

DEVELOPING RESPONSIBILITY USING PHYSICAL ACTIVITY: A CASE STUDY OF *TEAM SUPPORT*

DESARROLLANDO LA RESPONSABILIDAD MEDIANTE LA ACTIVIDAD FÍSICA: ESTUDIO DE CASO DEL PROGRAMA *APOYO DE EQUIPO*

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ABSTRACT

Physical activity-based interventions are becoming more popular as a way to enhance academic and social success of students in schools in underserved areas and are likely to be sustainable or replicated when based on a conceptual framework (Domitrovich, Bradshaw, Greenberg, Embry, Poduska, & Jalongo, 2010). This study explored (i) the fidelity of Team Support, a physical activity-based program, to Hellison's Teaching Personal and Social Responsibility (TPSR) model and (ii) the perceived competencies developed through participation in Team Support. To explore the program's fidelity to Hellison's TPSR model, a protocol adherence rating scale was developed to gather quantitative and qualitative data on advisors' behavior (n=15) in relation to Hellison's TPSR model. Using descriptive statistics and thematic analyses, the researchers found that the program adhered to Hellison's TPSR model. To explore the perceived competencies developed through participation in Team Support, interviews were conducted with individual students (n=12), two student focus groups (n=8 per group), and advisors of the program (n=9). Specific social, emotional, and academic areas of growth were identified in relation to Hellison's TPSR model.

RESUMEN

Cada vez son más frecuentes las intervenciones mediante la actividad física cuyo fin es la mejora académica y social de los alumnos de escuelas de áreas desfavorecidas; dichas intervenciones, si se apoyan en algún marco teórico-conceptual, son probablemente sostenibles o replicables (Domitrovich, Bradshaw, Greenberg, Embry, Poduska, & Jalongo, 2010). Este estudio explora (i) la fidelidad del programa *Apooyo de Equipo*, un programa basado en la actividad física, con el modelo de Enseñanza de

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la Responsabilidad Personal y Social (TPSR) de Hellison y (ii) las competencias que los participantes en él percibieron haber desarrollado. Para detectar la fidelidad con el modelo TPSR, se diseñó una escala a fin de recoger datos cuantitativos y cualitativos sobre la conducta de los líderes adultos (n=15) en relación con el modelo de Hellison. Mediante estadística descriptiva y análisis temático, los investigadores confirmaron que el programa se ajustaba al modelo. Para investigar las competencias que los participantes percibieron haber desarrollado, se realizaron entrevistas individuales con alumnos (n=12), dos grupos de discusión con los estudiantes (n= 8 por grupo) y con los líderes adultos del programa (n=9). Se identificaron, en relación con el modelo de TPSR de Hellison, áreas de crecimiento específicas de carácter social, emocional y académico.

KEYWORDS. Positive youth development; Hellison's TPSR model; physical activity

PALABRAS CLAVE. Desarrollo positivo de la juventud; modelo TPSR de Hellison; actividad física.

1. INTRODUCTION

Positive youth development programs are becoming more popular as a way to address academic and social success within urban schools (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Gillham, Reivich, & Shatte, 2002; Martinek & Hellison, 1998). Catalano et al. (2002) reported correlations between participation in positive youth development programs and participants' improved school attendance, academic performance, decision-making abilities, and decreased substance use and participation in risky sexual behavior. Additionally, these programs housed within a school system can help youth experience a sense of "smallness" in which student-teacher relationships can develop that facilitate student learning of academic concepts and life skills (Payzant & Horan, 2007).

Youth development programs that use physical activity to promote healthy development have proven to be particularly potent (Gould & Carson, 2008; Martinek & Hellison, 1997). Researchers have acknowledged the positive relationship between physical activity and development of skills including character development (Hellison, 2003), cooperation (Orlick, 2006), moral development (Shields & Bredemeier, 1995), sportsmanship (Giebink & McKenzie, 1985), social responsibility (Horrocks, 1978) and academic skills (e.g. better grades) (Fredricks & Eccles, 2008). Researchers (Gould & Carson, 2008) suggest that sport and physical activity provide an appropriate forum for developing life skills that can transfer to other areas of life. When based on a conceptual framework, physical activity-based youth development programs have a better chance of being sustainable or replicated (Domitrovich, Bradshaw, Greenberg, Embry, Poduska, & Jalongo, 2010). Unfortunately, not all youth development programs are based on a conceptual framework; therefore, a need exists for such conceptual, evidence-based programs to be implemented.

One conceptual model used is Hellison's Teaching Personal and Social Responsibility (TPSR) model. Hellison (2003) developed the TPSR model to be used in youth development programs designed to help underserved students cope with social

problems and build character through physical activity. He identified the value of using physical activity settings to facilitate development of personal and social responsibility because these settings allow interventions to be closely tied to immediate feedback on decision-making processes, which facilitates learning (Hellison & Walsh, 2002). A significant body of literature supports the effectiveness of Hellison's TPSR model as a framework for successful programs that help youth develop personal and social responsibility (e.g., Walsh, 2008; Wright & Burton, 2008).

While Hellison's model can be adapted to suit program needs and resources, four themes (i.e., integration, transfer, empowerment, and teacher-student relationship) (**Table 1**) and five responsibility outcomes (i.e., respect, effort, self-direction, coaching, and transfer) (**Table 2**), should be embraced by program facilitators and students. The final responsibility outcome level, transfer of these responsibilities to other settings, is the ultimate aim (Hellison, 2003). Hellison suggests practitioners follow a daily format for their lessons, which includes an awareness talk (in which the different responsibilities are discussed and the specific responsibility addressed in the current session can be identified), physical activity (which involves the implementation of that responsibility) as well as a cool down (referred to as group meeting in the TPSR literature) and reflection time which involve a debrief of the session and how the identified responsibility can be transferred outside the session. Throughout the lesson, individual counseling time is emphasized.

Table 1. Four Themes of Hellison's TPSR Model (Hellison & Walsh, 2002)

Theme	Definition
Integration	Teaching life skills and values must be integrated with the physical activity subject matter rather than taught separately.
Transfer	Lessons learned in the gym must be taught so that they can transfer to other aspects of the program participants' lives.
Empowerment	Instructional strategies must be based on a gradual shift of responsibility from the program leader to program participants.
Teacher-student relationship	For any of these convictions to be successful, the program leader must recognize and respect the individuality, strengths, opinions, and capacity for decision making of each program participant.

Table 2. Five Responsibility Levels of Hellison's TPSR Model (Hellison, 2003)

Responsibility level	Definition
Respect	Respect the rights and feelings of others
Effort	Self-motivate, explore new tasks, and persist through adversity
Self-direction	Exhibit on-task independence, show goal setting progression, resist peer pressure
Coaching	Care for others and sensitivity and responsiveness to others
Transfer	Use responsibilities learned in the program in other components of life

Team Support, a physical activity-based youth development program, began in 2007 as a response to the mayor of Boston's call for local universities to collaborate with the Boston Public Schools by providing comprehensive services aimed at improving student performance. One university and high school partnered to develop *Team Support*, an in-school, youth development program designed to use physical activity to teach responsibility to student-athletes. *Team Support* was designed to stand on the theoretical ground of Hellison's TPSR model. Its sessions began with the "huddle", which was designed to allow students to discuss what responsibility goals they wanted to focus on for the particular session. Next, in the physical activity component, students engaged in non-sport specific activities (e.g., strength building and athletic movement). The "cool down" provided a structured time for students to reflect on how well they incorporated their chosen responsibility into the physical activity session and discuss how they could transfer the responsibility to the rest of their lives. The adult program leaders of *Team Support*, titled *advisors*, were charged with facilitating the program and were composed of high school coaches and trained university graduate students. The current investigation sought to answer the following two research questions:

- 1.- Is Hellison's personal and social responsibility model implemented in *Team Support*, as evidenced through the presence of Hellison's four themes of integration, empowerment, teacher-student relationship, and transfer?
- 2.- What do students and advisors report as the competencies developed through

2. METHODS

Setting

During the 2008-2009 academic year, every Monday and Thursday during an in-school period, *Team Support* occurred in the gym of an urban public high school from 9:49-10:46 am. While the school served a diverse population of students from several countries, 93% of students were Black or Hispanic and 65% were on free or reduced lunch. The four year graduation rate was 51.9% during the year preceding data collection. All demographic information was gathered from the Boston Public Schools website. Data were collected in Spring, 2009. The study received IRB approval through Boston University's Institutional Review Board.

Participants for research question #1

Participating student-athletes (n=110) were divided into four advisory groups: men's baseball/women's softball (n=30), men's/women's soccer (n=29), football/track (n=29), and men's/women's basketball (n=22). In terms of advisors, the baseball/softball advisory group had three coaches and three university students, the basketball advisory group had four coaches and two university students, the football/track advisory group had two coaches and two university students, and the soccer advisory group had three coaches and one university student. It was expected that the group

affiliation would contribute to feeling comfortable participating in the program. There was no division between Freshman, Junior Varsity, or Varsity athletes. Students had been in the program for one or two years and were equally divided among all four grades. Over 90% of participants were of Latino or African American descent. Twenty-three percent (n=25) of the participants were female. Three raters gathered data, two graduate students and the principal investigator (PI), to assess the fidelity of *Team Support* to Hellison's TPSR model.

Measure for research question #1

To assess the fidelity of *Team Support* to Hellison's TPSR model, a measure was needed to capture theme adherence (Appendix). While other measures have been created to evaluate programs based on Hellison's TPSR model (Hellison, 2007; Wright, 2009) or to obtain data to reflect the extent to which teaching strategies are employed in physical activity lessons, with a broader focus than simply addressing Hellison's four TPSR themes (Wright & Craig, 2011) the current measure specifically addressed Hellison's four themes within *Team Support*.

Using information garnered from Hellison (2007) and Wright (2009) combined with the PI's knowledge of Hellison's model and *Team Support*'s mission, a protocol adherence scale, titled the *Team Support* Protocol Adherence Scale, was developed to measure the visibility of TPSR themes within *Team Support* (Appendix). The measure was used to identify the occurrences when advisors' behaviors aligned with Hellison's four themes. Two five-point Likert scales were developed to measure the quality and quantity of the themes present in *Team Support*. The first scale assesses the extent to which a session exhibited behaviors consistent with each theme. The second scale assesses the quality of observable behaviors for each theme. Raters were advised to keep in mind the following criteria: the lowest quality rating referred to occurrences in which advisors incorporated the theme to a minimal degree and the highest quality rating referred to occurrences in which advisors incorporated the theme and solicited follow-up discussion points. Raters were prompted to include qualitative feedback in which they explained or elaborated on quantitative findings and contributed information not gathered through quantitative data.

Procedure for research question #1

The PI conducted a two-hour training session: raters were trained on how to use the protocol adherence rating scale (see Appendix). Training included consideration of Hellison's model and how to assess the extent to which Hellison's four themes would emerge in *Team Support* sessions.

Raters independently assessed the *Team Support* session for the soccer advisory groups using the rating scale and discussed responses after the sessions. For discrepancies, raters discussed their rationale for scoring until all raters shared an understanding of what scores meant. Once raters were confident they had reached a shared understanding and were applying the scale consistently, each rater began rating sessions through naturalistic observations. All raters rated five sessions and focused on

one advisor per session, equaling 15 total different sessions. Each rater assessed each advisory group at least once.

The first author was the PI, an advisor during the first semester of the program but not during data collection, and one of the three raters. The two additional raters were advisors in the program. The second and third authors were not involved in the program. The fourth author founded the program.

Data analysis for research question #1

Raters completed all quantitative and qualitative sections of the protocol adherence rating scale. The mean and the standard deviation for each theme were determined (Table 3). The mean was determined by finding the average score across all items within each theme across all rated advisory groups; the data represents the presence of themes throughout the entire program, not per advisory group. If a theme was rated with a mean of at least three for quantity, meaning that it occurred at least three to four times during the session, and for quality, meaning those behaviors were compliant with the model at least some of the time, the theme was deemed present within *Team Support*, suggesting the fidelity of *Team Support* to each of the themes in Hellison's TPSR model.

Table 3. Means and Standard Deviations of the presence of each Hellison TPSR theme in *Team Support*

Theme	Quality M (SD)	Quantity M (SD)
Integration	4.65 (0.53)	4.75 (0.40)
Transfer	3.17 (1.01)	3.7 (1.03)
Empowerment	4.27 (0.53)	4.47 (0.51)
Teacher-Student Relationship	4.73 (4.40)	4.65 (0.43)

For qualitative data from the rating scale, inductive data analysis was conducted in which data were transcribed, coded, and analyzed (Patton, 2002). A manageable classification scheme was developed to identify emergent themes, which included an identification of meaningful units, lower order themes, and higher order themes while looking for patterns between themes. Once the PI analyzed the data, she conducted a member check with four randomly selected students in *Team Support* by asking them to assess the extent to which the qualitative results appeared consistent with their experiences. Additionally, for data analysis, two coders engaged in peer debriefing to ensure the trustworthiness of the qualitative data.

Participants for research question #2

Student participants engaged in either individual interviews (n=12) or two focus groups (n=8 per group) conducted by the PI. Included in the interviews and focus groups were 22 males and six females, with an equal distribution of students across grade levels 9-12. Individual interviews with advisors (n=9) were conducted to explore their perceptions of

students' development. At least one advisor was selected from each of the four advisory groups within the program.

Measure for research question #2

An interview guide was developed to prompt discussion of participants' program experiences and perceptions of what they learned from the program. Additionally, semi-structured interviews were conducted that explored whether advisors (n=9) thought that participants demonstrated learning of personal and social responsibility (both interview guides are available from the first author upon request). With questions concerning specific students, advisors were asked to speak specifically about students who had been interviewed.

A sample of participants' interview questions include:

- i. What is one of the best memories you have of Team Support?
- ii. Have you ever been in a situation outside of Team Support when you have changed your behavior because of what you have learned?
- iii. What kind of atmosphere do you think Team Support embodies?

A sample of advisors' interview questions include:

- i. Have you noticed a change in behavior for student X related to respect?
Can you provide a specific example?
- ii. Have you noticed student X take a leadership role in any part of his life)?
- iii. Have you heard of any positive changes in student X's school performance?

Procedure for research question #2

Individual interviews (n=12), ranging from 20-40 minutes, were audiotaped and conducted in a high school office. Two focus groups were 30 minutes long and held in a school hallway. A convenience sampling approach was used. Participants were selected by one of their advisors based on the criteria that they 1. consistently attended the program and 2. could communicate in English well enough to understand the interview questions. Advisors (n=9) were selected for interviews based on their availability during interview times.

Data analysis for research question #2

Following data collection, all data were transcribed, coded, and analyzed (Patton, 2002). Data analysis was conducted separately for students and advisors. A manageable classification scheme was developed to identify emergent themes. Meaningful units coalesced into lower order themes and, then, lower order themes coalesced into higher order themes. The second author reviewed the PI's data analysis at the level of meaningful units, lower order themes, and higher order themes until consensus was reached. Finally, deductive methods were used to verify the analysis outcomes, meaning that the PI ensured that all higher order themes contained appropriate lower order themes and meaningful units. If an emergent theme did not

match with our deductive framework, that data was reconsidered. Ultimately, all emergent themes matched with the deductive framework. The results are divided into participants' perspectives and advisors' perspectives.

3. RESULTS

Research Question #1

- Integration

Integration of responsibility levels in *Team Support* sessions was present an average of 5 to 6 times per rated session ($M=4.65$; $SD=0.53$) and instances were recorded as high quality ($M=4.75$; $SD=0.44$), meaning that advisors' behaviors were rated as mostly compliant with Hellison's TPSR model when integrating responsibility levels into the session. Qualitative data from rater forms suggested inherent integration into physical activity. On 19 occasions, raters documented that advisors created activities that encouraged participants to integrate the responsibility levels into physical activity. For example, on one occasion, the baseball team played a game of ultimate Frisbee that integrated the responsibility levels and physical activity by requiring that all participants who crossed their opponents' line to score a point could not receive their point until they had said a positive statement about a member of the opposing team, evidencing respect.

On seven occasions, the advisors modeled integration of the responsibility levels and the physical activity component of *Team Support*. For example, during a team game, one female student participant did not want to participate because she was the only female student participant among 20 male participants. The female advisor with the group noticed the participant's trepidation and responded by joining the game with enthusiasm. The advisor modeled the behavior she hoped to inspire in the student. Immediately after the advisor began playing, the female student tentatively joined the game. By the end of the game, the female advisor had ceased playing and the female student was actively engaged in the game.

- Transfer

Advisors' behaviors suggested that transfer was apparent approximately three to four times per session ($M=3.17$; $SD=1.01$) and was compliant with Hellison's TPSR model ($M=3.7$; $SD=1.03$). Qualitative data suggest students transferred their learning to the classroom ($n=2$), the "real world" ($n=5$), and to sport ($n=9$). The majority of qualitative comments identified it as discussed during the cool down, when participants reflected on their behavior during the advisory period.

In relation to transfer to the classroom, only two examples emerged. When asked "how can you transfer what you learned today to your school work?" one participant responded with "by putting more effort into my grades" and another answered with "by respecting my teacher." In terms of transfer to the "real world" on one occasion, advisors discussed with participants the importance of compromise in the weight room and how that transfers to other aspects of life. One advisor stated, "We have to roll with

things when they don't go our way," and participants provided examples of when they have compromised during their lives. On a separate occasion, one participant acknowledged, "we can take what we're learning without the stress of the streets and then use it when we need to." Finally, transferring responsibility to participants' sports was identified. During one advisory period, the advisors asked the participants to rest for a few minutes halfway through a game. One advisor stated, "We rest now so we can finish [the game]. We have to stay motivated, even when we're tired." He then asked participants how they could use this knowledge when playing basketball. Participants' responses included: "play hard", "never quit", and "do our best".

- o Empowerment

Empowerment was evident approximately five to six times per session ($M=4.27$; $SD=0.53$) and present through high quality statements and behaviors ($M=4.47$; $SD=0.51$). Empowerment was supported by qualitative data in the area of student leadership and choice. Participants experienced empowerment by being offered a leadership role through directing others and choosing physical activities, workout partners, and game rules ($n=19$). For example, during a game, one advisor implemented the rule that, at halftime, group members should collaborate to determine their strategy for the game's second half. The advisor created an environment that fostered participant leadership in selecting their own game strategy. Additionally, advisors progressively offered more choice to participants. To evidence this choice, one advisor offered, "to give you some ownership, we'll have you break into two groups. Someone from your group can show the rest of your group two stations that you'll do, okay?" This example evidences the empowering atmosphere the advisor created.

- o Teacher-student relationship

Implementation of the theme of teacher-student relationship was considered successful, with approximately 5-6 examples of advisors developing this per session ($M=4.73$; $SD=0.44$) and the examples were typically high quality ($M=4.65$; $SD=0.43$). Individual attention was highlighted through qualitative data as one of the most visible examples of theme adherence across all four themes. Raters identified many examples ($n=14$) of advisors providing participants with individual attention through greeting participants by name, asking participants questions about their lives, and identifying participants' strengths during the sessions. For example, one advisory group created a "student of the month" program in which the group praised one student for something he did outside *Team Support* that was positive in some way.

Research Question #2

Participants and advisors' responses are delineated into two primary higher order themes, instances of participants mentioning academic growth ($n=11$) with advisors corroborating that growth ($n=3$), and instances of participants mentioning social and emotional growth ($n=37$) with advisors corroborating that growth ($n=14$), with various lower order themes emerging within both higher order themes.

- o Academic growth

Increased effort in classroom

Many participants (n=9) identified increasing their effort in the classroom. One participant stated, "You can take what you're learning and use it in the classroom to get better at your schoolwork." Another participant added,

So, it's like when I can't do stuff in class, it's like I just try and try. Try making it up and doing what I need to do. I don't know, cuz, at first, I wasn't really doing that. Then I got into advisory and I got kicked out because of my grades and I got back in and I started realizing how important it was.

When asked how he was able to re-enter *Team Support* by raising his grades, he responded, "effort, making sure I stayed motivated, doing what I gotta do in class."

Advisors (n=3) attributed participants' increased effort in the classroom largely to their experiences within *Team Support*. One advisor shared a story about another participant who demonstrated a significant turn around in his classroom effort,

He is the leader of the class, which gives him a lot of power over other people. Recently, he is making it cool to work hard in class. Other people are following suit. He has a significantly different level of effort in the classroom.... I've had him in class before and only recently has he changed like this, and only recently has he been in Team Support. There is a correlation, that's for sure.

Increased positive communication with and respect for teachers

Two participants' comments reflected increasing positive communication with teachers. For example, one participant stated, in reference to teachers, "In here we learn, like, a good value of how to present ourselves, like, outside to the world and, like, how to respect our elders when we're in class or whatever". Not only did participants' positive communication increase with their teachers, during a focus group, a conversation ensued in which participants identified that *Team Support* helped them learn to be respectful toward their teachers. The participants described how, by modeling respectful behaviors, the advisors taught the participants how to treat others with respect.

- o Social and emotional growth

Perceived care from adults

Every participant in the individual interviews (n=12) and two focus groups (n=8 per group) identified feeling cared for by advisors. For example, one participant responded to the question, "How does *Team Support* make you feel?" by stating, "Like a family. At least, with our small group." He stated that this feeling led him to consistently attend *Team Support*. Four female interviewees identified the importance of knowing the advisors cared about them. One participant stated, "The advisors care about us. It's

hard being the only girl with all the guys because they get competitive. But the advisors are nice about it".

Increased effort in respective sport

Participants (n=9) identified that *Team Support* helped them increase their effort in sport. One participant stated, "Like when our team is in the weight room and we're lifting, I try to remember to work hard and not be a slacker." Other participants identified that *Team Support* encouraged them to transfer the effort they use in advisory period to their respective sports. One participant stated

Sometimes I don't want to do things here, but I do them anyway because it's not cool not to. It's like that on the field too. I mean, I try to remember what coach says about needing to put in effort all the time, even if I don't want to.

Four participants on one sport team identified reminding each other, during practice and games, to refer back to times in advisory period when they faced a challenging task and were encouraged to increase their effort. For example, in a baseball game, when the team was losing, one participant encouraged his teammates to remain dedicated to the game. "I told them that just because we're down doesn't mean we should give up. What would [advisors] say if they knew we quit before it was over? They wouldn't be cool with it".

Felt accountable and bonded to teammates

Participants (n=8) identified accountability to teammates as an outcome. One participant highlighted his favorite memory of *Team Support* as a day when "we were all together as a whole team. Everyone showed up and was prepared," To reflect this accountability, one participant stated, "advisory ... strengthens our bond. That makes us want to do more for each other."

Many members of one team identified that *Team Support* helped foster accountability by allowing students to share their concerns with each other about their team dynamics. For example, one participant stated,

Well, most of the time I workout with the guys and my first time working with them I was like 'Oh my gosh'. We were all scared to do stuff. We weren't used to each other. Team Support, like, it kinda builds a bond between all of us.

This bond allowed participants to develop accountability to each other that went beyond teammate obligation and incorporated aspects of trust and rapport. Three participants commented on transferring this accountability to their respective sports.

Advisors (n=4) attributed participants' increased participation within *Team Support* throughout the academic year to feeling bonded to others, especially among the women. One advisor stated, "When [student] was the only girl and she didn't want to participate, she was like, 'oh, [my advisor] is in there', then she went in and played."

Another advisor noticed that as participants became closer within *Team Support*, they spent more time together outside *Team Support*. He stated, "the program allows people to feel close to each other, which we're now seeing outside of the program."

Served as role model to underclassmen through leadership

Six participants identified the role *Team Support* played in helping them serve as role models to their younger teammates. One participant stated, "I try to model the right type of behavior for the other teammates. They look up to me. I'm their leader. I do that on and off the field. *Team Support* helps." This statement supported the idea that participants were developing both the capacity and desire to serve as role models to underclassman.

All advisors (n=9) interviewed stated many participants have assumed more of a leadership role throughout the year. One advisor who had been involved in *Team Support* since its inception stated,

There have been two to three students who have taken leadership roles recently... a week ago, we had a ton of equipment out and all the kids got ready to leave for the day and those specific kids I was talking about told everybody stop, come back,.. (they) had all the kids come back out of the locker room to put all the equipment back.

When asked how this behavior compared to participants' behavior last year, the advisor stated that one of the participants was a negative leader within *Team Support* last year, leading participants to misbehave, and the other participant was not a leader last year. This leadership behavior was increasingly evident within *Team Support* over time.

4. DISCUSSION

Regarding Research Question #1, findings suggest the advisors implemented Hellison's TPSR model in *Team Support* by including all four themes into the program: integration, transfer, empowerment, and teacher-student relationship; however, the data also showed transfer as the least visible theme. This finding is in keeping with other researchers' findings: transfer is viewed as the most important, and least attainable, outcome level of responsibilities (Hellison, 2003); however, it could also be due to a design flaw in the rating scale. The transfer scale had the fewest items for scoring; therefore, it is possible that the advisors taught the theme of transfer but the scale did not reflect that finding because the scale did not include specific enough items to rate. An item analysis must be run on the subscales to address this issue for future researchers.

The data does show that transfer to the sport context was more visible than transfer to other contexts. The prevalence of transfer within a sport context was likely due to three factors. First, the statements about responsibilities delivered within one sport context can easily be applied to other sport contexts. Second, the participants might have been more inclined to listen when the advisors made connections between *Team*

Support and other sport contexts since they were all interested in sports. Third, most advisors were interested in sport themselves, as they were either graduate students in a Sport Psychology or Coaching program or coaches of a sport; therefore, the advisors may have felt more comfortable making connections to sport than making other types of connections.

With respect to Research Question #2, the areas of growth were identified by student participants and advisors within *Team Support*. Data suggest that participation in *Team Support* yielded outcomes consistent with those identified in prior research for successful youth development programs (e.g., promoted bonding; promoted social, emotional, academic competencies; and provided recognition for positive behavior and opportunities for prosocial involvement) (Catalano, et al., 2002).

Of note in participants' responses is the amount of times participants identified feeling cared for by adults (i.e., 14 times). As previously noted in the study, Boston's youth development organizations were welcomed into the Boston Public School system to help create a sense of smallness in hopes of creating healthy relationships between students and teachers (Payzant & Horan, 2007). Healthy relationships between the advisors and participants were highlighted in the study in that many participants identified their relationships with their advisors as motivating factors to attend *Team Support*.

Emerging from advisors' interviews, a consistent finding is the outcome of increased leadership. All advisors who were interviewed identified an increase in participant leadership as the most visible benefit of participating in *Team Support*. Hellison suggests that leadership requires the skills and qualities of respect, effort, self-direction, and human decency along with the ability to balance providing direction to a group with facilitating the groups' needs and interests (Hellison, 2003). Additionally, the transfer of responsibility to program participants' lives outside *Team Support* corroborates existing research that shows programs based on Hellison's TPSR model can successfully lead to the following areas of growth: self-control improvement in the classroom, effort improvement in the classroom, making more reflective and better choices in the classroom, maturity development in the classroom, and learning to solve problems outside the program (Hellison & Walsh, 2002).

Creating a caring climate emerged as influential in facilitating an environment that contributes to youth's development of responsibility. This finding is consistent with previous research, which has shown that a caring climate (Fry & Gano-Overway 2010), created by adult leaders, is correlated with developing life skills. Additionally, Noddings (1992) suggested that individuals learn to care from others, such as teachers or advisors, who practice an ethic of care, which would lead to modeling of caring behavior by youth. *Team Support* advisors created a caring climate for participants and modeled caring behavior. Cohen (2001) identified that social and emotional competencies can best be fostered in a safe, caring, and responsive context, supporting our findings indicating that development of responsibility among participants is facilitated by the caring climate created by the advisors.

Implications

The results verified *Team Support*'s fidelity to Hellison's TPSR model and provided support for the application of Hellison's TPSR model in an in-school, non-P.E. class context. Finding that the program implemented Hellison's TPSR model suggested the program could be reproduced and was based on coherent conceptual framework. Exploring the fidelity of *Team Support* to Hellison's TPSR model illuminated gaps between the initiative and Hellison's TPSR model that could interfere with the program's effectiveness. For example, the theme of transfer was the least developed theme. Due to this study's findings, practitioners know to emphasize the theme of transfer in each session, perhaps by providing more specific examples of transfer to participants. The protocol adherence rating scale, designed for the current investigation, could be used as an instrument to assess the prevalence of Hellison's TPSR model's four themes for other programs once it is tested for reliability and validity. The results indicate that *Team Support* helped students develop academically, socially, and emotionally, suggesting the continued benefit of *Team Support*'s presence at the particular high school.

Limitations

One limitation of the current study is that the PI was also a volunteer with the football advisory group one day per week during the semester preceding data collection. To account for this limitation, the football team was assigned four additional advisors, allowing the PI to play a supportive role. Additionally, the two other raters for the protocol adherence form were advisors in *Team Support*. These dual roles are potential threats to the validity of the results. Given that all raters had received graduate training in conducting ethical research, combined with them tending to agree on theme adherence for the initial rating session, the likelihood of bias seemed very low. A third limitation was that the protocol adherence rating scale was developed specifically for use with this study. Further analysis must be conducted to determine the credibility of the measure as one that accurately measures theme adherence in other programs. There may be a ceiling effect in that many sessions were scored with a $M > 4$. Future refinement of the scales might include a larger range (e.g., 1 = 0 while 5 = up to 10).

Regarding the second research question, one limitation is that the interviews and focus groups relied on the honesty and self-awareness of the participants. Also, interviewees were recommended by their advisors based on ability to understand and speak English and their consistent attendance in the advisory group. Therefore, the data may only represent the perspective of the given participants.

Direction of future research

The current study is a springboard for future research that can address *Team Support*, Hellison's TPSR model, the protocol adherence scale, and youth development programs. Once the protocol adherence scale has undergone reliability and validity testing and any necessary refinement, future practitioners can use results of the scale to assess and improve their programs. This adherence rating scale offers youth development programs another tool to close the gap between stated goals and the actual behaviors of program leaders.

Furthermore, while this investigation found strong qualitative evidence of a caring climate, it could be supplemented by quantitative measures to identify the extent to which participants perceived the climate to be caring. Incorporating a quantitative measure may allow for a larger sample size of respondents, which would yield stronger quantitative results. Additional research is needed to identify if programs mirroring *Team Support* that serve non-athletes are as successful as *Team Support* when implemented. Finally, additional research can address the continued use of physical activity-based youth development models as creative measures to contribute to the positive development of youth.

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Appendix: Team support protocol adherence scale

(Next pages)

APPENDIX: TEAM SUPPORT PROTOCOL ADHERENCE SCALE

Directions: Please rate the degree to which the session includes each item and the quality of each item using the following scale.

Quantity	Quality (of observed behaviors)
1 = 0 times	1 = Behaviors are not compliant with model
2 = 1-2 times	2 = Behaviors are inconsistently compliant
3 = 3-4 times	3 = Behaviors are sometimes compliant
4 = 5-6 times	4 = Behaviors are mostly compliant
5 = more than 6 times	5 = Behaviors are always compliant

Integration: "Teaching life skills and values must be integrated with the physical activity subject matter rather than taught separately."

Quantity of Observed Behaviors	Advisor behaviors	Quality of Observed Behaviors
1 2 3 4 5	1. Advisor encourages effort during physical activity.	1 2 3 4 5
1 2 3 4 5	2. Advisor encourages respect during physical activity.	1 2 3 4 5
1 2 3 4 5	3. Advisor encourages self-coaching during physical activity	1 2 3 4 5
1 2 3 4 5	4. Advisor encourages coaching during physical activity.	1 2 3 4 5

Additional Comments: _____

Transfer: "Lessons learned in the gym must be taught so that they can transfer to other aspects of the program participants' lives."

Quantity of Observed Behaviors	Advisor behaviors	Quality of Observed Behaviors
1 2 3 4 5	5. During physical activity, students encouraged to identify ways to use TPSR outside the gym.	1 2 3 4 5
1 2 3 4 5	6. During the 'huddle' and/or 'cool down', students discuss how to use TPSR outside the gym.	1 2 3 4 5

Additional Comments: _____

Empowerment: "Instructional strategies must be based on a gradual shift of responsibility from the program leader to program participants."

Quantity of Observed Behaviors	Advisor behaviors	Quality of Observed Behaviors
1 2 3 4 5	7. Advisors provide opportunities for students to take responsibility during physical activity.	1 2 3 4 5
1 2 3 4 5	8. Advisors provide opportunities for students to take responsibility during 'huddle'.	1 2 3 4 5
1 2 3 4 5	9. Advisors provide opportunities for students to take responsibility during 'cool down'.	1 2 3 4 5
1 2 3 4 5	10. Advisors provide students with 'choice' during Team Support.	1 2 3 4 5
1 2 3 4 5	11. Advisors provide environment in which students can articulate concerns, questions, or suggestions.	1 2 3 4 5

Additional Comments: _____

Teacher-student relationship: "For any of these convictions to be successful, the program leader must recognize and respect the individuality, strengths, opinions, and capacity for decision making of each program participant."

1 2 3 4 5	12. Advisor identifies students' strengths.	1 2 3 4 5
1 2 3 4 5	13. Advisor shows interest in students as individuals.	1 2 3 4 5
1 2 3 4 5	14. Advisor greets students individually.	1 2 3 4 5
1 2 3 4 5	15. Advisor checks in with students before, during, or after Team Support.	1 2 3 4 5

Additional Comments: _____
