APPLYING THE TEACHING PERSONAL AND SOCIAL RESPONSIBILITY MODEL (TPSR) IN SPANISH SCHOOLS CONTEXT: LESSON LEARNED

APLICANDO EL MODELO DE ENSEÑANZA DE LA RESPONSABILIDAD PERSONAL Y SOCIAL (TPSR) AL CONTEXTO ESCOLAR ESPAÑOL: LECCIONES APRENDIDAS

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ABSTRACT

This article describes the different applications of the Teaching Personal and Social Responsibility model (TPSR) (Hellison, 1995) to the Spanish school context, and the main lessons learned from the research carried out. We have arranged our studies into three sections. In the first phase, the research focused on applying the TPSR model to adolescents at risk of social exclusion during physical education classes. From the results of these initial investigations, we concluded the advantages of implementing the model, not only with at risk adolescents, but with the entire class group and starting at younger ages. Hence, in a second phase, the studies focused on implementing the TPSR with the whole class group during the physical education lessons in elementary school. The results obtained led us to hypothesize that the effectiveness of TPSR would be greater if applied in all areas of the primary curriculum. The aim of the third phase (currently underway), was to adapt the TPSR model to other areas of the school curriculum and to assess the fidelity of its implementation by teachers, and their effectiveness in promoting the positive youth development.

RESUMEN

En este artículo se describen las diferentes aplicaciones al contexto escolar español del modelo de Enseñanza de la Responsabilidad Personal y Social (TPSR) (Hellison, 1995) y las principales lecciones aprendidas de los estudios realizados. Presentamos éstos organizados en tres apartados. En la primera fase, las investigaciones se centraron en aplicar el TPSR a adolescentes en riesgo de exclusión social...

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durante las clases de Educación Física. De los resultados de estas primeras investigaciones, concluimos la conveniencia de implementar el modelo, no sólo con adolescentes en situación de riesgo, sino con todo el grupo clase y comenzar haciéndolo desde edades más tempranas. En consecuencia, en la segunda fase, los estudios se centraron en la implementación del modelo con todo el grupo clase durante las clases de EF de alumnos de Primaria. Los resultados obtenidos en estas investigaciones nos llevaron a plantear la hipótesis de que la efectividad del TPSR sería mayor si se aplicaba en todas las áreas del currículo de dicha etapa. El objetivo de la tercera fase (actualmente en proceso) fue adaptar el TPSR a otras áreas del currículo escolar y evaluar la fidelidad de la implementación del modelo por parte de los profesores, y su efectividad para favorecer el desarrollo positivo de los alumnos participantes.

KEYWORDS. Teaching Personal and Social Responsibility model (TPSR), school-based programs, positive development perspective.

PALABRAS CLAVE. Modelo de Enseñanza de la Responsabilidad Personal y Social (TPSR), programas de intervención en la escuela, perspectiva del desarrollo positivo juvenil.

1. INTRODUCTION

The life experiences of children are considerably different both in the United States (USA) and Europe from past decades (López, López, Fuertes, Sanchez & Merino, 1995; US Department of Health and Human Services, 1996). A large number of families experience intense economic pressure, children have increasingly easy access to media outlets that encourage health-damaging behavior, the institution of the family and authority figures have become weaker, and the demands on schools to prevent problem behaviors and promote positive development have increased. Furthermore, it is increasingly common in public schools to find a high number of students with cognitive, emotional, and social deficits manifested in violent behaviors related to delinquency, intolerance, hedonism, addiction, passivity, and apathy (Fraser-Thomas, Côté, & Deakin, 2005).

In response to this situation, in recent years a large number of intervention programs have emerged, aimed at preventing behaviors such as violence, addiction, and school absenteeism while other programs are designed to promote topics and behaviors such as multiculturalism, safe sex, and conflict resolution (Catalano, Arthur, Hawkins, Berglund, & Olson, 1998; Eccles & Gootman, 2002; Weisberg, Kumpfer, & Seligman, 2003). However, in the majority of cases, there is no rigorous evaluation of program implementation (Catalano, Berglund, Ryan, Lonczk & Hawkins, 2004; Durlack, 1998; Hellison & Walsh, 2002; Petitpas, Cornelius, Van Raalte, & Jones, 2005; Wright, 2009; Wright & Burton, 2008).

Most authors agree on the usefulness of school-based programs directed toward children’s positive development. However, in order for a program to be successful, an essential element is that it be adaptable to the needs of both teachers and students. The concept of “positive development” is relatively recent, arising in the 1990s based
on the theoretical framework of positive psychology (Seligman & Csikszentmihaly, 2000). Positive psychology refers to an approach aimed at developing programs for children and youth that foster the learning of skills that will help them to successfully adapt to diverse challenges in life. For years the notion was implicitly accepted that when a child has no important problems, positive development takes place automatically. However, a child who attends school, obeys the law, and avoids drug use is not necessarily equipped to successfully deal with the demands that he or she is going to encounter in adolescence and adulthood. Therefore, the positive development perspective assumes that disruptive behaviors (drug or alcohol use, failure in school, aggressiveness) are important barriers that hinder development, and that the best strategy to prevent these problems is to develop cognitive, social, emotional, and moral competencies that help individuals to become successful in life and committed to well-being of others and their communities (Pittman & Fleming, 1991; Pittman, Irby, Tolman, Yohalem, & Ferber, 2001).

The Teaching Personal and Social Responsibility model (TPSR) is an example of a positive development model. It was proposed by Don Hellison (1978, 1985, 1995, 2003) to offer children and young people at risk of social exclusion the opportunity to develop their personal and social skills and their responsibility, both in sports and in life. The core assertion of the model is that students, in order to thrive in their social environments, have to learn to be responsible for themselves and others, incorporating strategies that allow them to exert control over their lives. The model defines responsibility as a moral obligation toward oneself and others. The basic premise of TPSR is that responsible behaviors can be taught through different strategies, and that these behaviors and attitudes will help children and young people adapt to changes in life and develop as healthy and competent adults. The values associated with well-being and personal development are effort and autonomy. The values related to social development and integration are respect for the feelings and rights of others, empathy and social sensitivity.

In this paper, we describe an ongoing program of research undertaken by our team of researchers, Escartí, Pascual, Gutiérrez, Marín, Martínez and Tarín, over a decade ago, applying and evaluating the TPSR model in the Spanish educational context. Specifically, we describe several studies and the lessons learned from our various applications of TPSR in Spanish schools, that we summarize in three stages. In the first of these, we applied TPSR with at-risk adolescents and focused our research on the program’s impact on the students. Based on this first experience, we drew two conclusions. Firstly, we wanted to expand the application of the TPSR model to reach the general student population rather than only at-risk youth. Secondly, we thought it would be beneficial to begin using the model with younger students in earlier grade levels. Therefore, in the second stage, we applied the TPSR model in the physical education (PE) program of an elementary school. Our research focus in this stage broadened to include implementation fidelity and its relationship to the program’s impact on students. The results obtained in this second stage led us to hypothesize that the effects on the participants would be greater if the TPSR model were applied in all areas of the elementary school curriculum. Therefore, the objectives of the third stage...
(currently in progress), were to adapt the TPSR model to areas of the curriculum other than PE and evaluate both the fidelity of the teachers’ implementation and the effects of the model on the students. Figure 1 illustrates the various processes involved in the implementation and evaluation of our resulting personal and social responsibility program in the Spanish educational context.

**Figure 1.** Implementation and evaluation of a TPSR-based program in the Spanish educational context

2. PHASE ONE. FOCUSING ON THE APPLICATION OF THE TPSR MODEL WITH AT-RISK YOUTH

In the year 2000, our team of investigators began a program of research intended to adapt and implement Hellison’s (1995) model to the Spanish educational context, applying the model in PE classes with adolescents at-risk of social exclusion. In this section, we describe the theories and objectives upon which we based the studies that we conducted in this initial stage of our investigations.

Our first objective was to adapt the TPSR model to the Spanish educational context because, although some authors consider the TPSR model to be an exemplary approach for designing PE classes (Siedentop, 1994), most of the TPSR programs offered
prior to 2000 were in extended-day settings, summer sport camps and alternative schools in the US (Hellison & Walsh, 2002). Even since that time, only a few studies have implemented the TPSR model through school-based PE classes for the general population, as in the cases of Wright and Burton (2008) in the USA and Gordon (2010) in New Zealand. Therefore, we wanted to implement the model as a school-based prevention program that would be relevant for at-risk adolescents in Spanish schools.

A review by Hellison and Walsh (2002) supported the theoretical and practical potential of TPSR as a program framework for underserved and at-risk youth, but did conclude that there was a need to conduct further research on the model including studies with more rigorous designs. With respect to this point, another of our team’s objectives was to evaluate the effects of the TPSR model on the self-efficacy of at-risk adolescents using a quasi-experimental design that included both quantitative and qualitative methods.

Based on Bandura’s self-efficacy theory (Bandura, 1986) we hypothesized that applying the TPSR model through PE classes would be an appropriate medium for teaching personal and social responsibility. More specifically, we hypothesized that by acquiring higher levels of both personal and social responsibility and by experiencing success in the activities of the program, the personal and social self-efficacy of the adolescent participants would improve. Self-efficacy refers to “belief in one’s capabilities to organize and execute the courses of action required producing given attainments” (Bandura, 1997, p.3). Albert Bandura proposed that individuals who perceive themselves as capable tend to attempt and successfully execute tasks or activities. To assess the proposed objectives in this stage, we conducted two studies.

**Study One:** Escartí et al. (2006). *Teaching personal and social responsibility to a group of at-risk adolescents: An ‘observational’ study.* This was a pilot study to describe our implementation of the TPSR model and the different strategies used for putting it into action. The participants were 13 at-risk adolescents (15 and 16 years old). Don Hellison trained the adults leading the intervention program (a psychologist and a PE teacher) for 30 hours, on the TPSR philosophy, goals, format, and instructional strategies. The intervention was developed and delivered in the school’s gymnasium. In order to evaluate the efficacy of the program, we observed the students’ behavior during the sessions in which the program was implemented and made assessments of actions related to personal and social responsibility. On the basis of the results, it can be concluded that over the course of the program there was a significant reduction in the students’ aggressive and disruptive behavior, while their behavior with regard to collaborating and helping others remained unchanged. The latter finding stands to reason as the focus during this program was on foundational responsibilities such as self-control and effort. The evaluation of the program demonstrated the usefulness of the TPSR model in fostering responsible behavior among at-risk adolescents. However, the duration (one academic term) seemed to be insufficient to bring about the intended learning outcomes related to social responsibility, e.g. helping others and collaboration.

**Lessons learned.** In this study, we: (a) demonstrated the feasibility and utility of observational methodology to evaluate the effects of TPSR in school-based programs;
(b) identified the need to extend the duration of TPSR implementation beyond one academic term to have the desired effect on all the responsibility levels; and c) found evidence indicating that in future investigations it would be necessary to design a specific training program for teachers with no previous knowledge of TPSR to successfully implement the model.

Study Two: Escartí et al. (2010a) . Application of Hellison’s teaching personal and social responsibility model in physical education to improve self-efficacy for adolescents at risk of dropping-out of school. This study evaluated improvement in self-efficacy and personal and social responsibility among adolescents at-risk of dropping-out of school who were participating in a program in which the TPSR model was applied in PE classes during the course of an entire academic year. Participants were 30 at-risk adolescents aged 13-14 years old. As they belonged to two intact groups, one was randomly designated as the intervention group and the other as the comparison group. The former consisted of 15 adolescents (12 boys and 3 girls). The comparison group was composed of 15 adolescents (11 boys and 4 girls) belonging to another school from the same community. The neighborhoods in which both secondary schools are situated are lower middle class and both schools are similar in terms of size, quality of sports facilities, and number of teachers. The PE teacher of the intervention group was responsible for carrying out the intervention. The first two authors trained the PE teacher in a course lasting 30 hours. The course consisted of three modules: (a) theoretical basis of the TPSR model, (b) previous applications of the model, and (c) strategies for implementing the model in PE classes. The PE teacher met the researchers once every school day to reflect on the program sessions and progressively incorporate the levels of responsibility and educational goals in accordance with the students’ progress. The teacher was provided with reading material and a manual of the program (Escartí, Pascual, & Gutiérrez, 2005). At the beginning of the program the PE teacher dedicated six hours of class time to familiarizing the students with the responsibility levels.

Two sets of analysis were conducted. The first analysis examined participants’ retrospective reports of their experiences during the program gathered by means of a standardized open-ended interview (Patton, 1990), which was administered to 15 subjects from the intervention group as well as their teacher. The second set of analyses were 2 (Group) x 3 (Time) factorial analyses of variance with repeated measures in the second factor. The group factor (independent variable) included both intervention and comparison groups. The time factor included three time points: before intervention, after intervention, and follow-up at six months. Quantitative results showed a significant improvement in the students’ self-efficacy for enlisting social resources and in self-efficacy for self-regulated learning. Qualitative results showed an improvement in responsible behaviors among participants in the intervention group.

Lesson learned. In this study, we learned about: (a) the usefulness of employing mixed methods to evaluate the effects of the TPSR model on the students as well as on the instructors; and (b) the potential of the model to enhance the self-efficacy beliefs of participants.
3. PHASE TWO. INTEGRATION OF THE TPSR MODEL IN ELEMENTARY SCHOOL PE

Based on the lessons learned in the first phase, we took the next step in which we introduced certain changes and improvements to our program. In this section, we first present the conceptual framework, the hypotheses, and the objectives that guided these changes. Next we summarize the studies undertaken during this period along with the main lessons learned.

Regarding our application of the TPSR model, the primary change was our departure from a focus on prevention and deficit reduction to a focus on the strengths of youth. In keeping with the literature on positive youth development, we hypothesized that the best way to avoid disruptive or problematic behaviors in adolescence was to teach students, at an earlier age, the basic skills and competencies they would need to successfully face the challenges of life (Larson, 2000; Lerner, 2004; Seligman & Csikszentmihaly, 2000). As some authors have indicated, the TPSR model can serve as a vehicle for promoting positive youth development (Hellison et al., 2000; Petitpas et al., 2005; Wright & Li, 2009). Therefore, in this phase we implemented the TPSR model as a positive youth development program offered to all students (from 10 to 12 years of age) during their PE classes in five different primary schools in the region of Valencia, Spain.

Consequently, our objective in this phase was to integrate the subject matter of PE with the teaching of responsibility, as advocated by Hellison (2003), in the Spanish context. To achieve this, we formed a working group with five elementary school PE teachers to plan and discuss the program, i.e. specific objectives, content, teaching strategies and activities. By including their perspective, we hoped to develop a program approach that would be acceptable to them and effective in promoting the goals of the TPSR model (see Escartí et al., 2005). The core activities of this first implementation of the program included: 1) participating in the discussion of class norms; 2) batting and fielding games; 3) juggling; 4) skating; and 5) acrobatics/gymnastics. These activities were included in the program because they were either cooperative or competitive in nature and, therefore, we reasoned they would offer varied but plentiful opportunities for the students to put the responsibility levels into practice.

With respect to teaching strategies, in this phase we initially provided an intensive 20 hour training course on the theoretical and methodological basis of TPSR. This was followed up with ongoing training, or in-service professional development, in which the team of researchers and teachers met twice a month throughout the school year, made joint decisions about ways the teachers could tailor the program to fit their settings and their students’ needs (Pascual et al., 2011). Recent studies indicate that those responsible for implementing a program must possess at least three characteristics: commitment to the program objectives, capabilities and skills to work effectively with young people; and specific training in the program in question (Allison, Metz, Burkhauser & Bowie, 2009; Allison, Metz, Tawana & Burkhauser, 2009). Although all participating teachers in this phase received the same training, our evaluations showed differences in individual teacher characteristics relative to pedagogical skill, personal style and philosophy, as well as the depth of their understanding of the model (Pascual...
As explained in Pascual et al. (2011: 508), “In many studies, the benefit of a teacher training program is assumed when, in reality, it can be insufficient, imperfect, or seriously compromised”. To fulfill the objectives of the proposed objectives in this phase, we conducted three studies.

**Study One:** Escartí, Gutiérrez, Pascual and Llopis (2010b). *Implementation of the personal and social responsibility model to improve self-efficacy during physical education classes for primary school children.* In this study we analyzed the application of the TPSR model in our own TPSR program with elementary school PE classes during an academic year, in order to evaluate its relevance as a method of teaching responsibility and to measure its effects on the students’ self-efficacy. The participants were 42 students aged 11 and 12 years old (22 males, 20 females). The intervention group and the comparison group were two intact PE classes from two different schools in the same city. The schools which the intervention and comparison group participants attended were similar in both size (21 class sections for students ranging in age from 11 to 12 years old) and the socio-economic characteristics of the area in which they were located. The socio-economic level of the families of both schools is working-middle class. The teacher in charge of delivering the intervention participated in an in-depth interview. The Multidimensional Scales of Perceived Self-Efficacy were administered to each of the youth participants before and after the program. The results showed that the TPSR model as implemented through our program was an effective teaching instrument that helped teachers to structure classes and promote the learning of responsible behavior by the students. A significant increase was observed in the self-regulatory efficacy of intervention group participants vs. the comparison group.

**Lesson learned.** In this study, we learned about: (a) the need to incorporate some of the recently created scales based on the TPSR model in order to more precisely measure personal and social responsibility (i.e. the Contextual Self-Responsibility Questionnaire, by Watson, Newman, & Kim, 2003; Personal and Social Responsibility Questionnaire-PSRQ, by Li, Wright, Rukavina, & Pickering, 2008) and other questionnaires to measure positive youth development variables such as empathy and pro-social behavior; and (b) the need to incorporate an assessment of the fidelity of implementation to the TPSR model in order to understand the effects on program participants.

**Study Two:** Pascual et al. (2011). *Implementation fidelity of a program designed to promote personal and social responsibility through physical education: A comparative case study.* The purpose of this qualitative comparative case study was to examine the implementation fidelity of the program we designed to deliver the TPSR model through PE and its relationship with short-term outcomes for elementary school students. The research questions were: (1) was the program implemented with fidelity? and (2) did better fidelity yield better student outcomes? Thus, we conducted a study on the implementation process used by two teachers who delivered the PSRP program in two PE classes in two different elementary schools in Spain. Data sources included observations and interviews with teachers and nonparticipant observers. Findings indicated that fidelity of implementation in Case 1 was higher and most children in...
those classes acquired the first three of five TPSR responsibility levels. Implementation fidelity in Case 2 was weaker and achievement of responsibility goals was minimal (only the first of five levels) and less stable for those students.

Lesson learned. In this study we learned about: (a) the importance of examining the connection between TPSR implementation fidelity and student outcomes; and (b) the need to provide opportunities for in-service teacher training to support school-based positive youth development programs.

Study Three: Llopis et al. (2011). Strengths, difficulties and improvable aspects in the application of a personal and social responsibility programme in physical education: An evaluation based on the implementers' perceptions. In this study, we analyzed the implementation of our TPSR in PE classes in five elementary schools. A utilization-focused evaluation was conducted in order to evaluate the program's strengths, limitations, and possibilities for improvement. Data collection included a double semi-structured interview and a focus group with the teachers who implemented the program. The results indicated that the main strengths of the program were its applicability to the school context and its ability to promote professional development. The limitations included the short time of the PE lessons (45 or 60 minutes) as well as the students' beliefs about PE and their difficulties in engaging in reflection and dialogue. Finally, the aspects that could be improved included the need to involve the educational community (teachers in other subject areas and parents), as well as the usefulness of initiating the program's application at younger ages (children 10 years of age and younger).

Lesson learned. In this study we learned about: (a) the suitability of implementing our TPSR-based program in all areas of the school curriculum; and (b) the potential benefits of our program not only to foster personal and social responsibility among students, but also as a means of professional development for the teachers who implement it.

4. PHASE THREE. IMPLEMENTATION AND EVALUATION OF THE TPSR MODEL IN ALL AREAS OF THE SCHOOL CURRICULUM

Based on the results and lessons learned from the previous phases, the investigation team proposed the following objectives in this phase: (1) to implement the TPSR model in all curricular subjects; (2) to analyze the psychometric properties of the Spanish version of the first section of Tool for Assessing Responsibility-Based Education (TARE; Wright & Craig, 2011) and the Personal and Social Responsibility Questionnaire (PSRQ; Li et al., 2008); and (3) to evaluate the fidelity to the TPSR model in our implementation of the program and its relationship with the effects on the participants.

Most data gathered in this phase are undergoing analysis and will be published separately. We do summarize results from one published study in this phase and then go on to present some formative data related to the implementation of the program across all areas of the curriculum along with a synthesis of the key findings reflecting on the fidelity of implementation.
Study One: Escartí, Gutiérrez y Pascual (2011). Psychometric properties of the Spanish version of the Personal and Social Responsibility Questionnaire in the physical education context. The purpose of this study was to analyze the psychometric properties of the Spanish version of the Personal and Social Responsibility Questionnaire (PSRQ), which assesses students’ perception of personal and social responsibility in physical education. The sample was selected on the basis of convenience and consisted in 395 students, ages 9 to 15, from 10 primary and secondary schools in the region of Valencia. The results of a confirmatory factor analysis supported the bi-factorial structure proposed by Li et al. (2008) and its internal consistency coefficients were satisfactory. The correlations between the responsibility factors and intrinsic motivation were positive and statistically significant, which supported the validity of the criteria.

Lesson learned. In this study we learned: (a) the Spanish version of the PSRQ is a straightforward instrument that is well-aligned with the TPSR model and easy to administer to evaluate students’ self-reported personal and social responsibility in the context of physical education; and (b) the results of the present study suggest a need to explore further applications of this instrument in order to better define and characterize the constructs of personal and social responsibility as they relate to student outcomes.

Study Two: Ongoing research on the implementation of the TPSR model in all areas of the school curriculum.

Program Overview. Our TPSR-based program, the PSRP, was implemented in three schools in a small town located near the city of Valencia. Twenty-two teachers volunteered to implement the program in their classes. In School One, the participants were four classroom teachers of elementary and preschool grades and two PE teachers. In School Two, the participants were three classroom teachers, one PE teacher, one music teacher, and one English teacher. In School Three, the participants were seven classroom teachers, one music teacher, one English teacher, and the PE teacher, with prior experience in the PSRP. The students participating in the intervention (N=282), were boys and girls ranging from eight to 12 years old. The implementation of the program took place over two academic years.

Teacher training. During the first weeks of September, the teachers were given an intensive 30-hour training course by members of our research group using several methodologies (lecture, discussion, demonstrations, and role-playing). The course addressed: 1) the theoretical foundations, objectives, and instructional methods of the TPSR model; 2) demonstration of important aspects of the TPSR model using videos that showed effective applications of the model; and 3) opportunities for teacher practice new skills and receive feedback.

Throughout the two school years, the teachers met with the research team twice a month. These training sessions provided teachers with detailed instructions about the implementation of the PSRP and had two objectives: 1) to continue the training and ongoing support of the teachers; and 2) to reinforce newly-learned skills.

Key elements. The key elements of the program were: 1) the responsibility levels were operationalized in concrete behavioral objectives, with the intention that the students
would learn the key components of each responsibility level (see Table 1); 2) the teachers were trained to apply the pedagogical strategies of the TARE [i.e. modeling respect, setting expectations, providing opportunities for success, fostering social interaction, assigning tasks, providing leadership roles, giving choices and voices, letting students have a role in assessment, and promoting transfer]; and 3) the daily structure of each session of the program.

The daily structure was as follows: (a) educational goal of the session: Every day the teacher would spend the first five minutes of class discussing the personal and social responsibility behaviors to be practiced that day in order to make the expectations of the class clear. The session’s goal was always related to one of the levels, with which the students were familiar and which were posted on the walls of the class. We worked progressively from Level 1 up to Level 5; (b) group meeting: At the end of the lesson, the teacher and students would share opinions, feelings and ideas about the program in general and that day’s experience in particular. These meetings generally lasted about 10 minutes; and (c) self-evaluation: the day concluded with an evaluation by each youth of his/her own behavior in class. They used a thumb gesture (up, horizontal or down) to give a positive, neutral or negative evaluation. This exercise lasted two to three minutes.

Table 1. Elements of the TPSR Model as Implemented in the PSRP

<table>
<thead>
<tr>
<th>Responsibility Levels</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Respect the rights and feelings of others</td>
<td>Resolve conflicts through dialogue; accept and include all peers in the activities; listen to the teacher and classmates when they are speaking; speak without interrupting others; avoid insulting others or calling them names.</td>
</tr>
<tr>
<td>2. Effort</td>
<td>Participate in planned activities even when they are not your favorite; persist in all activities even if they are difficult; follow the rules of the class such as wearing the appropriate clothing and adhering to rules and procedures.</td>
</tr>
<tr>
<td>3. Self-direction</td>
<td>Set short- and long-term goals; reflect on and evaluate your own progress honestly; assume responsibility for tasks; take on leadership roles; participate in activities whether the teacher is watching or not.</td>
</tr>
<tr>
<td>4. Helping others</td>
<td>Care for others; pay attention to the needs of your classmates.</td>
</tr>
<tr>
<td>5. Transfer (outside the gym)</td>
<td>Apply what is learned in the “gym” to other contexts such as the family, the playground, or your neighborhood.</td>
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</table>

To evaluate the fidelity of the program’s implementation, the TARE (Wright & Craig, 2011) was used to observe the participating teachers. This tool is supported by the extensive work on the topic related to the TPSR model (Hellison, 2003). This tool requires observers to record, at 5-minute intervals, the teaching strategies listed below; and circle the applicable code(s) for any strategy observed in that period of time; and record contextual comments such as key events, lesson content, or examples of how strategies were used. The observers check off each completed interval and after the observation period, complete and tally each column. The TARE codes are shown in Table 2.
Table 2. Description of Responsibility-Based Teaching Strategies

<table>
<thead>
<tr>
<th>Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modeling respect (M)</td>
<td>Teacher models respectful communication.</td>
</tr>
<tr>
<td>Settings expectations (E)</td>
<td>Teacher explains or refers to explicit behavioral expectations.</td>
</tr>
<tr>
<td>Opportunities for success (S)</td>
<td>Teacher structures lesson so that all students have the opportunity to be successful.</td>
</tr>
<tr>
<td>Fostering social interaction (SI)</td>
<td>Teacher structures activities that foster positive social interaction among the students.</td>
</tr>
<tr>
<td>Assigning tasks (T)</td>
<td>Teacher assigns specific responsibilities or tasks (other than leadership) that facilitate the program organization or a particular activity.</td>
</tr>
<tr>
<td>Leadership (L)</td>
<td>Teacher allows students to lead or be in charge of a group.</td>
</tr>
<tr>
<td>Giving choices and voices (V)</td>
<td>Teacher gives students a voice in the program.</td>
</tr>
<tr>
<td>Role in assessment (A)</td>
<td>Teacher allows students to have a role in learner assessment, i.e. self- or peer-assessment.</td>
</tr>
<tr>
<td>Transfer (Tr)</td>
<td>Teacher directly addresses the transfer of life skills or responsibilities from the lesson to areas outside the program.</td>
</tr>
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</table>

The lead author of the instrument, Paul Wright, trained two observers (a 26-year-old male with a Master’s degree in Physical Activity and Sports and a 27-year-old female with a degree in Psychology). The six-hour training process followed this sequence: 1) explanation and clarification of the meaning of each of the instrument’s categories; 2) practice of the procedures and application of coding definitions using video-footage from previous implementation of TPSR-based programs; and 3) assessment of inter-rater agreement between each of the trainees and Dr. Wright to confirm that each trainee was consistently reporting results with at least 80% agreement trainee vs. trainee and for each trainee vs. Dr. Wright.

Throughout the school year while the program was being implemented, the two observers videotaped five sessions taught by each of the seven teachers and coded them separately using a computer where the video images and the TARE category codes appeared together on the screen. The focus of the analysis was to document frequency with which the various strategies were used. To ensure the reliability of the coding, once all sessions had been analyzed, the two observers calculated their percentage of inter-rater agreement for all video-taped sessions. There overall percentage of inter-rater agreement, 90%, indicated a high degree of reliability. Moreover, there were no apparent differences within the various categories observed, which indicates the observers consistently applied the same criteria during the coding process. Regarding the strategies used by the teachers during the implementation of the program, it was observed that they used most of the teaching strategies measured by the TARE to some extent, but almost never used Leadership, Role in Assessment, and Transference (see Table 3 and Figure 2).
Table 3. Percent of Intervals Teachers Implemented the TARE Strategies

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>Teacher</th>
<th>Less.</th>
<th>Int.</th>
<th>%M</th>
<th>%E</th>
<th>%S</th>
<th>%SI</th>
<th>%T</th>
<th>%L</th>
<th>%V</th>
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Note. Less.: Number of lessons; Int.: Number of coded intervals; M: Modeling respect; E: Setting expectations; S: Opportunities for success; SI: Fostering social interaction; T: Assigning tasks; L: Leadership; V: Giving choices and voices; A: Role in assessment; Tr: Transfer.

Figure 2. Percent of 2295 Aggregated Intervals Teachers Applied the TARE Strategies

Lessons learned. Thus far, our preliminary findings suggest: (a) that the more empowerment based strategies associated with the TPSR model were not coming through in the implementation of the program, suggesting that in the training process
we need to better prepare the teachers to involve students in leadership and assessment and also directly address the notion of transfer with them; (b) we must continually improve the program based in formative data related to implementation fidelity; and (c) it is necessary to place greater emphasis during teacher training on concrete examples of how to implement the more empowerment based strategies in the classroom.

5. DISCUSSION AND CONCLUSIONS

The objective of this article was to describe the progression of a program of research on the adaptation and application of the TPSR model in the Spanish school setting with elementary and secondary students, and to evaluate each step in this process. The studies reviewed here describe the process of adapting the TPSR model to develop the program (PSRP), evaluating its implementation and fidelity to the TPSR model as well as its effects on students' positive development. We have also examined the training process and its impact on the teachers.

An initial conclusion that can be drawn from our results is that the TPSR model's instructional methodology as applied in the PSRP makes it an effective tool for teaching responsibility in schools because it was readily understood by the students and could be applied by trained teachers. These results confirmed our assumption that the TPSR model is an effective teaching approach that helps teachers structure their classes in ways that promote their students' learning of responsibility concepts and practices (Hellison, 2003; Oslin et al., 2001). This is a meaningful contribution to the TPSR literature as the majority of the programs based on the TPSR have been implemented in extra-curricular settings (Cummings, 1998; Cutforth, 1997; Cutforth & Puckett, 1999; Galvan, 2004; Georgiadis, 1990; Hellison, 1993; Hellison & Wright, 2003; Kahne et al., 2001; Martinek et al., 2001; Schilling, 2001), while little attention has been paid to the possibility of developing this type of programs during school hours (Compagnone, 1995; DeBusk & Hellison, 1989; Galvan, 2000; Kallusky, 2000).

From our perspective, the application of our TPSR-based program in the school context was effective because it took advantage of the school's resources, incorporating the TPSR objectives into the school's curriculum and philosophy, which made it possible to improve the students' responsibility. This finding supports theories of positive development which emphasize that all children need support in their developmental process and that the school, in the compulsory stage, is the ideal place to receive and apply programs that positively impact students' psychological and social development (Lerner, 2004; Lerner et al., 2005).

One of our studies' contributions to furthering the knowledge about the TPSR model was the importance given to training the teachers who implemented our program. In the past, Hellison or experts close to him have implemented the TPSR model in extra-curricular programs or within the school curriculum (Cutforth & Puckett, 1999; Georgiadis, 1990; Hellison, 1993; Hellison & Wright, 2003; Schilling, 2001). Currently, interest in the model’s application has moved beyond the US to several countries such
as New Zealand, Spain, Portugal, and Brazil. In these applications, the model is put into practice by PE teachers or coaches who share an interest in and curiosity about TPSR. However, typically they have not received sufficient training to implement the model in their programs with a high degree of fidelity to the original model. Our studies illustrate the importance of providing training programs for teachers, adapted to each context and incorporating the key components of the TPSR model.

In our studies, we provided this training, incorporating an intensive preparation that introduced the teachers to the philosophy and methodology of the TPSR model, and ongoing training during the program implementation that supported the teachers in their work. Still, more studies are needed to evaluate what key elements should be included in the teacher-training sessions to enable teachers to successfully implement the model. In addition, further studies are needed to evaluate the effects of the teacher training on professional learning, and its relationship with students’ learning (Armour & Yelling, 2007). In our studies, it appeared that teachers involved in implementing the program experienced improved motivation toward their teaching (Escartí et al., 2011). Likewise, effective professional development produced teacher learning and collaborative learning, thanks to the twice-monthly ongoing training seminars, in which the teachers and researchers became a collaborative learning community (Armour & Yelling, 2007).

Another important objective of our studies was to evaluate the fidelity of the PSRP program to the TPSR model. In recent years, studies have shown the need for research designs that analyze the process through which children obtain benefits from the TPSR model (Hellison & Walsh, 2002; Wright & Burton, 2008). Although the majority of researchers mention the importance of evaluating both the implementation process and the results, few studies actually do so (Escartí et al., 2006; Hellison & Walsh, 2002; Llopis, Escartí, Pascual, Gutiérrez, & Marín, 2011; Pascual et al., 2011; Wright & Burton, 2008; Wright & Li, 2009).

To evaluate the strategies used by teachers in implementing the program, we used the observational methodology which showed that the teachers used of the more fundamental TPSR strategies for teaching responsibility. However, more empowerment-based and alternative strategies related to leadership, active roles in assessment, and discussion of transfer were used with much less frequency. This underscores the importance of assessing implementation fidelity as teachers’ application of novel, especially more empowerment-based strategies, should not be left to assumption.

Regarding the effects of the program on participants’ personal and social responsibility, we found significant improvements in the intervention groups. These results seem to confirm the usefulness of the TPSR model for teaching students responsibility, and they agree with the review carried out by Hellison and Walsh (2002), who state that 19 of the 26 studies reviewed demonstrated that the use of the TPSR model improved respect, effort, autonomy, and the capacity for leadership among participants. These results were also confirmed by Wright and Burton (2008).
Some recommendations for further research would be to continue working on instruments to measure and evaluate the implementation as well as the effects of the TPSR model. As some authors have recently emphasized (Pascual et al., 2011; Wright & Craig, 2011), one fundamental way to advance the knowledge and research on the efficacy of programs based in the responsibility model, is to deepen the study of effective instruments and methods. Also, the implementation of the TPSR model as a positive youth development program in various areas of the school curriculum is a rich area for future study. We suggest increased focus on the design of training programs specifically to support the implementation of TPSR in the school setting. There is also a need for continued evaluation the impact of the training on implementation fidelity as well as its effects on participants and the teachers who deliver the program.

REFERENCES


DC: Center for Youth Development and Policy Research, Academy for Educational Development.


