

How Impactful are Recreation Center Offerings on Youth Development?

A Synthesis of the Research Literature

A Synthesis Project

Presented to the

Department of Kinesiology, Sport Studies, and Physical Education

The College at Brockport

State University of New York

In Partial Fulfillment

of the Requirements for the Degree

Master of Science in Education

(Physical Education)

by

Dillon Thompson

Spring '19

THE COLLEGE AT BROCKPORT
STATE UNIVERSITY OF NEW YORK

BROCKPORT, NEW YORK

Department of Kinesiology, Sport Studies, and Physical Education

Title of Synthesis Project: How Impactful are Recreation Center Offerings on Youth
Development?

Cathy Houston-Wilson

8/17/19

Instructor Approval

Date

Accepted by the Department of Kinesiology, Sport Studies, and Physical Education, The
College at Brockport, State University of New York, in partial fulfillment of the
requirements for the degree Master of Science in Education (Physical Education).

Cathy Houston-Wilson

8/17/19

Chairperson Approval

Date

Table of Contents

Abstract.....	4
Chapter 1.....	5
Chapter 2.....	9
Chapter 3.....	11
Chapter 4.....	20
Reference Page.....	23
Appendix.....	25

Abstract

Research indicates that recreational facilities impact youth development through programming and employee-patron interaction. The purpose of this synthesis project is to review the literature regarding quality programming within recreational facilities and the impact these programs have on youth development. Results indicate that quality facility offerings have an overall impact on youth development.

Keywords: recreation center, youth development, physical activity, quality programming

Chapter 1 – Introduction

Physical activity is important for youth development, including their current and future health; national recommendations are for them to engage in at least 60 minutes of moderate to vigorous physical activity daily

(<https://www.cdc.gov/healthyschools/physicalactivity/guidelines.htm>). Most of children's physical activity occurs outside of school hours; thus, access to and the quality of community recreation facilities and programming are particularly relevant (McKenzie, Moody, Carlson, Lopez, & Elder, 2013). Recreation facilities have a great capacity to meet the PA needs of children and youth therefore improving the development of their youth member-base. The after-school period is the largest block of discretionary time that school-aged children have, and one in which many children participate in community-based PA (Tudor-Locke, Lee, Morgan, Beighle, & Pangrazi, 2006).

Employees of recreational facilities have the responsibility of providing quality programming for their youth members in order to positively impact their development moving forward. Quality programming can be defined through outcomes such as are the children physically active during the program, or interaction quality which refers to how the instructors are interacting with participants. Recreational facilities provide an atmosphere different than a school environment that youth are already so familiar with and allows open engagement through programming with their peers off school grounds (Sheehan, 2015). Youth development can be defined as child growth through programming facilitated by recreation centers involving the physical activeness of the participants (McKenzie, Moody, Carlson, Lopez, & Elder, 2013). Such development is vital to factors such as a child's current and future health, and with access to quality recreational facilities and programming, it is likely those youth will have more

opportunities to grow in those areas. There is a significantly increased risk of being overweight or obese with consumption of one or more daily servings of sugar-sweetened beverages, although the consumption has declined slightly over the past decade, intake remains high, especially in youth (Trude, Surkan, Cheskin, Gittelsohn (2018). Physical activeness contributes to overall youth development and physical activeness, which can decline the percentage of obese youth, when exposing youth participants to a wide-variety of programming both sport-oriented and not. Recreation facilities offer the member-base, equipment, and facilities to provide quality programming that can impact the growth of child participants and their development if facilitated properly. Although both community and neighborhood factors contributed to obesity among youth, the association between the environmental characteristics and obesity differed by age, sex, and socioeconomic status. Among adolescents, factors such as recreation or exercise facility and equipment access and urban/rural characteristics of a community were associated with obesity (Kasehagen, Busacker, Kane, Rohan 2012).

Statement of the Problem

Along with access to quality recreational facilities, quality programming is a key component to improved health and development in youth. Instructor interaction during these programs provides a social collaboration between participants and their instructors which can also create a comfortable environment for participants to interact amongst themselves. The impact of quality programming on youth and participant satisfaction will be reviewed in this synthesis to determine what factors contribute to quality programming within a recreational facility have the greatest positive impact on youth health and development.

Purpose of the Review of Literature

The purpose of this synthesis project is to review the literature regarding quality programming within recreational facilities and the impact these programs have on youth development.

Operational Definitions

The following terms will be defined for the specific purpose of reference in this study.

1. Recreation Center: Community facilities that house opportunities for physically activity for youth outside of school (McKenzie, Moody, Carlson, Lopez, & Elder, 2013).
2. Youth Development: Child growth, such as physical, cognitive, social, and emotional well-being, through programming facilitated by recreation centers involving the physical activeness of the participants (McKenzie, Moody, Carlson, Lopez, & Elder, 2013).
3. Physical Activity: Programming offered that involves the physical activeness of the child participant as it is important for youth development and their current and future health (McKenzie, Moody, Carlson, Lopez, & Elder, 2013).
4. Quality Programming: Outcome quality regarding the participants level of physical activity during the program; Interaction quality regarding the instructor interaction with participants (Sheehan, 2015).

Delimitations

This study was delimited to:

1. All articles focused on children under the age of 16 as it relates to youth development and health through recreational centers and their offered programming.

2. All articles used came from the year 2000 or later.
3. All articles were peer reviewed.

Chapter 2 – Methods

The purpose of this chapter is to review the methods regarding quality programming within recreational facilities and the impact these programs have on youth development. The studies collected for this synthesis were located using the EBSCO database from The College at Brockport's Drake Library. Within the EBSCO database the following databases were searched: SPORTDiscus and Academic Search Complete. Within these databases a total number of 10 articles met the criteria for inclusion as a part of the critical mass within this literature review. In order for an article to meet the criteria for selection in this synthesis it must have been published between 2000-present, this will provide the synthesis with the most up to date and current information available. Other criteria for selection included scholarly and peer reviewed articles that were full-text. Having scholarly and peer reviewed articles provides more validity within the articles and better overall quality. Other articles or sources selected as a part of this literature review provided context about the topic, background information and supplemental information to complete the review. All articles and sources are appropriately cited in the reference section of this paper.

In order to gather valuable articles for this synthesis certain keywords and phrases were used when searching the data-base. The first keyword searched was "Youth Development" that resulted in 17,485 number of hits. "Youth Development" was used because of the desire to view wordage associated with academic articles pertaining to research. "Youth Development" was then paired with the phrase "recreation centers" which then resulted in 176 number of hits. Articles that were selected for use in this synthesis were scholarly and peer reviewed articles that were full-text. Also when selecting articles for use in this it was important that each article

selected had valuable information related to methods regarding quality programming within recreational facilities and the impact these programs have on youth development.

Specific criteria were used in order to be a part of the literature review. All of the articles selected were based on the exposure of recreational center programming and the impact those programs had on youth development. Participants in the studies reviewed were under the age of 16 years old. For this synthesis a total of 10 articles were used to compile data on the topic of quality programming within recreational facilities and the impact these programs have on youth development. These articles were picked from the 176 article hits found when the specific wordage was used. This wordage helped define the article searches pertaining to the topic itself. Articles came from a variety of journals including the Journal of Park & Recreation Administration, the Nutrition Journal, the Maternal & Child Health Journal, the Journal of Public Health Policy, and the American Journal of Health Promotion.

The critical mass for this synthesis is comprised of 1,320 number of participants. All research articles chosen for this synthesis were not selected based off the number of male or female participants, but with the understanding of their exposure to recreation centers and programming offered by those community facilities. Data were analyzed using the following methodologies for the studies under review through sport-oriented activities, as well as other programs such as Zumba, urban dance, wall climbing and ballet due to the equipment and space offered by the recreation centers. Factors contributing to youth development such as physical activeness and health were observed throughout the study period within the participants in correlation to their exposure to the recreation centers' programming.

Chapter 3 – Literature Review

The purpose of this chapter is to review the literature regarding quality programming within recreational facilities and the impact these programs have on youth development. Specifically, the following topics will be discussed: facility offerings and community impact.

Facility Offerings

Sheehan (2015), stated that customer satisfaction is determined by a sense of quality, which comes in many forms, such as outcomes quality and interaction quality of programming. To study the impact of quality physical activity programming offered in recreational facilities, youth participants and hired instructors were observed throughout the weeks of programs offered within Cardel Place in the city of Calgary, Alberta, Canada. The participants were the instructors hired by the recreation center and the youth participants in the programming aged 3-14. Only the observers knew the study was taking place, not the participants themselves. Instructor interaction received one of six hierarchical codes which were labeled: “1) promotes fitness (prompting or encouraging PA participation); 2) demonstrated fitness (models fitness engagement); 3) instructs generally (lectures, describes, prompts or provides feedback); 4) manages (participants or the environment in nonsubject matter tasks such as set-up); 5) observes (monitors the group or an individual); and 6) other task (attends to events not related to the responsibilities of the class).” An interesting trend related to the age of the participants and the instructors’ received code for the varying age groups. For example, the older participants decreased in physical activity as the instructor closely observed, however as the instructor demonstrated instead of simply observing, the older participants portrayed more engagement instead of self-consciousness. Furthermore, the quality of the hired instructors and their ability to properly facilitate programming based on the demographic and characteristics of their

participants, related to the customer satisfaction of the patrons belonging to the recreational facility. The recreational facility offered quality instructors and feedback for their employees to better the experience for their participants, therefore increasing the positive outcomes and development related to the programming. “To exclude or limit skill development for the sake of MVPA (moderate-to-vigorous physical activity) offers limited benefit. From the perspective of management, policy and staff development that focus on promoting all aspects of PA (physical activity) – including those that may not increase MVPA in the moment but overall PA over time – are necessary” (Sheehan, 2015).

Developmental disabilities, with onset in the childhood years, have lifelong effects. In this study, evidence of the benefits of physical activity for youth with developmental disabilities was analyzed, with specific use of group exercise programs, treadmill training, or therapeutic riding/hippotherapy, which can be found with recreation centers (Johnson, 2009). Articles relevant to the purpose of this study were collected, and out of the 3263 articles collected, 14 studies were used based on their observation and analyzation a physical activity and how it effected developmental attributes. Six of the studies resulted in benefits for youth/adolescents with disabilities, such as muscle strength, through group fitness programs offered within recreational facilities. Other physical benefit improvements were found through aquatic interventions, such as adapted swimming lessons, which positively impacted body function. These offerings were available through recreation centers in the form of certified/qualified instructors and proper facility space/equipment to be utilized by youth/adolescents with developmental disabilities. These offerings were found to benefit these participants through physical activity programming housed within the facilities (Johnson, 2009).

Childhood obesity can be attributed to increased sugar intake through consumption of unhealthy foods and beverages. Diets such as these incorporating refined carbohydrates, added sugars, fats, and salt can lead to diet-related diseases such as overweight and obesity, type-2 diabetes, and poor dental health (Trude, Surkan, Cheskin, & Gittelsohn, 2018). The purpose of this study was to analyze the impact of community-based intervention through improvement of availability and affordability of healthier foods alongside marketing efforts to better make individuals aware of said intervention. The B'more Healthy Communities for kids (BHCK) was a five-year funded childhood obesity prevention trial in Baltimore, Maryland. It aimed to improve healthier food access, purchase, and consumption in food environments such as recreation centers, among youth aged 9-15. The intervention was divided into the following three phases: 1) healthier beverages, 2) healthier snacks, and 3) healthier cooking methods. The program offered healthier alternatives during the healthier beverage and snack phases, and promoted healthier cooking ingredients during the healthier cooking method phase to encourage overall improved meal preparation. All of these promotions and programs were offered in a variety of platforms, all partnered together through community hubs, including recreation centers. Children aged 9-15 were also exposed to nutrition sessions and giveaways/taste-tests led by youth leaders of after-school programs. Recreation centers provided a youth-friendly atmosphere, able to house the BHCK intervention. Across the intervention, 1.4 more healthier foods and beverages were purchased per week, and a significant decrease in % of kcal from sweet snacks and desserts (Trude, Surkan, Cheskin, & Gittelsohn, 2018). Recreation centers offered the perfect hub for nutritional improvement sessions adding to the endeavors of this intervention, and were able to provide a peer-intervention approach that provided a more comfortability amongst the participants.

The following study tested the assumption that higher quality recreation facilities better serve the patrons involved and physical activity overall. This test was administered in the form of an expanded and renovated skate park facility, which nearly tripled in size. The attraction of the newly renovated facility brought a desire to understand its impact on the rate of physical activity (Cohen, Sehgal, Williamson, Marsh, Golinelli, & McKenzie, 2009). The renovated park was compared to another skate park with similar physical characteristics and was located within a large recreational facility. Trained assessors used the System for Observing Parks and Recreation in Communities (SOPARC) and conducted interviews with park users within a 2-mile radius of each park. On each day of observation the assessors observed four times a day, and administered face-to-face interviews with park users during two data collection periods of 7 days each. Usage of both parks increased, however the renovated skate park usage increased dramatically having six times as many users from the baseline observation. Because of this renovation, the need for staff always increased to match the proper ratio of child supervision, and a summer camp was offered to cater to the demand of the patrons after the renovation was complete. As the quality of the facility increased, so did the offerings made available to the public to better increase the physical activity of the child demographic (Cohen, Sehgal, Williamson, Marsh, Golinelli, & McKenzie, 2009).

Community Impact

Physical activity is important for children's development and their current and future health. Most of their physical activity occurs outside of school hours, which makes the community's access to recreation facilities and their programming important (McKenzie, Moody, Carlson, Lopez, & Elder, 2013). This study was driven by the association of neighborhood income and children's use of the centers and the characteristics of community

recreation centers. Thirty public recreation centers from five cities in San Diego County, California were involved in the study and 18 families with a child 5-8 years old living within 1.5 miles from each of the 30 centers participated as well. Trained evaluators used the Recreation Facility Audit Tool (REFAT) to score the facilities based on their amenities, which correlated with the economic status of the surrounding community. An annual income of households around the recreation center from the year 2000 was obtained to better understand the participants involved and the users of the facilities themselves. Based on the data analyzed, centers in poorer neighborhoods tended to have fewer options of physical activity programs for children to choose, and the conditions of facilities and amenities were related to neighborhood income (McKenzie, Moody, Carlson, Lopez, & Elder, 2013).

Within the field of recreation, sportsmanship problems have become more prominent in programming efforts. Verbal and physical assault has become more common in young athletes and can lead children to minimize their involvement in that sport or even stop playing completely (Engh, 2002). This then can lead to physical inactivity among youth and later reach childhood obesity (Wells, Arthur-Banning, Paisley, Ellis, Roark, & Fisher 2008). The purpose of this study is to observe benefits-based programming and its impact on sportsmanship the sportsmanship atmosphere in youth sports. Two community centers that facilitated youth basketball games in league play were observed, one of which served as the control with no intervention. The participants were the registered athletes for the youth leagues and divided into divisions based on age/grade. The specific age groups involved were 3rd-6th graders. At the site being intervened, for the 3rd and 4th graders one game was overseen by prosocial behavior trained officials and one by officials not extensively trained. For the 5th and 6th graders, trained officials oversaw the even-numbered weeks and the non-trained officials officiated the odd weeks. There

is considerable evidence to suggest that individuals will act in accordance with what is expected of them (Arthur-Banning, 2005), and creating the community of participant “buy-in” to the program resulted in more positive sportsmanship behaviors and fewer negative. The community prioritized fun and good sportsmanship within these youth programs, and as a result the youth involved were exposed to trained officials that then left an impression for the youth’s behavior moving forward (Wells, Arthur-Banning, Paisley, Ellis, Roark, & Fisher 2008).

With multiple health benefits being associated with consistent physical activity, the following study highlights the importance of increasing physical activity among African-American youth from only 29.5% meeting the recommendations in 2005 (Ries, Gittelsohn, Voorhees, Roche, Clifton, & Astone, 2008). The purpose is to investigate environmental factors influencing the use of recreational facilities for physical activity by urban African-American adolescents. This study included the city of Baltimore, Maryland, which in 2006 had a population of 631,366, 65% of which was African-American. Baltimore Active Living Teens Study (BALTS) participants were recruited by phone for in-depth interviewing. A trained interviewer addressed the two main topics of neighborhood characteristics that influenced their physical activities and a description of the participants experiences using recreational facilities. Twenty-four young men and twenty-four young women who all self-identified African-American, participated in this study, and the four broad categories gathered from the interviewing regarding facility usage included physical, social, organizational, and economic environments. Furthermore, these categories played an important role on the usage of the facilities by the African-American youth, for example feeling safe at the facility, while also providing a fun, peer-filled environment. An economic impact was relevant because the adolescents desired more programs catered to their demographic and if a facility was not

financially stable, the hours of operation may not cater to the targeted population (Ries, Gittelsohn, Voorhees, Roche, Clifton, & Astone, 2008).

Among adolescents, factors such as recreation or exercise facility and equipment access and urban/rural characteristics of a community were associated with obesity. The purpose of this study is to examine whether neighborhood characteristics are associated with youth meeting the minimum physical activity level (Kasehagen, Busacker, Kane, & Rohan, 2012). Data was analyzed from the 2007 National Survey of Children's Health (NSCH) and the Rural-Urban Commuting Area (RUCA) codes were used during the study. The main analysis being intensity and number of days per week that youth participated in physical activity, the respondents were asked: "During the past week, on how many days did the child exercise, play a sport, or participate in physical activity for at least 20 min that made him/her sweat and breathe hard?" Elements such as litter, dilapidated housing, and vandalism were combined together as a variable indicating if the child was reported to have these elements in his/her neighborhood, and sidewalks, parks, and recreation centers counted as neighborhood amenities as being present or absent. Physical activity for at least 20 minutes 5 or more times per week was more prevalent among youth living in most rural areas compared to youth living in most urban areas. With that being said, the presence of parks with recreational equipment was associated with meeting the physical activity level based on the community setting (Kasehagen, Busacker, Kane, & Rohan, 2012).

The purpose of the following study was to understand which recreation facilitation techniques are most successful in encouraging physical activity among youth. The programming strategies were analyzed to discover the most and least effective in promoting physical activity among elementary school aged children in organized recreation (West & Shores, 2008). Four

student classes participated where approximately 200 youth attend school in kindergarten through fifth grade. The school in Caldwell County, NC has 52% of their student population being African-American or Hispanic, and 98% of the overall student body receiving free or reduced-cost lunch. The four techniques observed were skills and drills, scrimmage, modeled play, and free play and data was collected for a 40 minute collection period during gym class. The study suggests that when given an appropriate activity environment and social support, children are intrinsically motivated to be physically active during play. Further suggestions include the reporting of more demanding lives from both children and adults, which gives the ability of physical activity by youth in a given recreational environment a greater chance of success (West & Shores, 2008).

The following study highlighted the problems voiced within the Glenview neighborhood such as violence and drug activity involving youth residents. It is believed by agents in the study that structured recreational activity could aid in countering these problems. The purpose of this study is to analyze the impact structured recreation has on child-linked social problems (Autry & Anderson, 2007). Glenview is a low resource urban area which incorporates the housing authority complex (HAC) which is Housing and Urban Development (HUD) funded and designated solely for single mothers on welfare. Twenty-one participants were interviewed in the study and were recruited through purposive sampling. A common theme collected through the interviews was neighborhood environment. There was a disconnect amongst those interviewed that they felt the neighborhood park was “their” park to utilize and recreate. Additionally, this added to the sub-theme of recreation needing an appropriate, safe setting that shares the value of recreation’s impact on childhood development. Without the sense of community or facility space for the youth to “call their own” and participate in recreational

programming, the changes this community look to incorporate are less likely to form (Autry & Anderson, 2007).

Chapter 4 - Discussion and Recommendations

The purpose of this chapter is to review quality programming within recreational facilities and the impact these programs have on youth development. Specifically, the effects facility offerings and community impact have on the programming offered and the youth participants' development. Based on the review, the following conclusions were discovered, and overall the programming held within recreational facilities positively encouraged the physical activeness and development of youth participants. In addition, facilities with superior offerings, including amenities, showed an increase in participant engagement and activeness.

Discussion

Based on a variety of articles that were reviewed in this synthesis, one prominent conclusion was presented; the higher quality of facility and its offerings provided an increase in youth participant physical activeness and development. It has been shown that multiple factors can influence participation including the space's location to where the users are, number and condition of amenities, program offerings, fees, levels of supervision, and even aesthetics (Cohen, Han, Derose, Williamson, Marsh, Rudick, & McKenzie, 2012; Cohen, McKenzie, Sehgal, Lurie, Golinelli, & Williamson, 2007; Cohen et al., 2013; McCormack, Rock, Toohey, & Hignell, 2010). Aesthetically, if the facilities aren't visually appealing, especially when youth are involved and are being enrolled by their guardians, participation can decrease. Instructor quality, both outcome quality and interaction quality, can impact customer satisfaction, which would impact the number of youth participants enrolling in programming, therefore also impacting the physical activeness of the youth involved (Sheehan, 2015). Instructors are a representation of the facilities' offerings based on how they are facilitating the physical activity of the participants.

Exposure to recreational facilities has shown to reduce childhood obesity through physical activity promotion (West & Shores, 2008). These facilities provide a social environment for youth participants that encourages healthy living through physical activity programming. It has been shown that most of children's physical activity occurs outside of classroom hours (McKenzie, Moody, Carlson, Lopez, & Elder, 2013), which makes the quality of facilitation styles, equipment, and space available relevant to the increase in attraction to these facilities.

The studies included in this synthesis contained some limitations and weaknesses, one weakness being the same programming being studied across all the literature reviewed. Utilizing studies that were guided by the same programs being offered within a variety of recreational facilities located in a variety of communities could better prove the quality of the facility offerings' impact on youth physical activeness and development. An assumption through these findings can be that a high quality facility, meaning in equipment and space provided, automatically means high participant satisfaction and benefit. However, through further research, quality instruction is also necessary to maintain these factors. Recreational facilities could benefit their patrons, especially youth participants, through upgrades in equipment housed within the facility, in-depth training and constant assessment of instructors hired by the facility, removal of obstruction to property such as graffiti that may encourage wrongful activity, and staying up-to-date with the trends that leading recreational facilities are taking advantage of through users' desires.

Recommendations

The following are recommendations for future research on the effect of quality programming within recreational facilities and the impact these programs have on youth development.

1. To analyze the instructor to participant ratio and the effect that ratio has on specialized development.
2. To identify participants with mental/physical disabilities/disorders and their impact on the data collected.
3. To discover which program offerings are the most consistently effective in engaging youth participants.
4. To identify which aesthetics are the most attractive to participants within recreation facilities.
5. To identify key attributes instructors should possess to be most effective during facilitation.

References

- Sheehan, D. (2015). Instructor Behavior and Youth Physical Activity in Recreation Center Programs: The Role of Management on Improving Outcomes. *Journal of Park & Recreation Administration, 33*(3), 1-16.
- McKenzie, T. L., Moody, J.S., Carlson, J. A., Lopez, N. V., & Elder, J. P. (2013). Neighborhood Income Matters: Disparities in Community Recreation Facilities, Amenities, and Programs. *Journal of Park & Recreation Administration, 31*(4), 12-22.
- Trude, A. C. B., Surkan, P. J., Cheskin, L. J., & Gittelsohn, J. (2018). A Multilevel, Multicomponent Childhood Obesity Prevention Group-Randomized Controlled Trial Improves Healthier Food Purchasing and Reduces Sweet-Snack Consumption Among Low-Income African-American Youth. *Nutrition Journal, 17*(1), N.PAG.
- Kasehagen, L., Busacker, A., Kane, D., & Rohan, A. (2012). Associations Between Neighborhood Characteristics and Physical Activity Among Youth Within Rural-Urban Commuting Areas in the US. *Maternal & Child Health Journal, 16*, 258–267.
- Cohen, D. A., Sehgal, A., Williamson, S., Marsh, T., Golinelli, D., & McKenzie, T. L. (2009). New Recreational Facilities for the Young and the Old in Los Angeles: Policy and Programming Implications. *Journal of Public Health Policy, 30*, S248–S263.
- Ries, A. V., Gittelsohn, J., Voorhees, C. C., Roche, K. M., Clifton, K. J., & Astone, N. M. (2008). The Environment and Urban Adolescents' Use of Recreational Facilities for Physical Activity: A Qualitative Study. *American Journal of Health Promotion, 23*(1), 43–50.
- Autry, C., & Anderson, S. (2007). Recreation and the Glenview Neighborhood: Implications for Youth and Community Development. *Leisure Sciences, 29*(3), 267–285.

- West, S. T., & Shores, K. A. (2008). A Comparison of Four Recreation Facilitation Styles and Physical Activity Outcomes in Elementary School Children. *Journal of Park & Recreation Administration, 26*(2), 115–133.
- Wells, M. S., Arthur-Banning, S. G., Paisley, K. P., Ellis, G. D., Roark, M. F., & Fisher, K. (2008). Good (Youth) Sports: Using Benefits-Based Programming to Increase Sportsmanship. *Journal of Park & Recreation Administration, 26*(1), 1–21.
- Johnson, C. C. (2009). The Benefits of Physical Activity for Youth With Developmental Disabilities: A Systematic Review. *American Journal of Health Promotion, 23*(3), 157–167.

Appendix A
Article Grid

Author	Title	Source	Purpose	Methods & Procedures	Analysis	Findings	Discussion/ Recommendations Research Notes – Commonalities/Differences
Dwayne Sheehan (2015)	Instructor Behavior and Youth Physical Activity in Recreation Center Programs: The Role of Management on Improving Outcomes.	Journal of Park & Recreation Administration. Fall 2015, Vol. 33 Issue 3, p1-16. 16p. 3 Charts, 1 Graph.	Evaluate participant and instructor behaviors in recreation center physical activity programs.	Participants included were children aged 3-14 enrolled in physical activity programs and the qualified instructors hired by the recreation center. The research coordinator trained five undergraduate students to observe the participants and the programming they were enrolled in.	The research coordinator and trained observers used the System for Observing Fitness Instruction Time (SOFIT) which is a multi-factor observation system designed to record several variables such as physical activity intensity, lesson context, and instructor interaction.	21 different programs encompassing 14 distinct activities/sports between 2 and 4 times each over 69 observation days. The observers and researchers determined lesson context and instructor interactions had different effects on moderate-to-vigorous physical activity.	Create an understanding for the observers when taking notes regarding the instructors and participants. Different opinions of various observations can lead to skewed data and create confusion when observing.
Thomas L. McKenzie; Jamie S. Moody; Jordan A. Carlson; Nanette V. Lopez; John P. Elder (2013)	Neighborhood Income Matters: Disparities in Community Recreation Facilities, Amenities, and Programs.	Journal of Park & Recreation Administration. 2013, Vol. 31 Issue 4, p12-22. 11p	Examine the effectiveness of an obesity prevention program for young children in Southern California.	30 public recreation centers from 5 cities in San Diego County. Approximately 18 families with a child 5-8 years of age living within 1.5 miles from each of the 30 centers participated in the larger study. Children	The availability and condition for each recreation center environmental characteristic was investigated for differences by neighborhood income.	Facility and amenity characteristics were identified and negative aesthetics/incivilities that were assessed in the recreation center shows there were no significant differences in the availability of facilities or amenities between the two income	Cater to other areas of the country with different costs of living that affects a wide variety of community members included.

				were excluded from participating in the study if their lived in a foster or group home.		groups.	
Angela C. B. Trude; Pamela J. Surkan; Lawrence J. Cheskin; Joel Gittelsohn (2018)	A multilevel, multicomponent childhood obesity prevention group-randomized controlled trial improves healthier food purchasing and reduces sweet-snack consumption among low-income African-American youth.	Nutrition Journal. 10/29/2018, Vol. 17 Issue 1, pN. PAG-N. PAG. 1p. 2 Diagrams, 4 Charts.	Observe the effect of low-sugar food and beverages on childhood obesity combined with youth-led nutrition education .	Children ages 9-15 in 30 low-income areas of Baltimore were exposed to an increased access to low-sugar foods and beverages combined with youth-led nutrition education in recreation centers and other platforms.	The intervention effects on the mean change in diet and food purchasing behaviors were assessed by the difference between the mean change of the outcome in the intervention compared to the control groups using a multilevel linear mixed-effect model.	Significant effect of the intervention on the decrease in % of kcal from sweet snacks and desserts.	Keep a consistent number of normal weight, overweight, and obese participants in order to collect more accurate data through an equal number of participants under each category.
Laurin Kasehagen; Ashley Busacker; Debra Kane; Angela Rohan (2012)	Associations Between Neighborhood Characteristics and Physical Activity Among Youth Within Rural-Urban Commuting Areas in the US.	Maternal & Child Health Journal. Dec 2012 Supplement, Vol. 16, p258-267. 10p. 3 Charts.	Observe the association between physical activity and neighborhood characteristics within seven levels of Rural-Urban Commuting Areas.	Data was analyzed from the 2007 National Survey of Children's Health and was designed to provide national and state-specific prevalence estimates for a variety of validated	The intensity and number of days per week that youth participated in physical activity was the main outcome of the analysis. The survey however only inquired as to the number of days of physical activity, the researchers were not able	All of the other key variables selected a priori for inclusion based on the existing literature were bivariately associated with minimum physical activity.	Explore other communities with similar comparisons outside of RUCAs for control use.

				physical and emotional health indicators among children.	to determine the number of minutes in excess of 20 min per day in which the child might have participated in physical activity.		
Deborah A. Cohen; Amber Sehgal; Stephanie Williamson; Terry Marsh; Daniela Golinski; Thomas L. McKenzie (2009)	New Recreational Facilities for the Young and the Old in Los Angeles: Policy and Programming Implications.	Journal of Public Health Policy. 2009 Supplement 1, Vol. 30, pS248-S263. 15p. 1 Chart, 3 Graphs.	Test the assumption that higher recreation facilities promote physical activity and serve communities better.	Observations were conducted in two skate parks and two senior centers in Los Angeles over a 3-year period. These two facilities were scheduled to undergo significant improvements and were compared to two parks that were not scheduled for improvement.	Trained bilingual assessors completed systematic observations in the four parks using the System for Observing Parks and Recreation in Communities (SOPARC) (14), and they also conducted interviews with park users and with residents living within a 2-mile radius of each park.	Use of both the comparison and intervention skate parks increased but the increase was dramatically higher in the intervention skate park which had six times as many users from the baseline.	Collect verbal feedback from those exposed to the non-improved park and the renovated park in order to determine what factors catered to their attraction for usage more.
Amy V. Ries; Joel Gittelsohn; Carolyn C. Voorhes; Kathleen M. Roche; Kelly J. Clifton; Nan M. Astone (2008)	The Environment and Urban Adolescents' Use of Recreational Facilities for Physical Activity: A Qualitative Study.	Journal of Health Promotion. Sep/Oct 2008, Vol. 23 Issue 1, p43-50. 8p. DOI: 10.4278/ajhp.07043042.	Investigate environmental factors influencing the use of recreational facilities for physical activity by urban African-America	Data from 48-in-depth interviews and 26 observations were coded using NVivo software and analyzed using the constant comparative method.	Facility use is influenced by characteristics of the physical, social, organizational, and economic environments.	Previous research points to the importance of increasing facility availability as a means of promoting physical activity, particularly in minority communities with availability disproportion	Collect data regarding transportation issues and needs of the participants.

			n adolescents.			ately limited.	
Cari E. Autry; Stephen C. Anderson (2007)	Recreation and the Glenview Neighborhood: Implications for Youth and Community Development.	Leisure Sciences. May 2007, Vol. 29 Issue 3, p267-285. 19p.	Improve the lives of the youth within the Glenview neighborhood through recreation.	The study focused on the setting of the Glenview neighborhood, the participants in the community organization effort, and individuals who lived and worked in Glenview. The data collection included active in-depth semi-structured interviewing, and the analyses were conducted through the process of constant comparison.	The average length of the interviews was two hours and most occurred in the participant's home or office while two occurred in the primary researcher's office. The primary researcher/interviewer implemented procedures of confidentiality for all participants.	Four themes emerged including neighborhood environment, despondence in Glenview: A Lack of Hope and Trust, Parental Conditions: Influences on Youth and Recreation Involvement, and Parents: The Key to Community Organization.	Comparison to a similar community with a different sense of unity to be compared to Glenview in order to continue to see similar themes across participant interviews.
Stephanie T. West; Kindal A. Shores (2008)	A Comparison of Four Recreation Facilitation Styles and Physical Activity Outcomes in Elementary School Children.	Journal of Park & Recreation Administration. Summer 2008, Vol. 26 Issue 2, p115-133. 19p. 1 Diagram, 5 Charts, 1 Graph.	To understand which recreation facilitation techniques are most successful in encouraging physical activity among youth.	Four classes were selected to participate in the study based on their availability during school physical education periods. Children agreeing to the study and giving consent	Study variables included participant characteristics, play facilitation styles, and measures of physical activity.	Objective measures of activity indicated that as a group, youth of all ages, race/ethnicities, gender, and body composition were most active during modeled play in the presence of college-aged role models and	Assess participant activity preferences, time permitting, in order to provide more trend lines in data collected.

				from their guardians wore activity monitoring equipment during physical activity, those students who opted out of the study did not wear the equipment.		demonstrated significant relationships to facilitations style and activity outcomes.	
Mary Sara Wells; Skye G. Arthur-Banning; Karen P. Paisley; Gary D. Ellis; Mark F. Roark; Kara Fisher (2008)	Good (Youth) Sports: Using Benefits-Based Programming to Increase Sportsmanship.	Journal of Park & Recreation Administration. Spring 2008, Vol. 26 Issue 1, p1-21. 21p. 6 Charts, 2 Graphs.	Test the benefits of benefit-based programming and structuring programs to maximize these benefits	Participants were registered for the youth basketball program at the two local community centers. The target issue to be altered was increasing the number of positive sportsmanship behaviors and decrease negative sportsmanship behaviors engaged in by players, coaches, and spectators each quarter.	Descriptive statistics were calculated for positive sportsmanship, negative sportsmanship, and fun. Means and standard deviations of these variables are reported for each level of the program participation variable and by game quarter.	Intentional programming can be successfully employed to increase sportsmanship in youth sports through benefits-based programming.	Incorporate in other sports leagues that have different cultures pertaining to such factors as sportsmanship.
Connie C. Johnson (2009)	The Benefits of Physical Activity for Youth	American Journal of Health Promotion. Jan/Feb 2009, Vol. 23 Issue 3,	Analyze evidence of the benefits of physical	A measurement tool to assess reviews criteria	Data shown in table format were synthesized in relation to five research	Strong evidence indicated that children and adolescents with	The strength of the studies in the area of group fitness is moderate but lacks the highest

	with Developmental Disabilities: A systematic Review.	p157-167. 11p.	activity for youth with developmental disabilities.	were used for systematic reviews; grading of recommendations, assessment, development, evaluation criteria used for observational studies; population, intervention, comparison, outcome criteria used for all studies.	questions.	developmental disabilities derive health benefits from participation in group exercise programs, treadmill training, or therapeutic riding/hippotherapy.	level of evidence—RCTs.
--	---	----------------	---	---	------------	--	-------------------------