


The relationship between out-of-school sport participation and positive youth development


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ABSTRACT

Carreres-Ponsoda F, Escartí A, Cortell-Tormo JM, Fuster-Lloret V, Andreu-Cabrera E. The relationship between out-of-school sport participation and positive youth development. *J. Hum. Sport Exerc.* Vol. 7, No. 3, pp. 671-683, 2012. Despite growing evidence that participation in out-of-school activities and especially physical activity and sport programs facilitates positive development, little developmental research has been conducted on out-of-school sports programs compared with no participation in these activities or participation in other activities. Our study examined the participation of youth in out of school sport activities compared with participation in other out-of-school activities and the influences in self-efficacy, prosocial behaviour and personal and social responsibility. Results showed that youth participating in out-of-school sport programs have significant higher levels in self-efficacy, prosocial behavior and personal and social responsibility respect to those adolescents participating in other activities or among those who do not practice in any kind activity. **Key words:** OUT OF SCHOOL SPORT ACTIVITIES, POSITIVE YOUTH DEVELOPMENT, SELF-EFFICACY, PROSOCIAL BEHAVIOR AND PERSONAL AND SOCIAL RESPONSIBILITY.

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INTRODUCTION

It is argued that individual diversity among youth is a result of changing complex relationships an individual maintains with her/his context (Bronfenbrenner, 1977, 2001; Bronfenbrenner & Morris, 1998; Lerner et al., 2001; Lerner, 2002). The contextual aspect of developmental systems theory is based on Bronfenbrenner's (1977, 2001) ecological systems approach and has led to conceptualizations of Positive Youth Development (PYD). Accordingly, PYD is fundamentally based on a belief in the inherent human capacity for systematic change throughout development and positive improvements in human lived experience are thought to be possible (King et al., 2005; Lerner et al., 2005; Lerner et al., 2005; Hoyt et al., 2012). Zarrett et al. (2009) suggested that positive youth development includes positive functioning in the present, the reduced risk for the development of problem behaviors, and an increased likelihood for healthy adjustment in the future. This holistic view links the importance of prevention and promotion, both of which are necessary components for youth to become functioning and contributing adults to society. In order to fully understand youth development, it is essential to examine the contexts in which youth are developing and the context effects that they experience (Bronfenbrenner, 2001; Lerner, 2002). Specific features of the environment can either foster or interfere with positive development (Bronfenbrenner & Morris, 1998). Researchers and practitioners argue that high quality, structured out of school programs are environments that have the potential to support and promote youth's development.

The skills and personal strengths that young people should learn to take responsibility for his life, his own welfare and the welfare of others have been a major topic of discussion in the literature of PYD. There are several specific theories of under the umbrella of PYD, including the interpersonal domains of learning experiences (Larson et al., 2006), the '5Cs' measurement model (Lerner et al., 2005), and the developmental assets framework (Benson & Scales, 2009). Overall, these approaches have revealed numerous characteristics associated with PYD. Furthermore, a general principle shared by these approaches is that the more attributes or positive experiences youth acquire (whether the 5Cs, domains of learning experiences, or developmental assets), the more likely they are to experience positive development. Prosocial behavior, defined as a collaborative behavior and voluntary support to others may have an inhibitory effect on antisocial behavior, becoming a key factor for the positive development of adolescents (Eccles et al., 2003; Catalano et al., 2004; Benson & Scales, 2009). Another highlighted personal resource to promote PYD is the level of individual self-efficacy (Bandura, 1990, 2001). The social cognitive theory describes that perceived self-efficacy affects human functioning and the adjustment and adaptation of subject to its environment. Beliefs about personal efficacy contribute to the achievement of human empowerment and increased motivation, which positively influences what people think, feel and do. Finally, the model of personal and social responsibility Hellison (1985, 2003) highlights the construct of responsibility as a key resource in the area of positive development. The personal commitment to take their own actions, act in consideration and respect for the value of people are key skills for the PYD.

There is sufficient evidence to state that the variables described (prosocial behavior, self-efficacy and personal and social responsibility) are a set of important socio-emotional skills that can be promoted and can be learned, which should be encouraged in the educational environment and especially from any out-of-school sport program (Catalano et al., 2004; Escartí, Pascual & Gutiérrez, 2005; Benson & Scales, 2009; Escartí et al., 2010).

Associations between positive youth outcomes and out-of-school sport participation.

Traditionally, the primary objectives of physical activity programming have been to optimize the motor and physiological development of youngsters and extra-curricular sport programs have not been always associated with positive developmental outcomes (Petitpas et al., 2004; Petitpas et al., 2005). For example, in the US, participation in high school extra-curricular sports has been associated with reports of high levels of stress (Larson et al., 2006), as well as increased alcohol use (Eccles & Templeton, 2002). In addition, extra-curricular sport involvement has been associated with negative experiences for youth including negative peer interaction and inappropriate adult conduct, such as pressuring youth to engage in morally questionable behaviours (Hansen et al., 2003). However, there is evidence that if the situational context of the sport activity is organized, structured and supervised lead to more positive outcomes (Whitt-Glover et al., 2009; Zarrett et al., 2009). Out-of-school sport activities have been associated with increased educational aspirations and attainment, positive psychological outcomes, reduced problem behaviours and a high contribution to the healthy development of young people (Li et al., 2008; Gutiérrez et al., 2011). Additional research indicates that adolescents who reported engaging in regular physical activity tended to have better interpersonal relationships with their parents, reported less frequent drug use and depression (Field et al., 2001), and experienced fewer feelings of sadness (Brosnahan et al., 2004). Researchers and practitioners have recognized physical activity and sport as a potentially powerful vehicle for optimizing the physical well-being as well as psychological development of youth (Petitpas et al., 2005)

Documenting the associations between youth outcomes and sport activity participation is challenging due to the diversity of out-of-school sport programs and youth's experiences in those programs. The amount of time youth spend in out-of-school programs and the quality of these programs can vary dramatically within and across activities. Further research is needed to examine the processes through which sport organized programs influence positive experiences. Subsequently, the current study was designed to examine the influences of participation in physical activity and sport programs in self-efficacy, pro-social behaviour and personal and social responsibility compared with no participation in these activities or participation in other kind of activities.

MATERIAL AND METHODS

Participants

A sample of 363 students (169 girls and 194 boys), aging from 12 to 19 (*Mean* = 14.41, *Standard Deviation* = 1.65 years), from different urban public schools of the city of Alicante (Spain) participated in the study. The socio-economic level of the families of both schools is working-middle class. For the current study questions, we divided the sample in four groups of activities: Sports-Only Group (*M* = 14.03, *SD* = 1.50 years) include 113 adolescents who practice sports as the unique out-of-school activity. Sports + Activity Group (*M* = 14.04, *SD* = 1.53 years) include 131 adolescents who practice sports and at least one other organized out-of-school activity. Other Activity Group (*M* = 14.85, *SD* = 1.19 years) include 47 adolescents who practice at least one out-of-school activity, but this activity does not include sports. Low-Engaged Group (*M* = 14.63, *SD* = 1.77 years) include 48 adolescents who does not participate in any out-of-school activity.

Instruments

Prosocial Behaviour (Caprara & Pastorelli, 1993; Del Barrio, Aluja & García, 2004). This is a 15-item scale that assesses the performance of support, trust and sympathy of adolescents through three possible answers (often, sometimes, never). The coefficient alphas detected is 0.74.

The Multidimensional Scales of Perceived Self-Efficacy (MSPSE; Bandura, 1990, 2001). To measure self-efficacy we used two Children's Self-efficacy Scales related to the subject of our research: Enlisting Social Resources (4 items; i.e., *How well can you get teachers to help me when I get stuck on schoolwork*) and Self-Regulatory Efficacy (5 items; i.e., *How well can you resist peer pressure to do things in school that can get me into trouble*). The heading of the scales began with the words "I am able to..." and adolescents had to answer in a 5-point Likert-type scale, ranging from *not at all confident* (1) through *absolutely certain* (5). These scales have been used extensively in research, and their reliability and validity are well established. All have previously been shown to have alpha reliabilities ranging from 0.79 to 0.85 (Anderson, Sabatelli & Trachtenberg, 2007; Miller, Coombs & Fuqua, 1999).

Personal and Social Responsibility. To measure personal and social responsibility we used the Spanish translation (Escartí et al., 2011) of the Personal and Social Responsibility Questionnaire (PSRQ) from Li et al. (2008). This questionnaire consists of 14 items, divided into two factors: Social Responsibility (seven items, $\alpha=0.79$) and Personal Responsibility (seven items; $\alpha=0.80$) Questionnaire (Li et al., 2008). Sample items include "I try hard" and "I set goals for myself". Only one item in the PSRQ was negatively worded. Adolescents must respond in a 6-point Likert-type scale, ranging from *strongly disagree* (1) through *strongly agree* (6).

Procedure

The Headmasters of the different schools were informed about the project and their permission to conduct the study was requested. The parents were asked for written authorization for their children to take part in the research. The primary investigator informed the students about the anonymity of their responses and asked them to give sincere responses. The questionnaires took approximately 25 minutes to complete.

Statistical Analysis

Descriptive statistics are presented as means \pm SDs. A one-way analysis of variance (ANOVA) with repeated measures was used to assess differences between the psychological variables in the four groups (Low-Engaged, Other Activity, Sports-Only and Sports + Activity). This section also took into account the homogeneity of variance. For data in which the F ratio was significant post hoc comparisons were completed by the least significant difference of DMS. The significance level was set at $p<0.05$. For the analysis we used SPSS 17.0 (SPSS Inc. Chicago, IL, USA).

RESULTS

Descriptive statistics are reported in Table 1. It shows the sample size, means, standard deviations, the confidence intervals and interrelationships among the variables between each group used in this study.

Table 1. Sample size, mean, standard deviation and the confidence interval for the mean at 95% for each group in the Prosocial Behaviour, Personal and Social Responsibility and Self-Efficacy measurements.

| | Groups | N | Mean | Standard Deviation | Confidence interval for the mean at 95% | |
|---|-----------------|-----|-------|--------------------|---|-------------|
| | | | | | Lower limit | Upper limit |
| Prosocial Behaviour | Low-Engaged | 48 | 12.46 | 2.705 | 11.67 | 13.24 |
| | Other Activity | 47 | 13.04 | 2.750 | 12.24 | 13.85 |
| | Sports-Only | 113 | 13.27 | 2.354 | 12.84 | 13.71 |
| | Sports+Activity | 131 | 13.77 | 2.595 | 13.32 | 14.22 |
| Personal Responsibility | Low-Engaged | 48 | 32.06 | 6.599 | 30.15 | 33.98 |
| | Other Activity | 47 | 32.32 | 5.993 | 30.56 | 34.08 |
| | Sports-Only | 113 | 34.44 | 3.894 | 33.72 | 35.17 |
| | Sports+Activity | 131 | 34.74 | 4.163 | 34.02 | 35.46 |
| Social Responsibility | Low-Engaged | 48 | 32.83 | 7.421 | 30.68 | 34.99 |
| | Other Activity | 47 | 32.9 | 6.925 | 30.46 | 34.52 |
| | Sports-Only | 113 | 35.72 | 4.290 | 34.92 | 36.52 |
| | Sports+Activity | 131 | 34.73 | 5.411 | 33.79 | 35.66 |
| Self-efficacy for enlisting social resources | Low-Engaged | 48 | 14.94 | 3.076 | 0.444 | 14.04 |
| | Other Activity | 47 | 15.70 | 2.225 | 0.325 | 15.5 |
| | Sports-Only | 113 | 16.04 | 2.623 | 0.247 | 15.56 |
| | Sports+Activity | 131 | 16.06 | 2.916 | 0.255 | 15.56 |
| Self-Regulatory Efficacy | Low-Engaged | 48 | 20.75 | 5.196 | 19.24 | 22.26 |
| | Other Activity | 47 | 19.83 | 4.512 | 18.50 | 21.15 |
| | Sports-Only | 113 | 21.64 | 4.652 | 20.77 | 22.50 |
| | Sports+Activity | 131 | 21.96 | 4.445 | 21.19 | 22.73 |

Prosocial Behaviour

The Sports + Activity Group had significantly higher levels of prosocial behaviour than Low-Engaged Group [$F(1,313) = 0.431$ $p = 0.003$]. Sports-Only Group had slightly lower levels of Prosocial Behaviour than Sports + Activity Group [$F(0,479) = 0.328$ $p = 0.131$]. Finally, Other Activity Group did not showed any significantly differences (see Figure 1).

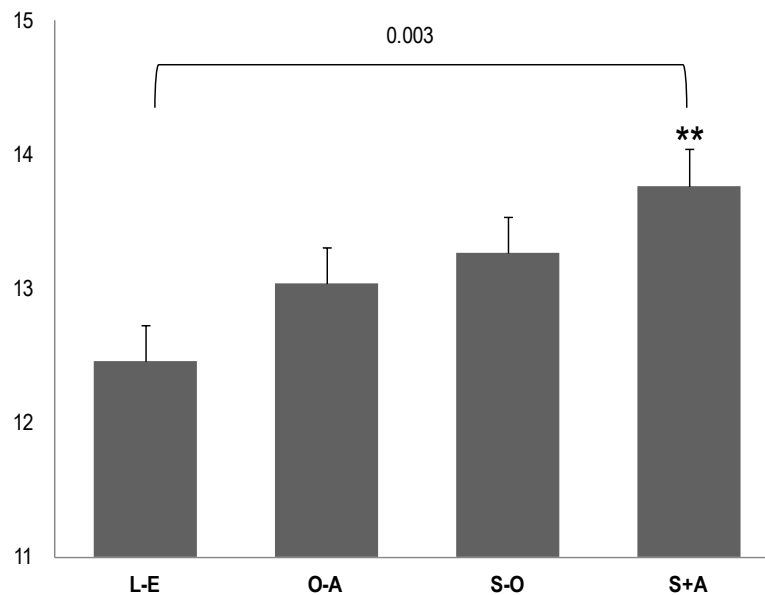


Figure 1. Total results of Prosocial Behaviour levels of each group. Low-Engaged (L-E), Other Activity (O-A), Sports-Only (S-O) and Sports + Activity (S+A). ** $p < 0.05$.

Personal and Social Responsibility

First of all, we describe the results of the first factor of the questionnaire that measures *personal responsibility*. In this case, the Sports + Activity and the Sports-Only Groups had similarly high levels of *personal responsibility* [$F(0.298) = 0.614$, $p = 0.628$]. Low-Engaged Group had statistically significant lower levels of *personal responsibility* than the Sports + Activity Group [$F(2.678) = 0.806$, $p = 0.001$] and the Sports-Only Group [$F(2.380) = 0.823$, $p = 0.004$]. Other Activity Group also showed statistically significant lower levels compared with Sports + Activity Group [$F(2.421) = 0.813$, $p = 0.003$] and Sports-Only Group [$F(2.123) = 0.829$, $p = 0.011$]. Low-Engaged and Other Activity Groups had similarly low-levels of *personal responsibility* [$F(0.257) = 0.981$, $p = 0.794$] (see Figure 2).

The factor related to social responsibility showed similar results than personal responsibility items. The Sports + Activity had statistically significant higher levels of social responsibility than the Other Activity Group [$F(2.236) = 0.959$, $p = 0.020$] and the Low-Engaged Group [$F(1.892) = 0.952$, $p = 0.048$]. In the same line, the Sports-Only Groups had statistically significant higher levels of social responsibility than the Other Activity Group [$F(3.227) = 0.979$, $p = 0.001$] and the Low-Engaged Group [$F(2.883) = 0.972$, $p = 0.003$]. No differences were found between the Low-Engaged and the Other Activity Group (see Figure 3).

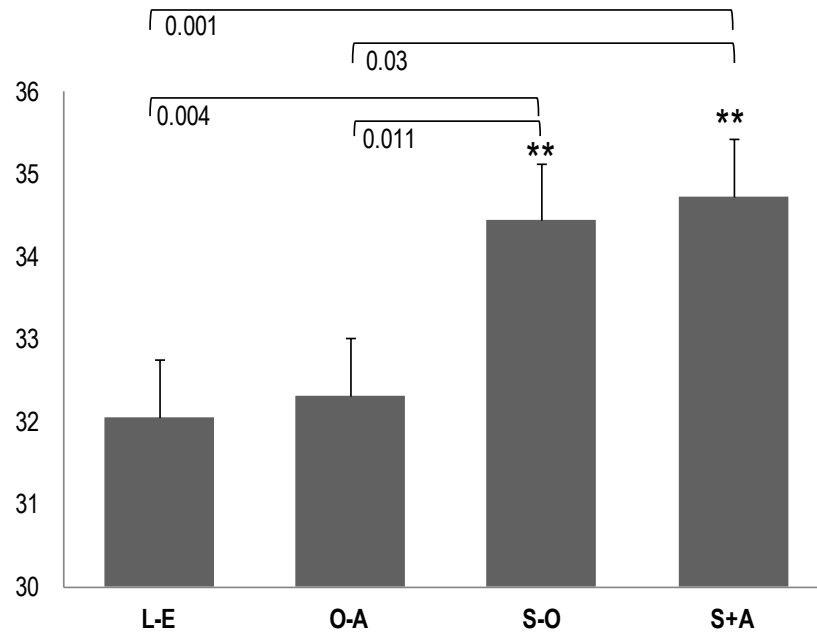


Figure 2. Total results of the Personal Responsibility levels of each group. Low-Engaged (L-E), Other Activity (O-A), Sports-Only (S-O) and Sports + Activity (S+A). ** $p < 0.05$.

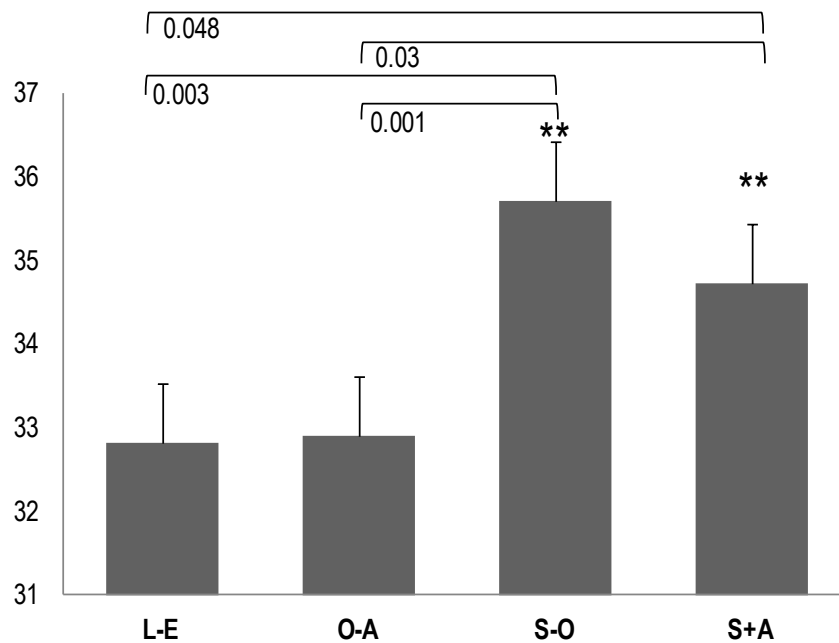


Figure 3. Total results of the Social Responsibility levels of each group. Low-Engaged (L-E), Other Activity (O-A), Sports-Only (S-O) and Sports + Activity (S+A). ** $p < 0.05$.

Perceived Self-Efficacy

The first factor we measured is Self-efficacy for enlisting social resources. The Sports + Activity and the Sports-Only Groups had similarly high levels of Perceived Self-Efficacy [$F(0.017) = 0.354, p = 0.962$]. Sports + Activity Group had statistically significant higher levels of Self-efficacy for enlisting social resources than the Low-Engaged Group [$F(1.124) = 0.465, p = 0.016$]. The Sports-Only Group showed statistically significant differences compared with the Low-Engaged Group [$F(1.107) = 0.475, p = 0.020$]. Low-Engaged and Other Activity Groups had similarly low-levels of Self-efficacy for enlisting social resources [$F(0.765) = 0.566, p = 0.178$] (see Figure 4).

The second factor of the scale is Self Regulatory Efficacy. Sports + Activity Group had statistically significant higher levels of Self Regulatory Efficacy than the Other Activity Group [$F(2.132) = 0.788, p = 0.007$]. The Sports-Only Group also showed statistically significant differences compared with the Other Activity Group [$F(1.807) = 0.805, p = 0.025$] (see Figure 5).

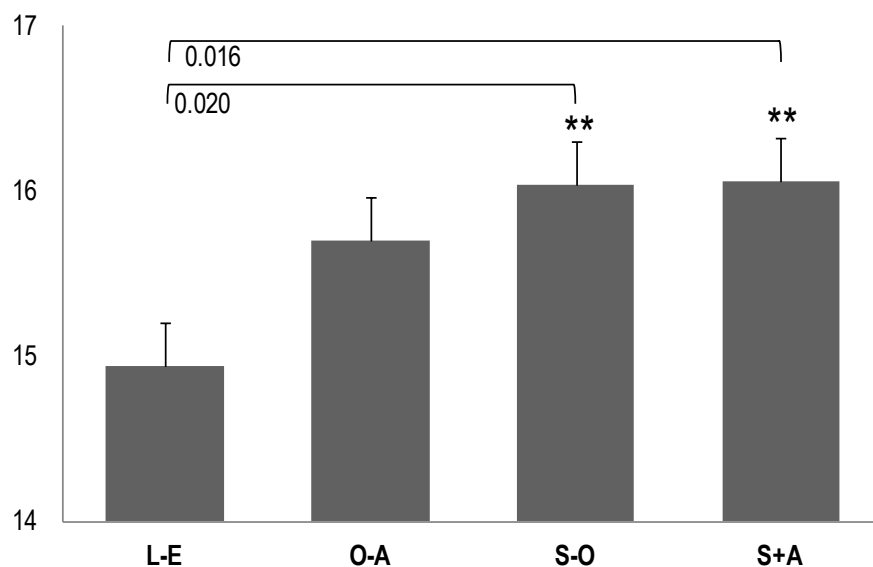


Figure 4. Total results of Self-efficacy for enlisting social resources levels of each group. Low-Engaged (L-E), Other Activity (O-A), Sports-Only (S-O) and Sports + Activity (S+A). ** $p < 0.05$.

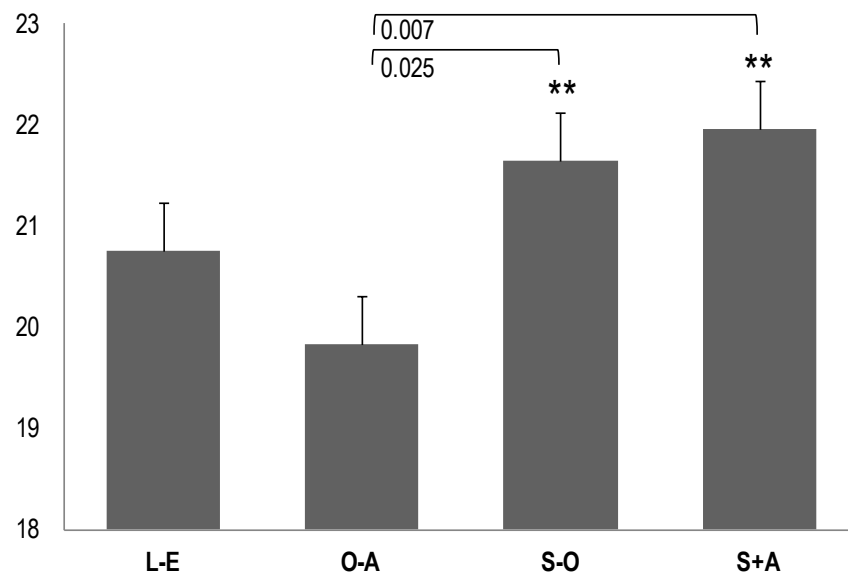


Figure 5. Total results of Self-Regulatory Efficacy levels of each group. Low-Engaged (L-E), Other Activity (O-A), Sports-Only (S-O) and Sports + Activity (S+A). ** $p < 0.05$.

DISCUSSION

The current investigation evaluated how youth spend time across multiple organized and unstructured activities and examined the effects of the adolescents' out-of-school activity participation in relation with various psychosocial skills. Initially, studies considering the developmental outcomes related to organized activity involvement compared participants in one or more activities to nonparticipants, thus treating involvement as an "all-or-nothing," dichotomous variable (Eccles & Templeton, 2002; Fredricks & Eccles, 2006; Zarrett et al. 2009). This approach fails to capture important differences between individuals in the intensity, duration, and nature of their involvement. Overall, results from this study demonstrated that the Sports + Activity Group had the highest levels in all the psychosocial skills and the Low-Engaged Group showed the lower effects on all indicators evaluated. The results of this study were consistent with previous research in urban school settings (Whitt-Glover et al., 2009). Our research yields similar results than Zarrett et al. (2009) in terms of confirming that the pathway of sports and at least one additional organized activity (Sport + Activity) was linked to the highest levels of Positive Youth Development.

In terms of Prosocial Behaviour, higher levels of prosocial behaviors in adolescence were directly associated with participation in sports and other organized activities. The present findings are consistent with prior research on the relationships between prosocial behaviors and extracurricular activities, and add to the accumulating evidence regarding the importance of programs designed specifically to enhance prosocial competencies in sport programs (Lerner et al., 2005; Carlo et al., 2007). Sport is a context in which prosocial behaviors can be learned. Nevertheless, there is no guarantee that the demonstration of prosocial behavior will increase with the introduction of sport alone (Jones et al., 2009).

Our results related to out-of-school activities and self-efficacy are similar to several studies that have shown that sport participants report higher levels of self-efficacy than non-sport participants (Morris, Sallybanks, Willis, Makkai, 2003; Pedersen & Seidman, 2004; Perkins & Noam, 2007). Furthermore, such research needs to incorporate the study of mediating factors that may help us to understand the differences between out of school activities and self-efficacy.

The development of personal and social responsibility within individuals should be a more concerted focus for developmental scholars and youth practitioners (Wray-Lake & Syvertsen, 2011). Few studies have been conducted to measure the relationship between personal and social responsibility and out of school activities. Our study was designed to address these limitations and we found that participating in sport and at least one additional organized activity was linked to the highest levels of personal and social responsibility. As important as its health benefits are for children, sport offers more for their development than just a form of exercise to reduce the risk of developing lifestyle diseases. For many children and young people, sport forms a significant out-of-school activity for their lives, shaping their development into members of society and the sorts of people they become. The results in personal and social responsibility of youth who were not involved in any out-of-school activities did not differ from those who were involved in other activities different from sports.

CONCLUSIONS

In our study we have shown that sports participation alone, or participation in any out-of-school activity, alone, does not tell the whole story of PYD. The pathway of sports and at least one additional organized activity (Sport + Activity) was linked to the highest levels of Positive Youth Development. There is nothing about sport itself that is magical or brings a spontaneous gain of life skills. Being on the field or the court does not contribute to positive youth development. It is the experience of sport that may facilitate this result. Most studies of extracurricular or leisure activities have focused on the time youths spend in various activities in relation to behavioral outcomes in a cross-sectional and correlational design. However, a more holistic perspective is needed to focus on the potential of physical activity to impact multiple domains of development. Only few studies have examined variations across activity contexts or have used indicators beyond participation to predict behavioral outcomes. We need to dig deeper into the impact of combinations of out-of-school activities on PYD. Finally, to move toward a causal model of activities and adolescent functioning, future research must consider the mechanisms through which activities exert their influence on development.

REFERENCES

1. ANDERSON SA, SABATELLI RM, TRACHTENBERG J. Community police and youth programs as a context for positive youth development. *Police Quarterly*. 2007; 10:23-40. doi:[10.1177/1098611106291372](https://doi.org/10.1177/1098611106291372) [[Back to text](#)]
2. BANDURA A. *Multidimensional scales of perceived academic efficacy*. Stanford, CA: Stanford University; 1990. [[Back to text](#)]
3. BANDURA A. Social cognitive theory: An agentic perspective. *Annual Review of Psychology*. 2001; 52:1-26. doi:[10.1146/annurev.psych.52.1.1](https://doi.org/10.1146/annurev.psych.52.1.1) [[Back to text](#)]
4. BENSON PL, SCALES PC. Positive youth development and the prevention of youth aggression and violence. *International Journal of Developmental Service*. 2009; 3:218-234. [[Back to text](#)]

5. BRONFENBRENNER U, MORRIS PA. The ecology of developmental processes. In: W. Damon & R. Lerner (Eds.). *Handbook of child psychology: Volume 1: Theoretical models of human development* (5th Ed.). Hoboken: John Wiley & Sons; 1998. Pp. 993-1028. [[Back to text](#)]
6. BRONFENBRENNER U. The bioecological theory of human development. In: N. J. Smelser & P. B. Baltes (Eds.). *International encyclopedia of the social and behavioural sciences*. New York: Elsevier; 2001. Pp. 6963-6970. [[Back to text](#)]
7. BRONFENBRENNER U. Toward an experimental ecology of human development. *American Psychologist*. 1977; 32:513-531. doi:[10.1037/0003-066X.32.7.513](#) [[Back to text](#)]
8. BROSNAHAN J, STEFFEN LM, LYTLE L, PATTERSON J, BOOSTROM A. The relation between physical activity and mental health among hispanic and non-hispanic white adolescents. *Archives of Pediatrics and Adolescent Medicine*. 2004; 158:818-823. doi:[10.1001/archpedi.158.8.818](#) [[Back to text](#)]
9. CAPRARA GV, PASTORELLI C. Early emotional instability, prosocial behaviour and aggression: Some methodological aspects. *European Journal of Personality*. 1993; 7:19-36. doi:[10.1002/per.2410070103](#) [[Back to text](#)]
10. CARLO G, CROCKETT LJ, RANDALL BA, ROESCH SC. A latent growth curve analysis of prosocial behaviors among rural adolescents. *Journal of Research on Adolescence*. 2007; 17:301-324. doi:[10.1111/j.1532-7795.2007.00524.x](#) [[Back to text](#)]
11. CATALANO RF, BERGLUND ML, RYAN JAM, LONCZAK HS, HAWKINS D. Positive youth development in the United States: Research Findings on evaluations of positive youth development programs. *The annals of the American academy of political and social science*. 2004; 591:98-124. [[Full Text](#)] [[Back to text](#)]
12. DEL BARRIO V, ALUJA A, GARCÍA LF. Bryant's empathy index for children and adolescents: Psychometric properties in the Spanish language. *Psychological Reports*. 2004; 95:257-262. doi:[10.2466/pr0.95.1.257-262](#) [[Back to text](#)]
13. ECCLES JS, BARBER BL, STONE M, HUNT J. Extracurricular activities and adolescent development. *Journal of Social Issues*. 2003; 59:865-889. doi:[10.1046/j.0022-4537.2003.00095.x](#) [[Back to text](#)]
14. ECCLES JS, TEMPLETON J. Extracurricular and other after-school activities for youth. *Review of Research in Education*. 2002; 26:113-180. doi:[10.3102/0091732X026001113](#) [[Back to text](#)]
15. ESCARTÍ A, GUTIÉRREZ M, PASCUAL C. Propiedades psicométricas de la versión española del Cuestionario de Responsabilidad Personal y Social en contextos de educación física. *Revista de Psicología del Deporte*. 2011; 20(1):119-130. [[Full Text](#)] [[Back to text](#)]
16. ESCARTÍ A, PASCUAL C, GUTIÉRREZ, M. *Responsabilidad personal y social a través de la educación física y el deporte*. Barcelona: Graó; 2005. [[Back to text](#)]
17. FIELD T, DIEGO M, SANDERS CE. Exercise is positively related to adolescents relationship and academics. *Adolescence*. 2001; 36:105-110. [[Abstract](#)] [[Back to text](#)]
18. FREDRICKS JA, ECCLES JS. Extracurricular involvement and adolescent adjustment: Impact of duration, number of activities, and breadth of participation. *Applied Developmental Science*. 2006; 10:132-146. doi:[10.1207/s1532480xads1003_3](#) [[Back to text](#)]
19. GUTIÉRREZ M, ESCARTÍ A, PASCUAL C. Relaciones entre empatía, conducta prosocial, agresividad, autoeficacia y responsabilidad personal y social de los escolares. *Psicothema*. 2011; 23(1):13-19. [[Full Text](#)] [[Back to text](#)]
20. HANSEN DM, LARSON RW, DWORKIN JB. What adolescents learn in organized youth activities: A survey of self-reported developmental experiences. *Journal of Research on Adolescence*. 2003; 13:25-55. doi:[10.1111/1532-7795.1301006](#) [[Back to text](#)]

21. HELLISON D. *Goals and strategies for physical education*. Champaign, IL: Human Kinetics; 1985. [\[Back to text\]](#)
22. HELLISON D. *Teaching responsibility through physical activity* (2nd Ed.). Champaign, IL: Human Kinetics; 2003. [\[Back to text\]](#)
23. HOYT LT, CHASE-LANSDALE PL, MCDADE TW, ADAM EK. Positive youth, healthy adults: does positive well-being in adolescence predict better perceived health and fewer risky health behaviors in young adulthood? *Journal of Adolescent Health*. 2012; 50(1):66-73. [\[Abstract\]](#) [\[Back to text\]](#)
24. JONES MI, DUNN JGH, HOLT NL, SULLIVAN PJ, BLOOM GA. Exploring the '5Cs' of positive youth development in sport. *Journal of Sport Behavior*. 2009; 34(3):250-267. [\[Back to text\]](#)
25. KING PE, SCHULTZ W, MUELLER RA, DOWLING EM, OSBORN P, DICKERSON E, et al. Positive youth development: Is there a nomological network of concepts used in the adolescent development literature? *Applied Developmental Science*. 2005; 9:216-228. doi:10.1207/s1532480xads0904_4 [\[Back to text\]](#)
26. LARSON RW, HANSEN DM, MONETA G. Differing profiles of developmental experiences across types of organized youth activities. *Developmental Psychology*. 2006; 42(5):849-63. [\[Back to text\]](#)
27. LERNER RM, ALMERIGI JB, THEOKAS C, LERNER JV. Positive youth development: A view of the issues. *Journal of Early Adolescence*. 2005; 25:10-16. doi:10.1037/0012-1649.42.5.849 [\[Back to text\]](#)
28. LERNER RM, LERNER JV, ALMERIGI JB, THEOKAS C, PHELPS E, GESTSDOTTIR S, et al. Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence*. 2005; 25:17-71. doi:10.1177/0272431604272461 [\[Back to text\]](#)
29. LERNER RM, LERNER JV, DE STEFANIS I, APFEL A. Understanding developmental systems in adolescence: Implications for methodological strategies, data analytic approaches, and training. *Journal of Adolescent Research*. 2001; 16:9-27. doi:10.1177/0743558401161003 [\[Back to text\]](#)
30. LERNER RM. *Adolescence: Development, diversity, context, and application*. Upper Saddle River, NJ: Prentice Hall; 2002. [\[Back to text\]](#)
31. LI W, WRIGHT P, RUKAVINA PB, PICKERING M. Measuring students' perceptions of personal and social responsibility and the relationship to intrinsic motivation in urban physical education. *Journal of Teaching in Physical Education*. 2008; 27(2):167-178. [\[Back to text\]](#)
32. MILLER JW, COOMBS WT, FUQUA DR. An examination of psychometric properties of Bandura's Multidimensional Scales of Perceived Self-Efficacy. *Measurement and Evaluation in Counseling and Development*. 1999; 31:186-196. [\[Back to text\]](#)
33. MORRIS L, SALLYBANKS J, WILLIS K, MAKKAI T. Sport, physical activity and antisocial behaviour in youth. *Trends & Issues in Crime and Criminal Justice*. 2003; 249:1-6. [\[Back to text\]](#)
34. PERKINS DF, NOAM G. Characteristics of sports-based youth development programs. *New Directions for Youth Development*. 2007; 115:75-84. [\[Abstract\]](#) [\[Back to text\]](#)
35. PETITPAS AJ, CORNELIUS AE, VAN RAALTE JL, JONES T. A framework for planning youth sport programs that foster psychosocial development. *The Sport Psychologist*. 2005; 19:63-80. [\[Back to text\]](#)
36. PETITPAS AJ, VAN RAALTE JL, CORNELIUS AE, PRESBREY J. A life skills development program for high school student-athletes. *The Journal of Primary Prevention*. 2004; 24:325-334. [\[Abstract\]](#) [\[Back to text\]](#)
37. WHITT-GLOVER MC, TAYLOR WC, FLOYD MF, YORE MM, YANCY AK, MATTHEWS CE. Disparities in physical activity and sedentary behaviors among US children and adolescents:

- prevalence, correlates, and intervention implications. *Journal of Public Health Policy*. 2009; 30:S309–S334. doi:[10.1057/jphp.2008.46](https://doi.org/10.1057/jphp.2008.46) [[Back to text](#)]
38. WRAY-LAKE L, SYVERTSEN AK. The developmental roots of social responsibility in childhood and adolescence. *New Directions for Child and Adolescent Development*. 2011; 114:11-25. doi:[10.1002/cd.308](https://doi.org/10.1002/cd.308) [[Back to text](#)]
39. ZARRETT N, FAY K, LI Y, CARRANO J, PHELPS E, LERNER R. More than child's play: Variable- and pattern-centered approaches for examining effects of sports participation on youth development. *Developmental Psychology*. 2009; 45(2):368-382. doi:[10.1037/a0014577](https://doi.org/10.1037/a0014577) [[Back to text](#)]