



The Efficacy of the Personal and Social Responsibility Model in a Physical Education Setting

Efficacité du modèle de responsabilité personnelle et sociale dans un contexte d'éducation physique

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Abstract

The personal and social responsibility model encourages students to apply positive social behavior through activities such as group discussion, goal setting and reflection (Hellison, 2003). This research study examined the effects of Hellison's TPSR model on individual and class wide anti and positive social behavior. A multiple baseline, behavior analytic design was used to determine the effects of the intervention on three students who displayed previous high levels of anti social behavior. Results indicate a positive effect on the individual students in the reduction of socially and personally irresponsible behavior. The Child Social Behavior Questionnaire (Warden, Cheyne, Christie, & Reid, 2003) was also administered to determine the effects of the model on the whole class. A statistically significant difference ($p < .01$) was found between the experimental school and a control school at post-test. This study provides quantitative evidence of the efficacy of Hellison's model on individual and class wide social behaviors.

Résumé

Le modèle de responsabilité personnelle et sociale encourage les élèves à adopter des comportements sociaux positifs dans le cadre d'activités comme les discussions de groupe, la détermination des buts et la réflexion (Hellison, 2003). Cette étude visait à explorer les effets du modèle Enseigner la responsabilité personnelle et sociale (modèle TPSR) de Hellison sur la positivité ou la négativité des comportements sociaux des élèves, individuellement et en groupe. Les chercheurs ont utilisé un schéma d'analyse comportementale à niveaux de base parallèles pour déterminer les effets de l'intervention sur trois élèves qui présentaient auparavant plusieurs comportements antisociaux. Les résultats ont démontré les effets positifs de l'intervention, chaque élève affichant ensuite moins de comportements personnels et sociaux irresponsables. Le Questionnaire sur le comportement social de l'enfant (Warden, Cheyne, Christie et Reid, 2003) a aussi été administré pour voir les effets du modèle sur la classe entière. Le post-

test a révélé un écart statistiquement significatif ($p < ,01$) entre l'école où avait lieu l'expérience et une école témoin. Cette étude a aussi produit des preuves quantitatives qui confirment l'utilité du modèle de Hellison pour modifier les comportements sociaux des élèves, individuellement et en groupe

Introduction

Approximately thirty years ago Don Hellison reconceptualized the nature of teaching youth in a physical activity setting. As a function of his work with children in inner city Chicago, Hellison adopted a more humanistic approach to teaching and working with his students (Hellison, 1973). Recognizing that it was the activity or sport that drew the youth in, Hellison began to focus on development of moral qualities that stemmed from teachable moments during the course of the class. Thus, the model teaching personal and social responsibility (TPSR) emerged. The model involves pedagogical recommendations for teachers including a five level approach (see Table 1) for encouraging students to move from irresponsibility to responsibility (levels 0-2) and from respecting oneself to caring about others (levels 3-5) (Hellison, 2003). For example, showing respect and concern for others comprises the focus of level 0. Students not meeting expectations at this level might engage in behaviors such as making fun of other students, talking while the teacher is talking, pushing others, loud outbursts, or arguing over a rule violation. Student behavior at the fourth level might be working independently, accepting responsibility for their work and performance. Examples of behaviors at this level might be the student fully engaged in an activity without the teacher watching, providing and encouraging comment to a fellow student, or personally organizing or facilitating a particular game or activity.

Table 1
Hellison's (2003) Levels of Responsibility in the TPSR model

Level	Description
5	Transfer
4	Caring
3	Self-Direction
2	Participation
1	Personally Irresponsible
0	Socially Irresponsible

The TPSR model possesses a strong foundation in humanism to create a student-centered approach that purports to facilitate development of student personal and social responsibility. The uniqueness of the model is situated in focusing the youth on setting daily goals for their participation in class. Another important aspect of this model is that it encourages students to become more reflective in their decision making and provides them with a “voice” in which to express their opinions, interests, and feelings. The underlying hope is that students will demonstrate appropriate behavior and activity choices through this type of instruction and show greater concern for the well being, safety, and quality of experience of their peers (Hellison, 1995, 2003).

While there is much anecdotal support for the TPSR model, it has also been criticized for its lack of empirical evidence supporting the effects on student behavior (Newton, Sandberg, & Watson, 2001; Shields & Bredemeier, 1995). Of the research studies that have been completed, the majority have occurred in after school programs and youth sports camps (Hellison & Walsh, 2002). While empirical evidence in support of the model is improving (Li, Wright, Rukavina, & Pickering, 2008; Wright & Li, 2009), examining the effects of the model in an intact school setting needs further study. The TPSR model has also historically been studied using qualitative research methods (Hellison & Walsh, 2002; Li, et al., 2008; Wright & Li, 2009). While this approach has provided important findings, there may be limitations in investigating the effects of the model through primarily one methodology. Thus, the purpose of the present study was to investigate, quantitatively, the effect of Hellison's TPSR model on individual and class-wide student behavior in a middle school setting. Specific research questions include:

- 1) What are the effects of the Personal Responsibility model on individual student behavior?
- 2) What are the effects of the Personal Responsibility model on the class as a whole with regards to levels of anti and positive social behavior?
- 3) How do classes that received the intervention compare in terms of pro and anti social behavior to a control class from another school?
- 4)

Method

Participant Selection

Middle School physical education classes were selected to participate in this study from two schools within one school district located in a mid-sized urban city in the western United States. To investigate the effects of the TPSR model on class-wide behaviors, three classes among 12 from Southside Middle School (SMS) were conveniently chosen to participate as the experimental site and three classes from Northside Middle School (NMS) were chosen to act as a control group. Both school names are fictitious. Self-reported demographics by the participants at SMS include 74 total students, ranging in grades 6-8. The participants were 40% Caucasian, 27% Hispanic, and 33 % Other. The mean age of the students was 12.8. Self-reported demographics by the participants at NMS included 71 total students, ranging in grades 6-8. The participants were 45% Caucasian, 45% Hispanic, and 10 % Other. The mean age of the students was 12.6. The schools were chosen because of their close proximity between one another and the administrations consent. The specific classes that were chosen were based on the teachers' willingness to be involved in the study and similar class sizes and student demographics.

Three students were selected as participants among the three classes at SMS to determine the effects of the TPSR model on individual student behavior. The selection process included the primary investigator observing these three classes over a two-week period and recording field notes during their physical education class. Qualitative research methods (Lincoln & Guba, 1985) were utilized to determine patterns of behavior as they related to particular students. The youth that were selected were consistently disruptive (e.g., talking while the teacher was talking, pushing other students) to the overall management of the physical education class. This information was shared with the teacher and was verified as

typical behavior. All three participants were male and ranged in grade level from grade 6 to grade 8. Two of these participants were Hispanic and one was Caucasian.

The physical education teacher from SMS was a Native American male and possessed an undergraduate degree in physical education. The teacher had over twelve years teaching experience, nine of which were at SMS. The teacher was not familiar with nor had ever implemented any elements of the TPSR model. The physical education teacher at Northside Middle School (NMS) was male and also possessed a teaching credential in physical education. The teacher had over five years experience and was Caucasian. The teacher was also not familiar with nor had ever implemented any elements of the TPSR model. Prior to any data collection, students, parents, and teachers at both schools signed informed university approved consent and assent forms.

Setting

Both schools followed traditional curricular offerings for physical education and taught within the context of skill development. Classes were held five days per week, for approximately 50 minutes. Both schools held all of their classes during the study in a gymnasium. The physical education lessons covered during the initial student selection and during the implementation of the model included badminton, indoor soccer, basketball, volleyball and fitness testing.

Research Design

The design chosen to compare the survey responses from students in three classes at SMS and students from three classes at NMS was a pre-test, post-test control group design. The students observed from SMS, along with the rest of their classmates, received the intervention and the other three physical education classes from NMS received no intervention. This design was chosen because it conforms to the structure of the research study and, through the pre-test, provides a comparison of the two groups before and after the intervention as well as providing within group comparisons relative to the dependent variable.

The design chosen to assist in analyzing the effects of the TPSR model on the three selected students was categorized as single case; behavior analysis methodology. This design was chosen to reflect the natural and unobtrusive implementation of an intervention within the ongoing activities of the school setting. A multiple baseline ABA design across three students was implemented for this study. Phase designation included; A= Baseline Period (No Treatment); B= TPSR Treatment; and A= Maintenance (Return to Baseline). The treatment lasted for two weeks with data being collected four times per week for each 50 - minute period.

The TPSR Intervention

Prior to collecting data, the teacher at SMS received training in implementation of the TPSR model. The training occurred at the conclusion of the baseline phase of data collection. The training consisted of two, 30-minute sessions in which The TPSR model was introduced, strategies for implementation were presented and role playing was undertaken by the lead investigator and teacher. The teacher felt comfortable with the TPSR model and expressed no hesitation after the training sessions in utilizing the intervention.

The TPSR intervention was based on the work of Hellison (2003). Thus, implementation strategies included awareness discussions, during activity reminders, post lesson group meetings, and personal reflection time. Once students entered the gym and role had been taken, the teacher directed all of the students to a diagram of the TPSR model that contained a summary of the five levels and had been placed on the gymnasium wall. The teacher asked the students to designate which of the five levels on the TPSR diagram most closely related to their behavior during the previous lesson. The teacher then asked students to demonstrate an example of the behavior(s). Students were then asked to set a goal for the upcoming class relative to their personal behavior. Students did not verbalize their goals aloud, but simply folded their arms when a goal was selected. Throughout the lesson, the teacher provided feedback that was parallel to the levels of the model, e.g., "Juan, I like how you are working cooperatively with your classmate." At the conclusion of the lesson the teacher asked the students to indicate by raising their hands who had met their goals.

Data Collection

The Child Social Behavior Questionnaire (CSBQ) (Warden et al., 2003) was utilized to address the class wide effect of the TPSR model. For the purposes of this study and in relation to the specific research questions, only the two pro social behavior and two anti social behavior subscales were utilized and collapsed into two scales, i.e., pro social behavior and antisocial behavior, in accordance with previous research (Warden et al., 2003). Students responded to the 16-item questionnaire relative to their behavior in physical education class on a 5-point rating scale (1 = almost never; 5 = almost always). Sample items include, "During physical education class, how often do you push or trip another kid on purpose?" or "During physical education class, how often do you cheer up another kid who is unhappy?" The CSBQ was administered at pre-test at SMS at the beginning of class on the first day of the intervention and the same day at NMS. The lead investigator administered the survey to both the experimental and control school sites (three classes at SMS and three classes at NMS).

For the individual student behavior, a Partial-interval recording procedure and was utilized for this study (van der Mars, 1989). The data collector observed the student for 10 seconds and then recorded the student's behavior to one of the 5 Personal Responsibility levels for 10 seconds. Level selection was determined by the most dominant behaviors observed over the 10-second interval. For example, if a student exhibited behaviors that fit into level zero for eight seconds and then exhibited behaviors that fit into level two for two seconds, level zero would be coded because it lasted longer or was most dominant. This process of assigning intervals of behavior to a level continued throughout the class period. The 10 second interval time and the 10 second recording time were kept consistent through the use of an audible tone by a portable Panasonic © tape player worn by the primary investigator during session observations.

Hellison's levels (2003) and the related coding practice utilized in this study began with Level 0, termed Socially Irresponsible. This category comprises of behaviors that are socially unacceptable in the classroom and hinder the flow of the lesson for other students or the class as a whole. Examples would be: making fun of other students, talking while the teacher is talking, pushing others, loud outbursts, arguing over a rule violation. The second level (level 1) is called

personally irresponsible where the student is socially in control (not affecting others) but lacks individual responsibility. Examples would be wandering off outside of the lesson set up or individually misusing equipment.

The next level (level 2) is Participant and this category describes students who not only are socially and personally in control of their actions but they are fully engaged in the lesson or activity under the observation of the teacher. Examples of this level would be a student listening to the directions of the teacher, using the equipment properly, and making appropriate transitions on the teacher's cue (e.g. when the teacher calls for everyone to come in- the student responds appropriately). Self-Direction is the next level (3) and includes students who show the behaviors of level 2 but also are able to work without teacher supervision. The final level is termed Caring (level 4) and behaviors show concern for the well being of his classmates and the good of the class. Behaviors within this level would be the student congratulating another on a good play, helping another up after falling down, and resolving conflict independent of the teacher.

An initial baseline period of two-weeks provided an indication of behavior levels of the three identified students before the treatment was implemented. This baseline period occurred after the two-week observation where three students were selected. After the initial baseline phase, all students in all three classes at SMS were exposed to the TPSR intervention (two weeks) followed by a return to baseline (two weeks). As required by a multiple baseline design, the three classes were exposed to the intervention at different times. Behaviors of the students were coded utilizing one of the five levels of Hellison's TPSR model (2003).

The primary investigator and one research assistant were trained through 15 hours of practice and instruction on assigning a segment of behaviors to one of the 5 TPSR levels. A three-step process was used train the observers. First, a criterion tape standard depicting a physical education setting where multiple occurrences of the various behavior was prepared. This videotape was used as the data standard to train all data collectors for this experiment. The second step involved data collectors being trained to a criterion of >.90 agreement for three consecutive observations on 4-minute segments of videotape and in comparison to the corresponding data standard created by the primary investigator. The final reliability step included independent inter observer agreement checks, assessed 35 % of all observations (including the baseline phases).

Results

Reliability

Kazdin's (1982) point-by-point formula was used to assess inter-observer agreement on 35% of the observations. This assessment was completed throughout the duration of the study, including the baseline, treatment, and maintenance phases. From this assessment (6 checks per student for a total of 18 checks), the average agreement was 90.1% with a range of 82% to 95%. Results from the treatment fidelity checks indicated that no part of the intervention took place during the baseline or maintenance (return to baseline) phases of the study across all three participants. Data also showed that all parts of the treatment were implemented during the treatment phase of this study and across all three participants (100%). Inter-observer agreement checks were also assessed on the

treatment fidelity data. From this assessment (18 total checks), the average agreement was 99% with a range of 95%- 100%.

Individual Student Behavior

Observation data are presented graphically in Figures 1 and 2 and in accordance with accepted applied behavior analysis graphing procedures (Sharpe & Koperwas, 2003). Hellison's levels of responsibility (2003) are represented and are a continuum of possible behavioral choices beginning with Level 0 (Socially Irresponsible) and ending with Level 4 (Caring). Hellison's model (2003) does include an advanced level not discussed or measured in this study. This advanced part of the model is Level 5 and is called "outside the gym." This level was not used due to the lack of resources and time that observing students beyond the physical education class would have required.

Figure 1 includes levels 0-2, with 0 identified as Socially Irresponsible behavior, 1 identified as Personally Irresponsible behavior, and the category of Participant represented by Level 2. Figure 2 includes Levels 3 and 4, which are Self-Direction and Caring respectively. Within each graph a dotted line separates the phases of the study and each phase is identified with a letter and a title (A-Baseline, B-Personal Responsibility, A- Maintenance). The dotted lines also show that the intervention was introduced to the participants at different times. The data points on the figures represent the total percentage of observation time that level was recorded. For example, Figure 1 shows that Darren's 1st observation is 14 for Level 1 (personally irresponsible). This number means that for 14% of the total observation intervals that day- Darren's behavior was recorded at Level 1. The figure shows that Darren's Level 0 (socially irresponsible) percentage is 20% on observation 1 and 57% for Level 2 (participant).

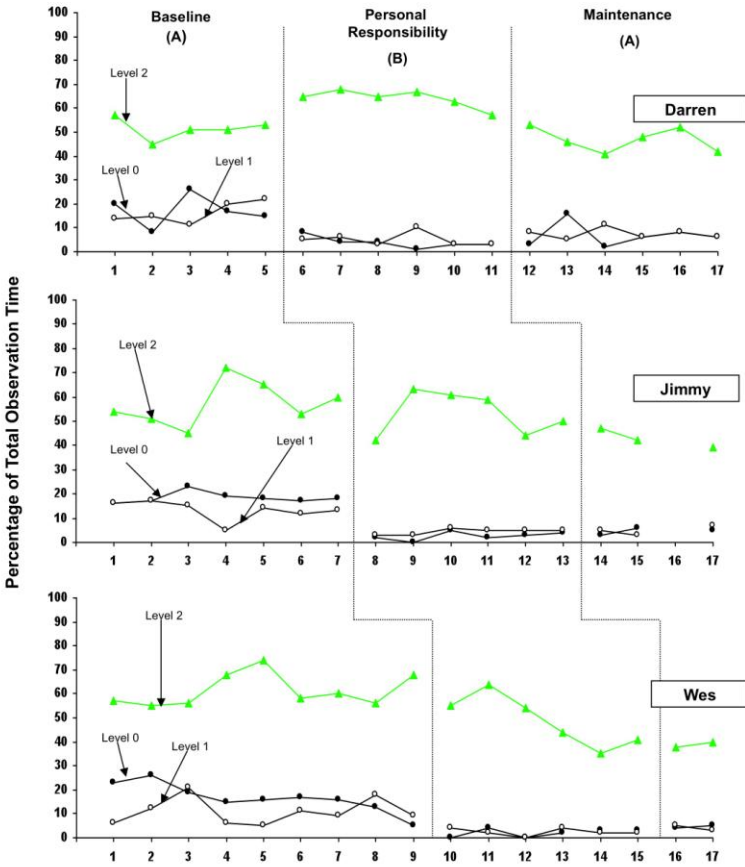


Figure 1. Percentage of Student Behaviors across Experimental Phases
Key:
 Level 0: Socially Irresponsible
 Level 1: Personally Irresponsible
 Level 2: Participant

The data represented in Figures 1 and 2 indicate the percentage of total class time the student displayed the level of behavior for each observation session. The effects of the Personal Responsibility model on each of these participants are as follows.

Darren

Figure 1 illustrates Darren’s percentage of social and personal irresponsible behavior (level 0) immediately decreasing as a function of the onset of the Personal Responsibility intervention (Socially Irresponsible Baseline Mean (M) = 17.2, range from 8 to 26; Personal Responsibility Treatment M = 3.8, range from

1 to 8; Personally Irresponsible Baseline $M = 16.4$, range from 11 to 20; Personal Responsibility $M = 5.0$, range from 3 to 10). Darren's Participant behavior, categorized as Level 2, increased from a baseline mean of 51.4 (range from 45 to 57) to a treatment mean of 64.2 (range of 57 to 68). After the intervention was withdrawn, Darren's level 2 behavior dropped to a mean level of 47.0 (range from 42 to 53). What is interesting about this level is a noticeable trend and immediate decline from the first day the intervention was introduced (65%) through the withdrawal of the intervention and on to the last day of data collection (42%).

Figure 2 shows the percentage of observation time Darren displayed behavior categorized as level 3 or 4. The data first showed that Darren's percentage of self-directed behavior to increase as a function of the onset of the Personal Responsibility intervention (Self-Direction Baseline Mean= 13.4, range from 6 to 32; Self-Direction Treatment Mean= 25.2, range from 16 to 34). Darren's level 3 behaviors showed an immediate increase from the onset of the intervention (16%), through the withdrawal, and on to the last day of data collection (41%). Figure 2 also shows the level 4 behavior of Caring to increase when the intervention was introduced (Caring Baseline $M = 1.2$, range from 0 to 4; Caring Treatment $M = 4.7$, range from 3 to 6).

Jimmy

Jimmy was absent on data collection day number 16. Figure 1 shows Jimmy's percentage of social and personal irresponsible behavior to substantially decrease as a function of the onset of the Personal Responsibility intervention (Socially Irresponsible Baseline $M = 18.3$, range from 16 to 23; Personal Responsibility Treatment $M = 2.7$, range from 0 to 5; Personally Irresponsible Baseline $M = 13.1$, range from 5 to 17; Personal Responsibility $M = 4.5$, range from 3 to 6). Jimmy's Participant behavior decreased from a baseline mean of 57.1 (range from 45 to 72) to a treatment mean of 53.2 (range of 42 to 63). After the intervention was withdrawn, Jimmy's Participant behavior dropped to a mean level of 42.7 (range from 39 to 47). Despite the first day of the intervention, Jimmy's Level 2 behavior shows an immediate decrease in Participant behavior from intervention phase through the withdrawal phase and on the last day of data collection (63%- second day of intervention to 39%- last day of data collection).

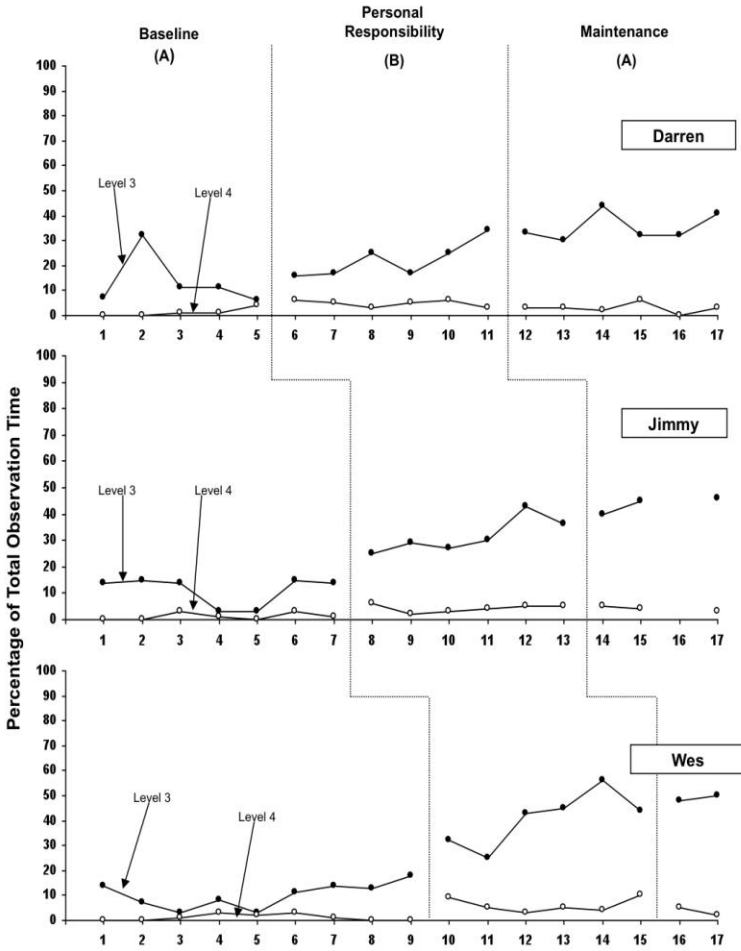


Figure 2. Percentage of Student Behaviors across Experimental Phases

Key:
 Level 3: Self Direction
 Level 4: Caring

Figure 2 shows Jimmy’s percentage of Self-Directed behavior to increase as a function of the onset of the Personal Responsibility intervention (Self-Direction Baseline $M = 13.1$, range from 3 to 15; Self-Direction Treatment $M = 31.7$, range from 25 to 43). There is also an immediate increase of Level 3 from the onset of the intervention (25%), through the withdrawal phase, and on to the last day of data collection (46%). Figure 2 also shows the Level 4 behavior of Caring to increase when the intervention was introduced (Caring Baseline $M = 1.1$, range from 0 to 3; Caring Treatment $M = 4.2$, range from 2 to 6

Wes

As Figure 1 shows, Wes’s percentage of social and personal irresponsible behavior decreased when the Personal Responsibility intervention was introduced (Socially Irresponsible Baseline $M = 16.7$, range from 5 to 26; Personal Responsibility Treatment $M = 2.0$, range from 0 to 4; Personally Irresponsible Baseline $M = 10.8$, range from 5 to 19; Personal Responsibility $M = 2.2$, range from 0 to 4). Wes’s Participant behavior, similar to Jimmy’s, decreased from a baseline mean of 61.3 (range from 55 to 74) to a treatment mean of 57.8 (range from 35 to 64). After the intervention was withdrawn, Jimmy’s Participant behavior dropped to a mean level of 39.0 (range from 38 to 40). A noticeable declining trend of Participant behavior was present when Wes was exposed to the Personal Responsibility intervention (55- first day of intervention, 41, last day of onset of intervention). Wes’s percentage of Self-Directed behavior increased at the onset of the Personal Responsibility intervention (Self-Direction Baseline $M = 10.1$, range from 3 to 18; Self-Direction Treatment $M = 40.8$, range from 25 to 56). There was a marked and immediate increase of self-direction (Level 3) from the onset of the intervention (32%), through the withdrawal phase, and on to the last day of data collection (50%). This upward trend is also noteworthy given the declining trend of Wes’s participation behavior during the intervention phase. Wes’s level 4 behavior (Caring) was shown to have increased when the intervention was introduced (Caring Baseline $M = 1.1$, range from 0 to 3; Caring Treatment $M = 6.0$, range from 3 to 10).

Class Wide Self-Reported Behavior

The Child Social Behavior Questionnaire (CSBQ) measuring levels of anti and pro social behavior was administered to two separate classes (experimental and control). As described previously, the CSBQ is a self-report tool that has 16-items which asks students to respond to questions about their behavior. The students then respond on a 5-point likert type scale ranging from Almost Never to Almost Always. In reading the scores, a number closer to 5 for the positive social questions indicates appropriate behavior while a number closer to 0 is appropriate behavior for the anti social questions.

Table 2 shows the mean score and standard deviation at pre and post test for both anti social and pro social behaviors. An independent t-test was performed on the mean difference in post-test scores for both the experimental and control school sites. The mean score for the experimental school site was 1.36 for anti social and 3.40 for pro social, while the mean score for the control group was 1.72 for anti social and 2.83 for pro social. A statistically significant difference ($p < .01$) was found between both groups anti and pro social behavior, anti social $t(143) = -3.25$, $p = .000$; pro social $t(143) = 4.19$, $p = .001$.

Table 2
Mean Score and Standard Deviation of Experimental and Control Group

	Experimental		Control	
	Pre	Post	Pre	Post
Anti	1.69 (.90)	1.36 (.50)	1.61 (.69)	1.72 (.80)
Pro	3.05 (.85)	3.40 (.78)	2.96 (.88)	2.83 (.87)

In addition to this analysis, a paired samples t-test was performed to compare the experimental groups pre and post test scores. The mean difference between the pre and post test scores was .316 for anti social and -.355 for pro social behavior. A statistically significant difference ($p < .01$) was found between the experimental groups pre and post test scores, anti social $t(143) = 2.68$, $p = .009$; pro social $t(143) = -2.65$, $p = .010$. A paired samples t-test revealed no significant difference ($p < .01$) between the control groups pre and post test scores, anti social $t(143) = -0.86$, $p = .388$; pro social $t(143) = 0.89$, $p = .372$.

Discussion

The findings from this study provide evidence for the efficacy of the TPSR model. From the observational data, it was found that all three students immediately decreased their levels of anti social behavior (socially and personally irresponsible behavior) when the personal responsibility model was introduced. As these behaviors decreased, other behaviors rose in frequency, namely Self-Direction and Caring. These decreases are important as the literature provides evidence of the negative effects they can have on a schools environment (Wynne & Ryan, 1997). For example, bullying types of behavior (categorized as socially irresponsible in this study) have the potential to not only harm physically but also psychologically (Beale, 2001). The TPSR model used in this study helped to reduce these types of behaviors.

The TPSR model influenced all three students to increase the amount of time they were fully participating in the lesson without the direct supervision from the teacher (Self-Direction). This increase was gradual and started when the intervention was first introduced and continued beyond the withdrawal. For the three observed students an opposite trend was found when looking at the Level 2 (Participant) behavior. This level was recorded when the student was fully engaged in the lesson under the supervision of the teacher. Despite a dip in the first day of the intervention for Jimmy, the students Level 2 behavior gradually decreased when the treatment was implemented. This decline also continued through the withdrawal, although the trend appeared to level off towards the last portion of data collection.

These data suggest that the TPSR model helped the students to take more responsibility for their behavior. This is important because the teacher was now given the opportunity to provide much needed attention to other students in the class. Research indicates that teachers do tend to spend most of their time dealing with students who display anti social behavior (Ryan & Yerg, 2001). It is also noteworthy that these trends were gradual in nature. The teacher did not just change his instruction and observation patterns immediately. It is logical that as he felt the students were fully participating in the lesson and the chance of social or personal irresponsible behavior was reduced, he could direct his attention to other important aspects of the lesson. This finding is consistent with what Martinek and colleagues (Martinek, Schilling, & Johnson, 2001, p.42) called a "slow and evolving process" in transferring social values through Personal Responsibility instruction. Although the effects in this study would not be considered "slow", the changes in Levels 2 and 3 were gradual over time.

All three students exposed to the personal responsibility model experienced an immediate increase in Caring (Level 4) behaviors. This increase was sustained throughout the intervention and was somewhat maintained after withdrawal. The

increase may also have been what caused the teacher to feel more comfortable in allowing students to be Self-Directed. As the students in this study were going out of their way to help another student or were providing encouraging comments to their peers, it likely increased the trust of the teacher to try new things or help another student who had specific needs. Although social validation was not a part of this study because of the already popularized nature of the intervention, informal comments from the teacher and students provided anecdotal evidence. For example, the teacher asked if he could use the model in other classes that were not apart of the study and also asked if he could keep the chart after the study was completed.

When comparing the pre and post test survey scores from the two schools, two important findings emerge. First, anti social behavior actually went up at Northside and Pro Social Behavior went down when comparing the pre and post tests. One might suggest that this is a natural progression as students progress throughout the school year (good to begin with and gradually get worse) (Evertson & Veldman, 1981). This further validates the decreases in anti social behavior and the increases in pro social behavior experienced by the group at the Southside School. The final significant finding from this analysis was the difference between the two groups in their post test scores. As similar as the two groups were before the study, there is a clear difference in the two groups after the study was completed. This finding is one of the most compelling and supports others claims that appropriate social skills often remain underdeveloped unless they are planned for and taught by the teacher (Patrick, Ward, & Crouch, 1998).

This study was designed for an urban middle school in which the treatment was designed specifically for students exhibiting chronic off-task and anti social behavior practices. The potential to generalize these findings to settings beyond this type of ecology with the character of teacher provider operating within this study is therefore limited. Other limitations include the fact that behavior data on the three selected students are limited to only directly observable, overt behaviors. Survey data were also limited by the inherent bias and subjectivity of the respondent providing data reporting and the internal validity threat of testing.

In conclusion, this study was an attempt to determine the effects of the TPSR model in a middle school setting. To these ends, quantitative evidence was presented to support the effects of the intervention on not only individual student behavior, but class wide behavior as a whole. This model was introduced with little extra work on the part of the teacher and did not compromise his previously planned curriculum. If results can be this compelling for others, hope is provided for teachers who may not have the resources or support to implement a wide scale program.

Additionally important to this study were data supporting the treatment's integrity regarding whether it was implemented correctly and at the appropriate times. One of biggest criticisms of values or character-based education (see for example, Davis, 2003) is that even if there is evidence to support the effects, how it is implemented and with whom are persistent issues. This study is one of the first to provide data showing that the personal responsibility model was implemented according to pre-established plans. These data are important because one of the major limitations to the model is that it has not been implemented properly (Buchanan, 2001). This limitation was addressed in this

study and provides guidance for those who are interested in implementing this model.

Thus, the TPSR model is a viable option for professionals seeking to enhance the manner in which they facilitate their students' personal and social responsibility in the gymnasium.

References

- Beale, A. V. (2001). Bullybusters: Using drama to empower students to take a stand against bullying. *Professional School Counseling, 4*(4), 300-308.
- Buchanan, A.M. (2001). Contextual challenges to teaching responsibility in a sports camp. *Journal of Teaching in Physical Education, 20*, 155-171.
- Davis, M. (2003). What's wrong with character education? *American Journal of Education, 110*, 32-58.
- Everton, C., & Veldman, D. (1981). Changes over time in process measures of classroom behavior. *Journal of Educational Research, 73*(2), 156-163.
- Hellison, D. (1973). *Humanistic physical education*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Hellison, D. (1995) *Teaching responsibility through physical activity* (2nd Ed). Champaign, IL: Human Kinetics.
- Hellison, D. (2003). *Teaching responsibility through physical activity*. Champaign, IL: Human Kinetics.
- Hellison, D., & Walsh, D. (2002). Responsibility-based youth program evaluation: Investigating the investigations. *Quest, 54*, 292-307.
- Kazdin, A. (1982). *Single-case research designs: Methods for clinical and applied settings*. New York: Oxford University Press.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications, Inc.
- Patrick, C. A., Ward, P., & Crouch, D. W. (1998). Effects of holding students accountable for social behaviors during volleyball games in elementary physical education. *Journal of Teaching in Physical Education, 17*, 143-156.
- Li, W., Wright, P., Rukavina, P.B., & Pickering, M. (2008). Measuring students' perceptions of personal and social responsibility and the relationship to intrinsic motivation in urban physical education. *Journal of Teaching in Physical Education, 27*, 167-178
- Martinek, T., Schilling, T., & Johnson, D. (2001). Transferring personal and social responsibility of underserved youth to the classroom. *The Urban Review, 33*, 29-45.
- Newton, M., Sandberg, J., & Watson, D. (2001). Utilizing adventure education within the model of moral action. *Quest, 122*, 483-494.
- Ryan, S., & Yerg, B. (2001). The effects of crossgroup feedback on off-task behavior in a physical education setting. *Journal of Teaching in Physical Education, 20*, 172-188.
- Sharpe, T., & Koperwas, J. (2003). *Behavior and sequential analyses: Principles and practices*. Sage Publications, Thousand Oaks, CA.
- Shields, D. L., & Bredemeier, B. J. (1995). *Character development and physical activity*. Champaign, IL: Human Kinetics Press.
- Van der Mars, H. (1989). The effects of specific verbal praise on off-task behavior of second grade students in physical education. *Journal of Teaching in Physical Education, 8*, 162-169.

- Warden, D., Cheyne, B., Christie, D., & Reid, K. (2003). Assessing children's perceptions of pro and anti social peer behavior. *Educational Psychologist, 23*, 547-567.
- Wright, P. M., & Li, W. (2009). Exploring the relevance of positive youth development in urban physical education. *Physical Education & Sport Pedagogy, 14*, 241-251.
- Wynne, E., & Ryan, K. (1997). *Reclaiming our schools: Teacher character, academics and discipline* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.