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## Physical activity and inactivity in Girl Scout Junior troop meetings

Samuel Ornelas & Richard Rosenkranz

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### Abstract

**Purpose:** To describe the environmental context, physical activity, and inactivity levels in Girl Scout Junior troop meetings. **Methods:** Forty-two girls (mean age  $10.8 \pm 1.2$ ) from four troops wore accelerometers during 28 meetings. Physical activity (PA) and sedentary behavior (SED) were assessed during a six-month period. Minutes spent in sedentary, light, moderate, and vigorous PA were summed and averaged. Direct observation measures assessed the environmental context of activity/inactivity. **Results:** In an average troop meeting, girls spent 94.4 min of time in SED, 26.3 min in light physical activity (LPA), and 2.0 min in moderate-to-vigorous physical activity (MVPA). There was no significant difference for time spent in PA at various levels among girls of different socio-economic status, racial/ethnic background, or weight status ( $F [3,238] < 1.0, p > .05$ ). Troop leaders were more likely to discourage PA (0.6% of time) than to promote PA (0.0%), and no PA related educational content was observed. **Conclusion:** Girls accumulated two min MVPA, and  $>90$  min SED per meeting. Based on our observations, these troop meetings currently are missing opportunities to contribute positively to the health and fitness of attending girls. Interventions providing opportunities for enjoyable PA specifically catering to needs and interests of girls are warranted.

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*Keywords: Girl Scouts, Accelerometer, Sedentary Behavior, Physical Activity, Childhood Obesity*

### Introduction

Sedentary behavior, including seated television viewing, computer use, and video games (collectively screen time) may be contributing to overweight and obesity (collectively overweight) in comparison to non-sedentary activities (Epstein et al., 2001). Child and adolescent television viewing has been found to be associated with overweight, poor cardio-pulmonary fitness, raised serum cholesterol, and smoking in early adulthood; all are established risk factors for cardiovascular morbidity and mortality later in life (Hancox et al., 2004). Strong and colleagues (2005) suggest reducing sedentary screen time to less than two hours per day in order to increase physical activity and health and also recommend that school-aged children participate in 60 minutes or more of moderate-to-vigorous physical activity (MVPA) that is enjoyable and developmentally appropriate. A study by Epstein and colleagues (2001) showed that targeting either a decrease in

sedentary behaviors or an increase in physical activity was associated with significant decreases in percent overweight and body fat. However, if children are not provided with access to enjoyable physical activity, they may substitute other sedentary behaviors when targeted sedentary behaviors are reduced (Epstein et al., 2001).

Childhood overweight is a major concern, considering it is an important predictor of adult obesity (Magarey et al., 2003; Whitaker et al., 1997) and the subsequent increased risk of morbidity and mortality in adulthood (Flegal et al., 2005; Gunnell et al., 1998; Must & Strauss, 1999). There has been little progress to report for the child and adolescent overweight prevalence objectives of Healthy People 2010. For years 2003 to 2006, 16.3% of children and adolescents were at or above 95th percentile of BMI according to the age- and sex-specific references given in the 2000 CDC growth charts (Ogden et al., 2008), three times the target

prevalence (5%) for the Healthy People 2010 objectives. For the same period, 31.9% of children and adolescents had a BMI for age at or above the 85th percentile (Ogden et al., 2008).

Physical activity levels tend to decline across childhood and adolescence, especially among girls (Kimm et al., 2002; Trost et al., 2002). A study by Kimm and colleagues (2002) examined longitudinal physical activity changes in a large cohort of adolescent girls (from age 9 or 10 to age 18 or 19) and found a substantial decline in physical activity. By age 18 or 19 years, the majority of girls were found to engage in virtually no habitual physical activities, other than those performed during school. Also, high body mass index (a marker of overweight) was associated with a greater decline in activity among girls (Kimm et al., 2002). In another study, the overall prevalence of meeting recommended levels of physical activity were found to be higher among males (43.7%) than females (25.6%) (Eaton et al., 2008).

A large portion of a child or adolescent's day is typically spent in school, where physical education (PE) and recess periods provide some opportunities for children to participate in physical activity. Nationwide, only 53.6% of youth went to physical education classes on one or more days in an average week when they were in school (Eaton et al., 2008). Overall, the prevalence of attending PE classes appears to be higher among male (57.7%) than female (49.4%) adolescent students (Eaton et al., 2008).

Taylor and colleagues (1999) suggested that structured physical activity sessions such as PE classes might not provide an enjoyable experience for girls. According to these authors, girls may have a fear or dislike of perspiring, and may be self-conscious about their appearance in the presence of boys. In PE, girls can be interested in physical activity, but may be frustrated with inadequate opportunities to participate. They may also feel that boys exclude them in sports and activities, and PE teachers may prefer teaching boys, showing boys more attention in class (Taylor et al., 1999).

Aside from PE, gender disparities among children engaging in physical activity during recess periods have also been shown. Ridgers and colleagues (2005) found that boys engaged in significantly more moderate and high intensity physical activities during recess periods than girls. On average, boys were physically active at a moderate or vigorous level about 33% of recess time, compared to about 25% of recess time for girls (Ridgers et al., 2005). Thus, opportunities for gender-specific physical activities that address the needs of girls may be fitting.

Schools are limited in their ability to address gender-specific needs. They have become increasingly focused on meeting educational and academic standards, which have made it difficult to provide sufficient time for health promotion efforts (Storey et al., 2003). Furthermore, some schools allow children to spend their recess time indoors, which likely promotes sedentary recreational activities during those periods. However, after-school programs have the capacity and infrastructure to reach a large number of children and adolescents. At the same time, these programs have the potential to promote physical activity by providing structured and unstructured opportunities, and by teaching students behavioral and movement skills associated with life-long participation in physical activity (Trost et al., 2008). Thus, after-school programs may be an important contributor to physical activity of attending children. Trost and colleagues (2008) found that the after-school programs in their study provided approximately 20 min of MVPA daily, though girls were less active than boys (17.3 min vs. 23.7, respectively). Depending on the organization's characteristics, after-school programs could provide additional opportunities and an alternative environment in which girls could potentially feel comfortable being physically active.

The Girl Scouts of the USA offers one type of after-school program that could provide a unique setting to address girls' physical activity in the absence of boys. Girl Scouts of America is an

organization dedicated solely to girls, and there are currently approximately 3.7 million members throughout the United States (Girl Scouts of the United States of America, 2009. Available at: <http://www.girlscouts.org>. Accessed November 24, 2008). Girl Scout troops are composed of similarly aged cohorts of girls, from kindergartners up to those in high school. Girl Scouts of the USA is making an effort to encourage healthy living among girls by offering more than 60 merit badges related to healthy living. Girl Scouts of the USA historically has had an emphasis on health to educate and empower girls to take action to strengthen their physical and emotional health (Girl Scouts of the United States of America, 2009. Available at: <http://www.girlscouts.org>. Accessed October 11, 2009).

Currently little is known about the physical activity and sedentary behaviors of girls attending Girl Scout meetings. Therefore, the purpose of this study was to investigate the physical activity levels and time spent in sedentary behavior of girls attending Girl Scout Junior troop meetings over a six-month period (October to March).

## **Methods**

### **Settings and Participants**

Seven Girl Scout Junior troops (generally composed of girls in the fourth and fifth grades) were recruited for a randomized controlled trial, Healthier Troops in a SNAP (Scouting Nutrition and Activity Program). SNAP was an intervention designed to improve the physical activity and nutrition environment in Girl Scout troops in an effort to bring about healthier behavior. Data from the four control condition (standard-care/no intervention) troops were used for the present study. Parental informed consent was obtained for all (n = 42, 100% female) children. Self-reported demographic information was obtained from questionnaires administered to girls and parents. The research protocol received approval from the IRB at Kansas State University.

Inclusion criteria for the study required each troop to have initial agreement of leaders and

parents for the troop to participate in the research study; the troop to consist of girls primarily in the 4th and 5th grades; the troop to meet at least twice per month; and each troop to be officially registered as a Girl Scout Junior troop. An inclusion criterion at the individual level was for the girls to be attending members of Girl Scouts in one of the observed troops. Participating troops earned a modest stipend for taking part in the study.

Troop meetings were held either weekly (n = 2) or twice-monthly (n = 2), generally lasting between one and two hours in length. Troop size ranged from six to sixteen girls (mean = 11). Troop meetings were held at the Girl Scout "Little House" property (n = 3), which can be described as a small kitchen and restroom adjoined to a large meeting room where tables and benches could be rearranged for various activities, or at a troop leader's home (n = 1), located in one of two adjacent Midwestern towns, ranging in population from about 20,000 to 50,000. The sites used for the current study were the same facility or comparable to other intervention troop meeting sites where physical activity occurred.

### **Instrumentation and Protocol**

Over the course of the observation period, objective monitoring was conducted on seven occasions at each troop meeting site. At the beginning of each meeting, a research assistant used an adjustable elastic belt to place an ActiGraph GT1M accelerometer-based physical activity monitor (Shalimar, FL), on the right hip of each participating girl. Start time and identification number of each monitor was recorded. The monitor was worn for the duration of each girl's attendance of the meeting. A 30-second epoch was employed to obtain an objective assessment of physical activity and sedentary behavior. At the end of the troop meeting, the research assistant removed all monitors and recorded the time. Monitors were then taken back to the laboratory for data downloading and storage. Raw accelerometer counts were processed through a customized software program for determination of time spent in moderate-to-vigorous ( $\geq 4$  METs), vigorous ( $\geq 7$  METs), moderate (4-6.99 METs),

light (1.5–3.99 METs), and sedentary (< 1.5 METs) physical activity levels. The age-specific count thresholds corresponding to these intensity levels were derived from the MET prediction equation developed by Freedson and co-workers (2005) and the appropriate count thresholds were divided by two to accommodate the 30-second epoch length. Invalid wearing time during the meeting period was assessed by counting the number of consecutive zero counts accumulated in strings of 10 min or longer. Accelerometer data for the entire meeting period was considered valid if wearing time was equal to or greater than 30 min.

During each meeting, a research assistant continuously observed the troop environment and activities. The research assistant recorded the details of the meeting using a form called the SNAP Session Form (appendix A), which was patterned off SOPLAY (McKenzie et al., 2000). Session was defined as a period of time when 51% or more of girls were engaged in one activity. The SNAP Troop Observation Form (appendix B) was used to record the general structure, general content, knowledge content and leader behavior relevant to promotion of physical activity. The recommended guidelines for behavioral observation were used to develop the behavioral and environmental observation system and both forms (Herbert and Attridge, 1975). The behavioral and environmental observation system and forms were largely patterned off of previously validated methodology (McKenzie et al., 1992).

Every 60 seconds, a vibrating timing device (Time Now Inc., Model: Invisible Clock II, Larkspur, CA), alerted the research assistant to determine the presence or absence of leader behavior relevant to the promotion or discouragement of physical activity (verbal or physical) in the preceding 60 seconds. Verbal encouragement of physical activity such as “keep going!” or “Run!” would constitute verbal promotion of physical activity. Physical promotion of physical activity included leaders’ modeling or demonstrating a physical skill to be copied by the scouts, or participation in the games or physical activities performed by the girls. The portable timing device was used for

the duration of the troop meeting. Careful training for use of all forms and observation techniques was provided for the two research assistants, and prior to actual data collection adequate inter-rater reliability (>90% agreement) was obtained.

### **Anthropometric Measures**

Girls’ height and weight were measured without shoes or heavy clothing in a semi-private setting. A portable stadiometer (Seca Corp, Model #214 Road Rod, Hanover, MD) was used to measure height to the nearest millimeter. Weight was measured using a high-precision electronic scale (Seca Corp, Model #770, Hanover, MD) to the nearest 0.1 kg. Body weight in kilograms and height in centimeters was used to calculate body mass index (BMI) percentiles using the age- and sex-specific LMS parameters from the CDC growth charts (Kuczmarski et al., 2000). Participants were classified as overweight if their BMI equaled or exceeded the age- and sex-specific 85th percentile; and obese, if their BMI equaled or exceeded the age- and sex-specific 95th percentile.

### **Statistical Analysis**

SAS 9.1 statistical software package (Cary, NC) was used for mixed-model analyses. Physical activity levels were evaluated using mixed-model analyses (PROC MIXED). The model included weight status (overweight or not), socio-economic status (free/reduced lunch eligible or not), and race/ethnicity (non-Hispanic Caucasian or not) as fixed effects, with observations nested within girls and girls nested within troops as random effect (to address multiple observations and clustering of girls within troops). SPSS 15.0 (Chicago, IL) was used to compute descriptive statistics.

### **Results**

Table 1 presents the descriptive characteristics of the girls attending the observed Girl Scout troop meetings. The mean age of participating girls was  $10.8 \pm 1.2$  at the start of the study. The majority of the sample was non-Hispanic Caucasian (76.2%). Thirty-five percent of the participating girls were eligible for free or reduced price lunch. Slightly over 48% of

parents were college graduates. The sample included more girls in the non-overweight category than the overweight category (78.5% vs. 21.5%).

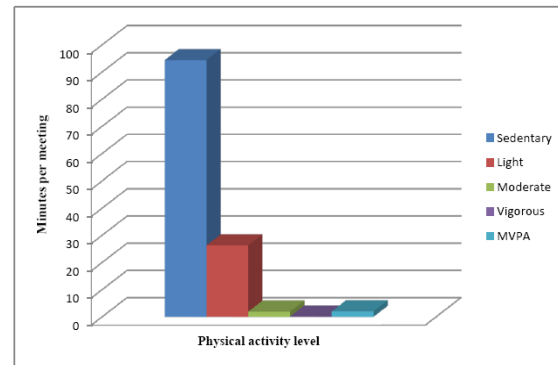
2.0 min. There was no significant difference ( $F [3,238] < 1.0, p > .05$ ) of time spent in physical activity at various levels by socio-economic status, race/ethnicity, or weight status (Table 2).

**Table 1**  
**Descriptive Characteristics of the Girl Scout participants (N=42)**

	%
Caucasian (non-Hispanic)	76.2
Minority Race/Ethnicity	23.8
Not eligible for free or reduced price lunch	64.3
Eligible for free or reduced price lunch	35.7
Parent college graduates	48.7
Overweight or obese	21.5
Non-overweight	78.5
	<b>Mean (SD)</b>
Age (yr)	10.8 ± 1.2

Results for physical activity are displayed in Figure 1. Girls on average spent 94.4 min of troop meeting time at a sedentary intensity level (SED), 26.3 min of meeting time was spent in light physical activity (LPA), 1.9 min in moderate physical activity (MPA), and 0.1 min in vigorous physical activity (VPA). Thus, the average proportion of moderate-to-vigorous physical activity (MVPA = MPA + VPA) was

Figure 1. Mean minutes of physical activity per troop meeting at various intensity level.



Note. MVPA=Moderate to vigorous physical activity (MVPA=MPA+VPA).

Table 3 displays meeting time spent in active recreation content (see appendix A for more detail) for all four troops. A total of 48 min of the 2,329 observed minutes was allocated for active recreation content for all four troops during 28 meetings across six months. Table 4 illustrates the troop meeting environment and leader behavior variables (see appendix B for more detail). The majority of troop meeting time was structured (90%). Troop leaders were observed to discourage physical activity more frequently (0.6%) than to promote physical activity (0.0%). There was no observed physical activity promotion and no observed physical activity knowledge content.

**Table 2**  
**Average meeting time spent in various physical activity intensity levels among girls attending Girl Scout troop meetings (N = 42)**

	Sedentary	Light	Moderate	Vigorous
Not eligible for free or reduced price lunch	93.9	26.3	2.2	0.25
Eligible for free or reduced price lunch	94.9	26.1	1.6	0.12
Minority Race/Ethnicity	93.9	26.0	1.8	0.12
Caucasian (Non-Hispanic)	94.2	26.3	2.0	0.25
Overweight or Obese	92.3	28.3	1.8	0.12
Non-Overweight or Obese	96.2	24.3	2.0	0.25

## Discussion

The present study used direct observation to assess environmental characteristics and accelerometry to assess sedentary and physical activity levels of participating Girl Scouts from four Girl Scout Junior troops in two Midwestern towns. Assessment was completed on seven different occasions for each troop throughout a six-month period.

The results indicate that, on average, each Girl Scout Junior troop meeting provided 2 min of MVPA for attending girls. This result is much lower than Trost and colleagues' (2008) findings in school-based after-school programs affiliated with the Boys and Girls Club, where girls accumulated 17 min of MVPA. In the present

study, participating girls accumulated, on average, more than an hour and a half of sedentary behavior per troop meeting. Although Girl Scouting can be thought of as an extra-curricular educational enrichment opportunity for girls, troop meetings offered no physical activity-related educational content, and girls were provided with very few active recreation opportunities. Of 28 meetings, only six physical activity sessions were observed. The average activity-related session was less than 8 min and this accounted for 2% of all monitored troop-meeting sessions. Furthermore, merely providing a physical activity session did not ensure that girls were actually being physically active during this time. Of note, the girls were homogeneously sedentary, as weight status, race/ethnicity, and socio-economic status did not influence observed physical activity or sedentary behavior.

**Table 3**  
**Troop time spent in active recreation content**  
**(2,329 total minutes of observed time)**

<u>Troop</u>	Total observed minutes	Total minutes Active recreation content	Percent of minutes Active recreation content
T1	395	0	0.0
T2	585	8	1.4
T3	742	30	4.0
T4	607	10	1.6

**Table 4**  
**Troop environment and leader behavior**

	<b>Percent Time</b>
Physical activity educational content	0.0
Meeting time structured	90.0
Any physical activity promotion	0.0
Any physical activity discouragement	0.6
No health promotion	99.0

In our study, physical activity discouragement was more common among troop leaders than physical activity promotion. For example, observations of troop leaders telling the girls to sit down, settle down, and not to run were recorded by our research assistants. Troop leaders offered no verbal or physical promotion (modeling) of physical activity. A possible explanation for the paucity of opportunity and encouragement for physical activity, as noted by Trost and colleagues (2008), is that adult leaders of these programs may be limited in physical activity instructional skills and/or confidence to lead girls in physical activities. Troop leaders may have real or perceived barriers for physical activity. These barriers may include: time constraints, the perception of not having the equipment or space for physical activity; troop leaders may not see physical activity as a mission or purpose of Girl Scouts, or perhaps leaders rank maintaining order above movement. Interventions aimed at getting leaders to offer more opportunities for MVPA and to reduce opportunities for sedentary behavior may be appropriate. To do this, leaders may need to be trained and equipped to implement enjoyable physical activity recreational opportunities, and the associated barriers to more active meetings may need to be identified and reduced.

The results of the present study should be interpreted with consideration of the following limitations. The sample of 42 scouts in four troops is likely not representative of the approximate 3.7 million Girl Scouts and thousands of troops in the U.S.A, but may be representative of other Junior troops in the region. Additionally, our sample was predominantly Caucasian from mid-sized towns, so findings among the observed troops may not generalize to other Girl Scout troops of varying age, diverse ethnic and racial make-up, and troops located in more rural or urban areas. Also, accelerometer-based monitors were used to assess physical activity and sedentary behaviors, and such devices do not provide information on the specific modalities of physical activity, or even sedentary behaviors performed.

Opposite these limitations were a number of strengths. Stringent accelerometer procedures were used to assess physical activity and sedentary behaviors. Accelerometer data was screened for adequate wear time and the length of attendance of each girl was recorded. Accelerometry was linked to an observation system, which recorded the start, transition of, and end of all sessions. Each troop was measured on seven different occasions totaling up to 28 monitoring days. Assessment was completed over a six-month period (October to March), which accounted for seasonal changes, except summer. Objective measures of child overweight and troop meeting environment further strengthened the study.

We examined only one of the six Girl Scout levels (Daisy, Brownie, Junior, Cadette, Senior, and Ambassador). The limitations of our study emphasize that it may be beneficial to replicate the present findings in larger samples, and to examine the physical activity and inactivity of the various Girl Scout levels in populations that are culturally and geographically diverse. Future

studies that investigate these variables across populations will illuminate the degree to which troop meetings are physically active, and provide insight into leader behavior in Girl Scouts as an influence on attending girls with respect to physical activity and obesity. Using this information, potential intervention strategies can be addressed to combat obesity and inactivity in young girls.

In conclusion, these findings show that girls and troop leaders did not take advantage of a potential opportunity to do enjoyable physical activities in the absence of boys. Instead, troop leaders provided opportunities catering to more sedentary pursuits. Based on the current study, there appears to be a gap between the Girl Scout Organization's stated health promotion focus ([http://www.girlscouts.org/who\\_we\\_are/facts/pdf/backgrounds\\_english\\_healthy\\_living.pdf](http://www.girlscouts.org/who_we_are/facts/pdf/backgrounds_english_healthy_living.pdf), Accessed November 30, 2009) and their actual practice in these four troops. The present study's findings suggest that these troop leaders could do much more to promote physical activity and discourage sedentary behaviors. Girls missed out on potential opportunities to achieve more than just two minutes of MVPA toward the recommendation of 60 minutes daily (Strong et al., 2005), and interventions providing opportunities for enjoyable physical activities specifically catering to the needs and interests of girls are warranted. A practical approach to increase MVPA levels in Girl Scout troop meetings would be to add more active components to troop meetings and to promote activity within those sessions. Active components could range from sports or free-play outside to dancing or stationary games (e.g., Simon Says) inside. To support their stated health promotion emphasis, the Girl Scout Organization, or another partner organization, may need to provide a system of health promotion training to troop leaders at the local, council, or national levels.



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## Appendix A

### SNAP Session Form

**SESSION FORM**    **DATE:** \_\_\_\_\_    **TROOP:** \_\_\_\_\_    **OBSERVER:** \_\_\_\_\_

START/END TIME	LOCATION (Room)	CONDITION				SESSION (Select One)	ACTIVITY (Name of Primary Activity)
		U U	S S	O O	E E		
____: ____ ____: ____		N 1Y	0N 1Y	0N 1Y	0.N 1Y	<input type="checkbox"/> Opening/closing/troop business <input type="checkbox"/> Non-Active Recreation <input type="checkbox"/> Active Recreation <input type="checkbox"/> Snack <input type="checkbox"/> Girl Scout Curricular Activity <input type="checkbox"/> Other _____	_____ Staff N= Girls N=
____: ____ ____: ____		N 1Y	0N 1Y	0N 1Y	0.N 1Y	<input type="checkbox"/> Opening/closing/troop business <input type="checkbox"/> Non-Active Recreation <input type="checkbox"/> Active Recreation <input type="checkbox"/> Snack <input type="checkbox"/> Girl Scout Curricular Activity <input type="checkbox"/> Other _____	_____ Staff N= Girls N=
____: ____ ____: ____		N 1Y	0N 1Y	0N 1Y	0.N 1Y	<input type="checkbox"/> Opening/closing/troop business <input type="checkbox"/> Non-Active Recreation <input type="checkbox"/> Active Recreation <input type="checkbox"/> Snack <input type="checkbox"/> Girl Scout Curricular Activity <input type="checkbox"/> Other _____	_____ Staff N= Girls N=
____: ____ ____: ____		N 1Y	0N 1Y	0N 1Y	0.N 1Y	<input type="checkbox"/> Opening/closing/troop business <input type="checkbox"/> Non-Active Recreation <input type="checkbox"/> Active Recreation <input type="checkbox"/> Snack <input type="checkbox"/> Girl Scout Curricular Activity <input type="checkbox"/> Other _____	_____ Staff N= Girls N=
____: ____ ____: ____		N 1Y	0N 1Y	0N 1Y	0.N 1Y	<input type="checkbox"/> Opening/closing/troop business <input type="checkbox"/> Non-Active Recreation <input type="checkbox"/> Active Recreation <input type="checkbox"/> Snack <input type="checkbox"/> Girl Scout Curricular Activity <input type="checkbox"/> Other _____	_____ Staff N= Girls N=

**Start & End Time** = Using the timer provided, write down when each session starts and ends. A session starts when at least 50% of the groups are engaged in an activity. There may be transition periods between sessions, with time lost to management, travel, or other reasons.

**Location** = Describe the room or area. For example, main room, gymnasium, outside, playground, kitchen, etc.

**Condition**

**U** = Useable: Area is useable for physical activity (not excessively wet, muddy, dusty, windy).

**S** = Supervised: Area is supervised by designated personnel (troop leader and/or assistant). Personnel must be in or adjacent to that specific area but does not have to be instructing, officiating, or organizing activities.

**O** = Organized: Organized physical activity such as a game, warm-up, cool-down where the personnel control the activity.

**E** = Equipped: Equipment is provided for the activity if necessary- does not count permanent equipment such as jungle gyms

**Session** (Classify the type of session according to categories listed. If none fit well, use other and describe it.)

**Opening/closing/troop business** = This includes taking attendance, collecting forms, discussing future activities, as well as girl scout troop rituals at the beginning or end of meetings- such as pledges, songs, etc.

**Non-Active Recreation** = This includes games and activities done for fun or diversion, without much physical activity. Examples are playing music, board-games, word games, charades, checkers, chess, and computers.

**Active Recreation** = This includes physically active games, dancing, fitness, or sports activities.

**Snack** = receiving and eating food. If actual food preparation is done by girls, do not include that time in snack session.

**Girl Scout Curricular Activity** = Doing activities toward badges, from a curricular book, or activities clearly arising from girl scouts programs or traditions.

**Other** = \_\_\_\_\_ Arts and crafts, special events, guest speaker, etc.

**Activity** = Written description of what activity occupies at least 50% of the children in the observation period. For example, if the children are playing soccer, the word "soccer" will be written in the space.

## Appendix B

### SNAP Troop Observation Form

DATE: \_\_\_\_\_ TROOP: \_\_\_\_\_ LEADER: \_\_\_\_\_

OBSERVER: \_\_\_\_\_ LOCATION: \_\_\_\_\_ START TIME: \_\_\_\_\_ STOP TIME: \_\_\_\_\_

NUMBER OF GIRLS: \_\_\_\_\_ SNAP Curriculum Used? YES NO OTHER SOURCE: \_\_\_\_\_

Interval	Session Context									Leader Promotion							
	Structure*		General Content*				Knowledge Content			PA		Nutrition		None			
1	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
2	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
3	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
4	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
5	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
6	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
7	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
8	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
9	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
10	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
11	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
12	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
13	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
14	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
15	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
16	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
17	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
18	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
19	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
20	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
21	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
22	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
23	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
24	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
25	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
26	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
27	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
28	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
29	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
30	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
31	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
32	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
33	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
34	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
35	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
36	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
37	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
38	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
39	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
40	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
41	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N
42	F	S	M	GS	Ag	Sn	O	PA	Nu	FC	VPI	PPI	PO	VNI	PNI	NO	N

## CODE SUMMARY

### Phase 1.

**Session context level** decision. What is the context of the session? How is time allocated for the class as a whole (at least 51% of the students)?

General structure- \*momentary time sample (circle one only)

(F) Freetime, freeplay- no defined task from leader(s)

(S) Structured activity- there is a defined task from leader(s)

General content- \*momentary time sample (circle one only)

(M) Management, Transition, Break- Opening & closing rituals, time spent cleaning up from one activity or other time between activities

(GS) Girl Scouting- Content related to specific Girl Scout programs, activities, upcoming events

(Ag) Physically active games, exercise, dancing, fitness activity, etc.

(Sn) Snack- girls have received food and are eating

(O) Other- Not management, Girl Scouting, Active session, or Snack

Knowledge content- presence/absence in past minute (circle one or more only if educational information presented)

(PA) Physical Activity, Sedentary behavior- educational information is being conveyed to girls on the benefits of physical activity (PA) or risks of sedentary behavior (SED), what things girls can do to be physically active or reduce SED, how to do PA, how to get support for PA, how to plan for PA, etc.

(Nu) Nutrition, Foods, Family Meal- educational information is being conveyed to girls on nutrition, foods, or family meals (Nu), including benefits of Nu or risks of poor diet, what things girls can do to eat better, prepare foods, or improve family meals, how to get support for good nutrition, how to plan for Nu, etc.

(FC) Family Connection- educational information is being conveyed to girls on activities that families can enjoy together to build bonds within the family. This may include benefits of FC, or risks of activities that may detract from FC. This would include the FC benefits of family meals & shared physical activity or similar, not nutritional or physical benefits.

### Phase 2.

**Leader(s) promotion** decision.

What is the leader doing? Observe presence or absence of promotion/discouragement in past minute

Physical Activity (Draw line through for discouraging physical activity, encouraging to be sedentary)

(VPI) Verbal promotion of PA in troop meeting- encouragement, praise, instruction for PA

(PPI) Physical promotion of PA in troop meeting-

role modeling, offering opportunities, other ways to get girls more physically active

(PO) Promotes PA, shared PA, or reduction of sedentary behavior outside of troop meeting

Nutrition (Draw line through for discouraging good nutrition, encouraging poor dietary habits)

(VNI) Verbal promotion of healthful eating, fruit/veg, water consumption in troop meeting

(PNI) Physical promotion of healthful eating, fruit/veg, water in troop meeting- role modeling, offering opportunities, things to get children to improve nutrition

(NO) Promotes healthful eating, family meals, fruit/vegetable, water consumption outside of troop meeting

No promotion

(N) No promotion