

**Teaching personal and social
responsibility model-based
programmes in physical education:
A systematic review**

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Abstract

The purpose of this study was to conduct a review of research on teaching personal and social responsibility model-based programmes within physical education. Papers selected for analysis were found through searches of Web of Science, SportDiscus (EBSCO), SCOPUS and ERIC (ProQuest) databases throughout combinations with the main identifiers 'responsibility model' and 'physical education'. The relevant articles were checked for the following criteria: (a) The study has been published in a peer-reviewed international journal, (b) it included teaching personal and social responsibility model-based programme implementation, (c) programmes were implemented within physical education classes, (d) full text available in English or Spanish. The quality of the selected studies was scored using a quality assessment list. Twenty-two papers that satisfied the selection criteria were identified, with all content standards receiving attention. A

practical analysis of these papers to present the results has placed them into three categories: (a) impact of teaching personal and social responsibility model-based programmes on teachers; (b) programme implementation features; and (c) outcomes of teaching personal and social responsibility-based programme on student participants. Longer studies with follow-up data, quantitative methodological designs and larger samples would be particularly important for future investigations.

Keywords

Teaching personal and social responsibility, physical education, schools, review

Introduction

Teaching personal and social responsibility model (TPSR; Hellison, 1985, 1995, 2003, 2011), is a curriculum and instructional model, considered to be one of the best models for promoting values, character, responsibility and life skills in physical education (PE) and other physical activity settings (Metzler, 2005; Petitpas et al., 2005). Its purpose is to help children and adolescents to learn to be responsible for their own and others' well-being, and incorporate strategies to exercise control over their lives to be efficient in their social environment.

The TPSR model-based programme suggests five levels of responsibility: (I) Respect for the rights and feeling of others; (II) self-motivation; (III) self-direction; (IV) caring; and (V) transfer 'outside the gym' (Hellison, 2011). Moreover, four themes represent the essence of the programme: A strong teacher-student relationship, empowering students, integrating responsibility into physical activity and promoting transfer of responsibility (Hellison, 2003). Although TPSR model-based programme does provide a specific lesson

plan format as well as teaching strategies to support the implementation programme, teachers are allowed to make adaptations to their context.

TPSR model-based programme has been field-tested for 40 years in several settings, predominantly in underserved urban environments, and many studies have described its numerous positive impacts on student's behaviours and attitudes (Hellison and Martinek, 2006; Hellison and Walsh, 2002). Initially, Hellison uses the 'Taking Personal and Social Responsibility' approach avoiding the term 'model', as the programme is not a rigid structure of actions that should be automatically or thoughtlessly followed. However, Hellison finally decided to adopt the term "Responsibility Model" as it is the name by which most people refer to it (Hellison, 2003). Later, the term 'Teaching Personal and Social Responsibility' (TPSR) was commonly adopted by most authors in the literature as it is more comprehensive, open to all kind of contexts and it includes the key concept of 'teaching'.

Traditionally, the application of the TPSR model-based programmes has most often taken place in after-school or community-based programmes with voluntary participation and a small number of participants (Hellison, 2011). This contrasts with the compulsory nature of PE classes that may include students with varying degrees of interests and motivation (Wright et al., 2010). Nonetheless, responsible behaviours and attitudes learned and experienced through school-based programmes might be transferred to other settings, at home and in community (Hellison, 2003).

Research on TPSR model-based programmes in PE has increased over the last two decades (Hellison and Martinek, 2006). However, the limited research support to date has prompted concerns about the validity of claims of the model's success, such as descriptions of university-community collaborations (Wright, 2012). There is a particular

shortage of research that examines implementations by classroom teachers, those who know better the group, rather than by external teachers (Li et al., 2008; Wright and Burton, 2008) or that analyses the process of implementing TPSR model-based programmes (Lee and Choi, 2015).

Currently, there are several literature reviews about TPSR model-based programmes (Hellison and Martinek, 2006; Hellison and Walsh, 2002), and several reviews within the Spanish context (Belando et al., 2012; Caballero et al., 2013; Escartí et al., 2012). Unfortunately, none included the analysis of implementations in PE settings.

As Hellison and Walsh (2002) mentioned, relatively few empirical studies of TPSR model-based programmes have been published in peer-reviewed journals. These authors observed that despite case studies advantages, the interest in post-positivist programme evaluations among many funders and policy makers suggests that future studies should include a balance between qualitative and quantitative research designs to systematically determine which strategies are the most effective (Wright and Burton, 2008).

In conclusion, for many physical educators the TPSR model-based programme is considered to be a viable and effective pedagogical approach to the teaching of PE. The purpose of this systematic review is to analyse the studies included in peer-reviewed journals of TPSR-based programmes within the PE context.

Method

Search limits

A comprehensive search of four databases of literature; Web of Science, SportDiscus (EBSCO), SCOPUS and ERIC (ProQuest), from January 1989 through March 2016 was undertaken. Those databases include all articles published in journals with Journal Citation Reports (JCR) impact factor, and they are reference databases on education or

sport. The principal categories of search terms were identified and used in different combinations: Responsibility model (personal and social responsibility, responsibility model, teaching personal and social responsibility, personal and social responsibility programme) and physical education (school, in-school, physical education, primary/elementary/secondary/high school).

Selection criteria

The relevant papers proposed to be included in the review were checked for the following criteria: (a) the study has been published in a peer-reviewed international journal, (b) it included TPSR model-based programme implementation and the analysis of its impact and results. Descriptive studies or practical strategies were not included to ensure methodological and statistical rigor, (c) programmes were implemented within the school context, particularly in PE classes, (d) full text was available in English or Spanish, the main languages used in this area. Additional studies were identified from reference lists.

Review and opinion articles, thesis, book chapters, and articles focused on the discussion of the practical strategies required to implement TPSR model-based programmes (pedagogical strategies, assessment, etc.) were excluded from this review to provide empirical rigor in the study design.

Data extraction and reliability

In order to analyse all the information from the articles included in this review, content analysis was performed. The following categories were defined a priori using the method suggested by Harris et al. (2013): authors, journal, year, study name, location, objectives, sample size, participants profile, length of study, data sources, methodological analysis and results. The search process was carried out by two independent reviewers (PPR and

AGC). They read every title and all the abstracts, and a consensus meeting was arranged to sort out differences between them. First, the most recent studies were summarized, and then the potentially relevant papers were screened for retrieval.

Quality assessment and level of evidence

The criteria for assessing the quality of included studies were adapted from the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement (Vandenbroucke et al., 2007) and the Consolidated Standards of Reporting Trials (CONSORT) statement (Moher et al., 2001). The quality assessment list was based on: (a) inclusion of TPSR model-based programme description, (b) number of study subjects, (c) inclusion of study journal in JCR, (d) implementation duration, (e) inclusion of methodological process description. Each item was rated from '0' to '2', depending on the criteria shown in Table 1. For all studies, a total quality score was calculated by counting up the number of positive items (a total score between '0' and '10'). Studies were defined as high quality (HQ) if they had a total score of '7' or higher. A total score of '4' to '6' was defined as medium quality (MQ) and a score lower than '4' was defined as low quality (LQ). Two reviewers (PPR and AGC) evaluated the quality of the studies, separately. A consensus meeting was arranged to sort out differences between both reviewers.

-Table 1 near here-

Results

General finding

The flow of search results through the systematic review process is shown in Figure 1. After removal of duplicates and exclusion at title or abstract level, a total of 98 papers

were retrieved. These potential studies were reviewed based on the selection criteria. Consequently, a total of 22 articles that met the criteria were included in the systematic review.

-Figure 1 near here-

Overview of studies

The total number of student participants of the included articles was 1800, ranged from six (Jung and Wright, 2012) to 802 (Sánchez-Alcaraz et al., 2012), and the total number of teacher participants was 28, ranged from two (Beaudoin, 2012; Pascual et al., 2011a) to six (Lee and Choi, 2015). According to the country where TPSR model-based programme took place, the most studies in this area were conducted in Spain (10/22), followed by USA (8/22), South Korea (2/22), Canada (1/22) and New Zealand (1/22). Table 2 provides an overview of each of the 22 data-based empirical articles that have formed the basis of this review.

-Table 2 near here-

Grade levels used

The most frequent grade levels for TPSR model-based programme studies in PE were those associated with primary school (Year 5 and 6) with 7/22, and middle school (Year 7 to 9) with 6/22, followed by secondary school (Year 10 to 13) with 4/22. Fewer studies emerged from a combination of middle and secondary school (3/22), and finally primary and middle school (2/22).

Programme duration

The intervention duration was between 6 weeks (DeBusk and Hellison, 1989) and 2 academic years (Llopis-Goig et al., 2011; Pascual et al., 2011), but several programmes

lasted 3-4 months (4/20). The number of lessons ranged from 10 (Cecchini, Montero and Peña, 2003) to 56 (Escartí et al., 2010a). With regard to the time per lesson, it ranged from 40 minutes (Lee and Choi, 2015) to 90 minutes (Escartí et al., 2010a), although many lessons in the studies lasted 60 minutes (10/19).

Focus of the studies and context

All the studies showed the application of a TPSR model-based PE programmes that involved students and teachers. The most frequent objective detected in the studies was the analysis of the impact on students (9/22), including the implementation of instructional treatments (Balderson and Sharpe, 2005), fair play and self-control assessments (Cecchini et al., 2003; Cecchini et al., 2007), self-efficacy assessment (Escartí et al., 2010a), behavioural assessment (Escartí et al., 2006), quality of life assessment (Sánchez-Alcaraz et al., 2012), personal and social responsibility (PSR) assessment (Sánchez-Alcaraz et al., 2013), effects observed by teachers on life skills development (Pascual et al., 2011a) and analysis of students' perceptions in a programme designed to enhance Self Determination Theory tenets (autonomy, relatedness and competency) (Ward et al., 2012). Followed in frequency, we found the analysis of effects on students and implementation of TPSR model-based programmes (4/22), including the relationship between implementation fidelity and short-term outcomes (Pascual et al., 2011a), short-term outcomes (Wright and Burton, 2008), programme's effectiveness and effects on the pupils' self-efficacy (Escartí et al., 2010), and educational outcomes (Wright et al., 2010). Another major focus was to examine the implementation of TPSR model-based programmes (4/22), throughout teachers' perceptions (Llopis-Goig et al., 2011) and students' assessments (Gordon, 2010; Jung and Wright, 2012; Walsh et al., 2012). Other studies were focused exclusively on teachers (4/22), as the analysis of

strategies used by in-service teachers (Beaudoin, 2012), impact on teachers of a Continuing Professional Development protocol (Hemphill et al., 2015), influence of a Professional Development (PD) programme on teacher's implementation and identification of PD characteristics that influence teaching practice (Lee and Choi, 2015), and analysis of teacher perceptions and implementation (Lee, 2012). Finally, one study analysed effects on both students and teacher, and TPSR model's validity (DeBusk and Hellison, 1989). Regarding context, most studies (14/22) involved at-risk students (behaviour problems, low socioeconomic background, ethnical minorities, etc.), while others (8/22) did not specify any problem.

Analysis and methodology

This research spans three distinctive methodological approaches: qualitative studies (11/22), quantitative studies (5/22) and mixed (both qualitative and quantitative, 6/22).

In qualitative studies, we found inductive-deductive analysis designs (6/11)(Lee, 2012; Lee and Choi, 2015; Llopis-Goig et al., 2011; Pascual et al., 2011; Walsh et al., 2012; Wright and Burton, 2008), case studies (4/11)(DeBusk and Hellison, 1989; Jung and Wright, 2012), including comparative case study (Pascual et al., 2011a) and ethnographic case study (Ward et al., 2012), and action research (1/11)(Beaudoin, 2012). Several data collection procedures were used such as interviews (11), observations (7), self-reflective diaries (4), narrative evaluations (3), daily journals (3), lesson plans (3), focus group (2), logs (2), field notes (2) and referrals (1).

In studies following quantitative measures, experimental (4/5)(Balderson and Sharpe, 2005; Cecchini et al., 2003; Cecchini et al., 2007; Sánchez-Alcaraz et al., 2013) and quasi-experimental research (1/5)(Sánchez-Alcaraz et al., 2012) have been used. The most frequently used instruments in these designs were responsibility values-based

questionnaires (4), systematic observation of behaviour instruments (4) and quality of life questionnaire (1).

Mixed methods (incorporating both quantitative and qualitative assessment) were also used (Escartí et al., 2006; Escartí et al., 2010; Escartí et al., 2010a; Gordon, 2010; Hemphill et al., 2015; Wright et al., 2010). Instruments used were interviews (4), observations (4), reflection sheets (2), self-efficacy scales (2), focus group (1), checklist (1), and systematic observation of behaviour instrument (1).

Outcomes

Three programme evaluation research questions were used to investigate in the 22 studies. The number of studies addressing each research question was highlighted in the parentheses.

- What was the impact of TPSR model-based programme on teachers? (5)
- What features had the programme implementation and the class involved? (10)
- What were the outcomes of TPSR model-based programme on student participants? (14)

Impact on teachers

Strategies used. In a recent study, physical education teachers showed a frequent use of the TPSR strategies (Hemphill et al., 2015), showing their usefulness. In other study from 2012, Beaudoin reported strong evidence of the use of four responsibility-based strategies to support each teacher throughout the process of the implementation: (a) empowering teachers through self-supervision; (b) providing opportunities for success; (c) setting expectations; and (d) nurturing a respectful relationship between supervisor and teachers.

Attitudes and values. Lee (2012) reported that teachers' concern shifted from self and tasks to become more impact-related through the implementation and afterward. Teachers also were more aware of responsibility-based teaching strategies, perceived them to impact positively on students and integrated the strategies into their teaching, improving their professional development (Hemphill et al., 2015; Llopis-Goig, 2011). Finally, teacher's attitudes and values regarding both delinquency-prone youth changed positively after a programme (DeBusk and Hellison, 1989).

Programme and class involved features

Implementation development. Teachers noted that the effects during and after the implementation increased in those students who had not internalized positive or negative models (Pascual et al., 2011). In Lee's study (2012) the model implementation's evolved through three phases: (a) functional implementation as behaviour management, (b) mechanical implementation as a formula, and (c) a move toward holistic implementation. Wright and Burton (2008) showed five themes characterized within the programme: (a) establishing a relevant curriculum by addressing physical, emotional, and mental health issues, (b) navigating barriers related to cultural differences and student disengagement, (c) practicing life skills, (d) seeing the potential for transfer, and (e) creating a valued programme. In addition, TPSR model-based programmes helped teachers to structure classes and promoted the learning of responsible behaviour by the students (Escartí et al., 2010). The use of a professional development programme helped TPSR model-based programme's adaptation by developing cultural differentiation strategies, modifying existing components, and extending the implementation through connection with other subjects or activities. Professional development also gave teachers common goals,

empowered them as creators of knowledge, and provided with them a continuous and authentic learning experience (Lee and Choi, 2015).

Fidelity of implementation. Pascual and colleagues (2011a) found that greater fidelity to the model was related to better short-term student outcomes. Later, Lee and Choi (2015) discovered that professional development enhanced the fidelity of implementation throughout improving structural adherence, facilitating coherent instructional delivery, and making the students more active and responsible.

Programme levels. Regarding specific improvements related to programme levels, Pascual and colleagues (2011) showed that teachers perceived benefits to the majority of their students, especially at level I (respect and self-control). Additionally, in another study, the core goals and life skills associated with TPSR model-based programmes appeared relevant and acceptable to participants, however, the concept of self-direction emerged as more difficult for them to understand and enact (Jung and Wright, 2012). According to levels' understanding, the programme goals were effectively delivered, received and enacted by participants (De Busk and Hellison, 1989; Wright et al., 2010). Gordon (2010) also pointed out that the majority of students developed a greater understanding of personal and social responsibility. For most students, however, this understanding was firmly associated with PE and they generally showed little understanding of the potential for the transfer.

Class environment. Creating a proper PE lesson environment is crucial in the TPSR model-based programme. Ward reflected the importance of a positive atmosphere in meeting TPSR programme goals (Ward et al., 2012). In the same way, Gordon (2010)

demonstrated that the programme developed positive, supportive and well-behaved classes in PE.

Programme outcomes

Behavioural outcomes. Jung and Wright (2012) informed that the implementation of the TPSR model-based programme contributed to numerous positive behaviour changes of participants. Escartí (2006) also observed significant reduction in the students' aggressive and disruptive behaviour, while variables related to collaborating and providing assistance remained unchanged. DeBusk and Hellison's (1989) study also showed behavioural changes, especially self-control from level I, and caring from level IV of Hellison's programme (2011). Decrease in fair play behaviours from the students, related to the drive to win, rough play, contact fouls, and poor sportsmanship were observed in two different studies (Cecchini et al., 2003; Cecchini et al., 2007). Furthermore, personal responsibility instructional treatment was found particularly effective with positive social behaviour and student conflict resolution (Balderson and Sharpe, 2005).

Several studies (Gordon, 2010; Escartí et al., 2010a) discovered that pupils became more personally and socially responsible in class, showing also improvements in indicators regarding enjoyment and sportsmanship (Cecchini et al., 2003; Cecchini et al., 2007).

Social outcomes. In Ward and colleagues' (2012) study, relatedness was cited as especially important to students, who were encouraged to strive to reach programme goals. Balderson and Sharpe (2005) also found that both personal accountability and personal responsibility treatments were effective for changing all managerial, off-task, and positive social measures in desirable directions.

Emotional outcomes. Many affective changes observed from the students such as understanding of feelings and problems, willingness to talk about them, self-confident and self-esteem improvements or understanding of teamwork were reported by DeBusk and Hellison (1989). In later studies, improvements on self-control in other contexts of everyday life (personal feedback, criterial self-control, delayed gratification and self-control process) were also found among the participants (Cecchini et al., 2003; Cecchini et al., 2007).

Psychological outcomes. Significant improvements were found on students' self-efficacy for enlisting social resources, self-efficacy for self-regulated learning and self-regulatory efficacy (Escartí et al., 2010; Escartí et al., 2010a).

Educational outcomes. Wright (2010) detected positive results on truancy, tardiness, grades and conduct. The TPSR model-based programme not only helped participants in school duties, Walsh and colleagues (2012) found that students could connect the TPSR model-based programme goals of respect, effort, goal-setting, and leadership skills to their possible futures; envision and explore a career in kinesiology; and link kinesiology to their own positive possible futures. In conclusion, Llopis-Goig (2011) highlighted that the main strengths of the TPSR model-based programmes are the need for the values promoted by the programme, its applicability to the school context, and the differentiation throughout different levels.

Discussion

The objective of this review was to analyse studies of the TPSR model-based programme implementations in PE context. To that aim, only programmes based on evidence and with methodological quality were included. The results and implications have been ordered attending to the three research questions.

The findings related to teachers show that: (1) teachers should provide opportunities for success to students, set expectations, and create a close and respectful relationship with their students; (2) the strategies used by teachers were perceived as positive. Moreover, their prejudices and preconceptions about at-risk students changed, due to teachers are more emotionally involved.

Pascual (2011a) argued that teacher training for the TPSR model-based programme was theoretical, without practical support, programme manual or individualized feedback. Hence, more specific and practical approaches such as the professional development programme suggested by Lee and Choi (2015), as well as identifying the key elements of high-quality implementation become necessary. To this end, it is important to use the Tool for Assessing Responsibility-Based Education (TARE) (Wright and Craig, 2011) to measure the fidelity of the implementation on teachers. In most of the programmes carried out (15/21), the classroom teacher was supervised and trained externally. Meanwhile, the researchers did the TPSR model-based programme implementation in the other studies. Our review suggests that more studies examining the perceptions and effects on teachers of the implementation are recommended. Sharing successes and struggles with other teachers dealing with similar issues and working in a cross-curricular method with other subjects might be useful for better TPSR model-based programmes.

There is evidence that students: (1) perceived greater difficulty understanding the concept of self-determination and transfer; (2) reduced their aggressiveness and disruptive behaviours; (3) improved self-control, caring, conflict resolution,

responsibility, enjoyment, relatedness, empathy, self-confidence, self-esteem and self-efficacy; (4) improved truancy, tardiness, grades and their vision and motivation to their academic and professional future. Due to these promising findings, we suggest that future investigations should be focused on the transfer of values and social skills to the academic performance and students' daily life, specially with disadvantaged populations and at-risk children and adolescents.

The findings concerning the TPSR model-based programme indicate the following implications: (1) it is useful to teach and improve life skills, but it should be introduced cross-curricularly to improve the effect; (2) it is important to design PE content align with programme levels; (3) cultural differences between participants and implementer and lack of motivation of students or teachers may be barriers to develop TPSR model-based programmes; (4) it should promote the fidelity of teacher implementation through specific training, practical support, professional development and monitoring; (5) the programme is clear for students and well structured, although it should have an impact on self-determination concept and transfer level.

Our review suggests that high quality TPSR model-based programmes should have the following features: (1) the duration should be at least one academic year, with 60-minute classes twice a week; (2) the content must be adapted to the programme level, age group and social context; (3) the class size should be larger than 15 students participants; (4) focus on at risk students, although interventions with other participants for prevention purposes are not discarded; (5) keep a good atmosphere, including respectful relationships, during all the implementation. These characteristics should be taken into account to design new TPSR model-based programme implementations.

The results of the present systematic review should be interpreted with caution due to the variety of effects analysed and methods used. Some of the shortcomings include

limited lesson time and PE hours, and little work to discover long term or longitudinal effects. Hellison and Walsh (2002) concluded that longer programmes helped to get transference outside the programme. In fact, more studies are required to examine the level of transfer from TPSR programme to other contexts.

Additionally, there is a balance between primary and secondary school students and most investigations came from United States of America and Spain, so it would be important to bring the programme to other contexts. Regarding the number of participants in the programmes, there is a lack of larger and varied groups. Another limitation of the study is that it has not been included articles in other languages. Future studies in TPSR model-based programmes in PE should consider several lines of investigation. First, researchers should consider designing quantitative or mixed studies due to the preponderance of qualitative investigations in our analysis. As Hellison and Walsh (2002) predicted, future TPSR model-based programme studies should include a more equitable balance of research designs, including mixed and quantitative methods, as they might provide objective and controlled measurement, and their findings can be generalised. Second, the implementation should not be limited only to the area of PE, it should be focused on addressing the level of transfer to other contexts and, similarly, the effectiveness of the study might also be checked upon completion to evaluate the maintenance of the programme objectives over time and the longitudinal effects. Third, future studies should investigate perceptions and programme effects on teachers, along with testing the TPSR model-based programme implementation fidelity.

In many ways, findings in this systematic review were consistent with a growing body of literature in teaching personal and social responsibility research. Similar to other studies, we found that TPSR model-based programmes fostered a positive learning environment and influenced student behaviour (Gordon, 2010; Hellison and Wright,

2003). Nevertheless, our review focuses on the area of physical education, where the number of students is higher and motivation and engagement issues may appear in comparison to other TPSR traditional environments such as after-school and community-based programmes.

In conclusion, although reviews in the field of TPSR studies are limited to date, responsibility-based PE is a potential scenario to motivate and integrate disadvantaged students. It offers strategies and skills for the students to be more responsible in their daily lives, both in and out of the school context.

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