

## **Extent of Positive Youth-Adult Relationships in a 4-H Afterschool Program**

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### **Abstract**

It is widely recognized that relationships with caring adults are essential for youth to achieve their fullest potential. The purpose of this study was to explore youths' relationships with adults in a 4-H after-school program setting. Methods used included a youth survey and observations of youth-adult interactions. All youth were found to be experiencing highly positive relationships with adults at the after-school program. Two major factors were found to contribute to such relationships: attendance and positive adult behaviors. Relationships with adults at the after-school program were significantly more positive than those with teachers or neighborhood adults. Implications for practice are discussed.

### **Introduction**

It is widely recognized that relationships with caring adults are essential for youth to achieve their fullest potential (Blum & Rinehart, 1998; Benson, Leffert, Scales, & Blyth, 1998; Eccles & Gootman, 2002; Tierney, Grossman, & Resch, 1995). Youth organizations provide an environment where positive adult relationships are known to develop and flourish. Adults who work in these settings create the safe, welcoming environment that provides engaging growth opportunities. Pittman (1992) noted that youth often define their attachment to a program or organization in terms of their relationship with a caring adult. Youth have reported that such relationships matter in their lives, and studies have found these relationships to result in positive outcomes for those youth (Gambone & Arbreton, 1997; Grossman & Johnson, 1999; Jekielek, Moore, Hair, & Scarupa, 2002; Herrera, Sipe, McClanahan, Arbreton, & Pepper, 2000; National 4-H Impact Study, 2001; Rhodes, Grossman, & Resch, 2000; Sipe, 2000; Tierney et al., 1995).

The characteristics of adults who work with youth and their role in creating group climate have been discussed in previous research (Astroth, 1996, 1997; McLaughlin, 2000; McLaughlin, Irby, & Langman, 1994; Sipe, 2000; Yohalem, 2003). Significantly, a recent study has concluded that

the ability of staff members leading an activity was more important to program quality than the specific activity itself (Grossman et al., 2002).

### **Purpose**

Adventure Central, an Extension-managed youth education center in west Dayton, Ohio, was the context selected for this study. As a collaboration between Ohio State University (OSU) Extension, 4-H Youth Development and Five Rivers MetroParks (FRMP), there was a need to understand progress toward reaching program goals, one of which is to foster positive relationships between adult staff and volunteers and youth participants. Therefore, the purpose of this study was to address the following questions:

1. To what extent are participants experiencing positive youth-adult relationships?
2. What factors contribute to the development of these relationships?
3. How do participant's relationships with adults at Adventure Central compare to those with adults in other contexts?

### **Program Context**

Adventure Central is situated within the Wesleyan MetroPark, part of Five Rivers MetroParks in Dayton, Ohio. Programs serve urban youth ages 5 to 19 from the surrounding community, which is primarily African-American with a median annual income of \$18,000. After-school programming is conducted Monday through Thursday from 2:00 p.m. to 6:30 p.m. The format consists of open computer lab time, dinner, homework assistance, and educational activities that focus on such topics as technology, gardening, or health and nutrition. There are five groups based on age, grade, and maturity level. Academic advancement and closing activities take place during group time. Full-day programming is conducted in the summer, where teens serve as program assistants in addition to adult staff.

At the time of the study, adults at Adventure Central included five full-time administrative and program staff members, three contracted prevention specialists, and two part-time interns. Adventure Central also relies heavily on volunteer involvement. A group leader, an assistant group leader, and other staff or volunteers supervise each small group. This staffing pattern allows for at least a 1:6 adult-to-child ratio. The vast majority of adults (80%) are African American. Two-thirds of these adults reported working at Adventure Central at least four days per week and two-thirds reported having three or more years of previous job experience in youth development programming.

### **Methods**

We determined that a multi-method design was needed to address the research questions. We used a survey to examine the extent of relationships between youth and adults and to compare

youth-adult relationships across contexts. Qualitative observations were conducted to learn more about the processes that contribute to youth-adult relationships.

### Participants

All youth attending the Adventure Central after-school program during the autumn of 2001 were invited to participate. Forty-eight youth (80%) received parental permission and completed the survey (Table 1).

<b>Table 1</b>	
<b>Profile of Youth Participants</b>	
<i>Participant Characteristics</i>	<i>Percent</i> ( <i>N</i> = 48)
Gender	
Female	54.0%
Male	46.0%
Age	
4 – 6 years	22.9%
7 – 8 years	25.0%
9 – 10 years	22.9%
11 – 13 years	29.2%
Race	
African-American	88.0%
Mixed race	12.0%
<i>Changed Homes</i>	( <i>n</i> = 45)
Past year	42.0%
<i>Living Situation</i>	( <i>n</i> = 46)
Single Parent	47.8%
Two Parents (One may be step-parent)	30.4%
Other (Grandparent/guardian)	13.1%
Parent(s) & Grandparent	8.7%

### Measures

**Relationships with adults.** Relationships with adults were measured with a series of four scales. In general, the items measured tendencies to view adults as caring, encouraging, approachable, and trustworthy. Youth were asked to indicate their level of agreement with the statements on a four-point scale of NO! (coded as 0), no (coded as 1), yes (coded as 2), and YES! (coded as 3). This scale was modeled after Arthur, Pollard, Hawkins, and Catalano (1997). Cronbach's alphas for the scales were acceptable: Adventure Central adults ( $\alpha = .76$ ), teachers ( $\alpha = .82$ ), adults in the home ( $\alpha = .77$ ), and adults in the neighborhood ( $\alpha = .69$ ).

**Interactions with adults.** To record observations, we modified a checklist for observing staff interactions in school-age child care programs (Ohio Hunger Task Force, 1999). We created additional items based on the literature (Dungan-Seaver, 1999; Eccles & Gootman, 2002; Jekielek et al., 2002; National School-Age Care Alliance, 1998; Rosenthal & Vandell, 1996). Three broad categories of behaviors were identified: communication (e.g., uses supportive language), teaching (e.g., assists a child with homework), and conflict or discipline (e.g., handles conflict, disciplines a child).

**Program attendance.** Attendance information was obtained from program records, measured by the quantity of contact hours during the five-month study period in 2001.

## **Procedures**

Program stakeholders reviewed the survey instrument for face validity, and a draft was pilot-tested for readability. Questionnaires were administered in a small group setting to the five pre-existing groups of youth. Staff and volunteers aided participants with reading questions as needed.

In addition, observation using the event sampling method (Beatty, 1994) was chosen for qualitative data collection. Ten separate observation periods totaling five hours were conducted (two observations each for five groups). To begin each observation, the observer recorded the date, time, type of activity, and child-staff ratio within the group. Each time a behavior was observed, a tally was made beside that item. Event sampling was conducted for 25-minute periods, followed by five minutes of additional notation. An effort was made to conduct the two observations on different days of the week and different times of day.

## **Data Analysis**

Descriptive statistics were computed for all measures. Spearman rank correlations were calculated to determine association between youth's relationship with adults at Adventure Central and the quantity of contact hours they received with the adults (Cohen & Cohen, 1983; Witte & Witte, 2001). Additionally, *t*-tests were conducted to determine significance between attendance and responses to individual scale items. Independent sample *t*-tests were also computed for the four adult relationship scales to measure for significant differences between contexts. The tallies for each item on the observation checklist were totaled and calculated as a percentage of the total observations.

## **Results**

### **Extent of Positive Relationships with Adventure Central Adults**

Mean responses for individual scale items were positive, ranging from 2.63 to 2.79, where 3.00 was the highest possible response (Table 2). Independent sample *t*-tests examining differences in responses by gender found no significant differences ( $t = -.295, p < .05$ ), thus indicating that both male and female participants perceived positive relationships with adults at Adventure Central.

<b>Table 2</b>		
<b>Adventure Central Youth-Adult Relationships</b>		
<i>Adventure Central (AC) Adult Relationship Scale Item</i>	<i>M</i>	<i>SD</i>
Trust adults at A.C. ( <i>n</i> = 43)	2.79	.51
Adults at A.C. encourage me. ( <i>n</i> = 43)	2.77	.48
Adults at A.C. talk with me about the future. ( <i>n</i> = 43)	2.74	.62
Adults at A.C. tell me “good job.” ( <i>n</i> = 43)	2.72	.63
Adults at A.C. care about me. ( <i>n</i> = 41)	2.66	.73
Can tell adults at A.C. about my problems. ( <i>n</i> = 43)	2.63	.62
<b>TOTAL</b>	16.27	2.48
<i>Note.</i> Youth were asked to indicate their level of agreement with the statements on a four-point scale of NO! (coded as 0), no (coded as 1), yes (coded as 2), and YES! (coded as 3).		

### Factors Contributing to Relationships at Adventure Central

**Attendance.** Youth attended Adventure Central between 4 hours and 246.5 hours ( $M = 98.9$ ,  $SD = 61.6$ ). They were grouped into two groups based on a median split ( $Mdn = 76$ ). A significant correlation was found between attendance and the adult relationship scale score,  $r(41) = .481$ ,  $p < .01$ . Additionally, there were significant positive correlations between attendance and four of the six scale items (Table 3).

<b>Table 3</b>							
<b>Correlations Between Individual Scale Items and Attendance</b>							
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
1. Attendance Hours	--	.079	.352*	.472**	.282	.378*	.323*
2. Adults at A.C. talk with me about the future ( <i>n</i> = 43)		--	.470**	.340*	.780**	.471**	.322*
3. Adults at A.C. care about me ( <i>n</i> = 41)			--	.326*	.605**	.464**	.332*
4. Can tell adults at A.C. about my problems ( <i>n</i> = 43)				--	.559**	.545**	.654**
5. Trust adults at A.C. ( <i>n</i> = 43)					--	.664**	.516**
6. Adults at A.C. tell me “good job” ( <i>n</i> = 43)						--	.704**
7. Adults at A.C. encourage me ( <i>n</i> = 43)							--
**Correlation is significant at the .01 level (2-tailed)							
*Correlation is significant at the .05 level (2-tailed)							

Differences on individual scale items were also explored using independent sample *t*-tests. High attendees responses were significantly more positive than those of low attendees for three of the six scale items (Table 4).

Scale Items	<i>M (SD)</i>		<i>t</i>
	<i>High Attendees</i>	<i>Low Attendees</i>	
Trust adults at A.C.	2.95 (.22)	2.64 (.66)	-2.133*
Adults at A.C. tell me “good job.”	2.95 (.22)	2.50 (.80)	-2.549*
Adults at A.C. encourage me.	2.90 (.30)	2.64 (.58)	-1.914
Can tell adults at A.C. about my problems.	2.90 (.30)	2.36 (.73)	-3.216*
Adults at A.C. talk with me about the future.	2.86 (.36)	2.64 (.79)	-1.189
Adults at A.C. care about me.	2.79 (.71)	2.55 (.74)	-1.072

\*Indicates statistical significance at  $p < .05$ .

**Youth-adult interactions.** Interactions between youth and adults were primarily one-on-one (84%), with significantly fewer being whole group (9%) or small group (7%). The ratio of adults to youth was at least 1:6. The interactions were categorized as either emotional or instrumental support based on Eccles and Gootman (2002). The frequencies are reported in Table 5.

<b>Emotional Support</b>	<b>Frequency Observed</b>
Talks to a child, positive tone	99
Listens to a child	56
Uses a child’s name when talking to him/her	55
Uses supportive language with a child	30
Encourages a child to participate	12
Acknowledges a child’s arrival or departure	2
Remains calm/patient with an angry/upset child	2
Comforts/consols a hurt/upset/disappointed child	1
Asks a child about his/her day	0
<b>Instrumental Support</b>	
Gives a child clear directions	75
Disciplines a child	47

<b>Table 5</b>	
<b>Observed Frequencies of Adult-Child Interactions</b>	
Assists a child with homework	34
Teaches a child	14
Answers a child's question	13
Handles conflict	3
Teaches how to work through conflict	1
Talks to a child about his/her future plans	0
<b>Negative Interactions</b>	
Talks to a child, negative tone	9
Criticizes a child	5
Yells at a child	0
<b>TOTAL</b>	<b>458</b>

### Comparing Youth-Adult Relationships Across Contexts

Independent sample *t*-tests revealed that relationships with adults at Adventure Central were significantly more positive than those with teachers or neighborhood adults. Furthermore, relationships with adults in the home were significantly more positive than relationships with neighborhood adults (Table 6).

<b>Table 6</b>				
<b>Examination of Youth Relationships with Adults Across Contexts: T-Test Results</b>				
<i>Adult Scales</i>	<i>M (SD)</i>	<i>t</i>		
		<i>Adults in the Home</i>	<i>Teachers at School</i>	<i>Neighborhood Adults</i>
Adventure Central Adults	2.71 (.41)	1.151	2.856**	3.827**
Adults in the Home	2.64 (.42)		-1.208	-2.444*
Teachers at School	2.52 (.51)			1.768
Neighborhood Adults	2.40 (.62)			
* Indicates significance at the .05 level.				
** Indicates significance at the .01 level.				

### Discussion

Scores indicated that youth perceived their relationships with adults at Adventure Central as highly positive. Youth trusting adults was the individual item with the highest mean score ( $M = 2.79$ ), which emphasizes the importance of trust in the formation of relationships. In related research, adolescent participants at Adventure Central acknowledged the adults as a reason they continue attending (Ferrari & Turner, 2004; Turner, 2002).

One factor that was found to significantly contribute to relationship quality was attendance: Youth with greater attendance reported more positive relationships. This is a logical finding, as higher attendance would provide more opportunities for contact with an adult, thus providing interaction opportunities. Further support for this finding is provided by studies of mentoring programs (Grossman & Johnson, 1999; Grossman & Rhodes, 2002).

One-on-one interactions were more frequently observed compared to small-group or whole-group interactions. This finding was consistent with the low adult-child ratio, which appears to have facilitated greater interaction. Type of interaction may be a factor contributing to relationship quality, as individual contact allows for more private discussion and may aid in the development of trust. However, considering the participants as a whole, one-on-one interaction could negatively affect relationships if the same youth continually receive the attention, and others do not receive the attention.

The behaviors selected for observation were seen in varying frequencies. Those interactions most frequently observed were talking to a child in a positive tone, giving a child clear directions, listening to a child, and using a child's name when talking to him or her, indicating that these behaviors may contribute to the development of relationships. These behaviors are consistent with those identified in the literature as factors contributing to positive relationships. Another encouraging finding is that only a small percentage of observations (3%) could be classified as negative (e.g., tone of voice).

However, there were desirable interactions that occurred infrequently or were not observed at all. Several possible reasons for this have been considered. One likely explanation is the timing of observations relative to the program schedule. For example, there were no observations of staff asking a child about his or her day. Generally, this type of interaction occurs as youth arrive at the program, during snack time, or when the schedule is less structured. Our observations occurred during more structured time with a focus on academic activities. Another possibility is that certain interactions may occur only during particular program offerings (e.g., discussion of future plans during career exploration programming). Finally, it is possible that the interactions are not occurring. Therefore, repeated observations may be necessary.

When comparing youths' responses concerning relationships with adults at Adventure Central to those with adults in other contexts, the results were consistent with past research. In other studies, youth have also reported satisfaction of relationships with their teachers and neighbors at much lower percentages than was found for their relationships with after-school program staff (Kahne et al., 2001; MetLife, 2001; Scales & Leffert, 1999).

Several limitations should be noted. We chose to study one program before exploring between-group differences. As no comparison group was used, we cannot generalize these findings. The sample size was small, limiting our statistical analysis. In addition, high scores on all items produced little variability. The measures used may not have been sensitive enough to detect differences that may have existed. However, the observations provided insight into the processes that contribute to the presence of positive relationships that were indicated by the survey

instrument. What we observed suggests that the high scores were a realistic assessment of the relationship experiences.

### **Implications**

This study has several implications for practice.

1. Encourage long-term participation of youth to realize important program benefits obtained through positive youth-adult interactions.
2. Recruit and select program staff with desirable characteristics.
3. Provide training for staff on youth development principles in general and building relationships in particular.
4. Conduct observation to provide insight into specific interaction practices.
5. Desirable interactions that occur infrequently may be noted and specific steps taken to increase these practices.
6. Provide positive feedback to and reward staff who exhibit desirable behaviors.

The National 4-H Strategic Plan recommends increasing opportunities for youth to participate in long-term, sustainable relationships with caring adults (National Strategic Directions Team, 2001). This study emphasizes the need for intentional inclusion of features known to contribute to desired outcomes and for understanding the processes that underlie them.

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