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Increasing Physical Activity and Enjoyment Through Goal-Setting at Summer Camp

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EXECUTIVE SUMMARY: Children's physical activity levels decrease in the summer months, which explains the interest in out-of-school programs that maintain and increase physical activity (Carrel, Clark, Peterson, Eickhoff, & Allen, 2007). Park and recreation professionals have long understood their contributions to physical activity efforts (Mowen, Trauntvein, Graefe, & Son, 2012). Physical activity is inherent in many recreation programs and commonly embedded in program and facility designs, though efforts to leverage these inherent strengths are often less intentional. In school and work contexts, programs that use goal-setting with pedometers have been linked to increasing physical activity levels (Kang, Marshall, Barreira, & Lee, 2009). However, for such a program to work in a recreation context, it would need to be effective at boosting physical activity and remain enjoyable for participants (Trew, Kremer, Gallagher, Scully, & Ogle, 1997). The purpose of this study was to assess the impact of three different goal-setting programs with pedometers on children's physical activity and enjoyment in a day camp setting. The goal-setting programs differed each week; campers set individual goals, small group goals, and then a camp-wide goal. A secondary aim was to assess if differences in step counts and enjoyment of physical activity existed for male/female and older/younger campers. Participants included 88 children between the ages of 5 and 11 (mean age was 7.8 ± 1.6 years). Physical activity and enjoyment measures were collected at baseline and three subsequent weeks during the goal-setting programs. There were significant increases in step counts when comparing the baseline to individual goal-setting ($\Delta = 776$ steps, $p = 0.003$, $d = 0.38$) and for camp-wide goal-setting ($\Delta = 1547$ steps, $p < 0.001$, $d = 0.78$), and significant increases in enjoyment compared to baseline for group goal-setting ($\Delta = .91$ enjoyment, $p = 0.001$, $d = 0.52$) and for camp-wide goal-setting ($\Delta = .66$ enjoyment, $p = 0.003$, $d = 0.40$). Boys were more physically active than girls ($p = .006$, $d = 0.50$) and on average took 796 more steps. Also, older campers enjoyed physical activity less; the correlation between age and enjoyment was $r = -.317$ ($p = .003$). These data illustrate that a goal-setting pedometer-based program functioning at a broader level was most effective at increasing both physical

activity and participants' enjoyment of physical activity. Concerted efforts by recreation programmers may be necessary to encourage physical activity that is enjoyable among girls and older children.

KEYWORDS: *Physical activity, recreation, youth programs, goal-setting, pedometry*

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Introduction

Children today are likely to suffer from problems associated with a sedentary lifestyle including being overweight or obese, and the chronic health conditions associated with excess weight (Tremblay et al., 2011). To promote the healthy development of children, the United States (U.S.) recommends guidelines of 60 or more minutes of physical activity daily (U.S. Department of Health and Human Services, 2008). Children who meet these recommended physical activity guidelines can benefit from leaner and healthier bodies (U.S. Department of Health and Human Services, 2008). However, a sizable proportion of children in the U.S. do not participate in sufficient amounts of physical activity (Troiano et al., 2008).

School-based programs focused on improvements in children's fitness have been effective at increasing physical activity during the school year (Von Hippel, Powell, Downey, & Rowland, 2007). Unfortunately, these gains dissipate over the summer months (Carrel et al., 2007; Gutin, Yin, Johnson, & Barbeau, 2008). During the summer (i.e., June to August) children are less active and gain a larger amount of weight compared to the amount gained during the school year (Von Hippel et al., 2007). Some authors posit that there are structural barriers to physical activity in the summer (Troiano et al., 2008). Many children have unstructured schedules in the summer with additional time spent at home (Franckle, Adler, & Davison, 2014). Consequently, children tend to engage in more sedentary leisure behaviors such as watching television or playing video games (Tovar et al., 2010). Additionally, children spend less time self-monitoring their physical activity and eating habits when at home (Franckle et al., 2014).

While all children are less active in the summer, there are discrepancies based on gender and age. Girls tend to be more sedentary and engage in less physical activity compared to boys (Trost et al., 2002). Also, physical activity levels decline after 9 years of age, regardless of gender (Wall, Carlson, Stein, Lee, & Fulton, 2011).

Park and recreation agencies have embraced health and wellness as a worthwhile and important goal. Recreation programs expand during the summer to accommodate an increased demand for health and wellness and can play an important role in encouraging children to be physically active (Sanders, Barfield, Hodge, Phillips, & Pino, 2014). Summer camps, many of which are run by public park and recreation agencies, represent a major setting where children can be physically active (Franckle et al., 2014). Each year, summer camps serve over 11 million people, and they remain a critical medium to reach children during summer (Goldlust et al., 2009). The premise that youth at camps are physically active is not new, and research has shown that camps can be effective settings for physical activity (Brazendale et al., 2017; Hickerson & Henderson, 2013). In addition, intentional

physical activity programming in camp has been associated with increases in physical activity, and decreased BMI and fat mass (Gately et al., 2005; Hickerson & Henderson, 2010; Huelsing, Kanafani, Mao, & White, 2010). Still, little research has been conducted on how summer camps might enhance programming to effectively target physical activity (Brazendale et al., 2017; Jago & Baranowski, 2004).

Goal-setting programs can be an intentional and effective way to motivate individuals to be physically active. Locke's (1968) goal-setting theory suggests five principles are necessary for effective goals. Goals must have clarity, challenge, complexity, commitment, and feedback. Clarity refers to goals that are clear and specific with a definite time set for completion so individuals are aware of what behaviors are necessary to accomplish a goal. Challenge denotes a goal that provides an individual adequate difficulty. Complexity indicates that goals should not be too complex as to overwhelm an individual. Goals should be realistic and attainable, providing individuals adequate time to achieve their goal. Commitment must be fostered by having individuals involved in the goal-setting process. They must understand the goals clearly and agree on the goal being set. Lastly, feedback provides opportunities for people to clarify expectations, adjust goal difficulty, and gain recognition of goal achievement (Locke, 1968).

Goal-setting programs on an individual, group, and organizational level can effectively improve performance and behaviors (Locke & Latham, 2006). Individual goal-setting occurs when someone sets high personal goals that result in directed attention and motivation toward goal attainment (Locke & Latham, 2006). Group goal-setting involves a team or small group setting a common shared goal to achieve. Group goals have an added layer of complexity but generate unique motivation in individuals such as planning, morale-building, communication, and collective efficacy (Kleingeld, van Mierlo, & Arends, 2011). Organizational level goal-setting results in a shared vision that can strengthen cooperative goal-setting and improves performance (Locke & Latham, 2006).

A fundamental aspect of goal-setting programs aimed at physical activity is the use of pedometers (Lubans, Morgan, & Tudor-Locke, 2009). Pedometers are inexpensive, body-worn motion sensors that are easy to use and provide immediate feedback on physical activity levels (Lubans et al., 2009). Researchers and practitioners commonly use pedometers to measure physical activity levels and motivate individuals to adjust behaviors to achieve physical activity objectives (Lubans et al., 2009; Tudor-Locke & Bassett, 2004). Pedometers are especially effective at encouraging individuals to engage in physical activity when accompanied with a goal-setting process (Lubans et al., 2009).

Goal-setting programs that utilize pedometers have been effective to increase physical activity in a variety of settings ranging from businesses to schools (Kang et al., 2009). For example, participants in a program called the Girls Stepping Out Program increased their step counts from baseline by approximately 2,700 steps/day (Schofield, Mummery, & Schofield, 2005). Another program encouraged participants to improve their baseline steps and increased their step counts by 2,700 to 3,800 steps/day (Horne, Hardman, Lowe, & Rowlands, 2009). While pedometers appear important in promoting physical activity, less is known regarding the impact on children's behavior (Lubans et al., 2009).

Summer camps that administer youth recreation programs may be able to implement goal-setting programs with pedometers to improve children's physical activity levels. This approach would be beneficial as it is low cost and accessible to summer camps wishing to encourage the physical activity of campers (Huberty, Balluf, Beighle, Berg, & Sun, 2009). Though, for summer camps to embrace physical activity programs, campers need to enjoy them (Trew et al., 1997).

Enjoyment of physical activity is an important facilitator of physical activity levels in children (Verschuren, Wiart, Hermans, & Ketelaar, 2012). A child who enjoys physical activity is motivated and is more active (Bengoechea, Sabistori, Ahmed, & Farnoush, 2010). School-based physical activity interventions are more effective when children enjoy physical activity (Moore et al., 2009). Enjoyment of physical activity also differs by gender; boys tend to enjoy physical activity more than girls (Carroll & Loumidis, 2001). In addition, youth tend to enjoy physical activity less as they get older (Bengoechea et al., 2010).

Given the efficacy of goal-setting programs with pedometers to increase physical activity in other settings, the primary aim of this study was to determine if setting goals (at the individual, group, and/or camp-wide level) increases physical activity and enjoyment of physical activity at summer camp. Given the literature on age and gender, a secondary aim was to see if differences in step counts and enjoyment of physical activity existed for male/female and older/younger campers.

Methods

Study Design

This study employed a quasi-experimental repeated measures design. Data collection took place across four weeks. Baseline measures were collected one week prior to the commencement of the goal-setting programs. Three different goal-setting programs were then implemented in subsequent weeks which are outlined in Table 1; participants set individual goals, group goals, and camp-wide goals.

Table 1

Goal-Setting Program Contrasts from Week to Week

	Goal-Setting Program
Week 1 Baseline	No goal-setting program implemented; camp programming implemented as usual.
Week 2 Individual Goals	Each individual child set a step count goal. Each day at lunch counselors provided feedback to individual campers on their progress toward their goal. At the end of every day feedback was provided on goal completion.
Week 3 Group Goals	Campers are placed into small groups every week at camp led by a counselor. Each group set a collective group step count goal. Each day at lunch counselors provided feedback to the entire group on their progress toward their goal. At the end of every day feedback was provided on group goal completion.
Week 4 Camp-Wide Goal	The entire camp set a collective step count goal. Feedback was provided at the start of every camp day on the progress towards the goal. At the end of the week feedback was provided on camp-wide goal completion.

Data from each goal-setting program are compared to the baseline week. Campers did not consecutively attend each of the four camp weeks where data were collected. Therefore, the sample sizes varied for the comparisons with the baseline and is not characterized as an identical sample.

Setting and Participants

The study took place at a university operated day camp open to the public in a large western U.S. city. The camp generally operated from 8:00-3:30 Monday-Friday and included a variety of activities each week, including arts, games, and sports. Camp programming was predominantly hosted on university green space and in campus facilities. While the programming each week was not identical, it was comparable; none of the program weeks were systematically biased toward physical activity. Table 2 illustrates typical mid-week

programming Tuesday through Thursday of each week. Mondays and Fridays each week are used to visit and explore local attractions such as parks, gardens, or museums.

Table 2

Camp Programming Comparisons from Week to Week

	Week 1	Week 2	Week 3	Week 4
8 – 8:15 a.m.	Check-in, greetings, and games	Check-in, greetings, and games	Check-in, greetings, and games	Check-in, greetings, and games
8:15 – 9 a.m.	Morning circle	Morning circle	Morning circle	Morning circle
9 – 11 a.m.	Week 1 electives (art, canoeing, rock climbing, and science)	Week 2 electives (art, gardening, rock climbing, and engineering)	Week 3 electives (art, gardening, canoeing, and mini golf)	Week 4 electives (art, archery, leather work, and calligraphy)
11 – 11:45 a.m.	Lunch	Lunch	Lunch	Lunch
12 – 2:30 p.m.	Swimming once a week/group or counselor-led games and initiatives	Swimming once a week/group or counselor-led games and initiatives	Swimming once a week/group or counselor-led games and initiatives	Swimming once a week/group or counselor-led games and initiatives
2:45 – 3 p.m.	Check-out	Check-out	Check-out	Check-out

The sample consisted of 88 children campers. The mean age of the sample was 7.8 ± 1.6 years, with 46 males and 42 females. In general, the sample was largely homogenous with the majority of campers being Caucasian, from affluent backgrounds, and without any known disabilities. Consent was obtained from campers' parents prior to data collection and campers provided assent before beginning the study. The University Institutional Review Board approved the protocols employed in this study.

Physical Activity Measurements

Physical activity was measured using Yamax DigiWalker CW600 pedometers (Tokyo, Japan). Pedometers provide valid assessments of physical activity in children (Trost, 2007). Each camper in the sample (n = 88) wore a pedometer for the baseline and at least one goal-setting program: individual (n = 64), group (n = 60), or camp-wide (n = 60) goals. Most campers attended the camp for multiple weeks, but session enrollment operates on a weekly basis, which explains discrepancies in weekly sample sizes. The devices were worn for five camp days (Monday through Friday) between the hours of 8 a.m. and 3:30 p.m. Pedometers were taken off for activities such as aquatics and rock climbing. On average, children did not wear their pedometers for 30 minutes a day; thus, all subsequent calculations are based on an active wear time of seven hours/day. The pedometers were secured to participants' pants above the knee and worn on the left hip. Camp counselors and members of the research team ensured that the devices were worn and used properly during the entirety of the camp day.

The pedometers have a seven-day memory that was used to record steps each day of the camp week. Yamax DigiWalker models have been shown to provide an accurate recording of steps within ± 3% of actual steps (Schneider, Crouter, Lukajic, & Bassett, 2003), and have been shown to be a valid measure of free-living physical activity (Crouter,

Schneider, Karabulut, & Bassett Jr, 2003). Participants were included in the analysis if they had recorded data for at least three valid days of the camp week. Three days of pedometer monitoring is the minimum criterion for estimating daily ambulatory physical activity. If at least three days of monitoring are available, missing data does not compromise the analysis (Tudor-Locke et al., 2005; Vincent & Pangrazi, 2002). It was also necessary that participants had valid data for the baseline week and at least one week of the goal-setting programs.

Enjoyment Measurements

Funometers were used to measure children's enjoyment of physical activity at summer camp. The funometer is a single item 10-point likert scale, 0 being no fun at all and 10 being the most fun. Funometers were distributed to campers at the end of every camp day. An aggregate score of physical activity enjoyment at camp was calculated for each week. The funometer has been previously used to effectively measure enjoyment in youth recreation programs (Arthur-Banning, 2005; Ellis, Henderson, Paisley, Silverberg, & Wells, 2004; Wells, Ellis, Paisley, & Arthur-Banning, 2005).

Goal-Setting with Pedometers

During week 1 of the study, baseline data were collected for both physical activity and enjoyment related to physical activity. To facilitate the goal-setting programs, an average step count was established during this baseline week. Prior to each goal-setting program, counselors were provided instruction on goal-setting logistics and how to help campers set step count goals. Levels of physical activity and enjoyment in weeks 2-4 were compared to the baseline data from week 1.

In week 2 campers set individual step count goals, which counselors recorded on their camp rosters. Campers were given five options in reference to this average which is outlined in Table 3; 10% fewer steps, 5% fewer steps, the same number of steps, 5% more steps, and 10% more steps. Counselors helped campers check their pedometers halfway through the day, and provided feedback on their progress and how many steps were necessary to reach their goal by the end of the day. Pedometers were checked at the end of the day to see if the campers had achieved their goals.

Table 3

Goal-Setting Parameters for Programs

PICK ONE STEP GOAL (please circle):				
A LOT FEWER (6,719 steps/day)	**FEWER** (7,092 steps/day)	**AVERAGE CAMPER** (7,465 steps/day)	**MORE** (7,838 steps/day)	**A LOT MORE** (8,211 steps/day)

In week 3, small groups (i.e., counselor units) set step count goals for their respective groups. Counselors were tasked with helping campers decide on the group step count goal (e.g., having each camper vote). The step count was then multiplied by the number of campers in the counselor's group to form a daily group goal; group sizes varied from 5 to 12 campers. Halfway through each day, counselors checked each camper's pedometers and added up everyone's step counts for a group total. To help counselors with this process, they were provided worksheets. An example is shown in Figure 1. Then counselors gave the group feedback on their progress towards reaching the goal. At the end of each day, this process was repeated to let the group know if they had reached their goal.

In week 4, the entire camp set a camp-wide step count goal. The camp director and counselors facilitated the process of choosing the goal. Multiple counselors held up signs with the goal options and campers were instructed to cheer for the goal they wanted. The loudest cheers decided what the camp-wide goal would be. The goal was then multiplied by the entire camp and by 5 days of camp for an overall weekly goal. At the end of each day, counselors calculated a final step count for their group. The researcher onsite added all group step counts together for a final camp-wide daily total. The daily progress toward the goal was recorded on a poster board which is outlined in Figure 2. Each morning the camp could see how they did and whether they were on track to achieving their goal.

GROUP GOAL: 39,190
*Based on the group choosing the goal MORE (7,838 steps/day x 5 campers)

Name	Monday		Pedometer Number
	11 AM	245PM	
Camper 1	4000 +	8000 +	22
Camper 2	2000 +	6000 +	23
Camper 3	4000 +	8000 +	24
Camper 4	3000 +	7000 +	25
Camper 5	4000 =	8000 =	26
GROUP TOTAL STEP COUNTS:	17,000	37,000	*Did not meet goal.

Figure 1. Counselor worksheet for group goal feedback.

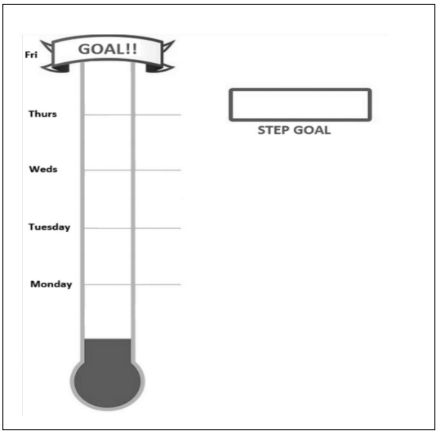

Figure 2. Camp-wide progress report for goal feedback.

Data Analysis

Prior to hypothesis testing, continuous variables were screened for outliers using box plots and z-scores (with a ± 2.5z cutoff) and data from faulty pedometers were removed from the data set. In addition to missing step count data due to lost pedometers, we defined daily step counts of less than 1,000 steps over the seven hours of camp to be faulty measures which is a standard among researchers (Rowe, Mahar, Raedeke, & Lore, 2004). This represented less than 5% of our step count data. Hypothesis tests for the study's primary purpose involved planned comparisons for main effects where each program was compared to the baseline. Cohen's delta determined the effect size and practical significance of each comparison. All analyses assumed an initial alpha level of $p \leq 0.05$. Planned comparisons were carried out using SPSS 20 statistical software program (Armonk, NY, USA).

To investigate the secondary aims, we averaged funometer scores and average daily step count for each camper across weeks attended. A two-tailed *t*-test was used to determine if male or female campers demonstrated higher average daily step counts. As age and enjoyment were both continuous, a correlation was used to determine degree of relationship.

Results

The results of our study generally support the efficacy of a goal-setting program to increase step counts and enjoyment of physical activity at summer camp. Table 4 shows the descriptive statistics for the total campers' physical activity and enjoyment. The week that utilized individual goal-setting showed increased step counts compared to baseline (Δ= 776 steps, $p = 0.003$, $d = 0.38$), but enjoyment was not significantly different (Δ= .12 enjoyment, $p = .473$, $d = 0.09$). The week that utilized group goal-setting showed increased enjoyment compared to baseline (Δ = .91 enjoyment, $p = 0.001$, $d = 0.52$), but step counts were not significantly different (Δ = 29 steps, $p = .937$, $d = 0.01$). The week that utilized camp-wide goal-setting showed increased step counts compared to baseline (Δ = 1547 steps, $p < 0.001$, d = 0.78), and enjoyment significantly increased (Δ = .66 enjoyment, $p = 0.001$, $d = 0.40$). Results from the planned comparisons are presented in Table 5 and 6.

Table 4

Means and Standard Deviations at Baseline and Goal-Setting Program Weeks for Campers Step Count Scores and Enjoyment of Physical Activity Scores

Goal-setting programs	*n*	Step count scores		Enjoyment of physical activity scores	
		M	*SD*	*M*	*SD*
Baseline	88	7058	1636	8.51	1.75
Individual Goals	64	7834	1960	8.64	1.56
Group Goals	60	7224	2362	9.15	.95
Camp Goal	60	8686	1731	9.03	1.17

Table 5

Planned Comparisons of Baseline to Week 2 – 4 for Physical Activity Step Count Scores

Baseline (I)	Goal-Setting Program (J)	Mean Difference (I-J)	Std. Error Mean	Sig.	95% Confidence Interval of Difference	
					Lower	Upper
	Individual	776	250	.003*	1276	277
	Group	29	378	.937	786	-726
	Camp	1547	253	.000*	2055	1040

* p < .05.

Table 6

Planned Comparisons of Baseline to Week 2 – 4 for Enjoyment of Physical Activity Scores

Baseline (I)	Goal-Setting Program (J)	Mean Difference (I-J)	Std. Error Mean	Sig.	95% Confidence Interval of Difference	
					Lower	Upper
	Individual	.12	.17	.473	.46	-.21
	Group	.91	.26	.001*	1.45	.38
	Camp	.66	.21	.003*	1.1	.23

* p < .05.

A secondary aim of this study was to examine differences by gender and age. Table 7 shows the descriptive statistics for campers' physical activity based on gender. Consistent with the extant literature, boys were more physically active than girls (p = .006, d = 0.50). Boys took an average of 796 more steps than girls. Also, older campers reported lower levels of enjoyment related to physical activity, the correlation between age and enjoyment was r = -.317 (p = .003).

Table 7

Means and Standard Deviations for Campers Step Count Scores by Gender

		Step count scores	
Gender	*n*	*M*	*SD*
Female	70	7206	1416
Male	62	8002	1778

Note. There were 8 campers who did not report gender.

Discussion

Camps are an important provider of opportunities for youth to be physically active in the summer and are a potential solution to combat the weight some children gain in the summer months. The primary purpose of this study was to examine the effect of goal-setting on children's physical activity and enjoyment of physical activity. The results indicated that goal-setting in youth programs can be effective for increasing physical activity while maintaining or increasing camper enjoyment of physical activity. Individual goals significantly increased step counts and neither increased nor decreased physical activity enjoyment. A group goal resulted in an elevated level of physical activity enjoyment, but not an increase in step counts. In this study, the camp-wide goal-setting was most effective overall. During this week campers took the most steps and reported enjoying physical activity more than during the baseline week.

These data can be useful to park and recreation agencies that administer summer recreation programs. Ultimately, all the goal-setting options exhibited potential benefits for park and recreation managers wishing to proactively address physical activity through summer camp programming. While the camp-wide goal-setting program was the most promising, as increases were observed in both actual step counts and enjoyment of physical activity, the individual and group level goal-setting options afforded some benefits without any notably detriments to either physical activity or enjoyment of physical activity. Thus, regardless of specific format, use of step count goals with pedometers appears beneficial.

Goal-setting theory also offers a possible explanation as to why the camp-wide goal appears most promising at increasing both physical activity and enjoyment of physical activity. Goals that are set across entire organizations such as camps help promote a shared vision which can strengthen cooperation toward achieving goals (Locke & Latham, 2006). The five principles of effective goal-setting (clarity, challenge, complexity, commitment, and feedback) were evident (Locke, 1968). Establishing one step count goal for campers to strive toward provides clarity. Everyone at camp was aware of the goal and how many steps were required to succeed. The camp collectively chose a challenging goal, which was adequately difficult for many individuals to complete. Having many people working toward the goal added a layer of complexity that was not overwhelming. The camp as a whole cooperatively chose the goal; this fostered social commitment and buy-in from all (Chow & Chan, 2008). Lastly, all participants received consistent feedback daily before camp started which provided the campers and staff time to adjust their previous strategies and outline ways as a collective to increase their progress. The combination of cooperative efforts between the entire camp, and the motivating influences of the leadership team at camp (camp directors and counselors) appears to have impacted the performance of increasing step counts, and also resulted in campers enjoying physical activity more. This

study provides a framework of a goal-setting program that can be implemented in a youth recreation program setting.

In addition to goal-setting theory, informal observations during the study indicate an alternative explanation for our findings. As the study progressed from the baseline week to the fourth week of physical activity tracking, campers, counselors, parents, and the camp directors all seemed more comfortable with the general premise that physical activity was an inherent part of the camp experience. Campers had accepted that physical activity was part of the camp culture. During the final week of the program, where the camp-wide goal was set, the culture of the camp and overall enthusiasm for being physically active seemed to increase. While this progression from week 1 (baseline) to week 4 (camp-wide goal) was not intentional, simply the presence and focus on physical activity over the four-week period could have altered the way campers, parents, and staff viewed physical activity at the camp. While both goal-setting theory and a cultural shift over time and exposure remain viable explanations of our finding, the primary mechanism of change seems to be the active incorporation of goal-setting with pedometers at camp.

After addressing our primary aim, we wanted to see if any differences in participants' gender and age were consistent with the extant literature. Girls tended to have lower step counts than boys; this aligns with previous literature (Trost et al., 2002). These results may be of interest to camp counselors and recreation program staff. If boys are generally more active than girls at camp, camps may want to pay particular attention to girls' physical activity needs. Camps can promote girls' participation in physical activity by 1) creating a greater awareness among those responsible for promoting physical activity (counselors and directors); 2) adapting camp activities to foster girls' active participation; and 3) encouraging girls via cues, messages, and incentives (Pardo et al., 2013). Enjoyment of physical activity also declined with age which is an issue because enjoyment of physical activity is a key facilitator of being active (Verschuren et al., 2012). To promote enjoyment among older campers, a suggestion is for counselors and campers to collaborate in the program development process by collectively selecting activities that generate fun, enjoyment, and interest (Prochaska, Sallis, Slymen, & McKenzie, 2003).

Limitations

Readers should understand several limitations of this study. First, camp programming differed across the four weeks of the study. While we do not anticipate any systematic bias across the four weeks of programming in this study, returning campers do not want to repeat identical activities across multiple weeks. In addition, it was difficult, operationally, to equate the specific procedures across weeks, and this does make cross-week comparisons more difficult (as opposed to comparisons to the baseline week). For example, selecting a camp-wide goal by "cheer" was a practical approach for the camp, but may have disadvantaged the voice of those less likely to vocalize their options. The use of a control group, difficult to obtain in a field-based study such as this, could have addressed this limitation. Second, there were issues with lost and non-functioning pedometers, which resulted in some missing data. We have no reason to believe lost or non-functioning pedometers biased the data in any way. Third, data from each week are compared to the baseline week. As campers did not attend each of the four consecutive weeks, sample sizes for comparisons with the baseline varied and do not represent an identical sample. However, demographics (age and gender) were similar across weeks and did not vary. Future studies could counterbalance the program groups, include control groups, and use true experimental designs.

Conclusion

In conclusion, goal-setting programming appears to be an effective and practical approach to increasing physical activity levels in this camp. The improved physical activity observed in this study can help further position recreation programs as stewards of individual and community health. Specifically, summer recreation programs that intentionally engage youth in physical activity may help decrease health risks associated with weight gains

observed over the summer months (Gately et al., 2005; Hickerson & Henderson, 2010; Huelsing et al., 2010). Recreation programs wishing to increase physical activity should consider using goal-setting programs. Pedometers provide immediate feedback, and an interactive physical activity focus may help programmers facilitate buy-in to the value of physical activity from participants, staff, and parents. Creating a culture that promotes physical activity can be both fun and effective.

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