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DEVELOPING AND VALIDATING A SCALE TO MEASURE YOUTH VOICE

By

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A THESIS

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DEVELOPING AND VALIDATING A SCALE TO MEASURE YOUTH VOICE

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University of Nebraska, 2018

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The purpose of this study is to develop and validate a scale to measure the level of engagement of youth in their community or organization using the construct of youth voice. Youth voice consists of three levels: being heard, collaborating with adults, and building leadership capacity. An initial list of 40 items were developed (13 being heard, 13 collaborating with adults, and 14 building leadership capacity). Youth development experts and youth leadership experts were invited to complete a survey to assess the content validity of the items developed for the youth voice scale. The data collected from 50 participants were subjected to the Kendall-Wallis H test and pairwise comparisons. Items that had significant results and appeared to measure the construct that they were designed to measure were then subjected to a factor analysis. The scale was reduced to 29 items (6 being heard, 11 collaborating with adults, and 12 building leadership capacity). The scale serves as a starting point to help youth leadership development practitioners assess the level of youth voice in their programming.

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CHAPTER I: INTRODUCTION

Youth in the United States are a massive and often untapped resource in their communities (Barnett & Brennan, 2006). According to the U.S. Census Bureau (2017) the estimated amount of 10-to 19-year-olds in the U.S. in 2016 was 41,748,232, or 12.9 percent of the total population. Youth need to be prepared for the large transfer of wealth ($75 trillion by 2060; Macke, Markley, & Binerer, 2011) and leadership (56% of all management occupation transferred within 20 years; U.S. Bureau of Labor Statistics, 2012). When rural Nebraskans were asked if youth were being prepared to be effective leaders in their community there were mixed opinions. Forty percent of respondents agreed, 32% disagreed, and 29% neither agreed nor disagreed (Vogt, Burkhart-Kriesel, Cantrell, Lubben, & McElravy, 2015). Rural Nebraskans were also asked how important it is to train young residents in the community for leadership roles for the future of the community. Of the 2,323 respondents, 61% said it was very important and 33% said it was somewhat important (Vogt, Burkhart-Kriesel, Cantrell, & Lubben, 2012).

However, youth are often underutilized contributors in their local communities, and a shift in perspective to view them as resources who can help solve community and societal problems may be warranted (Mortensen et al., 2014; Campbell et al., 2008). In a survey conducted with 1,501 high school youth, participants responded that they are concerned about the future leadership of our country (90% agreed), that they are more confident in the next generation of leadership than the current leaders (66% agreed), that today's leaders are more concerned about their own agenda (81% agreed), and are not focused on what is important to today's youth (76% agreed; National 4-H Council, 2016). Some students are frustrated because they are expected to be future leaders, but they are

not given many opportunities to be leaders (Mitra & Gross, 2009). Kress (2006) suggests leadership is best learned through experience. Des Marias, Yang, and Farzanehkia (2000) suggest granting youth consequential decision-making power and responsibility as an important element for leadership development. The National 4-H Council (2016) survey suggests there are several factors contributing to youth feeling prepared to lead, including: having role models, being highly motivated, having confidence, and having a strong network of adults to turn to. Additionally, the survey provides insight on reasons youth do not feel prepared to lead, including: lack of confidence, not having a plan, and having no previous experience leading. In order to develop youth into strong leaders, we should provide opportunities for them to serve in leadership roles. The U.S. Department of Health and Human Services, Office of Adolescent Health recognizes the importance of engaging youth with their Think, Act, Grow (TAG) initiative. According to their website, engaging youth in youth-adult partnerships can provide adolescents the opportunity to practice problem-solving skills, build self-esteem and leadership skills, and increase their influence and personal stake in the community (HHS, 2017).

Initial research has explored student engagement within schools (Mitra, 2006b; Mitra, 2008; Mitra, 2009). These studies focused on the theory of student voice, which Mitra (2006a) defines as youth having the opportunity to participate in school decisions that will shape their lives and the lives of their peers. This theory was successfully applied to a community-based youth organization (Mitra, 2006b), which shows it is possible for this theory to be applied within the community context as well as the school context. Several qualitative studies have provided a glimpse of what is being done to engage youth in their communities (Camino, 2000; Evans, 2007; Campbell, et al., 2008;

Zeldin, Petrokubi, & MacNeil, 2008). These studies primarily focused on the theory of youth-adult partnerships (Y-AP), which Jones and Perkins (2004) defined as relationships in which both youth and adults have the potential to contribute to decision-making processes to learn from one another and to promote change. While there are other youth engagement models that will be introduced in the literature review, this study focused on these two theories (student voice and Y-AP). Including youth in decision-making processes serves as a foundation for both theories. MacNeil and McClean (2006) reported that including youth in decision making helps both youth and adults view youth as current leaders instead of as future leaders.

Statement of the Problem

Youth Engagement is an important piece of youth leadership development. However, there is no scale to measure engagement from the youth's perspective. Current models and measures analyze youth engagement from the organization's or adult's perspective. Youth development practitioners could gain important information on the impact of programming efforts by developing a measure to better understand how youth perceive engagement in their community.

Research Objectives

The purpose of this study was to construct a scale to measure youth voice in communities, based on the theory of student voice (Mitra, 2006a). Youth voice is defined as youth having the opportunity to participate in community decisions that shape their lives and the lives of their peers and consists of the same three levels of student voice: being heard, collaborating with adults, and building capacity for leadership. This research seeks to develop a way to measure the degree in which high-school students are

experiencing engagement in their communities. The first objective of this study was to create a scale that measures the three levels of youth voice. The second objective was to test the content validity, or the degree to which the items accurately represent the theoretically predicted construct (Schriesheim, Powers, Scandura, Gardiner, & Lankau, 1993). This was done by asking a sample of youth development experts and youth leadership experts to indicate the extent to which each item represents each dimension of youth voice.

Rationale and Significance

Studies have shown youth engagement provides several benefits to youth, adults who work with them, and their communities (Larson, Walker, & Pearce, 2005; Zeldin, 2004; Iwasaki et al., 2014; Camino, 2000; Mitra, 2006b). A majority of youth felt adults can support leadership development in youth by furthering engagement (57%) and by creating more opportunities to lead (56%; National 4-H Council, 2016). Several researchers have theorized models for youth engagement that feature different levels of engagement or a continuum of engagement (Hart, 1992; Shier, 2001; Larson, et al., 2005), but these models either have no tool to measure youth engagement, or the measurement uses an adult perspective rather than a youth's perspective. To better understand youth community engagement, there is a need to capture all levels of youth engagement from their perspective. Communities can better assess how youth perceive their engagement, and how they can maximize youth community engagement efforts by understanding if youth feel like their opinions are being heard, if they are working with adults, or if they have the opportunity to express their leadership.

CHAPTER II: REVIEW OF THE LITERATURE

A review of related literature is provided below, figure 1 provides a visual of the literature included. The pyramid represents the theory of student voice, and the three levels: being heard, collaborating with adults, and building leadership capacity. The theories related and providing support to student voice link to different areas of the pyramid in the ways that they engage youth in decision making. These other theories, including youth engagement, youth-adult partnerships, and youth leadership, are reviewed first and followed by a review of student voice.

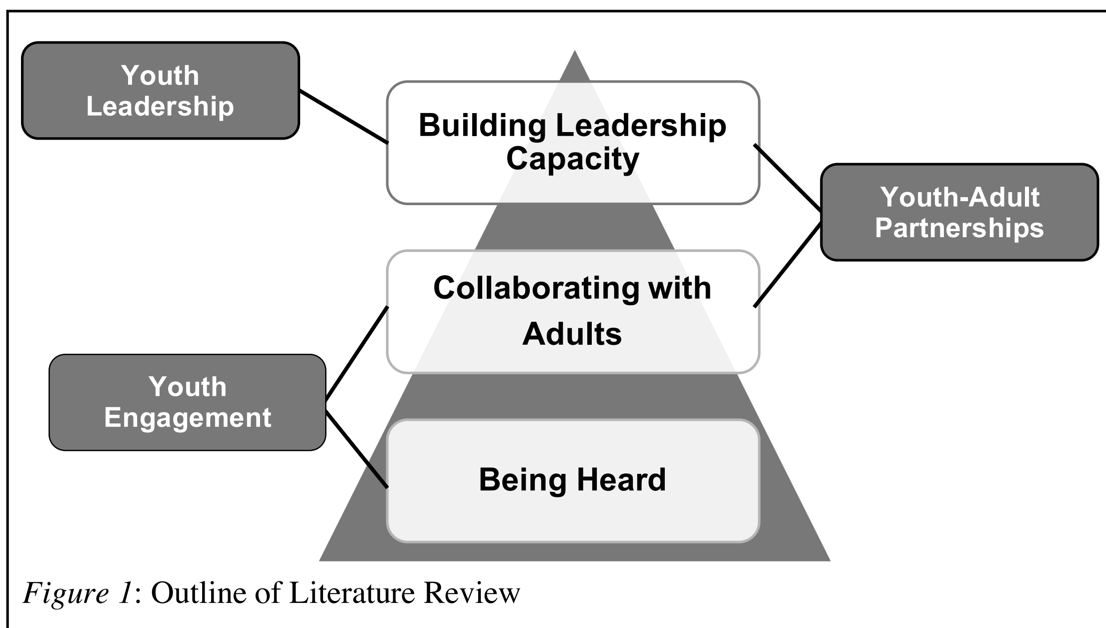

Figure 1: Outline of Literature Review

Youth Engagement Models

Youth engagement has had several conceptualizations by different researchers. This section will review different models of youth engagement that have been introduced by researchers. These models will be ordered chronologically.

Several models have been used to explore youth engagement in the past. Hart (1992) adapted the 'Eight rungs on the ladder of citizen participation' from Arnstein (1969) in order to apply it to children's participation, or the degree to which children

have a say in decisions that affect them (figure 2). The ladder of participation was first published in a Childhood City Newsletter in 1980 but did not gain popularity until it was published by UNICEF in 1992 (Hart, 2008). The ladder was designed to show the different degrees to which youth are allowed to initiate their own projects and make decisions (Hart, 2008). The first three rungs of the ladder are considered non-participation. These rungs (manipulation, decoration, and tokenism) do not give youth any say in matters that pertain to them. *Manipulation* comes in two forms. The first is when children do what adults tell them to do, without understanding the issues. The second is when children are asked for their opinion, and adults use some of their ideas, but the children are not told how the adults came up with the final decision. *Decoration* is when adults use youth to promote or support a cause without informing the youth; youth may not fully understand the cause. *Tokenism* is the final rung of non-participation, and at this level youth are asked for their opinions but have no choice in the way they express their opinions.

The next five rungs on the ladder are the degrees of participation, where adults place greater value on youth's opinions. Rung four is *assigned but informed*. At this level adults initiate the project, youth understand the project and why they were asked to be included, and adults respect the views of youth. *Consulted and informed* is when the project is designed by adults, but youth are consulted for their opinions, which are seriously considered by adults running the project. The next rung (*adult-initiated, shared decisions with children*) is the last level of adult-initiated projects and the first level where youth are involved at every step of planning and implementation. Rung seven is

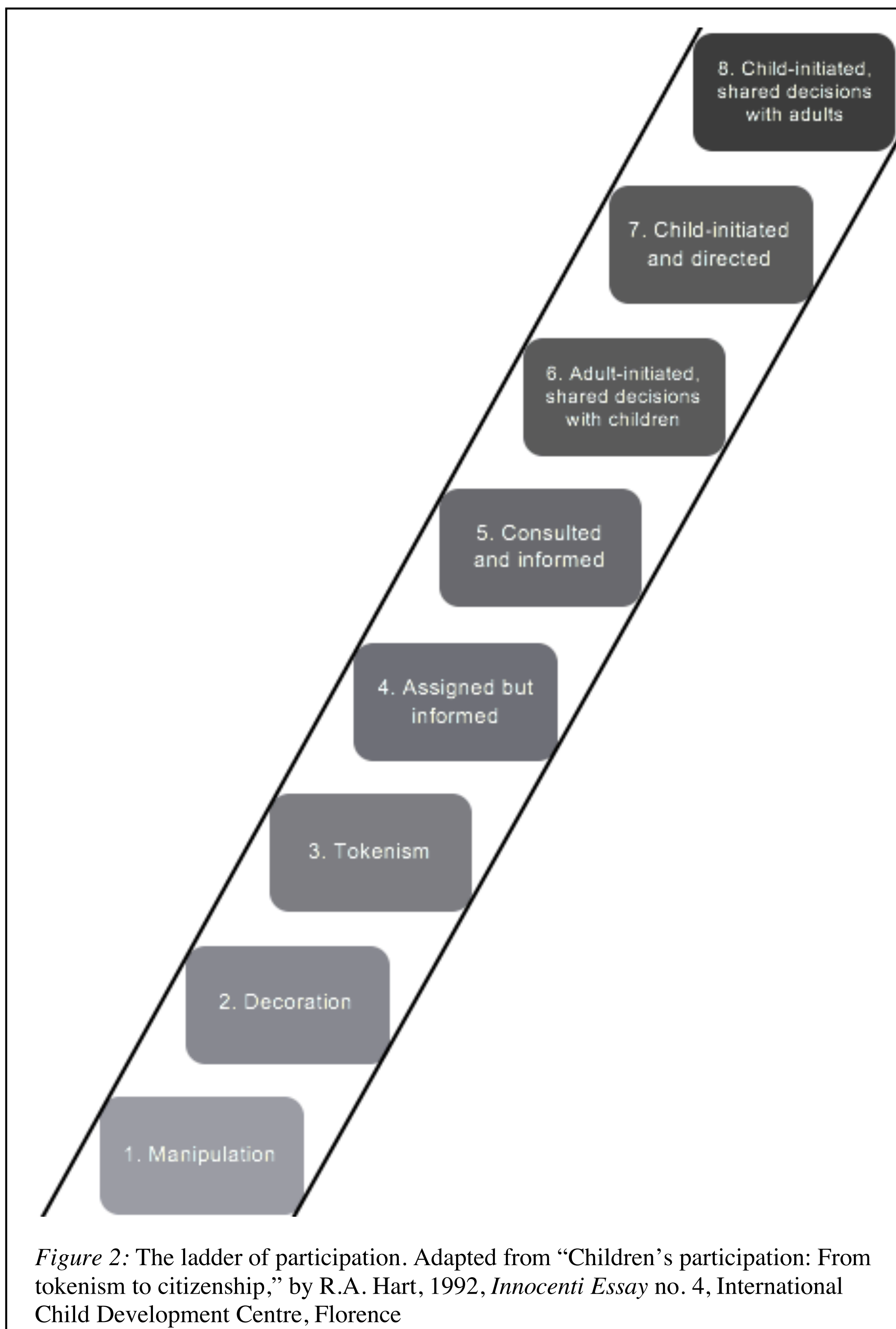

Figure 2: The ladder of participation. Adapted from "Children's participation: From tokenism to citizenship," by R.A. Hart, 1992, *Innocenti Essay* no. 4, International Child Development Centre, Florence

child-initiated and directed. At this level youth have the initial idea and make the decisions. Adults are available for support, but they do not take charge of the project. The last rung is *child-initiated, shared decisions with adults*. At this final level youth have the ideas, facilitate the project, and invite adults to partake in the decision-making process (Hart, 1992). Hart (2008) provided some reflections about how the ladder of participation had been used since it gained popularity in 1992. He stated he did not intend for people to use the ladder as a way to measure how they were working with children. He intended the model to stimulate conversations around the topic of youth participation and stated the most beneficial quality of the model was that it made practitioners and organizations rethink how they engaged youth. He intended the model only be a starting point for practitioners to reflect on their own work with children (Hart, 2008).

The Hart (1992) ladder of participation was the inspiration for another model of participation developed by Shier (2001). This model of youth participation has five levels and is designed to be analyzed from the practitioner or organizational perspective. For each level of participation, the three levels of commitment are: 1) opening, 2) opportunity, and 3) obligation. *Opening* refers to when the organization is ready to operate at a level but do not have the resources to do so. *Opportunity* is when the organization has the resources necessary to operate at a level. *Obligation* refers to when the organization has made it a policy to operate at a level. Table 1 provides the five levels and descriptions in this youth participation model. There are a few limitations with this model. First, the program is accessed from a practitioner or organizational standpoint rather than from the participants' perspectives. Second, the model does not have a level for when children make decisions independently from adults.

Table 1

Youth Participation Model (Shier, 2001)

Level	Description
1. Children are listened to	Children take it upon themselves to share their view, which is listened to by adults, there are no organized efforts to ask youth for their opinions
2. Children are supported in expressing their views	Adults take action to support and enable youth to share their views
3. Children's views are taken into account	Children's opinions are considered, along with other factors, when making decisions
4. Children are involved in decision-making processes	Children are now actively participating in the decision making, instead of just consulting
5. Children share power and responsibility for decision making	Adults explicitly commit to share their power and responsibility with the children in a supportive environment.

Larson et al., (2005) treated youth programs as a continuum for how decisions were made and where the authority rested in the program. One extreme was adults make every decision and provide the direction for the organization. The other extreme was that youth make every decision, and adults play little to no role in supervising or structuring activities. The researchers analyzed two approaches for engaging youth in organizations, youth-driven and adult-driven. They focused on programs that would exist toward the middle of the continuum, where both adults and youth had some input. The purpose of this study was to look at the development experiences youth have, what limitations exist with each approach, and what strategies adults use to bring out the developmental potential of each approach. Two youth-driven programs and two adult-driven programs

were included in the study. Data was collected through 279 youth interviews, 50 adult interviews, and 38 program observations. In the youth-driven programs, youth experienced a high level of ownership and empowerment and developed leadership and planning skills. They also learned how to work as a team and effectively communicate. One liability with this approach was that the youth sometimes got off track and needed adult guidance to get back on task. Youth from the adult-driven approach reported developing self-confidence, interpersonal skills, and a sense of responsibility. Adult leaders in these programs were able to create student-centered experiential learning activities that engaged the youth. A liability with this approach was that there is a threat of the adults' control undermining youths' ownership in the program. The two approaches analyzed in the study are not mutually exclusive for organizations. Youth development programs need to be flexible in the ways they engage youth because different scenarios require different forms of structure for decision making.

Iwasaki et al. (2014) approached youth engagement from a new perspective. This participatory action research study took a unique approach by including 16 youth leaders (ages 16-24) as part of the research team. Participants discussed the meaning of youth engagement and the aids and barriers to youth engagement. They came up with a framework for youth engagement from the nine themes discovered. The key components of the youth engagement framework created include basis, what, and how (see figure 3). *Basis* is the philosophy and principles that create the foundation for youth engagement. The themes for this component include empowerment, opportunity, learning, and community. *Empowerment* is about enabling youth to recognize their abilities by helping them develop confidence to make positive changes in their lives. *Opportunities* are

Basis	What	How
•Empowerment •Opportunity •Learning •Community	•Relationships •Stability •Achievements	•Communication •Activities

Figure 3: Framework for youth engagement. Adapted from "Youth-guided youth engagement: Participatory Action Research (PAR) with high-risk, marginalized youth," by Y. Iwasaki et al., 2014, *Child & Youth Services, 35*(4), 316-342.

planned or spontaneous occasions that help youth move toward a desired goal. *Learning* is providing youth with experiences in a variety of situations to foster the development of important skills. The last theme, *community*, is a group of people who create a supportive network.

What refers to the goals or outcomes of youth engagement and included three themes: relationships, stability, and achievement. *Relationships* are built through positive interactions in which two or more people develop a sense of connection. *Stability* is being able to rely on something due to a sense of consistency and strong foundation. *Achievements* is accomplishing a goal or overcoming a challenge.

The final component, *how*, refers to the pathway of getting from the *basis* component to the *what* component. *How* included two themes: communication and activities. *Communication* is a form of expressing yourself in a way that is understood by others. *Activities* are the meaningful ways youth spend their day, such as using their skills or bettering themselves in a constructive way.

This study by Iwasaki et al. (2014) provided an initial outlook on how youth see youth engagement. It provided a framework that looks at the outcomes of youth

engagement and how to achieve those outcomes within organizations. However, more research would need to be done to understand the relationship between the three components and the themes found within the components. This framework differs from other youth engagement models because it does not specify levels or a continuum that provides an indicator of youth engagement.

Youth engagement models have varied in their approach, but there are some limitations in the models that are available. A few studies rely on adult perspectives for analyzing youth engagement (Hart, 1992; Shier, 2001). Larson, et al. (2005) explained a continuum of engagement, along with the benefits and liabilities of two points on the continuum. However, they did not provide a clear explanation for how to interpret where an organization falls on the continuum. In order to understand youth engagement, it may be important to get youth perspectives because they are the experts of their own experiences. One study included youth as part of the research team and collecting qualitative data that provided a framework of youth engagement (Iwasaki et al., 2014). However, this framework differs from the trends of other engagement models, in that it does not incorporate different levels of engagement. Youth engagement is one theory that relates to youth participating in making decisions, but there are other theories that increase the role that youth play in those decisions. Specifically, youth-adult partnerships (Y-AP), a theoretical lens exploring how youth and adults work together to accomplish change.

Youth-Adult Partnerships

A common model for youth and adults collaborating together explored in the literature are youth-adult partnerships (Y-AP). Jones and Perkins (2004) define Y-APs as

relationships in which both youth and adults have the potential to contribute to decision-making processes to learn from one another, and to promote change. Camino (2000) analyzed 15 organization and community Y-APs and interviewed 43 adults and youth who were a part of a Y-AP. She reported a few common themes that build the construct of Y-AP, including principles and values, set of skills and competencies, and method to achieve action.

The Youth Leadership Institute in California reflected on their 12 years of experience and the benefits their participants experienced with Y-APs. They identified the process of providing opportunities for both youth and adults to become involved in their communities and the importance of bridging the gap between generations (Libby, Rosen, & Sedonaen, 2005). Youth are sometimes viewed as full of turmoil (Mitra & Gross, 2009) preventing adults from wanting to work with them. However, once a relationship is built between youth and adults, they achieve mutual insight from each other and gain more respect (Camino, 2000).

Y-APs can be a great resource for youth leadership development, but certain practices can make the partnership less effective. Camino (2005) provided reflections of those practices, namely: the assumptions made that youth should do everything, and adults believing they should get out of the way. Part of youth leadership development is providing youth with experiences and another part is observing others modeling the behavior to learn. When youth are left on their own to accomplish the goals of the partnership they may not have the knowledge or skills to finish. This can lead to frustrations from youth of not having enough guidance and frustrations from adults for not accomplishing their tasks (Camino, 2005). A way to overcome this difficulty is to

provide training to both youth and adults and to clearly define roles and responsibilities (Libby, Sedonaen, & Bliss, 2006). Another challenge with Youth-Adult partnerships is allocating the time and resources necessary to have a successful program. This is still a fairly innovative practice and gaining supporters and stakeholders can be difficult (Camino, 2000; Zeldin et al., 2008). A way to overcome this difficulty is to remind stakeholders of the purpose and expected outcome of the program, making sure that vision is correctly translating into practice, and building ownership within the stakeholders (Zeldin et al., 2008).

Mitra (2008) conducted a qualitative study examining how student voice was influenced by youth-adult partnerships. Through interviewing youth and adults and observing meetings from 13 different schools, she reported building meaningful roles for all members, developing shared language and norms, and developing joint enterprises can all strengthen student voice. Another study conducted by Seriodo, Borden, and Perkins (2011) explored whether youths' perceived quality of relationship with adults strengthens youth voice and if this increases the benefits youth perceive from the program. Based on survey results collected from 748 youth, these researchers suggest youth have a positive relationship with adults when they perceive they have more voice in the program (Seriodo et al., 2011).

Youth-adult partnerships are becoming a more common practice and provide more responsibility to the youth, helping them develop skills, and creating a positive relationship between youth and adults (Camino, 2000; Libby et al., 2006). Scholars have suggested that youth-adult partnerships contribute to youth leadership development (Des Marias et al., 2000), which will be discussed more in the next section.

Youth Leadership

There are several conceptualizations of youth leadership outlined by different leadership scholars. Des Marias et al. (2000) defined some common factors for youth leadership. These authors suggest that developmental experiences, for example service-learning, are useless without intentional leadership development. Des Marias et al. (2000) identified four elements that are important for developing youth leaders in service learning: 1) youth adult partnerships; 2) granting young people decision-making power and responsibility for consequences; 3) broad context for learning and service; and 4) recognition of young people's experience, knowledge, and skills.

Some of the earlier work on youth leadership included studies that evolved from work within 4-H, FFA, and career and technical education. Seevers, Dormody, and Clason (1995) developed a scale to measure Youth Leadership Life Skills Development (YLLSD). Their sample included seniors in high school who were involved with FFA or 4-H. The components of YLLSD include: communication skills, decision-making skills, skills in getting along with others, learning skills, management skills, skills in understanding yourself, and skills in working with groups.

Kress (2006) who was the director of youth development for National 4-H, defines youth leadership as, "The involvement of youth in responsible, challenging action that meets genuine needs, with opportunities for planning and decision making" (p. 51). Kress (2006) suggests the most important components of youth development include: full integration of skills and knowledge, relationships that balance challenge and support, and observing and modeling behaviors.

A meta-analysis of the literature that focuses on leadership for youth in career and technical education was conducted by Ricketts and Rudd (2002). They proposed a conceptual model for formal leadership development curriculum based on the literature in the meta-analysis. In this model, there were five dimensions: (a) leadership knowledge and information; (b) leadership attitude, will, and desire; (c) decision making, reasoning, and critical thinking; (d) oral and written communication skills; and (e) intra- and interpersonal relations. Within each dimension there were three levels: awareness, interaction, and integration (Ricketts and Rudd, 2002).

Wang and Wang (2009) also reviewed the literature and produced a definition and model of youth leadership development. They define youth leadership as, "the capacity of leading members to achieve common goals" (p. 488). The model of youth leadership they constructed was divided into two sections – individual and team – with seven dimensions. The dimensions under individual leadership are self-confidence, learning skills, and critical thinking. The dimensions under team leadership are a sense of responsibility, inspiration, interpersonal skills, and decision making (Wang & Wang, 2009).

Other researchers have focused on the entire developmental process for youth leadership development. Murphy and Johnson (2011) developed a framework for leader development across the lifespan. The model is broken into a couple of areas, the first area is early development factors. These factors include: early influences (e.g. genetics, temperament, and gender), parenting styles, and early learning experiences (e.g. sports, education, and practice). The second area is focused around dynamic development and has two factors: leader identity and self-regulation. These lead to the third area that includes the outcomes of engagement in leadership development and leader effectiveness.

The whole model incorporates contextual factors, including: developmental stages, societal expectations, and time in history. The authors note that leadership tasks changes with age and provide examples of leadership tasks for ages 2-22. The tasks suggested for high school students (ages 15-19) include: (1) organizing complex projects, (2) motivating team members, (3) Organizational skills, and (4) working with others to complete a work product.

Hastings, McElravy, Sunderman, and Bartak (2017) provided further conceptualization and a potential assessment that follows Murphy and Johnson (2011) inclusion of leadership identity in their framework. The purpose of their paper was to conceptualize positive youth leadership identity in preparation for building a scale to measure it. The authors defined positive youth leadership as, "dynamic relational influence process that promotes positive attitudes and/or behaviors in others and/or collective group action." Based on their previous research findings (McElravy & Hastings, 2014a, 2014b, 2016) and a review of the literature, the authors proposed four factors of positive youth leadership identity: motivation to lead, positive task affect in groups, social influence capital, and human relations capital. Table 2 provides the definition and components of the four factors.

Several studies have focused on youth leadership from a youth perspective. In a qualitative study, Mortensen et al. (2014) asked 130 youth to answer the questions "What does a leader look like?" and "What makes someone a leader?" (p. 453). The authors reported youth in this sample defined leadership as being "available to anyone in any context and involves creating change, collective action, modeling and mentoring, and strong character" (p. 447).

Table 2

Positive Youth Leadership Identity (Hastings et al., 2017)

Factor	Definition	Components
Motivation to lead	Willingness to engage in leadership positions and training and development	• Leadership self-efficacy • Desire to develop into an effective leader • Leadership role occupancy
Positive task affect in groups	Sense of positivity regarding accomplishing tasks with others	• Hopeful goal attainment • Optimistic outlook of group work • Collective orientation • Task orientation at a group level
Social influence capital	The confidence one has in influencing others using social astuteness	• Self-efficacy in social influence domain • Self-perception of interpersonal influential capacity • Emotional intelligence
Human resource capital	The confidence one has in developing authentic relationships using social skill	• Self-efficacy in relational domain • Self-perception of relationship building capacity • Empathy

The National 4-H Council (2016) conducted a national survey to better understand how today's youth feel about their readiness to lead currently, and in the future. Data was collected through interviews with 1,501 youth ages 13-19. Participants defined leadership as the "ability to take charge of a situation and lead others in the right directions," (p. 6). Participants were also asked to identify traits that are important for leaders. The top three traits identified were: responsible, hard-working, and being

confident (National 4-H Council, 2016). When asked what would help them grow as future leaders, youth identified: having more experience leading (54%), programs to build confidence (45%), and being encouraged to help lead regularly (45%). Participants were asked about their experiences in leadership roles, 59% had offered their opinion on an issue that was important to them, 45% had been asked by a leader to join a club or committee, 42% had volunteered for leadership roles, 38% had been asked by a leader to offer an opinion about a cause, 34% had been asked by peers to become a leader in an organization, and 22% had influenced a policy or position (National 4-H Council, 2016). Participants were asked if they had a leadership role in some capacity, 77% have had leadership roles (48% at school, 34% in social circles, 34% in groups or clubs, 27% in sports, 16% in the community, and 10% at work). The authors of the report suggest adults can support leadership among youth by furthering engagement and creating more opportunities for youth to lead (National 4-H Council, 2016).

Table 3 provides a summary of the components of youth leadership according to the scholars reviewed in this section. Several different components are theorized to be a part of youth leadership. Several of these components are related to components of student voice, such as decision making, working with others, youth-adult partnerships, and motivation to lead. An overview of student voice is provided in the next section.

Table 3

Summary of Youth Leadership Scholarship

Component of Youth Leadership	Citations
Observing behaviors of others and interpersonal skills	▪ Ricketts and Rudd (2002) ▪ Kress (2006) ▪ Wang and Wang (2009) ▪ Mortensen et al. (2014)
Decision making	▪ Des Marias et al. (2000) ▪ Seevers et al. (1995) ▪ Ricketts and Rudd (2002) ▪ Wang and Wang (2009)
Responsibility	▪ Des Marias et al. (2000) ▪ Wang and Wang (2009) ▪ National 4-H Council (2016)
Learning skills	▪ Des Marias et al. (2000) ▪ Seever et al. (1995) ▪ Ricketts and Rudd (2002) ▪ Wang and Wang (2009)
Critical thinking	▪ Wang and Wang (2009) ▪ Ricketts and Rudd (2002)
Confidence/self-efficacy	▪ Wang and Wang (2009) ▪ National 4-H Council (2016) ▪ Murphy and Johnson (2011)
Motivation to lead	▪ Murphy and Johnson (2011) ▪ Hastings et al. (2017)
Self-awareness	▪ Seevers et al. (1995)
Youth-Adult Partnerships	▪ Des Marias et al. (2000)
Inspiration	▪ Wang and Wang (2009)
Hard-working	▪ National 4-H Council (2016)
Communication skills	▪ Seever et al. (1995)
Skills in working with groups	▪ Seever et al. (1995)
Management skills	▪ Seever et al. (1995)

(Continued)

Table 3

Summary of Youth Leadership Scholarship

Component of Youth Leadership	Citations
Positive task affect in groups	▪ Hastings et al. (2017)
Social influence capital	▪ Hastings et al. (2017)
Human relations capital	▪ Hastings et al. (2017)

Student Voice

According to Mitra (2006a), student voice is defined as the ways in which youth can have the opportunity to participate in school decisions that shape their lives and the lives of their peers. Student voice initiatives are different from traditional student leadership roles in school (e.g. planning school dances; Mitra, 2006b). Outcomes of student voice include better instruction, better student-teacher relationships, and more empowered students (Mitra, 2008). Mitra (2006b, 2008, 2009) has done an in-depth qualitative analysis of the phenomenon of student voice in schools. These three research studies explored different components of student voice with a common set of data. This data was collected from 13 high schools in the San Francisco Bay area who had received funding to build student voice in their schools. Each school had a group of youths (group size ranged between 3-50 youth) who worked with one or two adults to develop and implement their proposed project. Data was collected through semi-structured telephone interviews, observations, and relevant documents (e.g. media coverage, information from websites).

Mitra (2006b) analyzed three case studies of schools utilizing different strategies of student voice. These strategies included youth sharing their opinions on problems,

collaborating with adults to address problems in schools, and youth taking the lead on seeking changes. In the first example of student voice, a high school wanted to learn why so many 9th and 10th grade students were failing classes. Teachers sought out the opinions of students by using a focus group. The teachers were surprised when the reasons they had identified did not align with what the students had identified. The teachers were able to use the information provided by students to create solutions. This level of student voice is called being heard. Adults seek student perspectives, interpret the meaning of the data, and then act based on that information. This allows students to voice their opinions on issues in their school and allows teachers and administrators to understand the students' perspectives. It is the most common form of student voice, but students have little ownership over issues that impact their school life. Although this may be an efficient way to ensure student voices are included in decisions, a limitation with this level is that students are not included in interpreting the data and adults may misinterpret what youth are trying to say.

The next case study of student voice takes place at a high school that had low graduation rates and high turnover rates among teachers (Mitra, 2006b). The school was awarded a grant to reform the school and decided to include youth in the process of the reform. Adults developed a process for students to share their views about issues in the school through focus groups. Youth helped analyze their perspectives and those of their peers, and collectively with adults in their school, decided upon what actions to take. This is an example of the second level of student voice, collaborating with adults. This level consists of students and adults working together to create change within the school. At

this level students share ownership with adults. Adults will typically initiate the change and have final say on group decisions.

The final case study does not take place in the school setting because the researcher was not able to find an example of this level of student voice in the school system (Mitra, 2006b). This level of student voice is more commonly found in community-based organizations. The organization used for this study is Unity of Youth, a non-profit that responds to racial conflict and violence at five schools. In this organization, youth are at the forefront of all the initiatives, handling questions, writing proposals for grant funding, and making decisions. The only role adults play is to engage in the activities youth cannot (e.g. set up meetings with the city council). This is the third level of student voice called building leadership capacity. The goal of this level is to increase student authority and decision-making power. It allows youth to gain leadership experience in ways typically unavailable to them. The role of adults in this scenario is to allow youth to lead and serve as a facilitator for youth development. The location of this organization outside of the school system allowed the students to not only tackle school specific problems, but also voice their opinions on community and statewide issues as well.

Mitra (2006a) theorizes the three levels of student voice (from the case studies) form a pyramid shape (figure 4). At the bottom of the pyramid is the level of student voice most commonly seen, and at the top is the level of student voice least commonly seen. The bottom level of the pyramid is being heard, where students are asked for their opinions, but then adults are the ones taking action based on that information. This is the most common level of student voice. It provides the least amount of challenge or growth

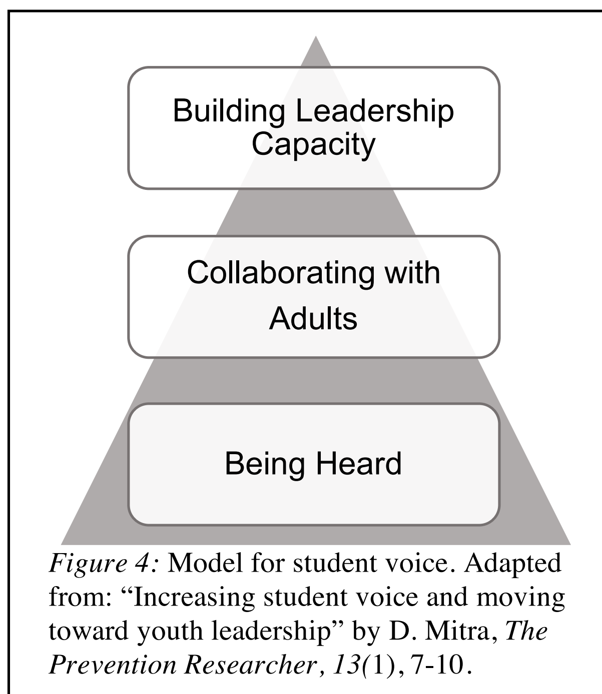

Figure 4: Model for student voice. Adapted from: "Increasing student voice and moving toward youth leadership" by D. Mitra, *The Prevention Researcher, 13(*1), 7-10.

for the students. The next level, in the middle of the pyramid, is collaborating with adults. At this level students work with adults in order to accomplish change in their schools. The top level is building capacity for leadership, which is creating leadership opportunities that allow youth to gain experience in leadership roles. This top level provides the most challenge and growth for the students.

Critical Analysis of Literature

Some youth engagement models are conceptualized from the practitioner perspective (Hart, 1992; Shier, 2001) and did not incorporate youth perspectives. Other youth engagement models did not have a way to measure youth engagement (Larson, et al, 2005; Iwasaki et al. 2014). Iwasaki et al. (2014) analyzed youth engagement from the youth perspective but does not incorporate different levels of engagement, which have been utilized in past models. Murphy and Johnson (2011) pointed out the lack of youth leadership development literature and argued that there needed to be more research in this

area. Kellerman (2013) identified a need to develop measures of leadership and incorporating context into leadership research. McElravy and Hastings (2014) identified a need to create assessments that go beyond the self-assessment of leadership skills. Mitra (2006b, 2008, & 2009) provided a qualitative look at how student voice is being used in schools but did not provide a scale to measure student voice.

Research Objectives

There were two objectives of the current study. The first was to construct a scale to measure youth voice in communities. Youth voice is based on the theory of student voice (Mitra, 2006a), defined as youth having the opportunity to participate in community decisions that shape their lives and the lives of their peers. It has three levels: being heard, collaborating with adults, and building leadership capacity. The second objective was to test the content validity of the scale by asking youth development experts and youth leadership development experts to indicate the extent to which each item represents each level of youth voice. This study is just the first step in creating a scale to measure youth voice. Following steps will include testing the scale with the youth population the scale is intended for.

Operational Definition of Terms

Youth – Studies focusing on youth have included a variety of age groups. However, Mitra (2006a, 2006b, 2008, 2009) has focused on high school students for her theory of youth voice. Therefore, the researchers will define youth as high school age students (ages 14-19) for this study.

Student Voice – Youth having the opportunity to participate in school decisions that will shape their lives and the lives of their peers (Mitra, 2006a). Constructed of three levels: being heard, collaborating with adults, and building leadership capacity.

Youth Voice – Adapted from the theory of student voice (Mitra, 2006a) to be applicable in community contexts. Defined as youth having the opportunity to participate in community decisions that shape their lives and the lives of their peers.

Being Heard – Adapted from the concept of student voice (Mitra, 2006a), defined as youth being asked for their opinions by adults, but adults in the community are responsible for taking action based on the opinions of youth.

Collaborating with Adults – Adapted from the concept of student voice (Mitra, 2006a), defined as youth and adults working together to accomplish change in their community.

Building Leadership Capacity – Adapted from the concept of student voice (Mitra, 2006a), defined as youth being provided with leadership opportunities in their community to create change.

Content Validity – The degree to which items on a scale accurately represent the construct they are associated with (Schriesheim et al., 1993).

CHAPTER III: METHODOLOGY

Statement of Purpose

The purpose of this study was to develop a scale to measure youth voice or their level of engagement in their community. Youth voice is based on the theory of student voice (Mitra, 2006a) but is a broader application of the theory. While student voice focuses on youth in a school context, youth voice is intended to be applicable to other environments. The researcher defined youth voice as the ways youth can have the opportunity to participate in community decisions. Youth voice was measured with the same construct of three levels used for student voice: being heard, collaborating with adults, and building leadership capacity (Mitra, 2006a). The first level, being heard, was defined as youth being asked for their opinions by adults, but adults in the community are responsible for taking action based on the opinions of youth. The second level, collaborating with adults, was defined as youth and adults working together to accomplish change in their community. The final level, building leadership capacity, was defined as providing leadership opportunities to youth.

Participants

Youth leadership development experts and youth development experts were asked to participate in the study to help assess the content validity of the scale items. Experts were defined as individuals who are responsible for delivering programs targeted for youth or who were pursuing a graduate degree focused on youth development or youth leadership development. Individuals who met the criteria were contacted through email, discussion board posts, and listservs. The initial goal was to have 150 participants complete the survey, and the minimum needed was 50 participants (Hinkin & Tracey,

1999). The researcher had the email addresses for youth leadership development organization program managers (*n*=19) in Nebraska and graduate students in the Great Plains IDEA Youth Development program (*n*=37). The emails for all FFA advisors in nine states (New Hampshire, New York, North Carolina, Delaware, Maine, Virginia, West Virginia, Wisconsin, and Montana) were obtained through the FFA state association websites (*n*=1,639). An email was sent out by the Nebraska FBLA and FFA state association advisor to all of the FBLA and FFA advisors in Nebraska (*n*=363). The emails of all of the advisors of the state associations for FFA, FCCLA, and SkillsUSA were obtained through the affiliating national websites (*n*=128). The president of the Association of Leadership Educators (ALE) sent an email to all ALE members on behalf of the researcher (*n*=451). The invitation to participate in the study was posted in the discussion board on the International Leadership Association's (ILA) website (*n*=2,560). Due to the small amount of traffic the post received, an email was also sent to ILA members who are part of the youth leadership interest group (*n*=270). One of the participants in the study recommended that the research team also reach out to the National Association of State Student Council Executive Directors (NASSCED) (*n*=72). The survey was sent through the Nebraska 4-H extension leadership team's listserv (*n*=38).

Complete data sets were obtained from 50 participants. Of the 50 participants who completed the survey, 32 were female (64%) and 18 were male (36%). The participants identified their race and ethnicity as follows: 86% White, not of Hispanic origin, 8% Black or African American, 4% White, of Hispanic or Latino origin, and 2% Asian.

Participants ranged in age from 23 to 63 (*M*=41), and in years of experience from two to 40 (*M*=15.6).

Research Design

This study followed the same design for scale development introduced by Hinkin (1998). They identified six steps for scale development: 1) item generation, 2) questionnaire administration, 3) initial item reduction, 4) confirmatory factor analysis, 5) convergent/discriminant validity, and 6) replication. The current study focused on the first step, item generation. This step has two components, item development and content validity assessment. The researcher used a deductive approach as defined by Hinkin (1998) for item development because there was a theoretical definition for each of the three levels of youth voice. Scale items were developed to measure the three levels as defined above. The researcher enlisted graduate assistants studying Leadership Education or Leadership Studies at a public Midwestern state university to help develop an initial list of 40 scale items (13 being heard, 13 collaborating with adults, and 14 building leadership capacity items). These items measure the three levels by focusing on affective, behavioral, and cognitive outcomes (Kraiger, Ford, & Salas, 1993) from the youth perspective for each level. This initial list was pilot tested with a class of graduate students in a leadership theory course. The students were given the definitions of the three levels of youth voice and the items in a randomized order. They were asked to pick which level each item best corresponded. The researcher took their responses and made edits to any items that were not unanimous categorized to the intended level to help clarify which level they represent.

The second component of item generation, content validity assessment, followed the same design introduced by Schriesheim et al. (1993). They identified a need for an objective method to assess content validity of a measure, and as a result, they created and tested a quantitative approach for content validity. The method they introduced has been used by several leadership scholars (Hinkin & Schriesheim, 2008; Neider & Schriesheim, 2011; Steffens et al., 2014).

A survey with the clarified items was created with Qualtrics, with each survey item followed by a 7-point Likert scale for each of the levels of youth voice. The Likert scale measured the representativeness of each item (1-not at all representative, 2-moderatley not representative, 3-slightly not representative, 4-neither, 5-slightly representative, 6-moderately representative, and 7-completely representative). Potential participants were invited to participate in the study through email, discussion board posts, and listservs, and were asked to complete the survey using Qualtrics. When participants followed the link to the survey and consented to participating in the current study, they were asked to read the theoretical definitions for the three levels of youth voice. They then assessed the extent to which each item was representative of the three levels using the 7-point Likert scale. To avoid order effect and to minimize inferences on the basis of preceding items, items for each dimension were administered in a randomized order. Each question required a response before the survey could be completed and responses recorded, thus, there was no missing data for the recorded responses. The researcher collected data over a three-month period. An initial recruitment email was sent out to potential participants asking them to participate in the study. At least a week after the initial email, a follow-up reminder was sent out. A third reminder was sent out to the FFA

advisers from across the U.S., ILA members, and FFA, FFCLA, and SkillsUSA state association advisors.

Data Analysis

This study used the same technique for analyzing data used by Neider and Schriesheim (2011). This technique requires a three-step data analysis plan: 1) one-way ANOVA, 2) planned directional t-tests, and 3) *extended data matrix* factor analysis as defined by Schriesheim et al. (1993). The first step of the data analysis plan was to conduct a one-way ANOVA to determine which items had a significant difference between the levels. An ANOVA could not be conducted for this study because the data violated the normality assumption required for ANOVAs. Instead, a nonparametric test was used in the ANOVA's place. The researcher used the Kruskal-Wallis H test[1]. This is a rank-based test used to determine if there were statistically significant differences in rankings between the three levels of youth voice. Each item was then subject to post hoc planned comparisons. These tests examined whether a particular item was seen to be more representative of the theoretical level it was designed for, rather than the alternative levels.

After completing the Kruskal-Wallis H test and the post hoc planned comparisons, an *extended data matrix* factor analysis was conducted with the items identified as representing the intended level from the first two steps.. The data were transformed into a matrix where youth voice items were represented as columns, and each participant's evaluations of the items as three separate rows for each level of youth

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[1] The researcher also considered the Kendall's W test, which is the nonparametric equivalent of a repeated measures ANOVA. The researcher chose to move forward with the Kruskal-Wallis H test which was the more liberal option, due to this study being a first step in the scale creation process. The scale items will be further tested before the scale is finalized.

voice. With the 50 participants in the study, the matrix had 150 rows (three per participant). The data were analyzed by means of principal-axis factor analysis to examine unrotated and rotated factor solutions. It tested whether, based on participants' judgements of the items' representativeness of each dimension, the items can be assigned to those underlying youth voice levels that they were theoretically expected to load on.

Delimitations

One delimitation for the study is that the reading comprehension of youth development experts is likely more advance than the reading comprehension of a typical high school student. The researchers addressed this delimitation using the Flesch-Kincaid grade level test. This test uses the average number of syllables per word and the average sentence length to rate text on the U.S. school grade level. This method of assessing readability was also used by Benet-Martinez and John (1998). When the scale items were tested, they received a Flesch-Kincaid grade level of 7.2. This indicates the high-school-aged students for whom the scale is intended, would not likely have a problem with reading comprehension. However, this can be tested when the scale is used with the intended population in future studies.

Another delimitation is that this study used a sample of participants, who are not the intended population for the survey. This study is using youth leadership development and youth development experts to assess the content validity of the scale items, rather than the high-school-aged youth who are the intended users of the youth voice scale. The researcher chose to use this population because this was the first step in creating this scale. It may be difficult to get youth to participate in a scale with 40 items and may be easier to get them to complete a scale once it has had some items reduced. Youth

leadership development and youth development experts may also have background knowledge and experience that would assist them with assessing the representativeness of the items for their intended constructs. The intended youth population will be included in the next stages of creating the youth voice scale.

CHAPTER IV: FINDINGS

The results of this study are presented in this chapter. A review of the research objectives is provided, followed by the Kruskal-Wallis H test results, and post hoc planned comparisons results, and the results of the *extended data matrix* factor analysis is provided.

Research Objectives

The first objective of this study was to create a scale to measure youth voice, defined as youth having the opportunity to participate in community decisions that shape their lives and the lives of their peers. The goal was to create items that accurately represent the three levels of youth voice (being heard, collaborating with adults, and building leadership capacity).

The second objective of this study was to assess the content validity of the items by having youth leadership development experts and youth development experts assess the items' representativeness to their theorized levels. A three-step data analysis plan was used to achieve the second objective. The first step was to see which items had a statistically significant difference between the three levels by using the Kruskal-Wallis H test. The second step was analyzing if the items matched their theorized levels, using post hoc planned comparisons. The third step was completing an *extended data matrix* factor analysis to see if three levels was the appropriate number and if the items can be assigned to the levels they were expected to load on.

Kruskal-Wallis H and Pairwise Comparisons Results

Mean ranks and results from Kruskal-Wallis H and pairwise comparison are presented in Table 4. There are four assumptions that must be met to run the Kruskal-

Wallis H test (Laerd Statistics, 2015a). The first assumption is that there is one dependent variable measure on a continuous or ordinal level. This study met this assumption by using a Likert-scale to measure the representativeness of the items. The second assumption requires that there is one independent variable with two or more categorical, independent groups. The second assumption was met with the three levels of youth voice serving as categorical, independent variables. The third assumption is that there are independence of observations, meaning that there is no relationship between observations in each group. With this study, each participant rated the level for each item. However, the participants' responses for each level on the items should not be biased by their other responses. Previous researchers who have used this study design used a one-way ANOVA, which has a similar assumption (Hinkin & Schriesheim, 2008; Neider & Schriesheim, 2011; Steffens et al., 2014). The researcher chose to move forward with running the Kruskal-Wallis H test, understanding that the results would be less conservative than if a Kendall's W test was run instead. The fourth assumption depends on the type of distribution of the scores for each group of the independent variable. The researcher had to determine if the data were the same shape or a different shape in order to correctly interpret the results. Figure 5 provides an example of what the distribution of data looked like for an item. By looking at the distributions of the data for each item, the researcher determined the data were a different shape. With all four assumptions being met, the Kruskal-Wallis test was run to determine if there was a statistically significant difference between the levels of youth voice. The results indicated there was a significant difference in 39 of the 40 items. The one item that did not have statistically significant difference between the three levels was an item intended to measure Being Heard. The

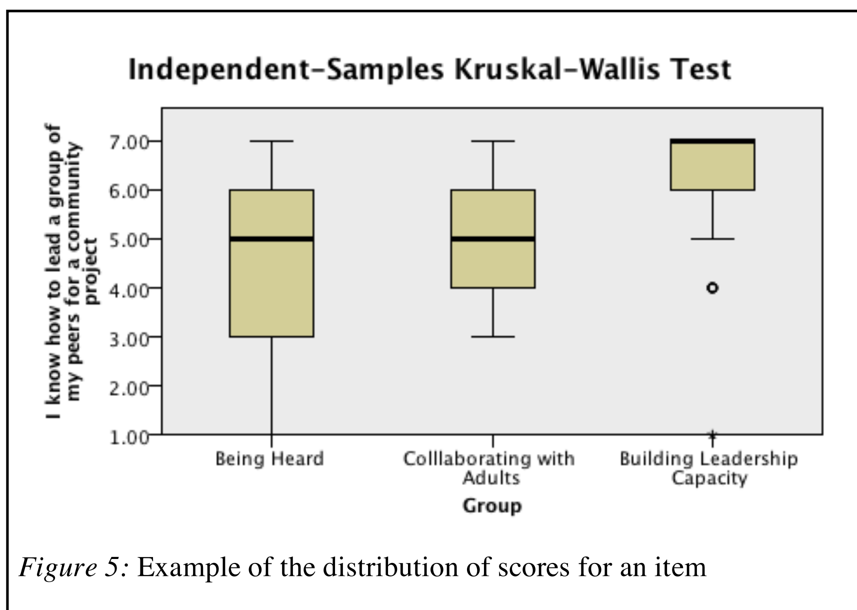

Figure 5: Example of the distribution of scores for an item

researcher did not analyze for outliers. Since this study used an ordinal scale, it may have been difficult to detect outliers. The researcher chose a data analysis method that does not require the normality assumption and is more robust to outliers. Zimmerman (1994) did find that outliers can increase the probability of a type II error in both parametric and nonparametric tests. However, the influence of outliers on parametric tests is greater than it is on nonparametric tests (Zimmerman, 1994).

A post hoc pairwise comparison analysis was performed on those 39 items using Dunn's 1964 procedure with a Bonferroni correction for multiple comparisons. When looking at the pairwise comparisons, the researcher only focused on the comparisons for the intended level of that item (e.g. if the item was intended to represent Being Heard, the researcher did not look at the comparison between Collaborating with Adults and Building Leadership Capacity). For this reason, the Bonferroni corrected for two comparisons instead of three comparisons. Statistical significance was accepted at the $p < .05$ level. This post hoc analysis revealed statistically significant differences for 29 items between the three levels and in the intended direction. The items were spread out between

the different levels, including six Being Heard items, 11 Collaborating with Adults items, and 12 Building Leadership Capacity items.

Table 4

Results from Kruskal-Wallis H test and pairwise comparisons

Item	BH Mean Rank	CA Mean Rank	LC Mean Rank	Test Statistic	Pairwise comparisons	
1 (BH)	91.59	64.57	70.34	11.49**	BH > CA**	BH > LC*
2 (BH)	86.32	70.57	69.61	5.06	BH > CA	BH > LC
3 (BH)	93.53	74.77	58.20	17.63***	BH > CA	BH > LC*
4 (BH)	92.09	71.99	62.42	12.99**	BH > CA*	BH > LC*
5 (BH)	102.66	65.74	58.10	31.26***	BH > CA***	BH > LC***
6 (BH)	86.33	75.65	64.52	6.80*	BH > CA	BH > LC*
7 (BH)	92.30	71.62	62.58	13.14**	BH > CA***	BH > LC*
8 (BH)	86.92	75.76	63.82	7.54*	BH > CA	BH > LC*
9 (BH)	92.77	75.58	58.15	17.12***	BH > CA	BH > LC***
10 (BH)	95.85	65.65	65.00	17.65***	BH > CA**	BH > LC**
11 (BH)	93.96	68.94	63.60	14.85**	BH > CA**	BH > LC**
12 (BH)	88.58	78.22	59.70	12.21**	BH > CA	BH > LC**
13 (BH)	89.86	74.55	62.09	10.97**	BH > CA	BH > LC**
14 (CA)	66.16	93.90	66.44	14.56**	CA > BH**	CA > LC**
15 (CA)	59.92	92.01	74.57	15.29***	CA > BH	CA > LC***
16 (CA)	61.28	93.28	71.94	15.34***	CA > BH***	CA > LC*
17 (CA)	64.79	90.93	70.78	10.74**	CA > BH**	CA > LC*
18 (CA)	60.86	95.17	70.47	17.86***	CA > BH***	CA > LC**
19 (CA)	65.86	92.49	68.15	12.39**	CA > BH**	CA > LC**
20 (CA)	66.92	87.91	71.67	6.81*	CA > BH*	CA > LC
21 (CA)	62.10	93.27	71.13	14.47**	CA > BH**	CA > LC**
22 (CA)	63.33	91.88	71.29	12.40**	CA > BH**	CA > LC*
23 (CA)	58.49	93.93	74.08	17.87***	CA > BH***	CA > LC**
24 (CA)	61.43	94.04	71.03	15.97***	CA > BH***	CA > LC*

(Continued)

Table 4

Results from Kruskal-Wallis H test and pairwise comparisons

Item	BH Mean Rank	CA Mean Rank	LC Mean Rank	Test Statistic	Pairwise comparisons	
25 (CA)	58.20	95.73	72.57	20.42***	CA > BH***	CA > LC*
26 (CA)	66.57	90.71	69.22	10.04**	CA > BH**	CA > LC*
27 (LC)	60.95	65.59	99.96	25.34***	LC > BH***	LC > CA***
28 (LC)	58.16	68.60	99.74	26.25***	LC > BH***	LC > CA**
29 (LC)	57.05	80.38	89.07	15.60***	LC > BH***	LC > CA
30 (LC)	58.97	68.05	99.48	25.04***	LC > BH***	LC > CA**
31 (LC)	63.66	71.25	91.59	11.62**	LC > BH**	LC > CA*
32 (LC)	59.60	66.86	100.04	26.03***	LC > BH***	LC > CA***
33 (LC)	63.35	71.82	91.33	11.46**	LC > BH**	LC > CA*
34 (LC)	63.34	69.89	93.27	13.61**	LC > BH**	LC > CA*
35 (LC)	57.56	68.63	100.31	27.28***	LC > BH***	LC > CA**
36 (LC)	61.55	64.58	100.37	25.95***	LC > BH***	LC > CA***
37 (LC)	60.92	67.53	98.05	21.86***	LC > BH***	LC > CA**
38 (LC)	60.56	69.75	96.19	19.16***	LC > BH***	LC > CA**
39 (LC)	61.32	76.83	88.35	10.37**	LC > BH**	LC > CA
40 (LC)	59.47	69.07	97.96	22.66***	LC > BH***	LC > CA**

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. Abbreviations for the three levels are: Being Heard (BH), Collaborating with Adults (CA), and Building Leadership Capacity (LC). Items in bold differed in the extent that they captured the youth voice level and matched the intended level of youth voice most strongly.

Factor Analysis Results

After the initial list of 40 items was reduced to 29 items through the Kruskal-Wallis H test and pairwise comparisons, an *extended data matrix* factor analysis was conducted. In order to run this factor analysis, the data first had to be formatted. The researcher created a matrix that had each item as a column, and each participant's responses to the three levels as the rows. With 50 participants, the data matrix had 150

rows of data (three rows per participant). In order to run a principal component analysis, there are five assumptions that must be met (Laerd Statistics, 2015b). The first assumption is there are multiple variables measured at the continuous level. This study used ordinal variables, which are frequently used in principal component analyses. The second assumption is a linear relationship between all variables exists. Inspection of the correlation matrix showed all variables had at least one correlation coefficient greater than .3. The third assumption is having sampling adequacy, which can be detected with the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy for the overall data set, and the KMO measure for each individual variable. For this study, the overall Kaiser-Meyer-Olkin (KMO) measure was .918 with individual KMO measures all greater than .7. According to Kaiser (1974) a KMO measure above .90 is marvelous, between .80 and .89 is meritorious, between .70 and .79 is middling, between .60 and .69 is mediocre, between .50 and .59 is miserable, and below .50 is unacceptable. The fourth assumption is having adequate correlations between variables in order for variables to be reduced to a smaller number of components, which can be detected with Bartlett's Test of Sphericity. This test was statistically significant ($p < .0005$) indicating that the data was likely factorizable. The final assumption is there should be no significant outliers. This study met this final assumption, by detecting no scores that were more than three standard deviations away from the mean, a general guideline for identifying outliers (Parke, 2013).

With all five assumptions being met, a principal component analysis was conducted using the *extended data matrix* of the 29 items. The analysis revealed that three components had eigenvalues greater than one. The three components explained 1) 44.8%, 2) 19.0%, and 3) 11.3% of the total variance in the scale. Visual inspection of the

scree plot indicated that three components should be retained (Cattell, 1966). In addition, a three-component solution met the interpretability criterion. As such, three components were retained. The three-component solution explained 75.1% of total variance. A Varimax orthogonal rotation was employed to aid interpretability. The interpretation of the data was consistent with the three levels of youth voice the scale was designed to measure with strong loadings of Building Leadership Capacity items on Component 1, Collaborating with Adults items on Component 2, and Being Heard items on Component 3. Component loadings and communalities of the rotated solution are presented in Table 5. The communalities are equal the sums of squares of the loadings for the variables over the three factors, and denote the degree of overlap between the variable and the three factors (Comrey & Lee, 1992).

Table 5

Results of the principle factor analysis

Item	Component 1 (LC)	Component 2 (CA)	Component 3 (BH)	Communality
1 (BH)	.298	.127	**.855**	.836
4 (BH)	-.019	.217	**.837**	.748
5 (BH)	-.066	-.045	**.673**	.460
7 (BH)	.055	.309	**.815**	.762
10 (BH)	.142	.175	**.903**	.866
11 (BH)	.080	.250	**.845**	.783
14 (CA)	.157	**.772**	.215	.666
16 (CA)	.215	**.790**	.264	.740
17 (CA)	.233	**.837**	.197	.793
18 (CA)	.237	**.850**	.118	.797
19 (CA)	.089	**.810**	.175	.695
21 (CA)	.339	**.772**	.139	.731

(Continued)

Table 5

Results of the principle factor analysis

Item	Component 1 (LC)	Component 2 (CA)	Component 3 (BH)	Communality
22 (CA)	.180	**.840**	.046	.740
23 (CA)	.088	**.817**	-.022	.676
24 (CA)	.086	**.807**	.058	.663
25 (CA)	.118	**.801**	.071	.660
26 (CA)	.265	**.720**	.276	.665
27 (LC)	**.916**	.056	.008	.842
28 (LC)	**.879**	.174	.025	.804
30 (LC)	**.929**	.203	.055	.907
31 (LC)	**.739**	.261	.095	.623
32 (LC)	**.919**	.107	.035	.858
33 (LC)	**.842**	.202	.119	.764
34 (LC)	**.833**	.279	.117	.785
35 (LC)	**.888**	.190	.099	.834
36 (LC)	**.854**	.083	.051	.739
37 (LC)	**.918**	.148	.044	.866
38 (LC)	**.790**	.174	.006	.655
40 (LC)	**.874**	.212	.087	.817

Note: Abbreviations for the three levels are: Being Heard (BH), Collaborating with Adults (CA), and Building Leadership Capacity (LC). Loadings greater than .4 are bolded.

CHAPTER V: DISCUSSION

This chapter begins with a review of the research objectives and what was accomplished in the current research study. A discussion of the limitations of the study is provided, followed by the implications and future research directions. A final conclusion is provided as summation.

Research Objectives

The purpose of this study was to construct a scale to measure youth voice in communities based in the theory of student voice (Mitra, 2006a). Youth voice was defined as youth having the opportunity to participate in community decisions that shape their lives and the lives of their peers. It consists of the three levels of student voice: being heard, collaborating with adults and building capacity for leadership. This research study aimed to develop a way to measure the degree in which high-school students are experiencing engagement in their communities. The first objective was to create a scale that measured the three levels of youth voice. The researcher utilized a group of graduate students to create an initial scale of 40 items (13 being heard items, 13 collaborating with adults items, and 14 building leadership capacity items). These items measured the three levels by focusing on affective, behavioral, and cognitive outcomes (Kraiger, Ford, & Salas, 1993)

The second objective was to test the content validity, or the degree to which the items accurately represent the construct they are associated with (Schreisheim et al., 1993). This objective was completed by asking a sample of youth development experts and youth leadership experts to indicate the extent to which each item represents each level of youth voice. Fifty experts completed the survey, and their responses were

analyzed using the Kruskal-Wallis H test and planned comparisons. Results suggest 29 of the items are a good fit for the construct they are designed to measure (six being heard, 11 collaborating with adults, and 12 building leadership capacity). It was not immediately clear why the initial items for the first level of youth voice did not represent that level to the same degree as the items for the other two levels of youth voice. Given that the levels are sequential, it may be reasonable for youth development experts to confound levels within youth engagement, such that experts inherently recognize lower stages of engagement as being necessary for higher levels of engagement. However, upon inspection, the six items for *being heard* appear to adequately represent the construct. The next step was to conduct an *extended data matrix* factor analysis with those 29 items. The factor analysis revealed that three components explained 75% of the total variance, and all the items loaded on the components for which they were expected to load. The researcher expected the factor analysis to confirm the three-factor solution, indicating the three separate levels of youth voice. This study measured if the items measured the construct they were designed to measure by using experts. According to the procedure outlined by Hinkin (1998), the next step would be to test this scale with the intended population, high school students, and use an exploratory factor analysis to further reduce the number of items.

Limitations

The limitations of the current studied are discussed below. First, a review of the delimitations that were originally identified in the Methodology chapter is provided. This is followed by a discussion of the limitations identified in the procedure and data analysis.

Review of Delimitations

A delimitation identified by the researcher was that the reading comprehension of youth leadership development and youth development experts are different from the high-school aged students that the scale is intended for. The researcher chose to use the Flesch-Kincaid grade level test to assess the readability of the scale. The initial list of scale items received a grade level of 7.2. The narrowed down list of scale items received a reading grade level of 7.1, which indicates that this scale should be the appropriate reading level for high-school students.

Another delimitation is that this sample participants in this study is not the intended population for the scale. This sample consisted of youth leadership development and youth development experts, whereas the intended population for this sample is high-school-aged youth. The researcher viewed this study as a first step for creating the youth voice scale, and the next steps for creating the scale should include youth as the participants. However, for this first step it was best to use experts who may have more patience to complete a 40-item survey and better understand the constructs measured.

Limitations in Procedure

This research study included asking youth leadership development and youth development experts to assess the content validity of the scale items. One limitation for this study was the small response rate and completion rate. The initial goal was to have 150 participants complete the survey, which was not met. The researcher was able to get the minimum number of participants that were needed, 50 individuals (Hinkin & Tracey, 1999). Researchers recruited potential participants through email and discussion posts in professional associations. Approximately 3,000 individuals were emailed with an

invitation to participate in the study. From the invitation to participate in the study, 184 individuals clicked on the link and consented to the study (response rate ~ 6%). Of those 184 individuals, 50 people completed the survey (completion rate = 27%). Through the survey metadata (collected by Qualtrics), the researcher learned 65 individuals had consented to participate spent less than two minutes in the survey. This suggests something about the format of the survey or the instructions provided to participants was causing them not to complete the survey.

Another limitation with the procedure was the timeframe that responses were recorded. A setting on the data collection instrument (Qualtrics) was turned on to automatically collect responses a week after the participant initially started the survey. If the participant had not completed the whole survey no responses were collected except for whether they consented to participate in the study or not. The reminders were sent to participants one week after the initial email. If a participant clicked on the initial invite right away and did not have a chance to finish the survey at that point, by the time the reminder was emailed their initial responses would have been collected and they could no longer continue the survey without starting over. Adjusting the settings knowing the specific challenges of survey completion may have increased responses.

Limitations in Data Analysis

A limitation with the data analysis was that the researcher had to alter the data analysis procedure and was not able to follow the same procedure other scholars have used (Hinkin & Schriesheim, 2008; Neider & Schriesheim, 2011; Steffens et al., 2014). The data from this study violated the normality assumption that is necessary to conduct a one-way ANOVA and t-tests. The researcher chose to use the nonparametric equivalent

of a one-way ANOVA, the Kruskal-Wallis H test and the post hoc planned comparisons. These statistical tests provided the information needed and provided a way around the normality assumption.

A second limitation with the data analysis was the researcher choosing the less conservative approach to analyzing the data. One of the assumptions associated with running the Kruskal-Wallis H test is independent observations. This study did not have separate groups analyzing the levels of youth voice. However, the researcher chose to follow the protocol laid out by Hinkin and Schriesheim (2008), Neider and Schriesheim (2011), and Steffens et al. (2014), who all used a one-way ANOVA for their data analysis. Using the Kruskal-Wallis H test is a more liberal than the Kendall's W test. The researcher decided that with this test being a first step in the scale creation process, it would be better to be more liberal with this first analysis, understanding that these items will be tested again during the next steps.

Implications

The implications of the current study are discussed below. The implications for theory development are discussed first, followed by implications for practice. This section concludes with a discussion of implications for research and future research directions.

Implications for Theory Development

The researcher was interested in furthering the research in how youth are being engaged in their communities. The literature revealed that some scholars have created scales or models that looked at youth participation or youth engagement, but those models were analyzed from the adult perspective (Hart, 1992; Shier, 2001), or they didn't

have a developed measure (Larson et al., 2005; Iwasaki, et al., 2014). The researcher saw a theoretical connection between youth engagement theories (including youth-adult partnership and youth leadership) and the theory of student voice introduced by Mitra (2006a). This study used the theoretical framework of student voice provided by Mitra (2006a), and transformed it to be applicable in a community setting rather than a school setting, creating youth voice. Youth voice is defined as youth having the opportunity to participate in community decisions that shape their lives and the lives of their peers. It consists of three levels: being heard, collaborating with adults, and building leadership capacity. This theory and scale provides a new framework for evaluating youth engagement.

Implications for Practice

There was a deficiency in ways to measure youth engagement from the perspective of youth. This study attempted to address this deficiency by creating a new measure for youth engagement assessed from the youth perspective, rather than an adult perspective. This was just the first step in completing the youth voice scale, but once the scale is complete it may be a valuable tool for youth and community leaders. Studies suggest that youth can become frustrated when they are expected to be future leaders but are not given opportunities to lead (Mitra & Gross, 2009). The youth voice scale can provide those interested in youth development and youth leadership development (both adults and youth) a way to assess how youth perceive their engagement in their communities. It also provides a theoretical framework consisting of levels youth can use to communicate with adults as to what level of engagement they wish to achieve. Not every program needs to be engaging youth at the highest level, but this scale provides

program managers the opportunity to identify a specific level if they wish to achieve and measure it.

Community leaders will also benefit from the creation of the youth voice scale. Youth are often underutilized resources in their community (Barnett & Brennan, 2006). This scale provides a tool community leaders can use to assess the level of youth engagement in their community. Understanding how youth perceive their involvement in their community can help improve their engagement strategies. It provides awareness of youth engagement and provides a starting point for discussion on how to better utilize youth in the community.

Implications for Research and Directions for Future Research

This study created a scale that can be used to further the research focused on youth engagement in communities. There were a limited number of measures available to researchers to measure youth engagement in communities. This research provides a scale that can be used and is measured from the youth's perspective rather than an adult's perspective. This scale will be helpful for researchers who are interested in measuring the level of engagement youth are experiencing in their communities, comparing youth engagement in different communities, or better understanding what contributes to youth's perception of their level of engagement.

This research serves as the first step for developing a youth voice scale. According to the procedure outlined by Hinkin (1998), the next step would be questionnaire administration. The reduced scale should be tested with the intended population for the scale (high school students). After data has been collected from a large enough sample, an exploratory factor analysis should be conducted to continue to refine

the scale (step three: initial item reduction). Hinkin (1998) recommends having around six to eight items to measure each construct. The next steps would include confirmatory factor analysis, assessing convergent and discriminant validity, and replicating the study.

Conclusion

This study was a first step to better understanding how youth perceive their engagement in their communities. The researcher used the theory of student voice to conceptualize youth voice, defined as youth having the opportunity to participate in community decision that shape their lives and the lives of their peers. Youth voice was measured through the three levels of student voice: being heard, collaborating with adults, and building leadership capacity (Mitra, 2006a). After developing an initial list of 40 items to measure the different levels of youth voice, a sample of youth development and youth leadership development experts were asked to assess the content validity of the items. Twenty-nine items were found to have a significant difference between the three levels, and the intended level was a better match than the other two levels. The principal component analysis using the *extended data matrix* revealed that three components explained 75% of the total variance. The levels of youth voice appeared to be clearly delineate by the items, as all of the Building Leadership Capacity items loaded on Component 1, Collaborating with Adults items loaded on Component 2, and Being Heard items loaded on Component 3. Although this scale is not complete, the theoretical definitions can be incorporated into youth engagement practices now. Youth development and youth leadership development professionals may use this framework to intentionally design the level of youth engagement they want for their programs. Once the scale is complete and ready for use, the scale can be used to measure if a program is

reaching the level of engagement intended. This study attempts to deliberately give youth opportunities to have a voice in the decisions that influence their life, and foster youth development for not just future leadership roles, but for fostering youth leaders to affect their community in the present.

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APPENDICES

APPENDIX A – INITIAL SCALE AND INTENDED LEVELS

BH = Being Heard

CA = Collaborating with Adults

LC = Building Leadership Capacity

1. I have a voice in my community (BH)
2. I can contribute my ideas in my community (BH)
3. I can voice my opinions openly to adults in my community (BH)
4. My ideas are listened to and appreciated by adults in my community (BH)
5. Adults ask for my opinion when it comes to issues in my community, and they take action without my help (BH)
6. I know how to share my ideas with adults in my community (BH)
7. I can share my ideas with adults in my community (BH)
8. I know how to express my thoughts on community issues with adults (BH)
9. Adults ask me for suggestions about my community (BH)
10. People listen to me when I speak about community issues (BH)
11. I am asked for my opinion on community topics (BH)
12. Adults in my community want to know my ideas (BH)
13. When decisions are being made in my community, adults ask for my opinions (BH)
14. There is an adult in my community who I know I can work well with (CA)
15. There is an adult in my community who I have worked with to create change (CA)

16. I have worked with adults to create change using my ideas (CA)
17. I feel confident when collaborating with adults to bring change (CA)
18. When working with adults, I can accomplish change in my community (CA)
19. Adults are excited to work with me on community projects (CA)
20. Adults invite me to serve on committees with them in my community (CA)
21. I know how to work with adults in my community (CA)
22. I get to work with adults to make changes in my community (CA)
23. I like working with adults to create change in my community (CA)
24. I work well with adults in my community (CA)
25. I can work with adults to make changes in my community (CA)
26. I am confident that I can collaborate with adults (CA)
27. I know how to lead a group of my peers for a community project (LC)
28. I am excited to be in charge of a project in my community (LC)
29. An adult in my community has asked me to lead a project (LC)
30. I'm confident in my ability to lead a community project (LC)
31. I am qualified to solve problems in my community (LC)
32. I can lead a team of my friends to bring change in my community (LC)
33. I'm excited about the opportunities my community provides for me to lead (LC)
34. I am aware of opportunities to lead a project in my community (LC)
35. I seek out opportunities to lead projects in my community (LC)
36. My peers have chosen me to lead projects in my community in the past (LC)
37. I enjoy leading projects in my community (LC)
38. I have the responsibility to complete a project in my community (LC)

39. Adults trust me to be responsible for implementing ideas in my community (LC)
40. If a problem arose in my community, I can lead a project to bring about change (LC)

APPENDIX B – ITEMS INCLUDED IN FACTOR ANALYSIS

Being Heard items:

- I have a voice in my community (BH)
- My ideas are listened to and appreciated by adults in my community (BH)
- Adults ask for my opinion when it comes to issues in my community, and they take action without my help (BH)
- I can share my ideas with adults in my community (BH)
- People listen to me when I speak about community issues (BH)
- I am asked for my opinion on community topics (BH)

Collaborating with Adults items:

- There is an adult in my community who I know I can work well with (CA)
- I have worked with adults to create change using my ideas (CA)
- I feel confident when collaborating with adults to bring change (CA)
- When working with adults, I can accomplish change in my community (CA)
- Adults are excited to work with me on community projects (CA)
- I know how to work with adults in my community (CA)
- I get to work with adults to make changes in my community (CA)
- I like working with adults to create change in my community (CA)
- I work well with adults in my community (CA)
- I can work with adults to make changes in my community (CA)
- I am confident that I can collaborate with adults (CA)

Building Leadership Capacity items:

- I know how to lead a group of my peers for a community project

- I am excited to be in charge of a project in my community
- I'm confident in my ability to lead a community project
- I am qualified to solve problems in my community
- I can lead a team of my friends to bring change in my community
- I'm excited about the opportunities my community provides for me to lead
- I am aware of opportunities to lead a project in my community
- I seek out opportunities to lead projects in my community
- My peers have chosen me to lead projects in my community in the past
- I enjoy leading projects in my community
- I have the responsibility to complete a project in my community
- If a problem arose in my community, I can lead a project to bring about change

APPENDIX C – FULL SURVEY

Consent

Purpose: The purpose of this study is to develop a scale to measure youth voice, or their level of engagement in their community. Youth voice is based on the theory of student voice but is a broader application of the theory. While student voice focuses on youth in a school context, youth voice will be applicable to other environments. Youth voice will be defined as the ways in which youth can have the opportunity to participate in community decisions and has three levels: being heard, collaborating with adults, and building leadership capacity.

Procedures: Youth Leadership Development experts will be invited to complete a short survey to validate the items developed for the youth voice scale. Participants will be asked to read the theoretical definitions for the three levels of youth voice (being heard, collaborating with adults, and building leadership capacity), and then will assess the extent to which each item is representative of the three levels. The estimated time for the survey is 10-15 minutes.

Risks and/or Discomforts: There are no known risks or discomforts associated with this research.

Benefits: There are no direct benefits to this study. The indirect benefits will contribute to the field of youth engagement and youth leadership development. This scale will provide communities the opportunity to understand how youth are being engaged in their community, from the youth's perspective.

Confidentiality: Your responses will be kept confidential and reported anonymously. Any data collected will be stored on a password-protected server and only accessible to the research personnel. The only people with access to this information will be the investigators directly involved in the project.

Opportunities to Ask Questions: You may ask any questions concerning this research at any time by contacting Jessica Bartak at jbartak2@unl.edu. If you would like to speak with the faculty advisor for this project, please contact Dr. L.J. McElravy at lj.mcelravy@unl.edu. You may also contact the Research Compliance Services Offices at 402-472-6965 or irb@unl.edu for questions related to your rights as a research participant.

Freedom to Withdraw: Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researchers, the University of Nebraska-Lincoln or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

Consent, Right to Receive a Copy: You are voluntarily making a decision whether or not to participate in this research study. By clicking on the I Agree button below, your consent to participate is implied. By clicking on the I Agree button, you are also implying that you are 19 or older. You should print a copy of this page for your records.

Link to Qualtrics Privacy Policy: https://www.qualtrics.com/privacy-statement/

IRB Approval #: 20180318169 EX

Jessica Bartak
Email: jbartak2@unl.edu
Phone: 402-760-1704

L.J. McElravy, PhD

Email: lj.mcelravy@unl.edu

Phone: 402-472-8058

○ I Agree
○ I Disagree

Scale items

Please carefully read the definitions of youth voice and the three levels, then assess the extent to which the each item represents each level of youth voice, as defined below.

Definition of Youth Voice: The ways in which youth can have the opportunity to participate in community decisions that impact them and their peers.

Three levels of Youth Voice:

Being Heard - Youth being asked for their opinions by adults, but adults in the community are responsible for taking action based on the opinions of youth.

Collaborating with Adults - Youth and adults working together to accomplish change in their community.

Building Leadership Capacity - Youth are provided with leadership opportunities in their community to create change.

I have a voice in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I can contribute my ideas in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I can voice my opinions openly to adults in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

My ideas are listened to and appreciated by adults in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

Adults ask for my opinion when it comes to issues in my community, and they take action without my help

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I know how to share my ideas with adults in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I can share my ideas with adults in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I know how to express my thoughts on community issues with adults

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

Adults ask me for suggestions about my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

People listen to me when I speak about community issues

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I am asked for my opinions on community topics

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

Adults in my community want to know my ideas

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

When decisions are being made in my community, adults ask for my opinions

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

There is an adult in my community who I know I can work well with

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

There is an adult in my community who I have worked with to create change

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I have worked with adults to create change using my ideas

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I feel confident when collaborating with adults to bring change

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

When working with adults, I can accomplish change in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

Adults are excited to work with me on community projects

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

Adults invite me to serve on committees with them in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I know how to work with adults in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I get to work with adults to make changes in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I like working with adults to create change in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I work well with adults in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I can work with adults to make changes in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I am confident that I can collaborate with adults

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I know how to lead a group of my peers for a community project

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I am excited to be in charge of a project in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

An adult in my community has asked me to lead a project

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I'm confident in my ability to lead a community project

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I am qualified to solve problems in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I can lead a team of my friends to bring change in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I am excited about the opportunities my community provides for me to lead

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I am aware of opportunities to lead a project in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I seek out opportunities to lead projects in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

My peers have chosen me to lead projects in my community in the past

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I enjoy leading projects in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

I have the responsibility to complete a project in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

Adults trust me to be responsible for implementing ideas in my community

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

If a problem arose in my community, I can lead a project to bring about change

	Not at all representative	Moderately not representative	Slightly not representative	Neither	Slightly representative	Moderately representative	Completely representative
Being Heard	○	○	○	○	○	○	○
Collaborating With Adults	○	○	○	○	○	○	○
Building Leadership Capacity	○	○	○	○	○	○	○

Demographics

How many years of experience do you have working with youth development or youth leadership development?

How old are you?

Gender

○ Male
○ Female

Are you Hispanic or Latino? (A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.)

○ No, not Hispanic or Latino
○ Yes, Hispanic or Latino

How would you describe yourself? (Choose one or more from the following racial groups)

- [ ] American Indian or Alaska Native (A person having origins in any of the original peoples of North and South America (including Central America), and who maintains a tribal affiliation or community attachment.)
- [ ] Asian (A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.)
- [ ] Black or African American (A person having origins in any of the Black racial groups of Africa –includes Caribbean Islanders and other of African origin.)
- [ ] Native Hawaiian or Other Pacific Islander (A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.)
- [ ] White (A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.)

Do you know of any listservs that the researchers should reach out to for potential participants?

APPENDIX D – IRB APPROVAL LETTER

Official Approval Letter for IRB project #18169 - New Project Form

March 9, 2018 - official approval letter

Jessica Bartak
Agricultural Leadership, Education and Communication
3911 Holdrege St Lincoln, NE 68503

LJ McElravy
Agricultural Leadership, Education and Communication
FYH 143, UNL, 685830947

IRB Number: 20180318169 EX
Project ID: 18169
Project Title: Developing and Validating a Scale to Measure Youth Voice

Dear Jessica:

This letter is to officially notify you of the certification of exemption of your project for the Protection of Human Subjects. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46) and has been classified as exempt. Exempt categories are listed within HRPP Policy #4.001: Exempt Research available at: http://research.unl.edu/researchcompliance/policies-procedures/.

You are authorized to implement this study as of the Date of Final Exemption: 3/9/2018

o Review conducted using exempt category 2 at 45 CFR 46.101
o Funding (Grant congruency, OSP Project/Form ID and Funding Sponsor Award Number, if applicable): N/A

This project should be conducted in full accordance with all applicable sections of the IRB Guidelines and you should notify the IRB immediately of any proposed changes that may affect the exempt status of your research project. You should report any unanticipated problems involving risks to the participants or others to the Board.

If you have any questions, please contact the IRB office at 402-472-6965.

Sincerely,

Becky R. Freeman

Becky R. Freeman, CIP
for the IRB

University of Nebraska-Lincoln Office of Research and Economic Development
nugrant.unl.edu

NUgrant

APPENDIX E – CONSENT LETTER

INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES
DEPARTMENT OF AGRICULTURAL LEADERSHIP,
EDUCATION AND COMMUNICATION

Developing and Validating a Youth Voice Scale

You are invited to participate in a research study. The following information is provided in order to help you make an informed decision about whether or not to participate. Please do not hesitate to ask questions.

Purpose: The purpose of this study is to develop a scale to measure youth voice, or their level of engagement in their community. Youth voice is based on the theory of student voice but is a broader application of the theory. While student voice focuses on youth in a school context, youth voice will be applicable to other environments. Youth voice will be defined as the ways in which youth can have the opportunity to participate in community decisions and has three levels: being heard, collaborating with adults, and building leadership capacity.

Procedures: Youth Leadership Development experts will be invited to complete a short survey to validate the items developed for the youth voice scale. Participants will be asked to read the theoretical definitions for the three levels of youth voice (being heard, collaborating with adults, and building leadership capacity), and then will assess the extent to which each item is representative of the three levels. The estimated time for the survey is 10-15 minutes.

Risks and/or Discomforts: There are no known risks or discomforts associated with this research.

Benefits: There are no direct benefits to this study. The indirect benefits will contribute to the field of youth engagement and youth leadership development. This scale will provide communities the opportunity to understand how youth are being engaged in their community, from the youth's perspective.

Confidentiality: Your responses will be kept confidential and reported anonymously. Any data collected will be stored on a password-protected server and only accessible to the research personnel. The only people with access to this information will be the investigators directly involved in the project.

Opportunities to Ask Questions: You may ask any questions concerning this research at any time by contacting Jessica Bartak at jbartak2@unl.edu. If you would like to speak with the faculty advisor for this project, please contact Dr. L.J. McElravy at lj.mcelravy@unl.edu. You may also contact the Research Compliance Services Offices at 402-472-6965 or irb@unl.edu for questions related to your rights as a research participant.

143 Filley / P.O. Box 830947 / Lincoln, NE 68583-0947 / (402) 472-2807 / FAX (402) 472-5863

Freedom to Withdraw: Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researchers, the University of Nebraska-Lincoln or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

Consent, Right to Receive a Copy: You are voluntarily making a decision whether or not to participate in this research study. By clicking on the I Agree button below, your consent to participate is implied. By clicking on the I Agree button, you are also implying that you are 19 or older. You should print a copy of this page for your records.

Link to Qualtrics Privacy Policy: https://www.qualtrics.com/privacy-statement/

If you agree to participate in the study, please click on this link to access the survey:
https://ssp.qualtrics.com/jfe/form/SV_eLjo5i6UZQtod6J

IRB Approval #: 20180318169 EX

Jessica Bartak
Email: jbartak2@unl.edu
Phone: 402-760-1704

L.J. McElravy, PhD
Email: lj.mcelravy@unl.edu
Phone: 402-472-8058

APPENDIX F – RECRUITMENT EMAIL

Subject: Invitation to participate in a leadership research study

Greetings,

We are currently recruiting youth development and youth leadership development professionals (e.g. adults who run leadership programs, adults who mentor youth) for a research project. The purpose of this research project is to develop a scale to measure youth voice, or their level of engagement in their community. We are asking for your participation to help validate the items developed for the youth voice scale.

Participation in this study is completely voluntary. To participate you will be asked to complete a 10-15-minute survey through an online survey website, Qualtrics. This survey will ask you to read the theoretical definition of youth voice and the three levels of youth voice: being heard, collaborating with adults, and building leadership capacity. You will then assess the extent to which each item is representative of each level of youth voice.

If you are interested in participating in the study, please click on the link or see that attached form to review the consent letter. If you agree to participate in the study, please click on this link to access the survey:
https://ssp.qualtrics.com/jfe/form/SV_eLjo5i6UZQtod6J

We hope you will consider assisting us in this research.

Sincerely,

Jessica Bartak
Email: jbartak2@unl.edu
Phone: 402-760-1704

L.J. McElravy, PhD
Email: lj.mcelravy@unl.edu
Phone: 402-472-8058

APPENDIX G – REMINDER EMAIL

Subject: Reminder about invitation to participate in a research study

Greetings,

This is a reminder about the study you were asked to participate in last week. We are still recruiting youth development and youth leadership development professionals for a research project. The purpose of this research project is to develop a scale to measure youth voice, or their level of engagement in their community. We are asking for your participation to help validate the items developed for the youth voice scale.

Participation in this study is completely voluntary. To participate you will be asked to complete a 10-15-minute survey through an online survey website, Qualtrics. This survey will ask you to read the theoretical definition of youth voice and the three levels of youth voice: being heard, collaborating with adults, and building leadership capacity. You will then assess the extent to which each item is representative of each level of youth voice.

If you are interested in participating in the study, please click on the link or see the attached form to review the consent letter. If you agree to participate in the study, please click on this link to access the survey:
https://ssp.qualtrics.com/jfe/form/SV_eLjo5i6UZQtod6J

We hope you will consider assisting us in this research.

Sincerely,

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