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Students' perceived behaviors at school: a relation between behaviors in physical education lessons and the classroom

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ABSTRACT

Proios, M., Proios M.C., Siatras, T., & Patmanoglou, S. (2015). Students' perceived behaviors at school: a relation between behaviors in physical education lessons and the classroom. *J. Hum. Sport Exerc.*, 10(1), pp.113-125. The purpose of this study was to investigate the students' perceived behavior during the physical education classes and in the classroom, to examine of the differences in the teachers' perceptions, as well as to investigate any possible relations between behaviors in PE and the classroom. The sample consisted of 258 in-service teachers (n = 204 teachers of several disciplines and n = 54 PE teachers). The results indicated that teachers perceived a predominance of the "cooperation" behavior among students, while their perception is differentiated relevant to their teaching experience. In addition, in this study a relation between behaviors in PE and the classroom was also established. Consequently, it could be maintained that the students' moral behavior in PE can contribute to the adoption of responsibility behaviors in the classroom. **Key words:** STUDENTS' BEHAVIOR, PHYSICAL EDUCATION, CLASSROOM.



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INTRODUCTION

Physical education constitutes an institutionalized part of the school curriculum interested in the students' physical, mental and cognitive development, as well as the latter's harmonious socialization, as described in the PE syllabuses in Greece (MNER, 2006). It has been considered that physical education, presumably, constitutes the most significant physical activity framework for the development of moral character, because it is less commercialized and emphasizes less the eventual winning in the sport activities involved (Shields & Bredemeier, 1995).

Researchers supported that in settings occurring in PE classes positive social skills can be developed (Hastie & Sharpe, 1999; Petitpas, Cornelius, Van Raalte & Jones, 2005; Sandford, Armour & Warmington, 2006) and thus let the development of the children's characters (Bredemeier & Shields, 2005; Shields & Bredemeier, 1995, 2001; Weiss & Smith, 2002). So, physical education and athletic programs constitute contexts that provide the students with chances to support ethical codes behaviors, team cohesiveness, cooperation, respect for other individuals and many other desirable social behaviors (Freeman, 1992; Grant, 1992; Lakie, 1964; Sharpe, Brown & Crider, 1995; Wandzilak, 1985). Telama (1999) considered that physical education contributes to the children's moral development as it often lets interaction, that is, very close relationships and team work. In addition, he supported that the development of the children's moral character, through the physical education programs, can be achieved because the students learn how to undertake a specific role, respect others, cooperate, converse, etc.

Apart from the positive view for the role of PE in the development of the students' moral character, there is a negative one as well, which supports that PE constitutes a means for the exhibition of immoral behaviors (Sheldon & Aimer, 2001; Shields, LaVoi, Bredemeier & Power, 2007). This phenomenon has been attributed to the intense emphasis put on winning, as well as on a set of social and contextual factors, even on the athletic programs within PE itself (Shields & Bredemeier, 1995; Weiss & Smith, 2002). Researches have revealed that much emphasis on winning and competitive outcomes might, for instance, decrease prosocial behavior and promote antisocial behavior (e.g., Kavussanu & Roberts, 2001; Ommundsen et al., 2003; Orlick, 1990).

The right or wrong action/ behavior is the subject of ethics. As concerning moral development, it was approached by means of two principally theoretical models: internalization and constructive. The internalization model, mainly, through the psychoanalytic theory (Freud, 1961) and the theory of social learning (Bandura, 1969), equates moral development with gradual internalization of moral values and criteria of a specific society. In this case, it could be maintained that each school or class constitutes a small society in which different moral values and criteria predominate and children learn what is right depending on what is considered right within this specific context (Brummett, 2003; Host, Brugman, Tavecchio & Beem, 1998; Proios, Doganis & Proios, 2006).

The constructive model, which is expressed through the cognitive-developmental theory (Kohlberg, 1969; Piaget, 1932), considers that moral development is the outcome of the individual's experiences acquired within its context, that is, by comparing and conveying what the individual itself perceives as moral (right), always depending the influence of its context. In addition, this model maintains that individuals belong to different moral maturity levels, something which is the cause of different behaviors within the greater framework of morality. For instance, a set of activities is developed within PE, performed in the framework of implementing specific rules. This can teach the children what is right or wrong for a whole range of issues, something that can apply in their everyday life.

Apart from the scholastic subcontext of PE, schools in general are considered to constitute a learning environment in which students exhibit a variety of behaviors. Exhibiting moral behaviors, according to Kohlberg's educational theory, is the result of the predominance of a moral atmosphere at school (Higgins, Power & Kohlberg, 1984; Kohlberg, 1985). The moral atmosphere in schools refers to the norms, values and meaning systems which students of a school share and is studied here through the perception of the students. Apart from the students' exhibiting moral behaviors, a whole set of negative behaviors is also reported, something that greatly preoccupies school administrators as well as teachers themselves. For example students' behavior could be misbehavior. The issue of the students' misbehavior was searched rather in the classroom than in physical education settings (Kulina, Cothran & Regualos, 2006). A consequence of such behavior is that the teachers spend time to administrate rather than teach students. A research revealed that the 55% of the secondary education teachers spent too much time for handling students' misbehavior (Houghton, Wheldall & Merrett, 1988).

Another type of students' behavior expressed is school violence and aggressive behavior. School violence is an ever increasing phenomenon, mainly in the west world and constitutes an interesting research object (Smith, Pepler & Rigby, 2004; Steffgen & Ewen, 2004). Some studies suggest that school violence could have a strong negative impact on teacher well-being (Horenstein & Voyron-Lemaire, 1997; Janosz, Thibaud, Bouthillire & Brunet, 2004).

Within the framework of the two main theoretical models mentioned above, and more specifically in PE of settings many programs were planned in order to aid children's social-moral development. However, the evaluation of behaviors remains underrepresented in literature (Li, Wright, Rukavina & Pickering, 2008). Such lack of research literature concerning misbehavior, in general, in PE setting was stressed by other researchers as well (Kulinna et al., 2006; Kulinna, McCaugherty, Cothran & Martin, 2006). Recently, Nikopoulou, Tsitskaris, Doganis & Kioumourtzoglou (2006) in the framework of evaluating an intervention program in PE, developed the "Physical Education Rating Scale" (PERS) for the estimation of students' behavior according to the Hellison's model (Personal and Social Responsibility Model; Hellison, 1983, 2003). At the same time, by modifying PERS they developed the Classroom Rating Scale (CRS) for the estimation of behaviors that students show during classroom lesson. CRS examines five behaviors (participation, irresponsibility, cooperation, multi-cultural cooperation and acceptance of assistance) that the students exhibit during the course in class.

As it was mentioned above, the limited literature references on school behaviors further underlines the significance of the present study. The estimate of the students' behavior with moral features and the relationship among them in school contexts (e.g., classroom and physical education) are considered significant because the relationship between engagement in physical activity and development of socially desired behaviors have not been adequately researched yet (Eldar, 2008). In addition, the findings of the aforementioned studies can constitute a useful guide for the planning of students' character development programs.

The main purpose of the present study is to evaluate behaviors characterized by irresponsibility in classroom and moral behavior in PE classes. Moreover, another purpose of the present study is to examine the relationship between behaviors in the classroom and the PE classes. A further purpose of the present study is to investigate the effect of developmental factors, such as age and experience, as well as gender in the teachers' perception of the students' attitude.

The hypotheses made in this study were the following: a) the teachers' perceptive behavior concerning students is expected to be characterized by high means for responsible behaviors in the classroom and

lower means for moral behavior in PE classes, b) the perception of the students' behaviors are to exhibit significant variations among teachers depending on the latter's age and years of experience, and c) the students' perceptive behaviors in PE classes and in the classroom are expected to be interrelated.

METHOD

Participants

Participants in this study were 258 in-service teachers (men $n = 83$, women $n = 175$, Mage = 41.24 years, age range: 23-59 years). Out of these, 200 were of several specialties (e.g., Theologians, Philologists, Mathematicians and Physicists) and 54 PE teachers, while 4 did not state their specialty. The years of experience of all the participants ranged from 1 to 40 years with a mean of $M = 14.91$, $SD = 9.46$ years of experience.

Measures

Perceived Students' Behavior. The students' behavior perceived by the teachers in the classroom was estimated by means of the "Classroom Rating Scale (CRS)" (Nikopoulou et al., 2006). Respondents completed 26 items (11 participation [e.g., "is on time for class"; "sets personal aims"], 7 irresponsibility [e.g., "pushes others to get out first for break], 4 cooperation [e.g., "cooperates with others in order to solve an exercise, regardless their skills"], 2 multicultural cooperation [e.g., "cooperates with others in order to solve an exercise, regardless their nationality"] and 2 assistance [e.g., "accepts others' assistance when his/ her performance in an exercise is not good"]) with reference to the stem, "Students usually. . ." Responses were indicated on a 5-point Likert scale anchored by strongly agree (1) and strongly disagree (7).

A principal component factor analysis with varimax rotation was conducted in order to examine the factorial structure of CRS. The results, however, did not provide the expected findings (loading items with common content in the respective factors). Thus, we considered that the choice of the items' content as well as their wording might not have been the appropriate one. Then, 19 out of the 26 items were chosen; namely those that presented the best behavior in factor analysis. After that, another principal component factor analysis with varimax rotation was conducted on the responses provided to the 19-item version. The results of the CRS factor analysis revealed that the 19 items were divided into four factors: Factor 1, labeled Participation (e.g., Pay attention when the teacher gives directions), Factor 2, labeled Goals (e.g., Poses personal learning aims), Factor 3, labeled Irresponsibility (e.g., Pushes others in order to go out faster for break) and Factor 4, Cooperation (e.g., Cooperates with others – regardless gender – for the solution of an exercise).

To provide further validity for the scale CRS, a confirmatory factor analysis was conducted for each scale to determine if the items fit with their associated constructs. The fit of the hypothesized structure, for the CRS was adequate: $\chi^2(146) = 286.35$, $p < .001$, IFI = .91, CFI = .91 and RMSEA = .06. In accord with conventions, IFI and CFI values of .90 or higher suggest an adequate correspondence between a given data set and the hypothesized model (see Byrne, 1994; Hoyle & Panter, 1995). The internal factors' coherence of the questionnaire was examined by the test of Cronbach alpha. The results revealed a satisfactory validity of the questionnaire. More specifically, the sub-scales reliabilities were: "participation", $\alpha = .72$, "goals", $\alpha = .78$, "irresponsibility", $\alpha = .80$, and "cooperation", $\alpha = .78$.

Moral Behavior. The Horrocks Prosocial Play Behavior Inventory (Horrocks, 1979) was used to assess moral behavior. This inventory asked teachers to rate their students on 10 behaviors commonly associated with fair play during participation in sport and game. Teachers' responses are given on a 4-point Likert

scale using anchors of 1 = not at all, and 4 = very much. Horrocks (1979) provided content and construct validation, as well as good reliability, for the HPPBI. The internal consistency for the moral behavior was .70. A coefficient of .70 is generally regarded as the minimum acceptable value (Nunnally, 1978).

Procedure

The course of the present study was developed in three phases: First, the researcher visited a great number of schools in order to ensure the teachers' participation in the research. Then, the relevant permits from the Ministry of National Education and Religious Affairs and the principles of the schools chosen were obtained.

The present study included the estimation of the students' behavior perceived by the teachers in two different contexts within school, namely the classroom and PE classes. Fifty four PE teachers filled in two questionnaires – at the same time – one for the estimation of the students' behavior in the classroom and one for the estimation of their moral behavior in the PE classes. It should be noted here that PE teachers in Greece have a perception of the students' behavior in the classroom as along with the PE class they run other courses as well (e.g., Career Guidance and Counselling or courses related to the human being, such as anthropology, biology, etc). Another 200 teachers of other specialties filled in only the questionnaire for the estimation of the students' behavior in the classroom. The teachers filled in these questionnaires in their free time within the school in the researcher's presence.

Data Analysis

Descriptive statistics were obtained and preliminary data analyses were conducted to estimate the students' behavior in both school contexts, i.e. the classroom and the PE classes. Simple correlations were calculated to test the relationships between variables. Inferential statistics (MANOVA) were used to analyze the extent to which the perception of the student's behavior varied on the basis of the teachers' age, teaching experience and gender. Finally, regression analyses were employed to assess the relationships among the predictor and outcome variables. All analyses were completed using SPSS for windows version 15.0.

RESULTS

Descriptive Statistics and Correlation Analyses

Descriptive statistics are shown in Table 1. Overall, the participants reported a relevantly high cooperation behavior, perceptions for the predominance of a cooperation climate in the classroom. Moderate-to-high perceptions of participation, and goals were reported, perceptions supporting a responsibility climate in the classroom. Moderate-to-high perceptions of irresponsibility also were reported suggesting a different behavior of the students in the classroom. Finally, perceived moral behavior in the lesson of physical education also moderate-to-high were reported.

Table 1. Descriptive statistics, Cronbach Alpha, and Correlation analyses

Variables	M	SD	Cronbach A	Correlation			
				1	2	3	4
1. Participation	4.69	.85	.72				
2. Goals	4.08	1.03	.78	.45**			
3. Irresponsibility	4.14	1.01	.80	-.36**	-.16*		
4. Cooperation	5.05	.99	.78	.38**	.26**	-.16**	
5. Moral behavior	2.60	.37	.70	.57**	.55**	-.41	ns

Note: * $p < .05$, $p < .01$, ns = no significant

Table 1 presents the correlation matrix for all of the variables in the study. As indicated in this table, perception moral behavior was strongly correlated with perception of participation ($r = .57$), and with the perception of goals ($r = .55$). Contrary, the perception of moral behavior was related negatively with perception irresponsibility ($r = -.41$). While, the perception moral behavior was not corrected with perception of cooperation.

Effect of age, teaching experience and gender in the perception of behaviors

A three-way MANOVA was conducted to determine whether there were age, experience and gender differences on the set of dependent variables of interest in this study (i.e. perception participation, goals, irresponsibility, cooperation and perception moral behavior). The multivariate test revealed a significant main effect only of teaching experience (Wilks = .04, $F(132, 165) = 1.61$, $p < .01$), with significant univariate effects for participation ($F(33, 249) = 2.22$, $p < .01$), and irresponsibility ($F(33, 249) = 2.22$, $p < .01$). Finally, a significant age, years of experience and gender interaction was also pointed out by the MANOVA (Wilks = .55, $F(8, 82) = 3.57$, $p < .001$), with significant univariate effects both for participation ($F(2, 249) = 4.40$, $p < .05$), and irresponsibility ($F(2, 249) = 4.78$, $p < .05$).

Relationship between moral behavior and classroom behaviors

It was hypothesized that behaviors in the PE classes can affect behaviors in the classroom. Standard multiple regression analyses (Tabachnick & Fidell, 1996) were conducted to examine the possible moderating role of behaviors in the PE classes in predicting students' behaviors in the classroom. In the regression analyses, the moral behavior scale was used as predictor variable for each of the four dimensions of classroom rating scale. The results indicated a significant relationship between moral behavior and three dimensions participation ($R = .57$, $R^2 = .33$, $F(1, 49) = 24.05$, $p < .001$), accounting for the 32.9% of the variance, goals, ($R = .55$, $R^2 = .31$, $F(1, 49) = 21.72$, $p < .01$), accounting for the 30.7% of the variance, and irresponsibility ($R = .41$, $R^2 = .17$, $F(1, 49) = 9.70$, $p < .01$), accounting for the 16.5% of the variance.

The standardized beta coefficient revealed a positive effect for moral behaviour on the dimensions participation ($\beta = .57$) and goals ($\beta = .55$). While, a negative effect of moral behavior was found for the dimension irresponsibility ($\beta = -.41$).

DISCUSSION

The main purpose of the present study was to investigate the primary and secondary education teachers' perception of concerning the students' behavior in scholastic subcontexts; and more particularly, whether they are characterized by responsibility in the classroom or moral behavior in the PE classes. Results suggest that students in the scholastic subcontexts classroom and physical education settings exhibited responsibility and moral behaviors. From a general perspective, these results support the assertion that schools—either consciously or not—contribute to the students' social and moral development (Hansen, 1993). More specially, the finding presented here support the relevance of a positive youth development orientation in physical education (Wright & Li, 2009).

Results of the present study did not support the first hypothesis that students would have low means in scores concerning moral behavior in PE classes. On the contrary, they revealed that the teachers' perception concerning the students' behavior within the framework of PE classes is characterized by a moderate-to-high behavior in fair play. A recent study researching the perceived students' behaviour in the PE classes showed that their behavior exhibits moral features, such as responsibility, effort, cooperation, goal, participation and assistance dimensions (Proios, 2011). At the same time, another study revealed that high school students exhibit more sportsmanship behaviors and less unsportsmanlike behaviors (Diggelidis & Krommidas, 2008).

On the contrary, the results of this study supported the other part of the first hypothesis, namely that the students' behavior in the classroom is expected to be characterized by an attitude of responsibility, i.e. to have high scores for the responsibility dimensions. Results of the present study revealed that the perceived students' behavior is characterized by a high sense of responsibility dimension and a slightly lower sense of the two dimensions participation and goals. However, the absence of other research findings hinders the comparison of the results hereof. On the basis of the current results that revealed a high estimation in the perception of behavior cooperation, it can be assumed that students exhibit a rather high sense of justice, because the cooperation behavior comprises the notion of fairness, which shapes a perception of mutuality or reciprocity (Rawls, 2001).

In the present study, the estimation of the students' moral behavior was performed according to their teachers' perception. They were asked to estimate the extent to which the students' behavior is characterized by moral functioning, responsibility in the classroom and fair play in physical education settings. In this study, it was hypothesized that the teachers' perception would be quite different depending on the teachers' age, gender and years of teaching experience. The results of the current study partly supported the above mentioned hypothesis. More specifically, they revealed that the years of teaching experience significantly affect the ability to characterize a behavior either as moral or not. This result is reinforced by the finding of another study that reported that teachers responded differently to moral and prudential rule violations (Tisak, Nucci & Jankowski, 1996). Husu & Tirri (2001) in a study of theirs showed that on occasions two educators do not perceive the same problem as being moral in nature, or they see different aspects of the situation as being morally relevant, while Husu (2004) suggested that teachers use different ethical perspectives in their practical reflection.

According to the cognitive-developmental theory, difference in the perception of a certain behavior as moral or non-moral can be attributed to the teachers' different development stage and developmental changes, such as improvement of experience through the years of teaching (Kohlberg, 1969, 1976; Rest, 1979). The stages represent moral schemas (Narvaez, 1998) revealing the way in which humans perceive justice. Rest

et al. (1999) suggested that "The schemas enable us to describe the developmental aspect of moral judgment, and the individual's construction of basic moral concepts" (p. 12). Recently, Proios and his colleagues studied the primary and secondary teachers' moral judgment schema development (Proios et al., 2011). They found significant differences in moral judgment schemas among the teachers of all disciplines, as well as concerning the educational level (elementary and middle education). Similar differences in morality among elementary and middle schools (secondary) teachers were reported in another study as well (Meyer, Astor & Behre, 2002).

Moreover, the different perception of a behavior has been previously reported as the outcome of experience contributing to cognitive development. Cognitive development takes place because humans are active interpreters of their experiences (Piaget, 1970). According to Kohlberg (1969), the special kinds of social experiences that are particularly conducive to development in moral thinking come from "role-taking" experience. Role-taking experiences are those social experiences in which a person takes the point of view of other. The teachers' experiences in the framework of teaching might be considered as such (i.e. role-taking experiences), since they are making decision concerning others, for instance evaluation of students' performance. Rest, Deemer, Barnett, Spickelmier & Volker (1986) reported that "Presumably, greater role-taking opportunities lead to devising more and more elaborate ways of coordinating human interests, and thus to more developed conceptions of justice" (p. 32).

Apart from the impact of experiences on the teachers; perception on the students' behavior, the present study also examines the impact of the teachers' age and gender. The results did not confirm the hypothesis of the present study that age and gender constitute significant factors for the perception of justice. This result supports the claim that such relation between moral judgment and age is versatile. Rest et al. (1986) maintained that while "age trend data indicates that people do develop over time, but it does not indicate why or how – that is, the causes, conditions and mechanisms of development" (p. 32). A recent research on a sample between 14 and 49 years of age revealed that while moral judgment scores increased until early adulthood, then they exhibited some versatility, without any evident trend (Proios & Doganis, 2006). In this case, the statement that moral development may reach a plateau at the beginning of adulthood (Rest, 1979) applies.

The result of this study that gender does not affect the teachers' perception of justice was supported by the results of meta-analyses revealing that there is no relation between gender and moral stage (Walker, 2006). A recent study revealed that there are no significant differences in moral judgment schemas between men and women (Proios, Athanailidis, Arvanitidou & Giannitsopoulou, 2011). Results of another study showed that men and women tended to judge disobedient pupils in the same way (Salvano-Pardieu, Fontaine, Bouazzaoui & Florer, 2009). These results are further supported by that of another study which acknowledged that individuals can employ both justice and care orientations, but asserted that only one of them (either justice or care) prevails in the people's thinking (Gilligan & Attanucci, 1988).

A third hypothesis of this study was that the perceived students' behaviors in the PE classes and in the classroom are to be interrelated. The results of the present study confirmed the above mentioned hypothesis showing that moral behavior in the PE classes has a positive relationship to responsibility behaviors (participation and goals) and a negative relationship to irresponsibility behaviors in the classroom. This result further supports the claim that physical activity instructional settings hold the potential for personal and social development, because as contexts they are very emotional, interactive, and, some kids, attractive (Hellison, 1995).

The relationship of dimension responsibility participation with moral behavior supports the claim that physical activity improves the children's personal stability (Hellison, 1985). According to the cognitive-developmental theory, moral behavior is the result of moral development. Moral development or socio-moral development, as it is called among researchers, refers to the striving for an optimal balance between the self and others by attending to one's own needs and the needs of others simultaneously (Haan, Aerts & Cooper, 1985; Solomon, Watson, Battistich, Schaps & Delucchi, 1990).

Goal achievement in sports activities (e.g., the improvement of a physical skill) is fully related with participation in such activities. Learning this habit in the present study seems to be able to have positive impact on students' behavior (responsibility) in the classroom. Martinek & Hellison (1998) reported that "Goal-setting assumes that, by creating and achieving goals, an individual gains greater autonomy and control in dealing with day-to-day challenges and setbacks." (p. 47) Learning goal-settings means he children themselves make the decisions. According to Shea (1996), decisions are made on the basis of value judgments related to what should be or what one ought to do which affect the lives of people are invariably related to the field of ethics. Participation in decision making contributes to the development of the character, helping the individual apply moral reasoning in his/ her behavior and social context (Chelladurai & Trail, 2001).

Eventually, the establishment of a negative relation between fair play behaviors in physical education settings and irresponsible behaviors in the classroom confirms, once more in the present study, the significant role played by the participation in PE settings in the improvement of the children's character. Fair play is considered a social convention (e.g., respect rules and opponents) informally joint by the participants in the game. The social conventions approach with fairness consists in the fact that it includes the fundamental principle of impartial deliberation that every individual considers the needs of others as free and equal people (Rawls, 1971). Thus, children's activities in PE settings within the framework of social conventions seem to negatively affect the exhibition of irresponsible behaviors (e.g. others' undermining or abuse for his/ her own benefit, mooching others, etc) in the classroom.

This study attempted to look into the teachers' perception of the students' behaviors and the existence of any relation between them; however, there are some limitations and our findings need to be interpreted in light of these. The first limitation has to do with the fact that the students' behaviors have been estimated on the basis of their teachers' perception and they are not behaviors observed. Future research using actual behaviors is needed to test whether the present relationships are maintained within physical education classes and the classroom. A second limitation involves the small sample of PE teachers employed in order to establish the relation among behaviors in PE classes and in the classroom. In this case also, future research employing a bigger sample or further observation of actual behaviors on a big number of students in both subcontexts, namely PE classes and the classroom, would confirm the relationships finding of the present study.

In conclusion, the present study extends previous claims that PE activities constitute a significant context behavioral change, i.e. improvement of the children's social-moral reasoning. Findings suggest that fair play behaviors in PE activities can contribute to the shaping of irresponsibility behaviors (i.e., participation, goals) and avoidance of irresponsible behaviors in the classroom. Yet, we consider that the relationship between engagement in PE and development socially desired behavior is an issue that should be further investigated.

Finally, although children's behavior in the scholastic context, and thus in the greater social context, is an issue entailing much controversy among scholars, yet researchers' interest remains low. The conduct of future research is suggested in order to investigate even further the issue of the students' behaviors within the scholastic contexts, by observing certain behaviors, so as to establish a more thorough perception of the way students behave, as well as a more accurate estimation of the relationships among such behaviors in different scholastic subcontexts.

REFERENCES

1. Abowitz, K.K. (2007). Moral perception through aesthetics engaging imaginations in educational ethics. *Journal of Teaching Education*, 58, pp.287-298.
2. Bredemeier, B. & Shields, D. (2005). Sport and the development of character. In: D. Hackfort, J.L. Duda, & R. Lidor (Eds.). *Handbook of research in applied and exercise psychology: International perspectives* (pp. 275-290). Morgantown, WV: Fitness Information Technology.
3. Byrne, B.M. (1994). *Structural equation modeling with EQS and EQS/Windows*. Thousand Oaks, CA: Sage.
4. Brummet, J. (2003). United Christian States of America [column]. *Las Vegas Review – Journal*, A15.
5. Diggelidis, N., & Krommidas, H. (2008). Fair play in physical education classes: Differences between sex, class and relationship between fair play and lesson satisfaction, perceived motivational climate and goal orientations. *Inquires in Sport & Physical Education*, 6, pp.149-161.
6. Gilligan, C., & Attanucci, J. (1988). Two moral orientations: Gender differences and similarities. *Merrill-Palmer Quarterly*, 34, pp.223-237.
7. Freeman, W. (1992). *Physical education and sport in a changing society* (4th ed.). New York: Macmillan.
8. Haan, N., Aerts, E., & Cooper, B. (1985). *On moral grounds: The search for practical morality*. New York: New York University Press.
9. Hansen, D. (1993). From role to person: The moral layeredness of classroom teaching. *American Educational Research Journal*, 30, pp.651-674.
10. Hastie, P.A., & Sharpe, T. (1999). Effects of a sport education curriculum on the positive social behavior of at-risk rural adolescent boys. *Journal of Education for Students Placed at Risk*, 4, pp.417-430.
11. Hellison D. (1983). Teaching responsibility (and more). *Journal of Physical Education, Recreation, and Dance*, 54, pp.23-28.
12. Hellison D. (1985). *Goals and strategies for teaching physical education*. Champaign, IL: Human Kinetics.
13. Hellison D. (1995). *Teaching personal and social responsibility through physical activity*. Champaign, IL: Human Kinetics.
14. Hellison D. (2003). *Teaching responsibility through physical activity*. Champaign, IL: Human Kinetics.
15. Higgins, A., Power, C., & Kohlberg, L. (1984). The relationship of moral atmosphere to judgment of responsibility. In: W.M. Kurtines & J.L. Gewirtz (Eds.). *Morality, moral behavior, and moral development* (pp. 74-106). New York: Wiley & Sons.
16. Horenstein, J.M., & Voyron-Lemaire, M.C. (1997). *Les enseignants de la violence [Teachers victim of school violence]*. In: B. Charlot B, J. C. Emin JC editors. *Violences a l'école: Etat des saviors* (p.285-300). Paris: Armand Colin.

17. Horrocks, R.N. (1979). *Relationship of selected prosocial play behaviors in children to moral reasoning youth sports participation, perceptions of sportsmanship*. Unpublished doctoral dissertation, University at North Carolina at Greensboro.
18. Host, K., Brugman, D., Tavecchio, L., & Beem L. (1998). Students' perception of the moral atmosphere in secondary school and the relationship between moral competence and moral atmosphere. *Journal of Moral Education*, 27, pp.47-70.
19. Houghton, S., Wheldall, K., & Merrett, F. (1988). Classroom behaviour problems which secondary school teachers say they find most troublesome. *British Educational Research Journal*, 14, pp.297-312.
20. Hoyle, R.H., & Panter, A.T. (1995). Writing about structural equation models. In: R.H. Hoyle (Ed.) *Structural equation modeling: Concepts, issues, and applications* (pp. 158-176). Thousand Oaks, CA: Sage.
21. Husu, J. (2004). A multifocal approach to study pedagogical ethics in school settings. *Scandinavian Journal of Educational Research*, 48, pp.123-140.
22. Husu, J., & Tirri, K. (2001). Teachers' ethical choices in socio-moral settings. *Journal of Moral Education*, 30(4), pp.361-375.
23. Janoz, M., Thiebaud, M., Bouthiller, C., & Brunet L. (2004). Perception du climat scolaire et epuisement professionnel chez les enseignants [Perceived school climate and teacher burnout]. Paper presented at the XIII Congres AIPTL de psychologie du travail et des organizations, Bologna, Italy; August.
24. Kavussanu, M., & Roberts, G.C. (2001). Moral functioning in sport: An achievement goal perspective. *J Sport Exercise Psy*, 23, pp.37-54.
25. Kohlberg, L. (1969). Stage and sequence: The cognitive developmental approach to socialization. In: D. Goslin (Ed.). *Handbook of socialization theory and research* (p. 347-480). New York: Rand McNally.
26. Kohlberg, L. (1976). Moral stages and moralization. The cognitive – developmental approach. In: T. Lickona (Ed.). *Moral development and behavior: Theory, research and social issues* (pp. 31-53). New York: Holt, Rinehart and Winston.
27. Kulinna, P.H., Cothran, D.J., & Regualos, R. (2006). Teachers' reports of student misbehavior in physical education. *Res Q Exercise Sport*, 77(1), pp.32-40.
28. Kulinna, P.H., McCaugherty, N., Cothran, D., & Martin, J. (2006). What do urban/inner-city physical education teachers teach? A contextual analysis of one elementary/primary school district. *Physical Education and Sport Pedagogy*, 11(1), pp.45-68.
29. Meyer, H.A., Astor, R.A., & Behre, W.J. (2002). Teachers' reasoning about school violence: The role of gender and location. *Contemporary Educational Psychology*, 27, pp.499-528.
30. Ministry Of National Education & Religious Affairs: Pedagogical Institute. (2006). *Physical education: Teacher's book*. Athens, Greece.
31. Nikopoulou, M., Tsitskaris, G., Doganis, G., & Kioumourtoglou, E. (2006). Development of a Student Behavior Rating Scale according to Hellisons' model. *Inquiries in Sport & Physical Education*, 4(1), pp.19-28.
32. Nunnally, J.C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
33. Ommundsen, Y., Roberts, G.C., Lemyre, P.N., & Treasure, D. (2003). Perceived motivational climate in male youth soccer: Relations to social-moral functioning, sportpersonship and team norm perceptions. *Psychology of Sport & Exercise*, 4, pp.397-413.
34. Orlick, T. (1990). *Winning through co-operation: Competitive insanity, cooperative alternatives*. Washington, DC: Acropolis Press.

35. Proios, M. & Doganis, G. (2006). Influence of developmental characteristics age and education on moral judgment in team sport. *Percept Motor Skill*, 102, pp.247-253.
36. Proios, M., Doganis, G., & Proios, M. (2006). Form of the athletic exercise, school environment, and sex in development of high school students' sportsmanship. *Percept Motor Skill*, 103, pp.99-106.
37. Proios, M., Athanailidis, I., Arvanitidou, V. & Giannitsopoulou, E. (2011). *A study of the Greek school teachers' moral judgment structures. Teachers and Teaching: theory and practice*, 17, pp.187-200.
38. Proios, M. (2011). Relationship between Perceived Students' Conduct in Physical Education Settings and "Unfair" Play. *International Journal of Applied Sports Sciences*, 23(2), pp.421-440.
39. Rawls, J. (1971). *A theory of justice*. Cambridge, Mass: Harvard University Press.
40. Rawls, J. (2001). *Justice as fairness: A restatement*. Cambridge, MA: Harvard University Press.
41. Rest, J. (1979). *Development in judging moral issues*. Minneapolis, MN: Minnesota Press.
42. Rest, J., Deemer, O., Barnett, K., Spickelmeir, J., & Volker, J. (1986). Life experiences and developmental pathways. In: J. Rest (Ed.). *Moral development, advances in research and theory* (pp. 28-58). New York: Praeger.
43. Rest, J., Narvaez, D., Bebeau, M.J., & Thoma, S.J. (1999). *Postconventional moral thinking: A Neo-Kohlberian approach*. Mahwah, NJ: Erlbaum.
44. Salvano-Pardieu, V., Fontaine, R., Bouazzau, B., & Florer, F. (2009). Teachers' sanction in the classroom: Effect of age, experience, gender and academic context. *Teaching and Teacher Education*, 25, pp.1-11.
45. Shea, J.E. (1996). *Ethical decision in sport interscholastic, intercollegiate, Olympic and professional*. Illinois: Charles C Thomas.
46. Sheldon, J.P., & Aimer, C.M. (2001). The role aggression plays in successful and unsuccessful ice hockey behaviours. *Res Q Exercise Sport*, 72, pp.304-309.
47. Shields, D., & Bredemeier, B. (1995). *Character development and physical activity*. Champaign IL: Human Kinetics.
48. Shields, D., & Bredemeier, B. (2001). Moral development and behavior in sport. In: R.N. Singer, H.A. Hausenblas, & C.M. Janelle (Eds.). *Handbook of sport psychology* (2nd ed.) (pp. 585-603). New York: Wiley & Sons.
49. Shields, D., Lavoil, N.M., Bredemeier, B.L., & Power, F.C. (2007). Predictors of poor sportsmanship in youth sports: Personal attitudes and social influences. *Journal of Sport & Exercise Psychology*, 29, pp.747-762.
50. Smith, P.K., Pepler, D., & Rigby, K. (2004). *Bullying in schools: How successful can interventions be?* Cambridge: Cambridge University Press.
51. Solomon, D., Watson, M., Battistich, V., Schaps, E., & Delucchi, K. (1990). *Creating a caring community: A school-based program to promote children's sociomoral development*. Paper presented at the International Symposium on Research on Effective and Responsible Teaching, Fribourg, Switzerland.
52. Steffgen, G., & Ewen, N. (2004). Gewalt an luxemburger schulen: stand der forschung [Violence in Luxemburg schools: What we know from research]. Luxemburg: Imprimerie St-Paul.
53. Telama, R. (1999). Moral development. In: Y.V. Auweele, F. Bakker, S. Biddle, M. Durand, & R. Seiler (Eds.). *Psychology for physical educators* (pp. 321- 342). Champaign, IL: Human Kinetics.
54. Tisak, M.S., Nucci, L.P., & Jankowski, A.M. (1996). Preschool children's social interactions involving moral and prudential transgressions: An observational study. *Early Education and Development*, 7(2), pp.137-148.

55. Vidoni, C., & Ward, P. (2009). Effects of fair play instruction on student social skills during a middle school sport education unit. *Physical Education and Sport Pedagogy*, 14(3), pp.285-310.
56. Walker, L.J. (2006). Gender and morality. In: M. Killen, & J. Smetana (Eds.). *Handbook of moral education* (pp. 93-118). Mahwah, NJ: Erlbaum.
57. Weiss, M.R., & Smith, A.L. (2002). Moral development in sport and physical activity: Theory, research, and intervention. In: T.S. Horn (Ed.). *Advances in sport psychology* (2nd ed., pp. 243-280). Champaign, IL: Human Kinetics.
58. Wright, P.M., & Li, W. (2009). Exploring the relevance of positive youth development in urban physical education. *Physical Education and Sport Pedagogy*, 14(3), pp.241-251.