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Promoting physical activity within under-resourced afterschool programs: A qualitative investigation of staff experiences and motivational strategies for engaging youth

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Abstract

Afterschool programs (ASPs) have become increasingly recognized as a key context to support youth daily physical activity (PA) accrual. Using Self-Determination Theory (SDT) as a framework, this study examined staff perspectives on the strengths and barriers within under-resourced ASPs for establishing a social-motivational climate for encouraging and supporting youth PA. Analysis of semi-structured staff interviews (28 staff; 7 ASPs) indicated that staff had knowledge and value for establishing a PA-supportive motivational climate. However, the feasibility of implementing PA curricula was identified as challenging across programs. Findings suggest increased need for staff training and supports to provide a PA climate that meets the developmental needs/interests of all youth, with particular attention toward increasing the PA of girls and older program youth. Furthermore, striking an appropriate balance between PA and other competing program demands (e.g., academics) will be required to optimize on the effectiveness of PA program components.

A system of out-of-school time programs founded on the principles of the Positive Youth Development (PYD) framework (Benson, 2003; Benson et al., 2006; Lerner, 2004; Lerner et al., 2005) support the safety, learning, and development of 10.2 million youth within the United States during the afterschool hours while parents are at work (Afterschool Alliance, 2014). As one part of a broad curriculum to foster the physical, psychological, and achievement-related adjustment of youth, many PYD-based programs (herein referred to as afterschool programs [ASPs]; e.g., 4-H, Boys & Girls Clubs of America), have adopted healthy eating and physical activity policies (Wiecha, Hall, Gannett, & Roth, 2011), feature well-developed healthy lifestyle missions, and provide physical activity as one part of the daily curriculum (Beets, Rooney, Tilley, Beighle, & Webster, 2010). Consequently, ASPs have become increasingly recognized as a key context to support youth daily physical activity (PA) accrual for the prevention and intervention of youth obesity and related diseases (e.g., Coleman, Geller, Rosenkranz, & Dzewaltowski, 2008; Huberty, Beets, Beighle, & McKenzie, 2013; Trost, Rosenkranz, & Dzewaltowski, 2008; Zarrett & Bell, 2014), with the goal of providing at least one third (20 min) of the recommended daily PA (Beets, Huberty, & Bieghle, 2012). However, despite the health-based goals shared by ASPs,

research has indicated the amount of activity youth accumulate within ASPs remains well below policy-recommended levels (Beets et al., 2012; Rosenkranz, Welk, & Dziewaltowski, 2011).

Beyond program dose (attendance, duration; Kane, 2004; Mahoney, Lord, & Carryl, 2005a), researchers have increasingly stressed the importance of program engagement (the degree to which ASPs engage youth participants) as critical for acquiring significant program-related benefits (Dawes & Larson, 2011; Halpern, 2005; Hansen & Larson, 2007; Mahoney, Lord, & Carryl, 2005b; Mahoney, Parente, & Lord, 2007; Shernoff, 2010; Weiss, Little, & Bouffard, 2005). Consequently, there is a growing body of research focused on identifying and addressing motivational climate characteristics within ASPs that are effective for encouraging youth PA engagement (Coleman et al., 2008; Huberty et al., 2013; Rosenkranz et al., 2011; Zarrett, Sorensen, & Skiles-Cook, 2015). Aligned with Self-Determination Theory (SDT; Ryan & Deci, 2000), and the key elements of “program quality” specified by the National Research Council and Institute of Medicine (NRC, 2002) and others (Eccles & Gootman, 2002; Granger, Durlak, Yohalem, & Reisner, 2007), this preliminary work has indicated that participation in PA during program hours is likely to be highly dependent upon whether the PA program components: (a) ensure physical and psychological safety; (b) are “engaging” (optimally challenging, support skill building, and efficacy beliefs); (c) provide youth opportunities to make their own choices and/or develop ownership over program components (autonomy; appropriate structures); and (d) facilitate positive social connections, support, and sense of inclusion/belonging with peers and staff.

However, we have minimal knowledge of whether ASPs, especially under-resourced ASPs, have the capacity necessary to provide an “engaging” PA curriculum. Given ASP frontline staff are allocated the primary responsibility of promoting youth PA, staff’s differing values for, perceived competence, comprehension, and ability to implement motivational strategies to engage youth in PA likely account for the large variations observed in youth ASP PA accrual. Moreover, ASPs vary significantly in resources, including recreational indoor and outdoor spaces, funding, staff capacity and training, with staff of under-resourced programs likely facing greater structural challenges for getting youth active than more resourced programs. Despite staff’s prominent role in delivering and ensuring youth engagement in ASP curricula, little-to-no research has examined staff’s perspectives on program-level strengths and barriers for meeting PA-based program goals.

The present study set out to examine the experiences of frontline program staff working within under-resourced ASPs to explore staff’s perspectives on the physical and social-motivational characteristics of ASPs that act to either engage or discourage youth participation in PA. The primary focus of the study was three-fold: (a) to determine the degree to which staff value and perceive the PA mission as a feasible part of the program; (b) examine staff’s knowledge and perceived ability to set up a social-motivational climate for encouraging and supporting youth PA engagement as specified by SDT and research on program quality; and (c) identify program-level, staff-level, and youth-level strengths and barriers for implementing an engaging PA curriculum. The current study was aimed to inform the development and implementation of a social-motivational climate-based PA intervention within pre-existing afterschool programming for underserved youth; therefore,

we took a collective case study design. A collective case study uses multiple sites (ASPs) to facilitate the exploration of a specific topic (i.e., PA promotion strategies; Creswell, 2007).

Program quality for PA engagement

According to SDT, the highest levels of motivation and engagement are experienced when participation in an activity is entirely internally regulated. That is, engagement in an activity is a direct function of the degree to which individuals' internalize, value, or develop a sense of "ownership of" or "identity over" the goals of the activity (Ryan & Deci, 2000). Ryan and Deci have proposed that the internalization of activity goals is largely driven by whether the activity context meets individuals' three basic psychological needs: competence, autonomy, and relatedness. In turn, accumulating research has shown that high-quality afterschool settings, defined by critical contextual features to support youth competence, autonomy, and relatedness, make a significant difference in the degree to which program participation impacts multiple indicators of positive adjustment (Mahoney et al., 2007; Dawes & Larson, 2011).

For example, aligned with SDT and other key motivation theories of engagement that emphasize social aspects of engagement (e.g., Deci & Ryan, 1985; Eccles, 1993; Juvonen & Wentzel, 1996), previous research on general program quality has indicated that a positive emotional climate and sense of safety, positive peer interactions, and the support and activity management of adult leaders are related to youth's self-reported enjoyment, engagement, and learning within the ASP (Blazevski & Smith, 2007; Grossman, Campbell, & Raley, 2007; Smith & Hohmann, 2005; Shernoff, 2010; Vandell, Shumow, & Posner, 2004; Vandell, Reisner, & Pierce, 2007). In turn, participation in ASPs with high quality social processes has been linked to several targeted academic (e.g., homework completion, school adjustment), behavioral (e.g., on-task behaviors), and social (e.g., social skills) outcomes (e.g., Vandell, Reisner, & Pierce, 2007). Settings that support mastery/competence and autonomy are also critical. For instance, Durlak and Weissberg (2007) found that programs were most successful in promoting positive adjustment when they required active youth engagement and provided developmental activities that were explicit, sequential, and focused on a set of skills ("SAFE" programs: Sequential, Active, Focused, Explicit).

Although there has been an increase in the number of studies (and available tools) for assessing program quality more generally (see Baldwin, Stromwall, & Wilder, 2015; Durlak & DuPre, 2008; Larson & Walker, 2010; Smith, Devaney, Akiva, & Sugar, 2009; Yohalem & Wilson-Ahlstrom, 2007; Yohalem & Wilson-Ahlstrom, 2010), only a few studies have examined contextual features of ASPs that are associated with youth PA engagement in particular (Rosenkranz et al., 2011). Aligned with recent afterschool-focused PA policy (NRC, 2002; Wiecha et al., 2011), the majority of these studies have focused on infrastructural supports, and staff training and behaviors, finding the availability of organized/structured freeplay activities (Coleman et al., 2008; Trost et al., 2008), access to recreational equipment, especially portable equipment (Huberty et al., 2013; Rosenkranz et al., 2011), and staff verbal promotion and active participation with youth in PA are all critical for youth PA accrual (Coleman et al., 2008; Huberty et al., 2013; Zarrett et al., 2015).

Moreover, in the first phase of our study within underserved ASPs we extended previous research by conducting systematic observations of the social-motivational context characteristics of each ASP to identify critical modifiable motivational features (supports for autonomy, competence, and relatedness) of the setting predictive of youth engagement in PA (Zarrett et al., 2015). This study indicated that relatedness supports (e. g., positive peer relations, inclusive and cooperative activities) were primary correlates of girls' PA and that numerous supports for autonomy, competence, and relatedness were all correlated with boys' PA. For both boys and girls, staff actively observing and participating with youth in the PA was also predictive of higher PA participation rates. However, for all motivational components and staff behaviors considered, minimal instances of implementation were observed across programs. These findings prompted several questions regarding the strengths and constraints of ASPs to implement an engaging context for promoting youth PA. For instance, is it feasible to expect ASPs, especially under-resourced ASPs, to provide a highly engaging PA curriculum/context? Is low implementation due primarily to structural barriers, staff training, (including their own knowledge, value, and efficacy for implementing PA), or youth-driven demands, preferences, and developmental needs (challenges of working with youth who have a diverse set of constantly changing developmental needs)?

Purpose of the current study

Although there has been some qualitative research examining staff's and youth's overall experiences in PYD-based afterschool programming (e.g., Carruthers & Busser, 2000; Hirsch, Deutsch, & DuBois, 2011; Larson & Walker, 2010), little qualitative research has examined staff's experiences implementing PA standards within these settings in particular (see Dinkel, Huberty, Beets, & Tibbits, 2014). This is a critical distinction, as many ASP staff are provided training and are comfortable with the management of the daily ASP curriculum, but receive little-to-no training on how to implement and participate with youth in a physical activity curriculum that appeals to their developmental and motivational needs (Ajja, Beets, Huberty et al., 2012; Huberty et al., 2012; U.S. Department of Health and Human Services, 2006). Rather, studies that specifically examine facilitators (staff/teachers) experiences implementing PA within youth settings have almost exclusively targeted physical education (PE) during the school day (e.g., Taylor, Ntoumanis, & Smith, 2009) or youth sports during the afterschool hours (Keegan, Harwood, Spray, & Lavalley, 2009; Pain & Harwood, 2007), although even within these contexts research has more commonly focused on youth perspectives of their sport experiences, and/or performance-based outcomes of elite athletes, than the perspectives of coaches/teachers. A series of qualitative studies have also examined the specific experiences of staff when implementing a PA intervention curriculum (e.g., Dinkel, Huberty, & Beets, 2015; Dinkel et al., 2014; Hastman, Bopp, Fallon, Rosenkranz, & Dzewaltowski, 2013; Zarrett, Skiles, Wilson, & McClintock, 2012). Together these studies have demonstrated that SDT constructs are critical for promoting engagement (enjoyment, continued participation) in PA. However, qualitative studies of PE teachers suggest that even when teachers are knowledgeable about effective motivational strategies to promote increased youth PA, perceived time constraints and cultural/social norms limited teachers' abilities to implement these strategies (Taylor,

Ntoumanis, & Smith, 2009), and thus, many school and afterschool interventions are difficult to sustain post-intervention (e.g., Wilson et al., 2011; Zarrett et al., 2012).

Drawing from previous studies of general program quality and qualitative studies of PA implementation within PE and sports, the current study aimed to examine program staff's experiences implementing PA within underserved ASPs. Thus, the primary focus of the study was to explore: (a) the degree to which staff value the PA mission as an important part of the ASP, (b) infrastructure supports and constraints that influence staff PA implementation, (c) staff's knowledge and perceived ability (efficacy) to facilitate quality PA content for encouraging and supporting youth PA engagement as specified by SDT and national standards and research on program quality (NRC, 2002; Wiecha et al., 2011), and (4) staff and youth-based challenges to engage youth in PA. Lastly, we examined staff perspectives on the structural, staff, and program content supports they believed were necessary to improve youth engagement in the PA curricula. The current study was aimed to inform the development and implementation of a SDT-based social-motivational PA intervention within pre-existing afterschool programming for underserved youth. The evaluation of staff's experiences in promoting youth PA within underserved ASPs contributes greatly toward identifying key strategies needed to optimize on program strengths and address barriers to successfully implement an engaging PA motivational climate within the afterschool hours.

Methods

Participants/setting

This qualitative study employed a collective case study design, using multiple programs, and multiple informants to identify commonalities in staff experiences implementing PA promotion within under-resourced afterschool programs. The boundaries of the present study were frontline staff of under-resourced PYD-based ASPs (commonly referred to as "aftercare" programs), that are located within community settings and that share fundamental similarities in program missions and curriculum. A total of 7 ASPs were recruited from widely accessible national and state-based youth programming organizations (e.g., Boys and Girls Club). All recruited ASPs were considered low-resourced sites, having less resourced facilities and equipment, minimum enrollment fees (\$0–\$25 per week) and serving a primarily underserved youth population (44% female) defined by both minority status (87%) and low socioeconomic status (SES; 90% on free or reduced lunch). Only ASPs that offered their program daily (5 days/week) throughout the school year, included a PA component as part of the daily curriculum (indoor/outdoor recreation), and was founded on a PYD framework (e.g., included a program mission and daily curriculum centered on fostering physical, psychological, and achievement-related well-being rather than a specified set of skills such as "improving basketball skills") were considered for inclusion in the study.

Despite sharing a common curriculum and structure, ASPs did vary in enrollment rates (22–99 youth), location (urban = 4 sites, rural = 3 sites) and physical capacity (e.g., access to indoor/outdoor recreational spaces). Six of the 7 ASPs served less than 50 youth (range = 22 to 48 youth enrolled). The seventh and "largest program" (Site 1), expanded from 44 youth

to 99 youth immediately prior to this phase of the study. Although all programs had allotted space for “freeplay,” only three programs (including the largest), had both indoor and outdoor spaces for freeplay. The remaining four programs had only outdoor spaces for “freeplay.” Prior to conducting staff interviews, the research team conducted systematic observations of each site (Zarrett et al., 2015) and developed strong relationships and community partnerships with program directors and staff of each program as the first phase of a larger study that provides a social-motivational climate based physical activity intervention within ASPs. There was a total of 28 frontline staff across sites with an average staff-child ratio of 1:15. Two of the largest programs (Site 1: $N = 99$ youth, and Site 2: $N = 48$ youth) had the largest staff of 11 and 6 respectively. All other programs, even the two additional programs with an enrollment of more than 45 youth, had 3 or less staff on site. Staff were primarily female ($N = 22$), African-American ($N = 24$), and ranged in age from 18 to 80 years old (average age category = 51–60 years old). On average, interviewed staff had worked for the program for a little more than 2 years (range = 1 to 7 years), and included 3 site/program directors, 12 paid employees, and 13 long-term program volunteers. All interviewed staff had regular interaction with attending youth and consistent roles in implementing all components of the daily program curriculum.

The majority of the sites (5 ASPs) targeted youth from grades K-5th grade, with the mean age of youth at all 5 sites 9 years old. Two sites were targeted to youth from K through 12th grade (Site 1 age range = 5 to 18 years old; Site 5 age range = 10 to 13 years old), however the mean age of youth at Site 1 was similar to the other programs examined ($M = 9$ years) and youth enrolled at Site 5 were slightly older ($M = 11$ years). Staff were not compensated for participating in the interview.

Procedures and interview questions

Drawing from theory and previous research on youth general ASP engagement, and PA engagement more specifically, an interview protocol was developed to address youth PA engagement at a comprehensive level. The protocol was created from a generated list of possible questions and then organized into five topic themes: Program mission and the daily goals and activities offered at the ASP; Infrastructural supports and challenges (e.g., PA equipment, space, staff capacity); Beliefs and perceived skills related to afterschool physical activity (e.g., staff’s personal PA beliefs and values; ways staff encourage PA); Challenges to youth being active (e.g., staff behaviors, youth-related strengths and challenges); and Ideas for program improvements. The protocol allowed for leeway in probing staff for a more in-depth account of their experience (Miles & Huberman, 1994). Interviewees were asked all of the open-ended questions listed on the protocol (see Table 1). This level of consistency helped serve to reduce idiosyncratic effects of the interviewers (Hill et al., 2005). Two trained research staff (one Caucasian female and one African American female) conducted the interviews at the after school programs using the semi-structured interview protocol (see Table 1 for interview prompts). The setting was as naturalistic as possible with each interview held in a quiet place at the after school program site in which the staff chose. Staff were told that there were no right or wrong answers and that all information discussed would be kept confidential. Consent was obtained to audiotape the interviews.

The interview audiotapes were transcribed by trained research staff. A codebook was created using a collaborative social research approach and a directed content analysis where analytic codes were derived from both existing theories and themes that emerged from the data itself (Berg, 2009). Through employing procedures of grounded theory (Strauss & Corbin, 1990) and immersion crystallization (Borkan, 1999), together of which are designed to identify underlying themes in the data and higher-order theoretical categories, six trained coders immersed themselves in the data by reading all transcripts and developing independent lists of codes based on a latent coding technique that involves interpretation rather than direct interview verbatim to identify commonalities and differences between ASPs (Bernard & Ryan, 2010). Coders met to discuss and come to consensus on all the codes. After consensus was reached, coders classified these codes into the five broad categories/themes used to develop the interview protocol (program mission/daily activities, infrastructural supports and challenges, PA-based beliefs and perceived implementation skills, challenges to youth PA, and improvement ideas), and a set of subthemes that were specifically derived from the SDT literature (Slater & Tigge mann, 2010; Taylor, Ntoumanis, & Smith, 2009; Vazou, Ntoumanis, & Duda, 2005) including indicators of support for competence, autonomy, and relatedness, as well as engagement in PA (see Berg, 2009; David & Sutton, 2004, for methods). Coders revisited the transcripts several times to determine whether any additional information was needed or whether analysis had reached a point of saturation (Strauss & Corbin, 1998). The final codebook was then used to code the transcripts.

The three teams of two independent coders met to come to consensus on their codes after coding each transcript. After establishing reliability across teams, the 28 staff transcripts were coded with discrepancies between coding pairs resolved through discussion. Each interview transcript was imported into QSR Nvivo as a rich text file and coded based on the consensus of coding pairs. Themes were then analyzed for content, specificity, frequency, and extensiveness. For the current study, frequency refers to the number of times a similar sentiment about a specific content area within a theme was mentioned, and extensiveness refers to both the number of staff in each program and the overall number of programs who expressed the content item. For the current study, we were interested in identifying common themes across the ASPs to help inform the development, implementation, and long-term adoption (sustainability) of our intervention. Thus, themes (topics, issues, or program suggestions) that were discussed by more than 50% of the ASPs (4 or more programs) are discussed here as common experiences across ASPs within underserved communities (see Zarrett et al., 2012 for a similar approach). Where appropriate, high frequency of a content item within a particular program was also discussed as another potential area of importance in understanding unique challenges specific to a particular ASP context. With a primary interest in how programs meet youth SDT needs for PA engagement/motivation, coders were primed to focus on identifying whether staff highlighted components of competence-, autonomy-, relatedness-support, and engagement in PA across these five meta-themes.

Results

Program mission and daily goals and activities

When asked the primary mission or goal of the afterschool program, the majority of staff across programs identified physical activity as a primary mission ($N=25$ staff, 6 programs), along with academic supports/achievement ($N=23$ staff, 7 programs), supporting SDT needs (building a sense of autonomy, competency, and relatedness, $N=25$, 7 programs), and developing interpersonal skills ($N=15$ staff; 6 programs). Despite similarity in location (community centers), curriculum, and structure to all other PYD programs included in the current study (including offering a 1.5 hour freeplay session in their programs, space, equipment, and opportunities for PA, and a specified mission that includes PA on their website), and the program director's endorsement of PA as a mission across all his program sites, it is important to note that all 3 of the staff in one of the 7 programs (Site 5) specified that PA is not a goal in their program. This program primarily served late elementary and early middle school youth and therefore, participants had the highest mean age across programs (11.27). They had access to a large classroom space, and a large outdoor playing area with an open field, playground, and basketball hoops. See Tables 2 and 3 for program goals identified across programs and by staff within each program.

Infrastructure supports and constraints

Throughout the interviews, staff identified several program-level supports and barriers for promoting youth PA (see Tables 2 and 3). In fact, staff commonly discussed the provision of space and program time allotted to PA as two prominent "strategies" for promoting youth PA (e.g., "we have the structured activity where all of them have to participate and we do that on a daily basis so we make sure they get that time to be involved in physical activity"; "we definitely have enough space"; "I mean, it's just so much. The space is so big"). Several staff across all seven programs also discussed having adequate staff-child ratios and enough time for staff planning of program activities.

However, as equally common, staff reported the lack of adequate equipment (e.g., "we need more equipment ... because over time things get broken so they need to be replaced"), space, and staff capacity (e.g., "if something is going on with one child or two of the kids and you have to address it then you have to make sure there's someone else that's there to monitor the kids and we have—we need more volunteers") as primary program-level barriers to PA. Although staff capacity was a concern for all but two programs (exceptions included the largest program with 11 staff, and the smallest program with only 22 youth), it was a particularly frequent expressed concern for programs with only 2 or 3 staff on site. Moreover, many staff discussed major time constraints impeding youth PA including staff's lack of opportunities/time to plan and implement PA games/activities (e.g., "Now once I walk through that door, no. You cannot plan activities"), as well as requiring youth to complete their academic work prior to engaging in PA which leaves some youth inactive across the week. For instance, one staff said, "Um, they're only out here two and a half hours, and that, sometimes that's not quite enough time to get their work done and do physical activities." And staff from two separate programs stated "To be honest with you, they don't really do much physical activities here, cause usually they'll do their homework

from 3 to 4” and “I think it would be based on the time that we are here and the fact that we are always going to set aside time for them to get their homework done.”

Staff beliefs/values, knowledge, and efficacy to implement PA

Staff identified several ways in which they actively promote youth PA including verbal praise and encouragement, organizing and actively participating in the PA games, and sharing a common value for PA including participation in their own PA outside of the program (See Tables 2 and 3). For example, to encourage PA one staff member said “If I see them sitting by themselves, I say like ‘go play with the other kids’ like ‘what’s wrong why don’t you want to play, exercise?’ or something [sic].” To model PA, several staff reported their own engagement in the program activities. For example, one staff member states “I’ve never been the lay around lazy type so anything, double dutch, jump, I mean whatever they are doing out there I’m doing out there” and another staff expressed the desire to share his/her own love of the game of golf “I have bought golf mats just to teach them how to putt.” Some staff spoke of other staff who were particularly active with youth (e.g., “Ya know what, the majority of us all are involved, especially Miss ‘R’. She has that one-on-one basketball game going on. They [the kids] try to beat her, but she beats them almost every time. So there’s always somebody out there doing something with them” [sic]). Several staff also reported that they participated in their own PA regiment, even when faced with physical challenges (e.g., I exercise too on Mondays and Thursdays, with Zumba right out here, but I have a problem with my knee and arthritis, but that doesn’t stop me. Anything I want to do, I can do it”). In fact, not a single staff expressed an attitude that PA was not important. One staff stated “we want them to be able to play, not just all work,” and another stated “Cause I see a lot of um obese kids, younger kids. So I think it’s, I think it’s important to be active.”

Several staff also discussed strategies to increase youth motivation to engage in PA, addressing the three primary components of SDT (autonomy, competence, and relatedness). For example, several staff highlighted the importance of youth choice “if they tell you what they want to do or what they are interested in doing then you have to listen to them. You may want them to do a certain thing but if they come in and say to us ‘can we run today, is it possible that we can race against each other?’ go with that, don’t go with your thoughts and ideas, if they want to run that day let them run.” And one staff described girls and boys having different activity preferences so that “they’re going to pair up together and the girls are going to play double dutch and the boys are going to play basketball. My little guys are going to play basketball with the guys and my little girls are going to cheer.”

Other staff discussed goals around relatedness, stating “Just getting them to care for each other. We are like a family. I do believe that all the staff here care,” and another stated “... all it takes is that one person to say ‘ok, I’m going to do this with y’all today’ and they will flock together to you ... I don’t know how to say it, but it just takes that one person that cares, someone that they can actually trust, and at least look at as a friend.” At another site, staff described using a peer mentoring system to help build relationships across enrolled youth, help facilitate mastery of specific and general skills, and to compensate for challenges related to time constraints and low staff capacity. For instance, one staff stated:

They [enrolled youth] can't do what we do, but we pair the little one's up with the bigger one's, okay we're going to play basketball, you got to pass the ball, your going to teach them how to play this game. Its basically, if I had the time to work with them maybe I could answer to that more, but just as far as with my students, I try to take them down there [the gym] because the bigger one's are going to show the little one's [sic].

Competence support was the least discussed of the SDT elements, with only three staff members highlighting competence/mastery support. One staff member stated "I mean I encourage them to do something that they never really thought they would see themselves end up doing, like play basketball, soccer, you know introduce them to different things." As previously noted, another staff discussed his goals of teaching youth golf, and a third staff focused on building the skills of younger enrolled youth by pairing them with more mature youth in the program. Despite reporting encouragement and participation with youth in the activity, the two "older enrollment aged" K-12 program discussed little-to-no SDT promotion strategies to encourage youth PA (1 staff; 0 staff from Site 1 and Site 5, respectively).

Lastly, the majority of staff in six of the seven programs were highly open to learning new strategies and games to implement in the freeplay component of their programs to increase youth engagement in PA. For example, one staff stated "No, it wouldn't be difficult [to change the PA component]. Like I said, as long as whatever the activities are will be creative and the staff have some enthusiasm for it, everything will be fine." One of the two "older enrollment aged" K-12 programs, and the largest program in the study (with the most staff: $N=11$) did not support changes to the PA component of their program, despite all endorsing physical activity as a primary mission of their program. Staff within this program were also the only to endorse using PA as a reward for completing homework, and behaving appropriately (e.g., "if, until they can get their work done, and then only after they're done doing their school work, then they can have fun time [sic]" and "after they complete their goals of homework, then they give them the opportunity to play the little sports games that they have").

PA challenges/barriers

Staff-level barriers—Staff identified very few limitations in their colleague's attitudes or behaviors for supporting youth PA. Contrary to program quality policy recommendations to not use PA as a reward or punishment (Wiecha et al., 2011), some staff discussed discipline as a primary reason why some youth do not participate in PA (5 programs [71%], 5 staff [18%]), and others expressed frustration with their colleagues' lack of active participation in the PA component of the program (3 programs [60%]; 7 staff [25%]). Several staff across programs were also resistant to change program components to improve youth PA opportunities. Instead, the majority of staff argued that their program should continue to focus on (or increase focus on) academic pursuits/improvements. For example, one staff echoed these values, stating, "Um, I actually think they have enough, maybe more than enough [opportunity to be active] actually. I think it should actually be more homework time" and when asked about the program's PA opportunities another staff proudly stated "we stress academics here because about 75% of the kids are actually on the AB honor roll."

Lastly, although the majority of staff reported engaging in their own PA at some point in their lives, very few staff reported having any previous experience or training to implement PA initiatives with youth in the programs (2 programs; 2 staff), a critical discourse missing in the interviews overall.

Youth-level barriers—Although staff discussed some barriers related to staff training, attitudes, and behaviors, the majority of efficacy constraints and areas where staff identified additional needs for training/intervention primarily concerned youth-level barriers. Staff discussed several youth characteristics that lead to engagement and ample PA accrual, commonly describing youth as naturally having a strong value and interest in PA (7 programs; 16 staff) and “lots of energy” (5 programs; 14 staff). For example, several staff reported youth “love to play and run around”, “they are just so energetic”. One staff even commented “there’s no challenge getting them active, it’s a challenge to get them still.” However, staff consistently reported that the younger children in the program (prompted as Grades K–2 in the interview protocol) were much easier to engage in PA than the older kids (Grades 3 +), typically describing them as “more active” and “more likely to try something different and new than the older kids.” And, staff within the two K–12 programs consistently expressed that the “middle school group is the hardest group to get involved with activities.” Similarly, the majority of staff reported that the boys in the program were more likely to seek out and engage in PA than the girls.

Staff identified several youth-based challenges to explain this lack of engagement of older youth (Grades 3 +) and girls that are directly aligned with our SDT-based themes of relatedness, competency/mastery, and autonomy. For instance staff consistently highlighted the need to address some of the relational issues (social connection and support) they face around peer cliques and peer influence (e.g., “That’s really hard [to get youth active], especially with the girls, there is a lot of problems with the girls, a lot of them are already cliqued up from school,” and; “they [the older kids] exert some influence on the other kids as to what they want to do as a group”). Another staff stated “We don’t have to worry about the young ones. They are active. So now with free play you’ll see the younger ones are actually playing and you’ll see the older ones might be cliqued up just walking around.” Referring to the older youth, other staff stated “If their friends won’t do it, they won’t do it” and “the older kids are like ‘I’m not interested’ [in PA].” Staff also expressed relational issues centered on bullying or teasing. For example, although several staff discussed how girls like to dance, and love to run more than the young men, that girls tend to be more likely to opt for alternative activities that they feel are more accepted by program peers, and that protect them from being teased. One staff described how “most of the girls go under the tree and sit on the picnic table,” and another staff stated “so you automatically, being a female you think, okay they’re [the boys are] gonna pick at me or they don’t want me to join their team or different things [sic].”

The engagement/mastery challenge of low PA self-efficacy was also provided as a common reason for why youth opt to not participate in PA. For example, one staff stated “When they’re trying to do something and they’re not good at it, they don’t want to do it. Or if we’re playing a game and we have teams, if their team is not winning, they want to quit.” Staff also discussed challenges in offering activities that appeal to both the younger children

in the program and the older youth (e.g., “it might be harder trying to get a game the older kids like with the younger kids,” and; “I think in some portions of our program we have games and activities specifically designed for the younger kids”), and to both girls and boys (e.g., ...with the girls, they sometimes don’t like to play some of the sports that the boys like to play like um wiffleball or kickball,” and; “if we are playing dodge ball or something, a lot of the girls don’t want to play, because they don’t want to be hit and they don’t want to play”).

Lastly, staff expressed several experiences of struggling with how to optimally meet youth’s needs for choice/autonomy during the freeplay hour while still meeting the PA goals/mission of the ASP. Specifically, across the interviews, the data demonstrated the ways in which staff grappled with how much organized activity they should impose on youth and how much should be left to youth choice. Discrepancies in this discourse were found even among staff located at the same sites, whereby some staff discussed ways in which they require youth to engage in PA (e.g., within a typical day they are required to do activities like running and each child is required to do something) and other staff discussed ways in which they do not “force” youth to participate (e.g., Like we don’t make them play dodge ball, if you don’t want to play just sit on the side. If you don’t want to play knock-out you just sit down ... Because they don’t have to”). This challenge of balancing organized activity with choice was identified as particularly challenging with older youth (e.g., “Once they hit like 6th, 7th, and 8th grade, you know they just don’t want to do anything [the program offers]”). For instance, some staff highlighted that older youth had stronger activity preferences than younger youth and only wanted to play the games that they know and are ‘good at’ (e.g., “if they [the older youth] don’t care for it. They don’t want to participate”). Many staff also commented that the older kids preferred to use the freeplay hour for alternative activities (other than PA) such as a time to socialize with peers, and/or to spend time on their technological devices (cell phones, computers) where “some of them [program youth] want to just go sit down and use the computer.” One staff stated that “this is a different time because most of these kids have cell phones and all kinds of stuff. So the older kids sometimes they sit up on the bench and just text and stuff like that.” See Tables 2 and 3 for frequency/percentage in which themes were reported across programs and within each program.

Improvements

Staff described several areas of improvement that align with some of the limitations they identified in program, staff, and youth features including the need for more resources (e.g., funding [2 programs (29%), 2 staff (7%)]; equipment [5 programs (71%), 11 staff (39%)]; staff [3 programs (43%), 4 staff, (14%)], to better identify youth needs across key program domains (academic, PA, social skills and opportunities, other skills) and to focus on developing more effective strategies for engaging program youth in PA including specified improvements in SDT components. For example, although only one of the 28 interviewed staff identified “offering multiple types of activity options for youth” as a strategy for meeting youth needs for autonomy, mastery and engagement in the PA curriculum, the majority of staff in six of the seven programs expressed the need or interest in learning new strategies and games to implement in the freeplay component of their programs. For

instance, when asked for improvements, some staff highlighted the importance of the provision of engaging activities (e.g., “it’s our job to try to find those types of physical activities that they do enjoy so we can engage them in that”) and that simply “offering more games would make a difference.” One staff stated adamantly “I think that what we do need is to have more activities than we have.” Other staff reiterated the need to address some of the issues they face around peer cliques and peer influence, especially among the girls (e.g., ... “there is a lot of problems with the girls, a lot of them are already cliqued up”).

Discussion

There is a growing body of research focused on evaluating the quality of the afterschool environment for facilitating youth motivation and participation/engagement in PA (e.g., Rosenkranz et al., 2011; Zarrett et al., 2015). Much of this research has focused on objective assessments (e.g., systematic observations) of ASP policy development and implementation (Beets et al., 2012; Beets et al., 2010), environmental/physical resources (indoor/outdoor recreational spaces; Huberty et al., 2013; McKenzie, Marshall, Sallis, & Conway, 2000; Rosenkranz et al., 2011; Zarrett et al., 2015), and staff behaviors (Coleman et al., 2008; Huberty et al., 2013; Zarrett et al., 2015). Although these observational studies have begun to provide a rich understanding of the nature of the afterschool context for supporting youth PA, a minimal amount of knowledge of staff’s perspectives and experiences implementing PA policies and missions of under-resourced ASPs remains. Given staff are the front line for implementing PA curricula, insight into their PA experiences, motivations, values, and competencies can greatly contribute to understanding the variations in PA program quality and youth PA accrual found in previous observational research within ASPs (e.g., Beets et al., 2012; Coleman et al., 2008; Huberty et al., 2013; Rosenkranz et al., 2011; Trost et al., 2008). Therefore, the present study set out to examine the strengths and barriers of under-resourced ASPs for implementing an engaging PA curriculum from staff’s perspectives including: (a) the degree to which staff value and perceive the PA mission as a feasible part of the program and (b) staff’s knowledge and perceived ability to set up a social-motivational climate for encouraging and supporting youth PA motivation as defined by SDT.

Our findings indicate that overall, under-resourced ASPs share a common mission of providing youth opportunities to engage in ample PA during program hours. Staff expressed positive personal attitudes toward PA, high value for youth PA, and recognized their own involvement with youth in PA as an important component of their programs. These findings are particularly promising for engaging youth in PA in light of previous research that indicated staff behaviors and beliefs, especially participation with youth in PA, are primary correlates of youth PA (Coleman et al., 2008; Huberty et al., 2013; Zarrett et al., 2015). However, there is considerable discrepancy between staff’s values and perceived behaviors and the observed behaviors of these same staff reported in a previous paper (Zarrett et al., 2015). In particular, week-long objective observations of each ASP site (584 total observation scans; an average 84 scans per site) indicated minimal instances of positive staff interactions with youth, with “staff observing PA” as the most common PA-related staff behavior (63.3% of scans), followed by a small percentage of instances in which staff were observed demonstrating or participating in PA with youth (6.7% of scans). There were

virtually no instances of staff praising or encouraging youth during PA (.2% of scans). These discrepant findings between staff's endorsement of youth PA and the nature of staff PA implementation suggests that there are other potential barriers that keep staff from engaging with youth consistently in the PA curriculum, and reflects the incongruence in implementation also found in research on ASP general program quality (Baldwin & Wilder, 2014; Carruthers & Busser, 2000; Larson & Walker, 2010).

Given ample research demonstrating the importance of an autonomy supportive motivational climate for facilitating youth motivation and participation in PA (Braithwaite, Spray, & Warburton, 2011; Chatzisarantis & Hagger, 2009; Standage, Duda, & Ntoumanis, 2003; Vierling, Standage, & Treasure, 2007), and the mixed abilities to design daily engaging activities found among frontline staff in previous studies on general program quality (Baldwin & Wilder, 2014), a primary aim of this study was to determine whether staff were knowledgeable and efficacious in establishing an engaging PA social-motivational climate. Staff discussed several PA promotive strategies that reflect a SDT motivational framework, indicating, at least informally, that staff have experiential knowledge of the benefits of establishing a motivational climate for promoting youth PA. Moreover, several staff expressed the need and value of establishing such a motivational climate.

However, despite demonstrating knowledge and value of these motivational strategies, staff equally identified the need to better meet the SDT-related needs of youth as a primary area of improvement in their programs. Moreover, staff's extensive identification with youth-level barriers further reinforced the need for improvements in program climate for supporting youth PA and sheds light on why we observed minimal provision of SDT-supports when conducting systematic observations of program sites in a previous study (e.g., a minimal proportion of observation scans included engaging [16.4%] or inclusive activities [10.9%], positive peer interactions [8.7%] or activities with clearly defined rules [23.4%] and the majority of scans involved "unstructured" forms of autonomy [53.4% of all scans] rather than the guided autonomy [21.9%] specified by motivation theory and research for fostering engagement; Zarrett et al., 2015). For example, staff identified youth poor PA self-efficacy/self-concept as a primary challenge for getting youth active, but strategies and values centered on fostering youth PA competency was almost absent from staff discourse. In contrast, staff did discuss several strategies for addressing youth autonomy and relatedness needs. However, difficulties with getting youth to opt for the PA program options offered (rather than other competing activities such as computer games) and challenges associated with cliques, peer social norms around PA, and bullying/teasing during PA, indicate that establishing a climate that fosters relatedness and autonomy-support may also be challenging without additional training and assistance.

Additionally, our findings are aligned with previous research indicating that ASPs are not effectively addressing the major declines in PA as youth transition into the adolescent years (Nader, Bradley, Houts, McRitchie, & O'Brien, 2008; Troiano et al., 2008; Trost et al., 2002) or the pronounced gender differences in adolescents' daily PA accrual (Belcher et al., 2010; Nelson, Neumark-Stzainer, Hannan, Sirard, & Story, 2006; Whitt-Glover et al., 2009). Adolescent girls have been shown to be at especially high risk for inactivity during the afterschool hours (Janz, Dawson, & Mahoney, 2000; Nelson et al., 2006; Rosenkranz, Welk,

Hastmann, & Dzewaltowski, 2011; Trost et al., 2008). As youth move through the middle to late adolescent years youth contexts must provide PA opportunities that map onto their greater aerobic and anaerobic capacities (Wilmore & Costill, 1994), increasing cognitive capacities and identity concerns (Harter, 1999, 2003), and additional autonomy needs (Eccles & Gootman, 2002). Activities that are appropriate in terms of skill level and adolescent needs (e.g., opportunities for leadership) promote participation (Lauver & Little, 2005; Pearce & Larson, 2006) by optimizing adolescent learning and motivation (Ryan & Deci, 2000; Rogoff, 2003). In contrast, adolescents' negative responses/experiences with PA (e.g., experiences of stress with increased competitiveness, getting teased by peers) and the physical changes that accompany puberty more generally (self-consciousness; concerns about body image) have been shown to lead to decreased motivation and increased dropout rates in sport and other PA opportunities (Cumming, Smith, & Smoll, 2006; Davison, Werder, Trost, Baker, & Birch, 2007; Scanlan, Babkes, & Scanlan, 2005; Slater & Tiggemann, 2010). For example, Slater & Tiggemann conducted a recent qualitative study of adolescent girls that identified similar barriers echoed by staff in the current study whereby interest, self-efficacy, gender boundaries, and concerns about appearance/image, and teasing by peers impeded continued participation in sports. Developing strategies to maintain a positive "fit" between program content and climate and youths' personal and changing developmental needs is critical to ensure continued PA engagement (Eccles, 2005).

Furthermore, several researchers have argued that organized activity is only effective when staff are trained and feel competent to implement activities that appeal to youth (e.g., Beets, Webster, Saunders, & Huberty, 2013). There was some indication in the present study that staff received minimal PA-based training and that ASPs may be better equipped (both in equipment and staff training) to provide the types of activities that engage boys more than girls in our culturally and economically specified sample. Although a majority of staff indicated greater challenges with getting girls' active, very few staff could identify girls' favorite activities within the program. In contrast, basketball, a favorite activity among our sample of males, was a dominant organized activity discussed by staff. Staff training and increased orientation towards providing activities that girls' enjoy and/or tailoring activities so that they better appeal to girls will be important for addressing these barriers within ASPs. Together, our findings support previous research on the importance of peer influence and support and staff support around PA (Cox, Duncheon, McDavid, 2009; Cox & Ullrich-French, 2010; Eccles & Gootman, 2002; Jago et al., 2009; Motl, Dishman, Saunders, Dowda, & Pate, 2007; Neumark-Sztainer, Story, Hannan, & Tharp, 2003), and emphasizes the need to develop improved strategies to address these social agents for increasing youth PA within afterschool programs.

Beyond challenges associated with establishing a PA-supportive motivational climate within ASPs, staff identified several additional (structural) barriers that impeded adequate delivery of the PA curriculum. In particular, time constraints, coupled with a high value/emphasis placed on academic support and achievement, left many staff struggling to provide an appropriate balance between providing academic and PA opportunities. Consequently, staff reported PA as commonly taking a "back seat" to the academic component of the program. The greater emphasis on academic support also led many staff to report resistance to change program components to improve youth PA opportunities. These findings indicate that future

ASP interventions for increasing youth PA will need to go beyond addressing just the freeplay/PA component of ASPs and consider other often competing components and goals of the program to ensure sustained engagement post-intervention.

As expected, staff also identified several resource-level barriers (e.g., adequate equipment, staff capacity) to engaging youth in PA that likely represent the experiences of staff across under-resourced ASPs nationwide (Afterschool Alliance, 2012) and highlights the critical need for allocating increased funding and support for ASPs. Given the consistent instability of U.S. funding at national and state levels for supporting afterschool programming in recent years, coupled with increased need for ASP programming within communities (Afterschool Alliance, 2012), the majority of ASPs, especially those serving underserved youth, will face continued challenges of how to effectively implement all components of their programs with shrinking resources and dismal prospects for new support. Consequently, researchers and other youth advocates will need to direct their focus towards developing cost-effective strategies (e.g., requiring minimal capacity) to improve the quality of the physical and motivational climate of ASPs for promoting youth PA.

Limitations and future directions

This research carries with it the common limitations of most exploratory qualitative research including limited generalizability due to the selectivity of the sample and the potential for biased responses. Although the study protocol assured participants of confidentiality and their responses appeared to be quite candid, we cannot exclude the possibility that some respondents may have provided socially desirable responses. However, methodological strategies, including interviewing all staff at each program (rather than only a select few from each), and establishing a highly conservative criteria for extracting themes from the interviews, helped to address these limitations. Furthermore, researchers embarking on qualitative research have different goals than the objective, cause-and-effect goals pursued in quantitative research, aiming instead to understand the social world from the perspectives of the respondents, their assigned meaning, values, and cognitions (Wildemuth, 1993). We argue that gaining the perspective of staff in this way is an essential ingredient if we wish to develop effective interventions that increase ASP staff motivation and efficacy for implementing PA curricula. Although this study provides novel insight into staff experiences with implementing PA curricula, and helps to explain some of the discrepancies in ASPs' health-based missions/goals and the actual experiences and PA accrual of attending youth (Beets et al., 2012; Rosenkranz et al., 2011; Zarrett et al., 2015), to further inform program evaluation and intervention, research comparing staff perspectives to youth perspectives of the ASP PA climate (e.g., staff support) will help delineate the degree to which staff behaviors and intentions are desired and received by youth.

Conclusions

The present study was a first step in understanding the nature of the ASP climate for promoting youth PA from the perspectives and experiences of front line staff. Despite positive support for ASP PA curriculum, the feasibility of implementing PA curricula was identified as challenging across programs. Findings suggest increased need for staff training

and supports for providing a motivationally-supportive PA climate within ASPs that meets the developmental needs and interests of all youth. This will entail particular consideration towards employing multiple PA strategies to increase girls' PA and maintaining the interest and engagement of youth as they mature. Helping staff identify an effective balance between offering directed PA program content and youth-centered strategies that prompt youth to initiate and take ownership over their own PA experiences could potentially increase PA engagement (e.g., Larson & Walker, 2010; Larson, Walker, Rusk, & Diaz, 2015). Similarly, reorienting PA experiences to be less performance based (i.e., a competitive game of basketball) and more centered on meeting youth social needs (Zarrett et al., 2012; Zarrett et al., 2015; Zarrett, Sorensen, & Skiles, 2013) to overcome autonomy, mastery, and social barriers identified in staff discourse would likely increase PA interest and engagement among disengaged program youth. Lastly, addressing how to strike an adequate balance between PA and other highly valued and competing demands/missions of the program (e.g., academics) with the minimal capacity (e.g., personnel) of current program structures will be required to optimize on the effectiveness of PA program components. In sum, the current study provided invaluable insight into the perceived strengths and barriers of under-resourced ASPs for implementing their PA missions and goals. Addressing these needs within ASPs will be an effective strategy for increasing youth PA during the afterschool hours.

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Table 1

Physical activity subset of the staff interview protocol.

Interview prompts
What's the primary mission or goal for the children participating in your program?
Can you describe what goes on in a typical day in the program?
What tasks do you do in a typical day in the program?
Does this program aim to increase children's physical activity?
In what ways do you think this program encourages children to be physically active?
Do you think it is important for children to be physically active?
Are there ways in which you encourage the children participating in this program to be physically active?
What are some challenges or barriers you face in trying to get the children in this program active and engaged?
Are there particular youth that do not like to be active? Why do you think they dislike physical activities?
Do you offer different types of games to the younger children (Grades K–2) than the older children (third grade and up) in the program, or do they all like the same things?
Are there similar or different challenges getting the younger (Grades K–2) versus older children active (Grades 3 +)?
Can you think of anything that might help staff get kids to be more active in the program?
Do you think it would be difficult to change the way activity is offered to kids in a typical day in the program? (Or increase the amount of PA offered to kids on a typical day?) How so?
Do you feel like you would have support from the program (e.g., other staff, director, parents) if changes were made in how activity was planned and offered to the kids?
Do you regularly play a sport or exercise in your free time?
What activities in the program do you think the kids like the best?
How often do kids participate in their favorite activities here?
Are the kids in the program given an opportunity for decision-making? (Do they sometimes get to choose what activities they participate in?)
Does the program focus on promoting positive interactions and relationships among the children. If yes, how so?
Does the program focus on promoting positive relationships between children and the staff? If yes, how so?

Table 2

Frequency of themes by staff and program.

Themes	Staff (N = 28)	Programs (N = 7)
A. Program mission		
Academics	23	7
Physical activity	25	7
Safe place	9	5
Social-motivational development	25	7
Intrapersonal skills	15	6
Fun	4	3
B. Infrastructure strengths		
Time allotted for staff planning of PA	11	6
Provide safe and accessible PA space	14	6
Staff-child ratio	13	6
C. Infrastructure constraints		
Equipment	11	5
Staff-child ratio	5	4
Time constraints	10	6
D. Staff value, knowledge, practice strengths		
Time in program schedule allotted to PA	18	7
Provide games/activities	24	7
Staff involved in PA	26	7
Verbal encouragement/general support	13	6
Positive personal attitude toward PA	28	7
Participate in PA in own free time	23	7
Staff willing to learn new activities	12	6
Motivational strategies (total)	9	6
Choice/leadership	5	4
Social connection/inclusion	7	5
Engagement/mastery	3	3
E. Staff-level practice constraints		
Discipline/misbehavior	5	5
Staff lack of participation in PA	3	7
Resistant to change program components	4	4
G. Youth-related constraints		
PA self-efficacy (mastery)	9	6
Peer norms (inclusion)	7	4
Negative PA Attitudes (choice/engage)	17	6
Technology	5	4
Age differences	26	7
Gender differences	12	5
H. Improvements		

Themes	Staff (N = 28)	Programs (N = 7)
Resources	12	5
General content improvements	11	5
PA specific	6	5
PA motivational strategies	6	4

Table 3

Percentage of staff reporting a theme within each program.

Themes	Programs						
	1	2	3	4	5	6	7
A. Program mission							
Academics	63.63	100.00	100.00	66.67	100.00	100.00	100.00
Physical activity	100.00	100.00	100.00	100.00	0	100.00	100.00
Safe place	36.36	50.00	50.00	33.33	0	0	50.00
Social-motivational development	81.81	100.00	100.00	100.00	100.00	100.00	100.00
Intrapersonal skills	63.63	33.33	50.00	66.67	50.00	100.00	0
Fun	18.18	33.33	0	0	0	0	50.00
B. Infrastructure strengths							
Time allotted for staff planning of PA	0	33.33	100.00	33.33	100.00	100.00	100.00
Provide safe and accessible physical space	27.27	100.00	50.00	33.33	100.00	50.00	0
Staff/child ratio	0	50.00	50.00	100.00	100.00	100.00	100.00
C. Infrastructure constraints							
Physical logistics (equipment/capacity)	0	83.33	100.00	66.67	0	100.00	50.00
Time constraints	18.18	50.00	50.00	33.33	100.00	0	50.00
D. Staff value, knowledge, practice strengths							
Time in program schedule allotted to PA	54.54	83.33	50.00	66.67	0	100.00	100.00
Provide games/activities	81.81	83.83	50.00	100.00	100.00	100.00	100.00
Staff involved in PA	81.81	100.00	100.00	100.00	100.00	100.00	100.00
Verbal encouragement/general support	45.45	50.00	50.00	66.67	50.00	0	50.00
Positive personal attitude toward PA	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Participate in PA in own free time	81.81	66.67	100.00	66.67	100.00	100.00	100.00
Provide games/activities	81.81	83.83	50.00	100.00	100.00	100.00	100.00
Staff involved in PA	81.81	100.00	100.00	100.00	100.00	100.00	100.00
Verbal encouragement/general support	45.45	50.00	50.00	66.67	50.00	0	50.00
Positive personal attitude toward PA	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Participate in PA in own free time	81.81	66.67	100.00	66.67	100.00	100.00	100.00
Staff willing to learn new activities	0	83.33	50.00	66.67	100.00	50.00	50.00

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Themes	Programs						
	1	2	3	4	5	6	7
Motivational strategies (total)	9.09	16.67	50.00	66.67	0	50.00	50.00
Choice/leadership	0	60.00	50.00	66.67	0	50.00	50.00
Social connection/inclusion	18.18	0	50.00	33.33	0	50.00	50.00
Engagement/mastery	9.09	0	0	33.33	0	0	50.00
E. Staff-level practice constraints							
Discipline/misbehavior	9.09	16.67	0	33.33	0	50.00	50.00
Staff lack of participation in PA	27.27	66.67	0	33.33	0	0	0
Resistant to change program		0	16.67	50.00	0	0	50.00
G. Youth-related constraints							
PA self-efficacy (mastery)	27.27	16.67	50.00	33.33	0	50.00	100.00
Peer norms (inclusion)	27.27	0	0	0	100.00	50.00	50.00
Negative PA attitudes (choice/engage)	81.81	50.00	50.00	0	50.00	100.00	50.00
Technology	0	16.67	50.00	100.00	100.00	0	50.00
Age differences	90.90	100.00	100.00	100.00	50.00	100.00	100.00
Gender differences	18.18	66.67	0	66.67	0	100.00	100.00
H. Improvements							
Resources	9.09	83.33	100.00	66.67	0	100.00	50.00
General content improvements	45.45	33.33	50.00	0	0	50.00	100.00
PA specific	0	0	50.00	66.67	100.00	50.00	0
PA motivational strategies	18.18	33.33	0	0	0	50.00	50.00