do tasks. Another panelist stated volunteers are also “very busy and often feel overwhelmed with keeping their clubs going, trying to raise money for enrollments, plus all of the enrollment requirements on themselves as well as 4-H members.”

Increased workload on educators (69.23%).

Increased workload on educators received 69.23% agreement by the panel. One panelist said budget cuts and staff reductions are responsible for the educators’ increased workload. One comment indicated that educators leave Extension for better opportunities due to the “workload for what is expected of us.” Another panelist said educators are not receiving much assistance from state and district specialists, leaving educators feeling frustrated.

“Rural vs. Urban Opportunities” was a challenge identified in round one but received less than 51% agreement, or scores of “4” and “5,” among the panel. This item was removed from further inquiry from the panel (See Table 7).

Professional development of early-career educators (53.85%).

Panelists somewhat agreed that a need for professional development of early-career educators exists as a challenge to the Oklahoma 4-H program. “I feel we have very little professional development with new educators that will actually prepare them for what they have to deal with in the counties,” said one panelist. Comments also indicated new educators need

training on tasks and goals they should be completing throughout the first year on the job. One comment stated, “They get too much thrown at them in the beginning and they have no idea where to start.” One panelist shared an idea for seasoned educators to provide mentorship and spend time with new educators at 4-H activities and programs.

Table 7

Challenges that Received Less than 51% Agreement in Round Two: Extension Educator and Volunteer Panel

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Rural vs. Urban Opportunities for Youth	46.15

Rural vs. urban opportunities (46.15%).

Only 46.15% of the panel agreed with the challenge statement “Rural vs. Urban Opportunities.” One panelist indicated the difference in opportunities will always be a problem as staffing in rural and urban counties do not always match county populations. Another panelist said, “I lived in a town of 800 and now a town of 30,000 and see no difference in 4-H activities.”

Delphi Panel, Round Three Findings: Extension Educators and Volunteers

In round three, panelists were asked to rank their level of agreement with three challenge statements facing the Oklahoma 4-H program (See Table 8). The questionnaire was sent to the 13 panelists who completed round two. Of the 13 panelists, 13 completed round three, resulting in a 100% response rate.

Table 8

Frequencies and Percentages Presented in Round Three: Extension Educator and Volunteer Panel

Item	Strongly Disagree		Somewhat Disagree		Neither Agree or Disagree		Somewhat Agree		Strongly Agree	
	%	f	%	f	%	f	%	f	%	f
Volunteer Retention	0.00	0	0.00	0	7.69	1	15.38	2	76.92	10

Item	Strongly Disagree		Somewhat Disagree		Neither Agree or Disagree		Somewhat Agree		Strongly Agree	
	%	f	%	f	%	f	%	f	%	f
Professional Development of Early-Career Educators	7.69	1	0.00	0	30.77	4	7.69	1	53.85	7
Increased Workload on Educators	0.00	0	0.00	0	7.69	1	23.08	3	69.23	9

The panelists ranked their level of agreement on a five-point summated scale (Franklin & Hart, 2007; Smalley & Retallick, 2011): 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Neither Agree or Disagree, 4 = Somewhat Agree, 5 = Strongly Agree. Comment boxes were included with each challenge statement for panelists to provide final remarks for the remaining challenges. Two of the remaining challenges received scores of “4” and “5” by at least 75% of the panel, resulting in consensus regarding these two challenges (Ramsey, 2009; Shinn et al., 2009). The challenges were included with the nine challenges that met consensus in round two (See Table 9).

Table 9

Challenges that Met Consensus Agreement in Round Three: Extension Educator and Volunteer Panel

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Volunteer Retention	92.31
Increased Workload on Educators	92.31

Volunteer retention (92.31%).

In round three, the panel agreed volunteer retention is a challenge facing the Oklahoma 4-H program. One panelist noted the amount of work it takes to maintain a volunteer base, stating, “It is important to have knowledgeable and well-trained volunteers, but the expectations of volunteer recruitment and training don’t reflect the reality that we face at the county level.” The

panelists indicated reductions in staff could result in challenges regarding volunteer retention. One panelist said in order to train and support volunteers, there must be Extension educators. With the reductions in educators, volunteer retention will be a hindrance. The panel also noted heavy reliance on volunteers could drive them away from the program. “As educators depend more and more on our volunteers, I am afraid they will burn out faster than they have in the past,” said one panelist. “With busy schedules and all the hoops we make leaders jump through, a lot of mine give up,” another panelist commented.

Increased workload on educators (93.31%).

Panelists agreed that increased workload on educators is challenge Oklahoma 4-H must overcome. “There is more being put onto educators and there is not a lot being taken off their busy workload,” said one panelist. Other comments indicated educators might feel inclined to leave Extension, especially new educators. However, even the more seasoned educators feel the stress of increased workloads, said one panelist. “Every time we are given something new to manage, I feel like we take steps backward instead of forward. Even the best of educators feel the pressure and it’s overwhelming,” the panelist said. One panelist commented that having a solid volunteer base can provide relief to overstretched educators.

One challenge statement did not reach consensus among the panel in round three. This statement indicated that a need for improved professional development of early-career educators should be addressed as a challenge to Oklahoma 4-H (See Table 10).

Table 10

Challenges that Did Not Receive 75% or More Agreement in Round Three: Extension Educator and Volunteer Panel

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Professional Development of Early-Career Educators	61.54

Professional development of early-career educators (61.54%).

Panelists (61.54%) agreed with the challenge statement “Professional Development of Early-Career Educators.” Panelists indicated new educators are not properly prepared for their careers. “The first months and years are crucial for new educators. They need support and guidance that I don’t really feel like they are given to set them up for success,” said one panelist. Another panelist stated regular trainings need to be implemented to assist new educators with developing and implementing programs, volunteer management, and other tasks. However, one panelist said it is not the lack of preparedness that deters early-career educators, “...it’s more about commitment, high stress causes less-experienced educators to leave.”

At the conclusion of all three rounds, 11 items were identified as challenges facing the Oklahoma 4-H program in the next five years (See Table 11).

Table 11

Challenges Identified by Extension Educators and Volunteers in All Rounds of the Delphi Study Regarding Challenges Facing the Oklahoma 4-H Program in the Next Five Years

Challenges Facing the Oklahoma 4-H Program in the Next Five Years
Volunteer Recruitment
Volunteer Retention
Increased Workload on Educators
Marketing and Promotion
Budget Challenges
Enrollment Barriers
Member Retention
Time Commitment of Youth
Competition with Other Activities

Lack of 4-H/School Partnerships

Lack of Adult Engagement in Youth's 4-H Involvement

Findings Related to Objective Three

Objective three determined the selected 4-H parents' perceptions of challenges facing the Oklahoma 4-H program in the next five years.

Delphi Panel, Round One Findings: Parents

The first-round questionnaire was administered to Delphi panel of 4-H parents to gain insight on the perceived challenges facing the Oklahoma 4-H program in the next five years. Panelists first were prompted to answer questions regarding their personal and professional characteristics. Then, panelists were given the opportunity to answer the open-ended question: "What challenges will the Oklahoma 4-H program face in the next five years?"

Seventeen parents participated in round one. The 45 challenges provided by the panelists to the open-ended question were analyzed by the researcher, consolidating analogous comments and compound statements. (Shinn et al., 2009). The researcher utilized thematic analysis to develop the initial statements into concepts and categories, which were finalized into 15 themes reflecting challenges facing the Oklahoma 4-H program in the next five years (See Table 12).

Table 12

Challenges facing Oklahoma 4-H in the Next Five Years Identified by 4-H Parents

Challenges Facing the Oklahoma 4-H Program in the Next Five Years

Increased Volunteer Responsibility

Volunteer Recruitment

Lack of Professional Support and Leadership for Educators

Marketing and Promotion

Challenges Facing the Oklahoma 4-H Program in the Next Five Years

Outdated Image of Program

Outdated Programming

Adhering to National 4-H Initiatives

Lack of Adult Engagement in Youth's 4-H Involvement

Family Financial Barriers

Member Retention

Enrollment Barriers

Time Commitment of Youth

Competition with Other Activities

Lack of 4-H/School Partnerships

Budget Challenges

Panelists identified challenges to the Oklahoma 4-H program that span a variety of topics, such as the financial situations of families, members' experiences in 4-H, and the image Oklahoma 4-H portrays. The misconception that 4-H is only for youth involved in agriculture was a challenge frequently addressed by the panel. "Keeping 4-H current both in substance and branding" and "growing and maintaining membership" also were indicated as challenges the Oklahoma 4-H program must overcome.

Delphi Panel, Round Two Findings: Parents

In round two, the 17 panelists who completed the first round were sent the second round's questionnaire. Fourteen panelists participated in the second round, resulting in an 82.35%

response rate. The questionnaire asked panelists to rank their level of agreement with the 15 challenge statements identified in round one (See Table 13).

Table 13

Frequencies and Percentages Presented in Round Two: Parent Panel

Item	Strongly Disagree		Somewhat Disagree		Neither Agree or Disagree		Somewhat Agree		Strongly Agree	
	%	f	%	f	%	f	%	f	%	f
Increased Volunteer Responsibility	0.00	0	7.14	1	7.14	1	42.86	6	42.86	6
Volunteer Recruitment	0.00	0	0.00	0	0.00	0	42.86	6	57.14	8
Lack of Professional Support and Leadership for Educators	7.14	1	14.29	2	21.43	3	28.57	4	28.57	4
Marketing and Promotion	0.00	0	7.14	1	14.29	2	42.86	6	35.71	5
Outdated Image of Program	0.00	0	7.14	1	21.43	3	21.43	3	50.00	7
Outdated Programming	0.00	0	21.43	3	35.71	5	35.71	5	7.14	1
Adhering to National 4-H Initiatives	14.29	2	14.29	2	50.00	7	7.14	1	14.29	2
Lack of Adult Engagement in Youth's 4-H Involvement	0.00	0	0.00	0	7.14	1	28.57	4	64.29	9
Family Financial Barriers	7.14	1	14.29	2	21.43	3	28.57	4	28.57	4
Member Retention	0.00	0	0.00	0	0.00	0	50.00	7	50.00	7
Enrollment Barriers	0.00	0	7.14	1	35.71	5	14.29	2	42.86	6
Time Commitment of Youth	0.00	0	14.29	2	7.14	1	57.14	8	21.43	3
Competition with Other Activities	0.00	0	0.00	0	0.00	0	35.71	5	64.29	9
Lack of 4-H/School Partnerships	0.00	0	0.00	0	28.57	4	21.43	3	50.00	7
Budget Challenges	0.00	0	0.00	0	14.29	2	35.71	5	50.00	7

The panelists ranked their level of agreement on a five-point summated scale (Smalley & Retallick, 2011; Franklin & Hart, 2007): 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Neither Agree or Disagree, 4 = Somewhat Agree, 5 = Strongly Agree. Panelists also had the opportunity to provide additional statements in comment boxes provided with each challenge statement.

75% of the panel scored eight challenges with a “4” or “5,” meeting consensus among the panel (Shinn et al., 2009). Table 14 highlights the eight challenges that met consensus.

Table 14

Challenges that Met Consensus of Agreement in Round Two: Parent Panel

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Volunteer Recruitment	100.00
Member Retention	100.00
Competition with Other Activities	100.00
Lack of Adult Engagement in Youth’s 4-H Involvement	92.86
Increased Volunteer Responsibility	85.72
Budget Challenges	85.71
Marketing and Promotion	78.57
Time Commitment of Youth	78.57

Volunteer recruitment (100%).

Panelists agreed with the challenge statement “Volunteer Recruitment.” Comments mentioned the difficulty finding prospective volunteers willing to devote time to 4-H. Once good volunteers are recruited, retention actions need to be implemented. One panelist said those volunteers who provide invaluable service “are worth gold and need to be treated that way.”

Member retention (100%).

The panel was unified in their agreement with the challenge statement “Member Retention.” Several panelists commented on the continuing challenge of retaining 4-H members as they grow older. 4-H might not be viewed as the popular choice of extra-curricular activities, several panelists mentioned. “It is hard to keep kids engaged as they grow older. It has to be cool again to be an older 4-H member,” said one panelist.

Competition with other activities (100%).

Competition with other activities is a challenge identified by the panel. One comment expressed the necessity to provide invaluable experiences to members. “If it is worthwhile and they have buy-in they will find the time,” said the panelist. However, one panelist indicated that although there are many activities to choose from, decision-making is a life skill-building exercise for youth.

Lack of adult engagement in youth’s 4-H involvement (92.86%).

Panelists agreed lack of adult engagement in youth’s 4-H involvement is a challenge facing the Oklahoma 4-H program. Comments expressed family involvement is crucial to a rewarding 4-H experience. “Families are the backbone of successful 4-H’ers,” said one panelist. With parents’ busy schedules, many youth’s 4-H involvement is compromised. One panelist said, “Most parents work and half of them don’t even come to meetings. They have no idea what their kids are missing out on.” Aside from parents, volunteers provide positive adult mentorship to youth. One panelist commented it is difficult to find parent volunteers who are willing to assist other children instead of focusing on their own.

Increased volunteer responsibility (85.72%).

Panelists agreed increased volunteer responsibility is a challenge facing the Oklahoma 4-H program. One panelist commented, “It’s hard enough to get volunteers now, but when the workload is more it will be even harder.” However, another panelist said volunteer responsibility is crucial for improvement of Oklahoma 4-H, indicating increased responsibility leads to more engaged and invested volunteers.

Budget challenges (85.71%).

Panelists agreed with the challenge statement “Budget Challenges.” One panelist indicated Extension educators receive the most hardships from budget decreases, and the financial state of Extension causes educators to seek employment elsewhere. While volunteer club leaders also have felt the repercussions of continued budget cuts to Extension, one panelist said volunteers “should not depend on funds from Extension offices for all needs.” Another panelist stated, “Budgets are always going to be a challenge.”

Marketing and promotion (78.57%).

The majority of the panel agreed marketing and promotion is a challenge. While one panelist said 4-H is “well-promoted through national marketing campaigns as well as plenty of local and regional human-interest stories,” other panelists indicated misconceptions about the 4-H program continue to exist. Two panelists stated the common misconception that 4-H strictly is an agricultural-based organization is an ongoing issue. “It amazes me the number of people who still don’t know that 4-H is more than showing livestock,” said one panelist. Another panelist indicated 4-H should focus on promoting the leadership, citizenship, and life skills-building aspects of the program. Additionally, the panelist said many newcomers to 4-H are confused about the structure of the program and opportunities in which to get involved.

Time commitment of youth (78.57%).

Panelists agreed that time commitment of youth is a challenge facing the Oklahoma 4-H program. Commitment to the 4-H program results in a positive experience, said one panelist. With a broad selection of activities and organizations to take part in, youth are drawn to where their interests can be developed. One panelist stated if youth discover a project area they are interested in, they will invest the time in their 4-H career. A hindrance to maintaining youth's commitment is "the program not changing just the regurgitating of old programs over and over," one panelist said.

Five challenges were included in the third round of the study (See Table 15). These challenges received scores of "4" and "5" by more than 51% but lower than 75% of the panel

Table 15

Challenges that Received More than 51% but Lower than 75% Agreement in Round Two: Parent Panel

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Outdated Image of Program	71.43
Lack of 4-H/School Partnerships	71.43
Enrollment Barriers	57.15
Family Financial Barriers	57.14
Lack of Professional Support and Leadership for Educators	57.14

Outdated image of the program (71.43%).

Panelists somewhat agreed with the challenge statement "Outdated Image of the Program." One panelist commented that one component of the outdated image is the uniforms youth in the highest levels of leadership roles wear. Consisting of green blazers and ties, the panelist expressed concern about the appropriateness of the dress on female members. "If the officers and 4-H ambassadors are the face of 4-H, it is very outdated," the panelist said. Another

panelist indicated that some aspects of the program need updating, however, “the professional world still regards those students in 4-H in high regard.” Another panelist stated, “Not sure image is simply outdated, but most entirely not understood by the public.”

Lack of 4-H/school partnerships (71.43%).

Panelists (71.43%) indicated a challenge facing the Oklahoma 4-H program is lack of 4-H/school partnerships. One panelist provided a comment in favor of an increase in a working partnership with Oklahoma 4-H and school systems. “The groups that we have that have more school involvement are way larger and stronger clubs than those that are not,” the panelist said.

Enrollment barriers (57.15%).

Panelists somewhat agreed with “Enrollment Barriers” as a challenge to the Oklahoma 4-H program. The panelists who provided comments in this section were concerned with the 4HOnline enrollment system. One panelist stated the online enrollment system “is a temporary learning curve and good when it works.” Two panelists expressed concerns with the complexity of online enrollment. “The online enrollment process is far too complex. Online enrollment is a great idea, but the process needs to be simplified,” said one panelist. Another panelist stated paper enrollment cards “were simpler, faster, and more effective.” One panelist said the online enrollment process can be daunting, but more guidance to navigate the system would be appreciated.

Family financial barriers (57.14%).

A portion of the panel (57.14%) agreed that family financial barriers exists as a challenge facing the Oklahoma 4-H program. With the implementation of a 4-H program fee in 2016, families have had “a lot tugging on their pocket books. Everyone is charging to participate.” One panelist said that although the program fee is not expensive, the issue derives from the sudden

installation of the fee. On the other hand, several panelists commented that the new program fee is not a barrier. One panelist said, “4-H costs much less than most any other extra-curricular activity.” Another panelist stated, “I think the program is very affordable for what is offered.”

Lack of professional support and leadership for educators (57.14%).

Panelists (57.14%) identified lack of professional support and leadership for educators as a challenge facing Oklahoma 4-H. One panelist indicated the lack of support will cause adverse effects, saying “Too much work with not enough people. The people we have are going to burn out fast.” Another panelist noted although educators have many opportunities to attend in-services, many are not implementing the skills learned in their county programs. “I am not seeing them bringing what they learn back to their counties,” the panelist said.

Two challenge statements were identified in round one but received less than 51% agreement, or scores of “4” and “5,” among the panel. “Outdated Programming” and “Adhering to National 4-H Initiatives” were removed from the study (See Table 16).

Table 16

Challenges that Received Less than 51% Agreement in Round Two: Parent Panel

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Outdated Programming	42.85
Adhering to National 4-H Initiatives	21.43

Outdated programming (42.85%).

Panelists somewhat agreed that outdated programming is a challenge facing the Oklahoma 4-H program. Several comments commend the advancement 4-H programming has made throughout the years and that “the general public’s perception hasn’t caught up with the changes.” Moreover, another panelist commented that communicating the variety of programs

offered is “more of the hurdle than revamping the programming for the students.” One panelist mentioned many rules, specifically dress codes, are outdated.

Adhering to national 4-H initiatives (21.43%).

A small percentage of the panel somewhat agreed with the challenge statement “Adhering to National 4-H Initiatives.” One panelist said, “Don’t see that as a challenge. The national initiatives seem to be pushing toward the updated programming.” However, another panelist noted that “National 4-H agendas imparted in Oklahoma communities don’t always match our values.”

Delphi Panel, Round Three Findings: Parents

In the third round, panelists ranked their level of agreement with five challenge statements (See Table 17). The 14 panelists who participated in round two were sent the third questionnaire. In total, 13 out of 14 panelists completed round three, resulting in a 92.85% response rate.

Table 17

Frequencies and Percentages Presented in Round Three: Parent Panel

Item	Strongly Disagree		Somewhat Disagree		Neither Agree or Disagree		Somewhat Agree		Strongly Agree	
	%	f	%	f	%	f	%	f	%	f
Lack of Professional Support and Leadership for Educators	0.00	0	30.77	4	15.38	2	38.46	5	15.38	2
Outdated Image of Program	0.00	0	15.38	2	15.38	2	38.46	5	30.77	4
Family Financial Barriers	7.69	1	53.85	7	7.69	1	23.08	3	7.69	1
Enrollment Barriers	15.38	2	23.08	3	15.38	2	30.77	4	15.38	2
Lack of 4-H/School Partnerships	0.00	0	0.00	0	15.38	2	61.54	8	23.08	3

The panelists ranked their level of agreement on a five-point summated scale (Smalley & Retallick, 2011; Franklin & Hart, 2007): 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Neither Agree or Disagree, 4 = Somewhat Agree, 5 = Strongly Agree. Along with each challenge statement was a comment box for panelists to provide any concluding remarks. One remaining challenge statement received scores of “4” and “5” by at least 75% of the panel, indicating consensus was met for this item (Ramsey, 2009; Shinn et al., 2009). The challenge was combined with the eight challenges that met consensus in round two (See Table 18).

Table 18

Challenges that Met Consensus of Agreement in Round Three: Parent Panel

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Lack of 4-H/School Partnerships	84.62

Lack of 4-H/school partnerships (84.62%).

In the third round, the panel agreed with the challenge statement “Lack of 4-H/School Partnerships. Several panelists indicated a need for a strong relationship between schools and the 4-H program. These comments included: “In my county, I don’t see a relationship with the school” and “You can tell the clubs that have more school partnership/support, they are the larger clubs.” In contrast, one panelist commented, “We better keep 4-H separate from schools,” but did not include a reasoning for their statement. Further, another panelist said “in the larger schools this is a problem.”

In the third round, four challenge statements did not reach consensus among the panel (See Table 19).

Table 19

Challenges that Did Not Meet Consensus of Agreement in Round Three: Parent Panel

Challenges Facing the Oklahoma 4-H Program in the Next Five Years	% Agreement
Outdated Image of Program	69.23
Lack of Professional Support and Leadership for Educators	58.84
Enrollment Barriers	46.15
Family Financial Barriers	30.77

Outdated image of program (69.23%).

Outdated image of the program was agreed upon by 69.23% of the panel. Many of the comments provided with this challenge statement were in regards to the misconception of 4-H’s programs. Comments such as “people don’t see all the possibilities 4-H offers” and “there are still people with misperceptions/image of 4-H” indicate that although there are updated aspects of the 4-H program, the public’s perception of 4-H remains in the past. Similar to round two, a comment reflecting a panelist’s displeasure with the state officer and ambassador teams’ uniforms was made. The panelist said the uniforms do “not encourage teens to want to be a part of that leadership group.”

Lack of professional support and leadership for educators (58.84%).

Panelists (58.84%) agreed tlack of professional support and leadership for educators is a challenge facing the Oklahoma 4-H program. One panelist commented state-level 4-H staff may not fully understand the needs of county educators, stating, “state staff is not always keyed into or involved with county levels, so implementation of education received sometimes doesn’t happen well.” Another panelist commented that there is a “lower work ethic standard” among younger educators. Additionally, panelists said educators are “overworked” and that “it is going to be very hard to keep up the support as people start having more jobs to do.”

Enrollment barriers (46.15%).

Panelists (46.15%) agreed with the challenge statement “Enrollment Barriers.” The comments provided with this challenge statement expressed concerns with the online enrollment system, 4HOnline. Several panelists indicated internet connectivity is a barrier to enrolling youth, particularly in rural locations. Further, one panelist stated county staff need to assist families with no internet access by seeking out internet sources. Other panelists commented about the “intimidating,” complicated process on online enrollment. “The computer system is not user friendly for first-time enrollees and then it is hard to correct errors,” one panelist said. However, one panelist commented with each passing year, the online enrollment process becomes easier.

Family financial barriers (30.77%).

A small percentage of the panelists agreed with the challenge statement “Family Financial Barriers.” Several panelists indicated the newly-implemented program fee was not a deterrent for many 4-H families. “Most everyone we have come in contact with see no problem with the enrollment fee,” one panelist said. Moreover, another panelist expressed “clear and transparent communication from the state level to average 4-H families would have gone a long way in understanding the new fees.” Other panelists said other aspects of 4-H are costly, including project work and events. Additionally, another panelist shared a concern that charging a program fee for Cloverbuds will result in a decrease in enrollment in youth under 8 years of age.

At the conclusion of three rounds of the Delphi process, nine items were identified as challenges facing the Oklahoma 4-H program in the next five years (See Table 20).

Table 20

Challenges Identified by 4-H Parents in All Rounds of the Delphi Study Regarding Challenges Facing the Oklahoma 4-H Program in the Next Five Years

Challenges Facing the Oklahoma 4-H Program in the Next Five Years
Increased Volunteer Responsibility
Volunteer Recruitment
Marketing and Promotion
Lack of Adult Engagement in Youth's 4-H Involvement
Member Retention
Time Commitment of Youth
Competition with Other Activities
Lack of 4-H/School Partnerships
Budget Challenges

Findings Related to Objective Four

Objective four compared the perceptions of Extension educators and 4-H volunteers, and 4-H parents regarding the challenges facing the Oklahoma 4-H program in the next five years.

After three rounds, Extension educator and volunteer panelists identified 11 challenges and the parent panelists identified nine challenges facing the Oklahoma 4-H program in the next five years (See Table 21).

Table 21

Comparison of the Challenge Statements Identified by the Extension Educator and Volunteer Panel and the Parent Panel that Reached Consensus After Three Rounds

Challenges Identified by Educators and Volunteers	% Agreement	Challenges Identified by Parents	% Agreement
Volunteer Recruitment	92.31	Volunteer Recruitment	100
Member Retention	92.31	Member Retention	100
Competition with Other Activities	92.31	Competition with Other Activities	100
Lack of Adult Engagement in Youth's 4-H Involvement	92.31	Lack of Adult Engagement in Youth's 4-H Involvement	92.86
Budget Challenges	92.31	Budget Challenges	85.72
Marketing and Promotion	92.31	Marketing and Promotion	78.57
Lack of 4-H/School Partnerships	84.61	Lack of 4-H/School Partnerships	84.62
Time Commitment of Youth	76.92	Time Commitment of Youth	78.57
Volunteer Retention	92.31	Increased Volunteer Responsibility	85.72
Increased Workload on Educators	92.31		
Enrollment Barriers	92.31		

Both panels reached consensus on eight identical statements reflecting challenges to Oklahoma 4-H: "Volunteer Recruitment;" "Marketing and Promotion;" "Lack of Adult Engagement in Youth's 4-H Involvement;" "Member Retention;" "Time Commitment of Youth;" "Competition with Other Activities;" "Lack of 4-H/School Partnerships;" and "Budget Challenges."

Three distinct challenge were identified by the Extension educator and volunteer panel: "Volunteer Retention;" "Increased Workload on Educators;" and "Enrollment Barriers." The

parent panel also identified “Increased Volunteer Responsibility” as a challenge different from the Extension educator and volunteer panel.

“Professional Development of Early-Career Educators” and “Lack of Professional Support and Leadership for Educators” were two similar challenges identified by both panels. However, these items did not reach consensus. Additionally, “Enrollment Barriers” reached consensus by the Extension educator and volunteer panel but did not reach consensus with the parent panel. Table 22 outlines items challenge statements that did not reach consensus after three Delphi rounds.

Table 22

Comparison of the Challenge Statements Identified by the Extension Educator and Volunteer Panel and the Parent Panel that Did Not Reach Consensus After Three Rounds

Challenges Identified by Educators and Volunteers that Did Not Reach Consensus	% Agreement	Challenges Identified by Parents that Did Not Reach Consensus	% Agreement
Professional Development of Early-Career Educators	61.54	Outdated Image of Program	69.23
Rural vs. Urban Opportunities for Youth	46.15	Lack of Professional Support and Leadership for Educators	58.84
		Enrollment Barriers	46.15
		Outdated Programming	42.85
		Family Financial Barriers	30.77
		Adhering to National 4-H Initiatives	21.43

Summary

Delphi Panel Summary: Extension Educators and Volunteers

The personal and professional characteristics of panel one show that the majority of Extension educators and volunteers were female (75%), Caucasian (81.25%), and were between 45 and 54 years of age (62.50%). Regarding their residency, 43.75% of the panelists reported they lived on a farm while the majority (56.25%) lived in rural communities, towns, suburban communities, and cities. In terms of 4-H involvement, 56.25% said they were 4-H alumni. All

four 4-H districts equally were represented among the panel. Nine panelists (56.25%) indicated they were Extension educators with varying years served in their professional roles. Seven panelists (43.75%) reported they were 4-H volunteers. 71.43% of the volunteers reported serving between six and 10 years as a 4-H volunteer.

Twenty-three panelists who expressed their willingness to participate in the Delphi study were asked to answer the open-ended question: “What challenges will the Oklahoma 4-H program face in the next five years?” Twenty panelists participated, but four panelists did not respond to the open-ended question. Forty-one statements were analyzed and developed into 13 challenge statements.

The 13 challenge statements were sent to 16 panelists in the second round to assess their level of agreement with each statement identified in the first round. Comment boxes were also paired with each challenge statement, allowing further discussion. Thirteen panelists participated in round two. Using a panelist-check process, the panel was able to view anonymous comments and the researcher’s thematic analysis to assist in understanding each challenge statement. Nine challenge statements reached consensus among at least 75% of the panel. More than 51% but less than 75% of the panel agreed on three challenge statements. These three statements were sent to panelists in the third round. Less than 51% of the panel agreed on one statement, and as a result, it was removed from the study.

In the third round, panelists ranked their level of agreement with the remaining three challenge statements. Anonymous comments from the second round were included with the third questionnaire. Thirteen panelists participated in the third round. Panelists met consensus on two additional challenge statements. The remaining statement that did not meet consensus was removed from further consideration. Eleven items reflecting challenges facing the Oklahoma 4-H program were identified after three rounds of the Delphi study.

Delphi Panel Summary: Parents

The majority of the 4-H parents who served on the second Delphi panel were female (88.24%), Caucasian (93.75%), and between 45 and 54 years of age (64.71%). In reference to the panelists' residential statuses, 11 panelists (64.71%) indicated they lived in rural communities. Panelists also provided information regarding their 4-H involvement. Ten panelists (58.82%) reported they were 4-H alumni and 52.94% reported living in the Southwest District. The majority of the panel (47.05%) reported having two children and 52.94% responded that two children in their families participated in 4-H. Six panelists (35.29%) indicated they have been 4-H parents between six and eight years while six panelists (35.29%) said they have been 4-H parents between eight and 10 years.

In the first round, 21 panelists were sent the first questionnaire with the open-ended question: "What challenges will the Oklahoma 4-H program face in the next five years?" Seventeen panelists participated in the first round, resulting in 45 statements regarding the panel's perceived challenges facing the Oklahoma 4-H program. The 45 statements were analyzed and consolidated by the researcher into 15 challenge statements.

In the second round, 17 panelists were sent a questionnaire asking them to rank their level of agreement with the 15 challenge statements identified in round one. Of the 17 panelists, 14 participated in the second round. Anonymous statements provided in the first round along with the researcher's thematic analysis were included with the questionnaire. These documents were used as tools to assist the panel in understanding the challenge statements and thoughts from the other panelists. At least 75% of the panel met consensus on eight of the 15 challenge statements. More than 51% but less than 75% of the panel agreed on five challenge statements, which were sent to the panel in the third round. Two challenge statements received less than 51% of agreement among the panel and was removed from the study.

In the third round, panelists ranked their level of agreement with the remaining five challenge statements. Panelists also were given the opportunity to view anonymous comments from panelists in the second round to promote further thought and clarification on the statements. Thirteen out of the 14 panelists who participated in the second round completed the third questionnaire. Panelists met consensus on one additional challenge statement. The other four statements did not meet consensus and were removed from further investigation. Conclusively, nine items reflecting challenges facing the Oklahoma 4-H program were identified after three rounds of the Delphi study.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter describes the conclusions and implications from the study and recommendations for future research and practices.

Conclusions & Implications Related to Objective One

Objective one sought to identify the personal and professional characteristics of the jury of experts who served on the two panels: Extension educators and volunteers (Panel 1) and 4-H parents (Panel 2).

Panel one was comprised of nine Extension educators and seven 4-H volunteers. Regarding the number of years served as an Extension educator, the educator panelists varied greatly. The majority of volunteer panelists served as a 4-H volunteer between six and 10 years. Pertaining to the educator and volunteer panel, the typical panelist was female, Caucasian, between 45 and 54 years of age, and a 4-H alumna. A large percentage of the educator and volunteer panelists indicated they lived on a farm. Additionally, there was an equal representation of panelists in all four 4-H districts (Northwest, Southwest, Northeast, and Southeast). The typical panelist on the parent panel was female, Caucasian, between 45 and 54 years of age, a 4-H alumna, and lives in a rural community in the Southwest District. The typical panelist also had been a 4-H parent for at least six years. The majority of the panel reported having two children

and two children in their families participated in 4-H.

Conclusions and Implications Related to Objective Two

Objective two sought to determine the challenges facing the Oklahoma 4-H program in the next five years as perceived by selected Extension educators and volunteers.

Eleven challenge statements reached consensus by the Extension educators and volunteers who served on Delphi panel one:

1. Volunteer Recruitment
2. Volunteer Retention
3. Increased Workload on Educators
4. Marketing and Promotion
5. Budget Challenges
6. Enrollment Barriers
7. Member Retention
8. Time Commitment of Youth
9. Competition with Other Activities
10. Lack of 4-H/School Partnerships
11. Lack of Adult Engagement in Youth's 4-H Involvement

According to the Extension educator and volunteer panel, these are the primary challenges the Oklahoma 4-H program will need to overcome in order to grow as an organization. The results of the Extension educator and volunteer Delphi panel mirror findings revealed in previous studies regarding challenges experienced in 4-H programs.

The panel understands the importance of volunteers to the success and delivery of 4-H programs, as they indicated recruiting and retaining volunteers should be a priority for the

Oklahoma 4-H program. The importance of volunteer recruitment previously has been stated by Borden et al., 2014). Retaining volunteers can result from utilizing a volunteer's expertise and applying it within areas of 4-H (Culp, 2009). Findings from this study reveal educators and volunteers believe adult involvement in youth's 4-H career is crucial for a positive experience. This finding aligns with previous studies reporting the importance of parental involvement (Radhakrishna, Foley, Ingram, & Ewing, 2013; Wingenbach et al., 1999). However, with the busy lifestyles of today's families, it can be difficult to expect parents to fully commit to 4-H. Solidifying a volunteer base within the organization can help address the issue of 4-H youth who do not have parental support in their 4-H experiences, as positive volunteer relationships can impact youth's involvement in the organization. (Wingenbach et al., 1999). Understanding parents' and volunteers' needs and interests is important to engage them in the organization. Further, recruiting parents to take a more active role in the 4-H program by serving as volunteers potentially can fulfill a dual purpose of increasing the volunteer base and incorporating adult engagement in youth's 4-H experiences.

The panel was concerned about the workload placed on Extension educators. In result of the budgetary decline in OCES, many educators are experiencing the repercussions. With shifts taking place in the structure of OCES, Extension educators are tasked with more responsibilities in addition to their already considerable workloads. The budgetary climate paired with increased workloads may result in compromised 4-H programming (Safrit & Owen, 2010). Increased workloads with little relief have educators looking for better opportunities, said one panelist. This supports research conducted by Kutilek et al. (2002) and Harder et al. (2015) who determined heavy workloads and long work hours contribute to educator burn out. However, an interesting finding is that the panel initially viewed helping new educators become successful in their roles as important, but ultimately did not agree with the challenge statement "Professional Development of Early-Career Educators" despite the literature revealing that new educators need

professional and moral support and trainings to combat turnover (Harder et al, 2015; Safrit & Owen, 2010).

Member retention was noted by the panel as a challenge facing the Oklahoma 4-H program. 4-H members must be fully engaged in the program in order to experience the benefits of positive youth development. Encouraging youth to commit the time in 4-H to receive those benefits, such as gaining valuable life skills, can aid in retaining youth throughout their adolescence. Panelists indicated Oklahoma 4-H must offer a variety of life skill-building experiences to retain its members. This finding is similar to previous research stating youth participate in 4-H activities based on their desire to develop skills such as public speaking and leadership (Gill et al., 2010). Youth have a wide selection of activities in which to participate. “Even with competing and/or complementary activities, 4-H continues to offer unique opportunities that are appealing to a segment of the youth population” (Van Horn et al., 1999). Offering a range of activities that meet the needs of members will prevent youth venturing to other activities and organizations better suited to their interests and needs.

Panelists identified a need for more 4-H/school partnerships. Forming 4-H partnerships with public school systems can result in increased youth involvement, as 4-H activities, such as school enrichment, can pique students’ interest to participate in 4-H activities outside of school. This finding supports Van Horn et al. (1999), who reported school-based programming can generate more awareness of 4-H. Establishing a presence within schools can generate awareness of the Oklahoma 4-H program, resulting in increased membership.

Once youth decide to join 4-H, they need to enroll in the program. Similarly, all 4-H members must complete an enrollment process each year. However, panelists indicated the enrollment process is a challenge that needs to be addressed. Particularly, the panel was most concerned with the online enrollment system, 4HOnline, and its lack of simplicity. In the first round of this study, panelists expressed their concerns about the \$20 program fee, but did not

discuss the program fee as an enrollment barrier for 4-H members throughout the remaining rounds of this study.

Addressing the challenge of marketing and promotion is another priority, according to the panel. The literature reveals a need for 4-H programs to improve marketing efforts to promote an inclusive organization and help the public understand the depth of 4-H (Cano & Bankston, 1992; Ferarri et al., 2004; McKee et al., 2002). Increasing and improving marketing efforts can serve multiple purposes in Oklahoma 4-H such as recruiting members and volunteers and overcoming the agricultural stereotype associated with 4-H, which can attract more diverse audiences. Extension educators are the face of the 4-H within their counties. Therefore, educators should prioritize promoting their 4-H programs as a job responsibility. Marketing efforts should emphasize the variety of opportunities within Oklahoma 4-H, including project areas, awards and recognition, and state and national trips to attract youth from all backgrounds and settings.

Conclusions and Implications Related to Objective Three

Objective three sought to determine the challenges facing the Oklahoma 4-H program in the next five years as perceived by selected 4-H parents.

Nine challenge statements reached consensus by the 4-H parent panel:

1. Volunteer Recruitment
2. Member Retention
3. Competition with Other Activities
4. Lack of Adult Engagement in Youth's 4-H Involvement
5. Budget Challenges
6. Increased Volunteer Responsibility
7. Lack of 4-H/School Partnerships
8. Marketing and Promotion

9. Time Commitment of Youth

The parent panel identified these challenges as imperative for the Oklahoma 4-H program to address in the next five years. All but one challenge statement, “Increased Volunteer Responsibility,” were identical to the items identified by the Extension educator and volunteer panel.

The parent panel identified volunteer recruitment as a challenge. Panelists noted the difficulty finding volunteers within their communities. As stated above, parents of current members are a potential source of volunteers. 4-H parents who currently serve in volunteer roles can encourage other parents to take on more responsibility. Findings in this study reveal parents believe parental involvement in 4-H is an important aspect to a successful 4-H experience. The budgetary climate of Extension has required educators to rely more on volunteers to maintain the expected amount of 4-H programming in their counties. Increasing the responsibility of volunteers could result in more ownership of their roles, but also could result in volunteer burnout, panelists said.

The decline in funding for Extension is a concern for parents, and one panelist recognized that educators experience the most hardships from budget cuts and potentially could seek employment elsewhere (Kutilek et al., 2002; Harder et al., 2015) Another concern regarding the budgetary state is reduced funding in county 4-H programs results in less funds given to volunteer club leaders.

Member retention will persist as a challenge to the Oklahoma 4-H program if youth are not offered life skill-building opportunities and activities that suit their interests. Previous literature shows youth were found to participate in 4-H based on the development of life skills in the project area of choice (Gill et al., 2010). Ensuring promotional efforts are made by all 4-H constituents on local, county, district, and state levels can aid in increasing membership while generating awareness of Oklahoma 4-H. Panelists identified the importance of showcasing the

multitude of 4-H programs through marketing efforts to overcome the misconception that 4-H solely is an agriculture program. This finding supports the need for improved marketing displayed in the literature (Cano & Bankston, 1992; Ferarri et al., 2004; McKee et al., 2002).

The panel was in agreement that 4-H should be incorporated into school systems across the state, as clubs with a presence in their schools are “way larger and stronger clubs than those that are not,” said one panelist. This supports Van Horn et al. (1999), who stated strong partnerships with schools result in reaching more youth. While educators actively should seek ways to incorporate 4-H into local schools, parents assist in lobbying for more school/4-H partnerships.

Conclusions and Implications Related to Objective Four

Objective four sought to compare the perceptions of Extension educators and 4-H volunteers and 4-H parents regarding the challenges facing Oklahoma 4-H in the next five years.

The Extension educator and volunteer panel identified 11 challenges and the parent panel identified nine challenges facing Oklahoma 4-H. Of those items, eight identical challenge statements were identified by both panels:

1. Volunteer Recruitment
2. Marketing and Promotion
3. Lack of Adult Engagement in Youth’s 4-H Involvement
4. Member Retention
5. Time Commitment of Youth
6. Competition with Other Activities
7. Lack of 4-H/School Partnerships
8. Budget Challenges

According to both expert panels, the Oklahoma 4-H program needs to focus on improving the program to address these primary challenges.

“Volunteer Retention” and “Increased Workload on Educators” were two challenge statements identified by the Extension educator and volunteer panel that did not surface among the parent panel. It can be concluded parents are more concerned with recruiting additional help to relieve the overstretched volunteers already in the program, as “Increased Volunteer Responsibility” was identified as a challenge by the parent panel. Additionally, unlike educators and volunteers, parents are less familiar with the workload that comes with the profession of an Extension educator. However, the parent panel initially identified “Lack of Professional Support and Leadership for Educators” as a challenge, indicating a perceived weakness in the professional expectations of educators. This particular challenge did not reach consensus among the parent panel. Equivalently, the Extension educator and volunteer panel initially identified “Professional Development of Early-Career Educators” as a challenge, but also did not reach consensus. It can be concluded that educators, volunteers, and parents perceive that OCES and state 4-H staff provide adequate training and support to educators. “Increased Volunteer Responsibility” also was a differing challenge defined by the parent panel. Parents interact with volunteers through club meetings and other 4-H activities and are able to perceive a direct need for more volunteer support. “Enrollment Barriers” was a challenge statement identified from the comments made by both panel members. However, only the Extension educator and volunteer panel reached consensus on the item. While the online enrollment system was the main concern for enrollment for both panels, the parent panel did not agree that barriers to enroll were a primary concern for Oklahoma 4-H.

Recommendations for Future Research

The Extension educator and volunteer panel identified 11 challenges facing the Oklahoma 4-H program. Additionally, the parent panel identified nine challenges. Future research

should be conducted to examine each challenge specifically, addressing the causes and solutions of the challenges. This study included Extension educators, volunteers, and parents involved in Oklahoma 4-H. Additional studies should be conducted to determine the perceptions of challenges facing the Oklahoma 4-H program by modifying the panels in an effort to obtain other viewpoints. Such modifications could include 4-H youth and alumni serving on the expert panels. Future research also should be conducted to determine challenges to certain areas in Oklahoma 4-H, similar to the Delphi study conducted by Mantooth and Fritz (2006) that examined challenges of service-learning in Tennessee 4-H. This study also can be implemented in other states to determine the overarching challenges facing 4-H programs.

Recommendations for Future Practice

Based on results from this study and review of the literature, the researcher has made the following recommendations. Findings of this study should be shared with Extension stakeholders and professionals to promote discussion to solve the challenges addressed.

Volunteer Recruitment: Volunteer recruitment is an important aspect of an Extension educator's job. Results of this study display panelists' perceptions of the difficulty of maintaining a volunteer base. State administration should improve volunteer recruitment and management trainings to help educators understand and execute their roles as volunteer managers. Parents of 4-H members are an excellent source of assistance to educators and current club leaders. Parents should actively be recruited to serve in volunteer roles. Educators should look for ways to harness the interests and expertise of volunteers and use them to benefit the growth of the 4-H program without excessively leaning on them for support, as panelists in this study indicated the increased responsibility could be a deterrent for prospective volunteers.

Marketing and Promotion: Results from this study show Extension educators, volunteers, and parents perceive the public to be unaware of what today's 4-H program has to offer.

Oklahoma 4-H professionals should strive to establish a strong 4-H presence in all 77 Oklahoma counties. Many individuals are unaware of 4-H or are under the assumption that 4-H only caters to youth involved in agriculture. Combating this challenge can be a daunting task, however, educators must incorporate marketing their 4-H programs into their day-to-day responsibilities. In order for educators to successfully market their programs, they need to be properly prepared and trained to promote 4-H with the public through various communication channels. As stated by panelists, life skill development through project work, leadership opportunities, and citizenship projects should remain on the forefront of 4-H promotional efforts. In addition, special focus should be centered on attracting urban and diverse audiences, as the literature and panelists in this study indicate this is a weakness of 4-H programs (Cano & Bankston, 1992; Radhakrishna et al., 2013). Those that benefit from 4-H programming and assist with its delivery should contribute to the promotion of 4-H while increasing awareness (McKee et al., 2002).

Lack of Adult Engagement in Youth's 4-H Involvement: Club leaders need to overcome the parent "drop off" aspect of their programs, said one panelist. Results from this study and previous research show the importance of making 4-H a family affair (Radhakrishna et al., 2013; Wingenbach et al., 1999). Club Leaders should seek opportunities to engage parents in 4-H events and activities with their children.

Member Retention: Findings from this study support the recommendation that 4-H programming should incorporate life skill development and provide an environment for personal growth to retain and attract members (Gill et al., 2010). One panelist stated the importance of offering quality and life skill-building experiences to youth. Educators and club leaders should continue to provide fun, educational, and hands-on learning experiences for youth that are age appropriate.

Time Commitment of Youth: Educators, volunteers, and parents should assist youth in developing strategies to balance and manage their time spent in 4-H and other activities to have successful experiences (Albright & Ferrari, 2010). It is important youth do not feel pressured to

solely commit to 4-H, but feel encouraged to pursue their interests by their parents and adult 4-H leaders. As stated by a panelist, decision-making is a life skill promoted by the 4-H program, and 4-H members should feel empowered to make decisions based on their interests and talents.

Competition with Other Activities: Educators and volunteers should prioritize trying to gain a better understanding of what youth want to learn in 4-H programs (Harrington et al., 2011). Moreover, if educators and volunteers learn more about youth's interests, they will be able to provide opportunities better suited for youth to develop those interests. One panelist commented on the importance of offering worthwhile opportunities. Offering flexible opportunities, especially to older youth, can help alleviate the pressure to make decisions and give youth the freedom to participate in 4-H and other activities (Albright & Ferrari, 2010).

Lack of 4-H/School Partnerships: Schools are a useful environment to market 4-H. Educators should make strong connections with school administrators in their communities to expand Oklahoma 4-H's impact. School-based 4-H programming is effective in reaching a wider audience of youth (Van Horn et al., 1999) and enrollment should be encouraged in elementary schools, suggested one panelist. By forming stronger partnerships with schools, educators can encourage 4-H enrollment and introduce youth to 4-H through school enrichment activities.

Budget Challenges: Budgetary shortfalls can have serious repercussions to the Oklahoma 4-H program if not addressed. The value of 4-H programs should be documented in times of budget shortfalls (Radhakrishna & Sinasky, 2005). Many state legislators are unfamiliar with the organization into which 4-H has evolved. Oklahoma 4-H should prioritize demonstrating the benefits and impacts of its diverse programs to state policy leaders and decision makers to increase funds invested in Extension. Sharing impact reports and personal success stories from 4-H members and alumni also can be beneficial to articulate the influence 4-H makes in youth's lives.

Kurt Lewin's process model for organizational change demonstrates the process in which an organization proceeds through the change process. An important aspect of Lewin's model is

including others within the organization in the change process (Coghlan & Brannick, 2003). This study proposes Oklahoma 4-H is in the “Unfreezing” phase of Lewin’s model. In the “Unfreezing” phase, an organization identifies a need for change. This study included constituents of Oklahoma 4-H to assist in identifying the challenges the organization needs to overcome in order to continue through the change process. The findings from this study reveal eight common challenges identified by the two expert panels. Findings should be shared with 4-H professionals and stakeholders to promote discussion to address these challenges and identify potential solutions to improve the Oklahoma 4-H program.

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APPENDICES

APPENDIX A

INSTITIUAL REVIEW BOARD
APPROVAL FORM – ROUND ONE

Oklahoma State University Institutional Review Board

Date: Tuesday, June 13, 2017
IRB Application No AG1726
Proposal Title: Challenges Facing the Oklahoma 4-H Program in the Next Five Years: A Delphi Study

Reviewed and Processed as: Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 6/12/2020

Principal Investigator(s): Kristin Knight, Jeff Sallee
205 4H Youth Development
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

- 1Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Scott Hall (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,
Hugh Crethar, Chair
Institutional Review Board

APPENDIX B

INSTITUTIONAL REVIEW BOARD
APPROVAL FORM – ROUND TWO

Oklahoma State University Institutional Review Board

Date: Thursday, August 10, 2017 **Protocol Expires: 6/12/2020**
IRB Application No: AG1726
Proposal Title: Challenges Facing the Oklahoma 4-H Program in the Next Five Years:
A Delphi Study

Reviewed and Exempt
Processed as: **Modification**

Status Recommended by Reviewer(s) **Approved**
Principal
Investigator(s):

Kristin Knight Jeff Sallee
Stillwater, OK 74078 205 4H Youth Development
 Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

- The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

add round two for both panels

Signature :



Hugh Crethar, Chair, Institutional Review Board

Thursday, August 10, 2017
Date

APPENDIX C

INSTITUTIONAL REVIEW BOARD
APPROVAL FORM – ROUND THREE

Oklahoma State University Institutional Review Board

Date: Friday, September 8, 2017 Protocol Expires: 6/12/2020
IRB Application No: AG1726
Proposal Title: Challenges Facing the Oklahoma 4-H Program in the Next Five Years: A Delphi Study

Reviewed and Exempt
Processed as: Modification

Status Recommended by Reviewer(s) Approved

Principal Investigator(s):

Kristin Knight Jeff Sallee
Stillwater, OK 74078 205 4H Youth Development
Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Mod to sent a third questionnaire to panelists and to send two reminder emails

Signature :

[Handwritten Signature]
Hugh Crethar, Chair, Institutional Review Board

Friday, September 8, 2017
Date

APPENDIX D

EMAIL SCRIPTS – ROUND ONE

First email to be sent to prospective volunteers and educators to serve on panel 1:

Dear [Insert Name],

I am writing to request your participation to serve on a panel of experts in my upcoming research study.

My name is Kristin Knight and I am the marketing coordinator in the Oklahoma 4-H office and a graduate student at Oklahoma State University. I am conducting a Delphi research study to determine 4-H volunteers' and Extension educators' perceived challenges facing Oklahoma 4-H in the next five years. You were selected for this study because of your strong knowledge about and/or experience with the 4-H program.

Participation in this study includes completing three online questionnaires, each taking approximately 10 minutes to complete. Questionnaires will be administered throughout the duration of six to eight weeks. Please see the attached participant information sheet for more information.

This study aims to identify perceived challenges in efforts to maintain the success of the Oklahoma 4-H program in years to come. Your valued input in this study will provide a great benefit to the 4-H program as we seek ways to improve our programming and meet the needs of our clientele. Please respond to this email and indicate your willingness to participate in this study. If you wish to participate, you will be sent an additional email with a link to the first questionnaire.

Thank you for your consideration,

Kristin Knight



First email to be sent to prospective 4-H parents to serve on panel 2:

Dear 4-H Parent,

I am writing to request your participation to serve on a panel of experts in my upcoming research study.

My name is Kristin Knight and I am the marketing coordinator in the Oklahoma 4-H office and a graduate student at Oklahoma State University. I am conducting a Delphi research study to determine 4-H parents' perceived challenges facing Oklahoma 4-H within the next five years. You were selected for this study because of your strong knowledge about and/or experience with the 4-H program through involved child(ren).

Participation in this study includes completing three online questionnaires, each taking approximately 10 minutes to complete. Questionnaires will be administered throughout the duration of six to eight weeks. Please see the attached participant information sheet for more information.

This study aims to identify perceived challenges in efforts to maintain the success of the Oklahoma 4-H program in years to come. Your valued input in this study will provide a great benefit to the 4-H program as we seek ways to improve our programming and meet the needs of our clientele. Please respond to this email and indicate your willingness to participate in this study. If you wish to participate, you will be sent an additional email with a link to the first questionnaire.

Thank you for your consideration,

Kristin Knight



Second email to be sent to volunteers and educators serving on panel 1:

Hello,

Thank you for agreeing to participate in my study regarding challenges facing the Oklahoma 4-H program. Your perceptions will provide useful insight as we seek ways to improve 4-H's efforts as a leading youth development organization. We greatly appreciate your input to improve the 4-H program and make the best better.

This questionnaire will take approximately 10 minutes to complete. I ask you please complete this questionnaire soon upon receiving this email, as it is only available for a short time.

Click the link below to be taken to the online questionnaire.

link goes here

Please let me know if you cannot access the questionnaire or have any questions about this study. Your participation in this study is completely voluntary, and you may withdraw your participation at any time.

Thank you,

Kristin Knight



Second email to be sent to 4-H parents serving on panel 2:

Hello,

Thank you for agreeing to participate in my study regarding challenges facing the Oklahoma 4-H program. Your perceptions will provide useful insight as we seek ways to improve 4-H's efforts as a leading youth development organization. We greatly appreciate your input to improve the 4-H program and make the best better.

This questionnaire will take approximately 10 minutes to complete. I ask you please complete this questionnaire soon upon receiving this email, as it is only available for a short time.

Click the link below to be taken to the online questionnaire.

link goes here

Please let me know if you cannot access the questionnaire or have any questions about this study. Your participation in this study is completely voluntary, and you may withdraw your participation at any time.

Thank you,

Kristin Knight



APPENDIX E

PARTICIPANT INFORMATION SHEET

Participant Information

Title: Challenges Facing the Oklahoma 4-H Program in the Next Five Years: A Delphi Study

Investigator: Kristin Knight, Marketing Coordinator, Oklahoma 4-H Youth Development

Purpose: The purpose of this study is to determine Oklahoma 4-H Extension educators', volunteers', and parents' perceptions of challenges facing the Oklahoma 4-H program in the next five years.

Procedures: This study will include three short questionnaires that will be administered over the course of six to eight weeks. Participants will be asked to complete three questionnaires. The first questionnaire will ask for demographic information and your affiliation with the Oklahoma Cooperative Extension Service and Oklahoma 4-H. Additionally, you will be asked about any perceived challenges you believe Oklahoma 4-H will need to overcome within the next five years. The second and third questionnaires will include Likert-type scale response questions based on answers provided in the first questionnaire.

Risks and Benefits: There are no known risks to participate in this study. While there are no direct benefits associated with participation, the results of this study will contribute to existing knowledge exploring the challenges of 4-H. By conducting this research, the Oklahoma 4-H program can identify perceived challenges to ensure the continued success of the program.

Confidentiality: Information will be stored securely on a password-protected computer in the Oklahoma 4-H Youth Development office. Only the researcher and individuals overseeing the research will have access to collected information. The records of this study will be kept private. Any written results will discuss group findings and will not include information that will identify you. Information collected will remain in strict confidentiality for up to two years until data is destroyed.

Voluntary Participation: Your participation in this study is voluntary, and you are free to skip any questions, opt-out, or stop any time without explanation throughout the duration of this study. There will be no penalty for refusal to participate in this study.

Contacts: You may contact me or any of the researchers to discuss your participation in this study or request more information regarding your rights as a research volunteer. Kristin Knight, 205 4-H Youth Development Bldg., Stillwater, OK, 74078, 405-744-8886; Jeff Sallee, 205 4-H Youth Development Bldg., Stillwater, OK, 74078, 405-744-8885; Dawnett Watkins, IRB Manager, 223 Scott Hall, Stillwater, OK, 74078, 405-744-3377.



APPENDIX F

ROUND ONE INSTRUMENTS

Round One Instrument – Panel 1: Educators and Volunteers

Gender:

- Male
- Female

Ethnicity/Race

- Caucasian
- Hispanic
- African American
- American Indian or Alaskan Native
- Asian
- Other

Age Range:

- 22-34
- 35-44
- 45-54
- 55-64
- 65 and older

Where do you reside?

- Farm
- Rural Community
- Town
- Suburban Community
- City

Are you a 4-H alumnus?

- Yes
- No

Which role best defines yourself?

- Extension Educator
- 4-H Volunteer

In which 4-H district do you live?

- Northwest
- Southwest
- Northeast
- Southeast

How many years have you served as an Extension educator?

- 0-5
- 6-10
- 11-15
- 16-20
- 21-25
- 26+
- N/A

How many years have you served as a 4-H volunteer?

- 0-5
- 6-10
- 11-15
- 16-20
- 21-25
- 26+
- N/A

What challenges will the Oklahoma 4-H program face in the next five years? (Please elaborate on your responses).

Round One Instrument – Panel 2: Parents

Gender:

- Male
- Female

Ethnicity/Race

- Caucasian
- Hispanic
- African American
- American Indian or Alaskan Native
- Asian
- Other

Age Range:

- 22-34
- 35-44
- 45-54
- 55-64
- 65 and older

Where do you reside?

- Farm
- Rural Community
- Towns
- Suburban Community
- Cities

Are you a 4-H alumnus?

- Yes
- No

In which 4-H district do you live?

- Northwest
- Southwest
- Northeast
- Southeast

How many children do you have?

How many of your children participated in 4-H?

How many years have/were you involved in 4-H as a parent?

- 0-2
- 3-5
- 6-8
- 8-10
- More than 11

What challenges will the Oklahoma 4-H program face in the next five years? (Please elaborate on your responses).

APPENDIX G

EMAIL REMINDER – ROUND ONE

Email follow up if prospective participants do not respond to first email:

Hello,

I recently sent you an email about participating in my research study focused on identifying the perceived challenges facing the Oklahoma 4-H program. I am seeking your decision on participation in my study. Please confirm your willingness to participate.

Thank you,

Kristin Knight



Email follow up if participants agree to participate, but have yet to complete instrument:

Hello,

Thank you for your participation in my research study. I noticed you have not filled out the questionnaire that was sent to you last week. Please consider responding to this important questionnaire as we look for ways to improve the 4-H program.

Thank you,

Kristin Knight



APPENDIX H

EMAIL SCRIPTS – ROUND TWO

Email to be sent to parents who completed the first questionnaire:

Dear [Insert Name],

Thank you for your participation in the first round of my research study addressing the perceived challenges facing the Oklahoma 4-H program in the next five years. Using answers provided in the first questionnaire, round two of this study has been created.

Completion of round two involves taking a short questionnaire where you will rank your level of agreement/disagreement with themes gathered from round one. With your valued input, we can further determine issues facing Oklahoma 4-H and strengthen our organization.

To access the questionnaire, please click here:

[link goes here]

Participation in this study is voluntary, and you may withdraw your participation at any time.

Thank you,

Kristin Knight



Email to be sent to volunteers and educators who completed the first questionnaire:

Dear [Insert Name],

Thank you for your participation in the first round of my research study addressing the perceived challenges facing the Oklahoma 4-H program in the next five years. Using answers provided in the first questionnaire, round two of this study has been created.

Completion of round two involves taking a short questionnaire where you will rank your level of agreement/disagreement with themes gathered from round one. With your valued input, we can further determine issues facing Oklahoma 4-H and strengthen our organization.

To access the questionnaire, please click here:

[link goes here]

Participation in this study is voluntary, and you may withdraw your participation at any time.

Thank you,

Kristin Knight



APPENDIX I

ROUND TWO INSTRUMENTS



Round 2

Challenges Facing the Oklahoma 4-H Program in the Next Five Years: A Delphi Study

Thank you for your participation in the first round of this study. In the first questionnaire, participants were asked to answer the open-ended question: "What challenges will the Oklahoma 4-H program face in the next five years?" The answers provided were compiled into themes representing challenges facing Oklahoma 4-H. You will be asked to rank your level of agreement/disagreement with each item on a summated scale. A comment box is included after each theme, if you believe the theme needs more clarity, does not make sense, or spurs you to think of something else that should be considered a challenge to the Oklahoma 4-H program, please share your corrections, suggestions, or comments with the research team.

Using thematic analysis, themes were developed through a series of identifying concepts, categories, and definitions. Example:

Concept: Enrollment Categories: Complicated Process, Enrollment Fee Definition: Simplified enrollment leads to increased membership. Theme: Enrollment Barriers

Anonymous responses gathered from the first round and the thematic analysis can be found in the attachments below. You may utilize these documents to help understand how the researcher came to the themes listed in this questionnaire. This panelist-check process will ensure the researcher is addressing items that represent the first round's responses. We ask that you please do not share the responses with others outside this panel.

Thank you for your support of the Oklahoma 4-H program. Your expertise in this study will serve as a useful tool as we seek ways to make the best better.

[Panel 1 Responses](#)

[Panel 1 Analysis](#)

Challenges facing the Oklahoma 4-H program in the next five years include:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Volunteer Recruitment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Volunteer Retention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Professional Development of Early-Career Educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Increased Workload on Educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Marketing and Promotion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Budget Challenges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Enrollment Barriers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Rural vs. Urban Opportunities for Youth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Member Retention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Time Commitment of Youth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Competition with Other Activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Lack of 4-H/School Partnerships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Lack of Adult Engagement in Youth's 4-H Involvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

Please include any additional comments:



Round 2

Challenges Facing the Oklahoma 4-H Program in the Next Five Years: A Delphi Study

Thank you for your participation in the first round of this study. In the first questionnaire, participants were asked to answer the open-ended question: "What challenges will the Oklahoma 4-H program face in the next five years?" The answers provided were compiled into themes representing challenges facing Oklahoma 4-H. You will be asked to rank your level of agreement/disagreement with each item on a summated scale. A comment box is included after each theme, if you believe the theme needs more clarity, does not make sense, or spurs you to think of something else that should be considered a challenge to the Oklahoma 4-H program, please share your corrections, suggestions, or comments with the research team.

Using thematic analysis, themes were developed through a series of identifying concepts, categories, and definitions. Example:

1. Concept: Enrollment
2. Categories: Complicated Process, Enrollment Fee
3. Definition: Simplified enrollment leads to increased membership.
4. Theme: Enrollment Barriers

Anonymous responses gathered from the first round and the thematic analysis can be found in the attachments below. You may utilize these documents to help understand how the researcher came to the themes listed in this questionnaire. This panelist-check process will ensure the researcher is addressing items that represent the first round's responses. **We ask that you please do not share the responses with others outside this panel.**

Thank you for your support of the Oklahoma 4-H program. Your expertise in this study will serve as a useful tool as we seek ways to make the best better.

[Panel 2 Responses](#)

[Panel 2 Analysis](#)

Challenges facing the Oklahoma 4-H program in the next five years include:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Increased Volunteer Responsibilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Volunteer Recruitment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Lack of Professional Support and Leadership for Educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Marketing and Promotion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Outdated Image of Program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Outdated Programming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Adhering to National 4-H Initiatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Lack of Adult Engagement in Youth's 4-H Involvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Family Financial Barriers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Member Retention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Enrollment Barriers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Time Commitment of Youth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree
Competition with Other Activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Lack of 4-H/School Partnerships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Budget Challenges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

Please include any additional comments:



APPENDIX J

EMAIL REMINDER – ROUND TWO

Email follow up if participants have not completed survey:

Hello,

I recently sent you an email about participating in round 2 of my research study focused on identifying the perceived challenges facing the Oklahoma 4-H program. I am seeking your input as we look for ways to improve the 4-H program. Please consider taking the following five-minute questionnaire. I ask that you please take this questionnaire soon, as it is only available for a limited time.

To access the questionnaire, please click here:

[insert link]

Thank you,

Kristin Knight



APPENDIX K

EMAIL SCRIPTS – ROUND THREE

Email to be sent to participants who completed the second questionnaire:

Dear [Insert Name],

Thank you for your participation in the first two rounds of my research study addressing the perceived challenges facing the Oklahoma 4-H program in the next five years. I sincerely appreciate your willingness to serve on the panel of experts and time to provide input. As we continue to seek ways to grow and improve the 4-H program, it is imperative to seek input from those who make Oklahoma 4-H one of the nation's leading youth development organizations. Educators, volunteers, and parents all play a crucial role in our organization's success, and your inclusion in this study will serve as a tremendous asset as we improve our efforts.

The final questionnaire of my research study has been created. In this short questionnaire, you will be asked to rank your level of agreement/disagreement with remaining themes from round 2 that did not reach consensus among the panel.

To access the questionnaire, please click here:

[link goes here]

Participation in this study is voluntary, and you may withdraw your participation at any time.

Thank you,

Kristin Knight



APPENDIX L

ROUND THREE INSTRUMENTS



Round 3

Challenges Facing the Oklahoma 4-H Program in the Next Five Years: A Delphi Study

Thank you for your continued participation in the first and second rounds of this study. As a member of this panel of experts, your input has proven invaluable. In the first questionnaire, participants were asked to answer the open-ended question: "What challenges will the Oklahoma 4-H program face in the next five years?" The answers provided were compiled into themes representing challenges facing Oklahoma 4-H. In the second round, participants were asked to rank their levels of agreement/disagreement with each item on a summated scale. Items that reached consensus among the panel (75%+ agreement) have been accepted as perceived challenges to the 4-H program. Items that received less than 51% agreement did not meet the definition of consensus among the panel, but are still noted as important challenges to the 4-H program.

In the third and final round, you will be asked to rank your level of agreement/disagreement with the remaining items that received between 51%-74% agreement among the panel. This round provides each participant an opportunity to clarify their thoughts related to each identified challenge that has not reached consensus. Anonymous comments from round two and the thematic analysis from round one are attached below. You may utilize these documents to assist you as you complete this final questionnaire. We ask that you do not share the comments with others outside this research panel.

[Panel 1 Comments](#)

[Panel 1 Analysis](#)

Challenges facing the Oklahoma 4-H program in the next five years include:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Volunteer Retention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Professional Development of Early-Career Educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

Strongly disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Strongly agree

Increased Workload on Educators



Comments:

Please include any additional comments:



OKLAHOMA STATE UNIVERSITY



Round 3

Challenges Facing the Oklahoma 4-H Program in the Next Five Years: A Delphi Study

Thank you for your continued participation in the first and second rounds of this study. As a member of this panel of experts, your input has proven invaluable. In the first questionnaire, participants were asked to answer the open-ended question: "What challenges will the Oklahoma 4-H program face in the next five years?" The answers provided were compiled into themes representing challenges facing Oklahoma 4-H. In the second round, participants were asked to rank their levels of agreement/disagreement with each item on a summated scale. Items that reached consensus among the panel (75%+ agreement) have been accepted as perceived challenges to the 4-H program. Items that received less than 51% agreement did not meet the definition of consensus among the panel, but are still noted as important challenges to the 4-H program.

In the third and final round, you will be asked to rank your level of agreement/disagreement with the remaining items that received between 51%-74% agreement among the panel. This round provides each participant an opportunity to clarify their thoughts related to each identified challenge that has not reached consensus. Anonymous comments from round two and the thematic analysis from round one are attached below. You may utilize these documents to assist you as you complete this final questionnaire. **We ask that you do not share the comments with others outside this research panel.**

[Panel 2 Comments](#)

[Panel 2 Analysis](#)

Challenges Facing the Oklahoma 4-H program in the next five years include:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Lack of Professional Support and Leadership for Educators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Outdated Image of Program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Family Financial Barriers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Enrollment Barriers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Lack of 4-H/School Partnerships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

Please include any additional comments:



APPENDIX M

EMAIL REMINDER – ROUND THREE

Email follow up if participants have not completed final questionnaire:

Hello,

I recently sent you an email about participating in the final round of my research study focused on identifying the perceived challenges facing the Oklahoma 4-H program. Please consider taking the following two-minute questionnaire. I ask that you please take this questionnaire soon, as it is only available for a limited time.

To access the questionnaire, please click here:

[insert link]

Thank you,

Kristin Knight



VITA

Kristin Elizabeth Knight

Candidate for the Degree of

Master of Science

Thesis: CHALLENGES FACING THE OKLAHOMA 4-H PROGRAM IN THE NEXT FIVE YEARS: A DELPHI STUDY

Major Field: Agricultural Communications

Biographical:

Education:

Completed the requirements for the Master of Science in Agricultural Communications at Oklahoma State University, Stillwater, Oklahoma in December, 2017.

Completed the requirements for the Bachelor of Science in Agricultural Communications at Oklahoma State University, Stillwater, Oklahoma in 2014.

Experience:

Employed as Marketing Coordinator for the Oklahoma 4-H Youth Development Program from June 2014 to present.

Professional Memberships:

Association for Communication Excellence, 2017