Teachers’ Perceptions of Personal and Social Responsibility Improvement through a Physical Education-based Intervention


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Published online: December 31, 2018
(Accepted for publication November 23, 2018)
DOI:10.7752/jpes.2018.04342

Abstract:
The aim of this study is to assess teachers’ perception of the Personal and Social Responsibility Model (TPSR) in their students’ responsibility behaviors. The participants were 16 physical education teachers (12 men and 4 women), whose ages varied from 27 to 51 years old. They applied the TPSR in 714 students (395 boys and 319 girls), whose ages ranged from 11 to 16 years old (Mage=14.02; SD=1.73), through physical education lessons (twice a week) during twelve weeks. The Spanish version of the Personal and Social Responsibility Questionnaire (PSRQ) was the evaluation of the physical education lessons. The results referring to teachers’ perception showed that the students in the experimental groups improved in personal and social responsibility variables after the application of the TPSR model. The implications of this study are discussed.

Key Words: - physical education, Personal and Social Responsibility, teacher’s perceptions, adolescence

Introduction
Intimidation, maltreatment, xenophobia, racism, violence, absenteeism, drugs: although not a universal facet of all education systems, these issues are some of the problems faced by today’s teachers in classrooms across Europe. A preoccupation with negative student behaviors can impede student learning and teacher satisfaction, resulting in the negative student behaviors that have increased in the past few years (Donat, Dalbert, & Kamble, 2014; Hemphill, Plenty, Herrenkhol, Toubourou, & Catalano, 2014; Ruiz et al., 2006). Teachers often complain about negative behaviors that some students express in the classroom (Muñoz, Carreras, & Braza, 2004; Gómez-Mármol, Sánchez-Alcaraz, Molina-Saorín, & Bazaco, in press). For instance, Strom, Thoresen, Wentzel-Larsen, and Dyb (2013) report that scholar violence showed how students who do not let the lesson develop adequately are the main problem teachers face. The negative behavior of some students causes an unremitting hindrance to a teacher’s work, students’ learning, and the normal development of lessons. According to Calvo (2002), teachers attribute the causes of these disruptive behaviors principally to personal student factors (e.g., temperament, personality problems, antisocial behavior) and educative administration factors (e.g., lack of preventive rules, inadequate solving conflicts law, defective application of rules, lack of teachers formation).

The high levels of violent events have promoted efforts to develop and evaluate intervention programs to reduce negative behaviors through psycho-social development and sport (e.g., Cecchini, Fernández, González, & Arruza, 2008; Hellison, 2011; Martinek & Hellison, 1997; Martinek, Schilling, & Hellison, 2006). To date, programs have been implemented in numerous contexts (e.g., physical education lessons, leisure time physical activities, sport schools, summer camps), and authors (e.g., Goudas & Giannoudis, 2010) have suggested physical education lessons are particularly salient contexts for young people’s positive psychosocial development because physical education encapsulates sustained effort, cooperation, problem-solving, conflict management and reciprocal relationships with peers and teachers (Pascual, Escarti, Llopis, & Gutiérrez, 2011). These developmental conditions could provide opportunities for developing and demonstrating personal and social skills (Escarti, Pascual, & Gutiérrez, 2005; Kosma, Buchanan, & Hondzinski, 2015).

Thus, the Personal and Social Responsibility Model (TPSR) (Hellison, 2011) is one of the more effective teaching models in education of values through sport that emerged to help adolescents with social exclusion risk because it aims to help students experience success through situations that promote their personal and social skills and values development, as much in sport as in their daily life (Escarti et al., 2005; Sánchez-Alcaraz, Gómez-Mármol, Valero, De la Cruz, & Díaz, 2016). To acquire and learn the behaviors related with Responsibility Model values, Hellison (2011) proposes four progressive and accumulative levels that students must develop:
Level 1. Respect: While students may not participate in the day’s activity or show much mastery or improvement in this level, they can control their behavior enough so that they don’t interfere with other students’ right to learn or the teacher’s right to teach.

Level 2. Effort: In this level, the students not only show respect but are involved in the subject matter, exploring effort, trying new tasks and persisting when subjects become complex, as well as creating a personal definition of success.

Level 3. Self-direction: The students learn to take more responsibility for their choices and for linking these choices to their identities in this level; they are also able to work without direct supervision and eventually take responsibility for their intentions and actions.

Level 4. Caring and helping: Students are motivated to extend their sense of responsibility by cooperating, giving support, showing concern, helping people in need in this level; additionally, students act without expecting any external reward.

Previous research that applied Personal and Social Responsibility Model in physical education lessons has analyzed its effects on responsibility behaviors through interviews, questionnaires or observation (Martinek, Schilling, & Jonhson, 2001; Sánchez-Alcaraz, Gómez-Mármol, Valero, De la Cruz, & Díaz, 2014; Wright and Burton, 2008; Wright & Li, 2009). Nevertheless, the perception of physical education teachers about the efficacy of the model on values related to responsibility is very important. Educators are present in every physical education lesson where the program is implemented, unlike external observers, and they are therefore uniquely positioned to observe student behavior, especially in studies that implement the model in several educative centers across a few months (Pascual et al., 2011), as is the case with this study.

Conscious of the importance of this type of research, Llopís, Escartí, Pacual, Gutiérrez, and Marín (2011) and Pascual et al. (2011) have assessed teachers’ perception about model efficacy through semi-structured interviews; unfortunately, to date, there is not any study that uses quantitative methodologies. Thus, the main aim of this study is to assess teachers’ perception of Personal and Social Responsibility Model in their students’ responsibility behaviors.

Material & methods

Research design
According to Montero and León’s (2007) classification, this is an empirical study with a quantitative quasi-experimental methodology that includes a pre-test and post-test using comparison control groups.

Participants
The participants of this study were 16 physical education teachers (12 men and four women), whose ages varied from 27 to 51 years old (Mage=36.69; SD=3.55) that teach in 16 different educative centers (8 primary school and 8 secondary schools) in the Region of Murcia (Spain). The teachers applied for the program in 714 students (395 boys and 319 girls), whose ages ranged from 11 to 16 years old (Mage=14.02; SD=1.73), through physical education lessons (twice a week) for twelve weeks. The ethical contents of the teachers’ formation course were approved by the Bioethic Committee; furthermore, the Heads of the Schools permitted the implementation of the Model during the physical education lessons.

Instruments
Personal and Social Responsibility. To evaluate teachers’ perception of their students’ personal and social responsibility, the Spanish version of Personal and Social Responsibility Questionnaire (PSRQ), designed by Li, Wright, Ruckavina, and Pickering (2008), and validated by Escartí, Pacual, and Gutiérrez (2011), was used. This instrument has 14 items that are classified into four factors: respect has three items (e.g. “The students respect the teacher”) with Cronbach α=0.90; effort has four items (e.g. “The students try hard”) with Cronbach α=0.92; self-direction has three items (e.g. “The students set their goals”) with Cronbach α=0.82; and caring and helping has four items (“The students help others”) with Cronbach α=0.89. Items of effort and self-direction are grouped with personal responsibility with a Cronbach α=0.67, and items of respect along with caring and helping are grouped with social responsibility with a Cronbach α=0.82. The participants marked their answers in a Likert scale of that ranged from (1) totally disagree to (6) totally agree. The scores of each factor that are summed as higher scores represent more responsibility.

Procedure
Selection of participants. The selection of schools was made according to the territorial division provided by the CPR (‘Centros de Profesores y Recursos’ - Teacher and Resource Centers) of the Community to be analyzed, so that each of the CPRs counted on the participation of two centers belonging to its area – a primary school and a secondary school. In each of the Centers, two groups (around 20 students per group) were selected.
at random, both from the same school year (6th in Primary and 3rd in Secondary), in which case the selected Centers had to give two stages of education (Primary and Secondary).

Teacher training. Once the Centers and the control and experimental groups were selected, the 16 teachers responsible for the application of Hellison’s Personal and Social Responsibility Program were given 30 hours of training, distributed across five sessions. The course was taught by experts in the TPSR Model. The content of the training program was as follows: the five levels of TPSR, the structure of the PE session, the pedagogical tools necessary to adapt the contents of the PE sessions to the TPSR, conflict resolution strategies, and activities to enhance the values of each TPSR level. Once the training course was completed, a test was administered to ensure that the contents had been properly assimilated. This test was made up of 40 multiple choice questions about the contents of the training program, and a score of 80% was necessary to participate in the study. Only two teachers failed the exam, and, as a result, they had to pass it in the second call.

TPSR Implementation. Once the teachers’ formation concluded, the Personal and Social Responsibility Questionnaire about teachers’ perception of their students’ initial levels of responsibility was distributed to the participant teachers. Afterward, teachers of the experimental groups applied the TPSR over a period of four months (two, sixty-minute physical education sessions per week). The daily format of the session was structured in four parts: awareness talk, responsibility, group meetings, and evaluation and self-evaluation (Hellison, 2011). The teachers’ performances were based on implementing the PE session according to the TPSR standards, which prioritized one of the levels of responsibility and involved the highest amount of categories representing the educator’s teaching strategies.

Teachers also applied the guidelines on conflict resolution that were provided during the training session. Teaching personal and social responsibility involves several aspects (Escartí et al., 2010):

(a) the purpose of the curriculum should include taking personal responsibility;
(b) the teacher should be capable of recognizing and respecting students’ strengths, individuality, voices, and autonomy;
(c) the teacher must master two sets of content – physical activity and personal and social responsibility – and integrate them into each lesson;
(d) the teacher must structure the PE session according to the TPSR model;
(e) the teacher must empower their students; and
(f) the teacher should gradually introduce the concept of transferring the responsibilities and life skills to other settings.

During treatment implementation, four ongoing support sessions were held to observe the difficulties encountered by the teachers, revise the contents of the PE lessons to adjust them to the TPSR values and levels, and provide feedback and different strategies to continue its implementation. Meanwhile, the teachers of the control groups followed their usual methodology with the session structured into warm-up, the physical activity lesson, and cool down. The teachers’ behavior during PE classes was analyzed through a self-assessment questionnaire. Although fidelity was defined regarding the adherence to essential aspects of the model, there was room for flexibility in its implementation to fit situational needs. In this sense, each teacher adapted his/her teaching units to TPSR while still respecting their sport contents (football, basketball, handball, volleyball, traditional games, among others). Finally, after the implementation, the questionnaire about teachers’ perception of their students’ final levels of responsibility was administrated again.

Data analysis
First, descriptive statistics of all variables were calculated (mean and standard deviation). Kolmogorov-Smirnov and χ2 test were used to assess the normality of the data distribution. Then, a non-parametric test was used to determine the effects of the implementation Model in teachers’ perception of their students’ responsibility levels, and Mann-Whitney U was used to determine the influence education stage on studied variables. The statistical data treatment was carried out with SPSS 22.0.

Results
Table 1 shows the perception of 16 Physical Education teachers about the effects of Model implementation on responsibility levels regarding the stage of education. The results showed improvements in primary stage experimental groups in respect (p=.04) and caring and helping (p=.041) and improvements in secondary stage experimental groups in respect (p=.011) and self-direction (p=.010). We did not observe improvements in any of the variables in the control group.

Table 2 demonstrates the teachers’ perception about the effects of TPSR application on personal and social responsibility regarding students’ stage of education. The results showed improvements in primary stage experimental groups in social responsibility (p=.042) and improvements in secondary stage experimental groups in personal responsibility (p=.018) and social responsibility (p=.017). We did not observe improvements in any of the variables in the control group.
Determined teachers’ perception about Personal and Social Responsibility Model in their students’ responsibility behaviors was the central purpose of this study. Our initial hypothesis, which TPSR was a methodological tool that improves values related to students’ personal and social responsibility, was confirmed.

Within this framework, before TPSR implementation, personal and social responsibility levels were analyzed, and results showed that they were higher among primary education students. These results are similar to other studies, which indicated that responsibility values, such as respect, effort, autonomy or help, are more developed in a child than in adolescents (Hellison, & Wright, 2003; Sánchez-Alcaraz, Gómez-Mármol, Valero, & De la Cruz, 2013).

Applying TPSR in physical education classes showed improvements for the students of experimental groups in personal and social responsibility variables. This finding is in line with other studies that have used TPSR in physical education classes (Escartí et al., 2010; Sánchez-Alcaraz et al., 2013; 2014) or school sports (Hellison, & Wright, 2003; Martinek et al., 2001; 2006; Schilling, 2001), highlighting the importance of the TPSR as a program for improving values in schools.

The teacher assumes a key role in achieving success in any values program education (Martinek et al., 2000; Walsh, Ozaeta, & Wright, 2010); therefore, this research is similar to other research developed within the last few years that has assessed teachers’ opinions and perceptions in the school context (Barros and Leal, 2015) and during TPSR Model implementation (Escartí, Gutiérrez, Pascual, & Wright, 2013; Hemphill, Templin, & Wright, 2013; Llopis et al., 2011; Pascual et al., 2011).

Nevertheless, we have found some limitations in this study due to the duration of the application period. Although the duration of the application period was similar to other studies that implemented the TPSR (Jung and Wright, 2012; Wright et al., 2010), a longer application period will be necessary in future research, as well as different samples, such as disadvantaged youth or those at risk of exclusion, or in contexts such as camps, afterschool activities, sports schools, etc. Furthermore, fidelity in implementing the TPSR was assessed using

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**Table 1. Effects of the Hellison’s Model implementation in levels of personal and social responsibility by function of stage of education.**

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<td>3.11</td>
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<td>4.39</td>
<td>13.60</td>
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<td>.197</td>
<td>.011*</td>
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<td>.023*</td>
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<td>.105</td>
<td>.010*</td>
<td>.172</td>
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<td>.262</td>
<td>.057</td>
<td>.472</td>
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**Note:** *p<.05; **p<.01

**Table 2. Effects of the Hellison’s Model implementation in personal and social responsibility by function of stage of education**

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<td>.260</td>
<td>.017*</td>
<td>.306</td>
<td>.002**</td>
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**Note:** *p<.05; **p<.01

**Discussion**

Determining teachers’ perception about Personal and Social Responsibility Model in their students’ responsibility behaviors was the central purpose of this study. Our initial hypothesis, which TPSR was a methodological tool that improves values related to students’ personal and social responsibility, was confirmed. Within this framework, before TPSR implementation, personal and social responsibility levels were analyzed, and results showed that they were higher among primary education students. These results are similar to other studies, which indicated that responsibility values, such as respect, effort, autonomy or help, are more developed in a child than in adolescents (Hellison, & Wright, 2003; Sánchez-Alcaraz, Gómez-Mármol, Valero, & De la Cruz, 2013).

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Nevertheless, we have found some limitations in this study due to the duration of the application period. Although the duration of the application period was similar to other studies that implemented the TPSR (Jung and Wright, 2012; Wright et al., 2010), a longer application period will be necessary in future research, as well as different samples, such as disadvantaged youth or those at risk of exclusion, or in contexts such as camps, afterschool activities, sports schools, etc. Furthermore, fidelity in implementing the TPSR was assessed using
only a self-report instrument. Finally, given that we have based this study on data collected through questionnaires, it would be of interest for future research to apply behavioral observations in the school context.

References:


Escartí, A., Gutiérrez, M., Pascual, C., & Wright. (2013). Observación de las estrategias que emplean los profesores de educación física para enseñar responsabilidad personal y social [Observation of the strategies that physical education teachers use to teach personal and social responsibility]. *Revista de Psicología del Deporte, 22*(1), 159-166.


