|  | Study | Context | Country | Design | Method | Sample | Selection/allocation | Instruments ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Abakay, 2013 | Sports | Turkey | Cross-sectional | Quantitative | 728 youth ( 284 females, 444 males) | Random selection | Communication Skills Assessment Scale (Korkut, 1996) |
| 2 | Agans and Geldhof, 2012 | Sports | USA | Longitudinalobservational | Quantitative | 710 youth ( $68.7 \%$ females, grade 10 to 12 ) and their parents | Not specified | The Profiles of Student LifeAttitudes and Behaviors (Benson et al., 1998) survey and the Teen Assessment Project (Small \& Rodgers, 1995) survey question bank |
| 3 | Akelaitis and Malinauskas, 2016 | PE | Lithuania | Experimental | Quantitative | 51 students of grade 9 ( 28 females, 23 males) | Random serial sampling | Bulotaite and Gudznskiene (2003) communication skills questionnaire, Social Skills Rating System Gresham \& Elliott, 1990), Snaider's social self-control evaluation methods (Rajgorodskij, 2000), Subjective social adaptation scale (Legkauskas, 2000) |
| 4 | Aksoy and Gürsel, 2017 | PE | Turkey | Action research | Qualitative | 30 students of grade 9 (29 females, 1 male) of which 6 focus students and 1 teacher acting as a researcher | Purposeful sampling (focus students) | Students activity reflections, video recordings, and semi-structured interviews |
| 5 | Allen et al., $2015$ | Sports | UK | Cross-sectional | Qualitative | 18 males (aged 12 to 13) | Purposeful sampling and random selection | Semi-structured interviews |
| 6 | Anderson- <br> Butcher et al., 2013 | Sports | USA | Pre-test, post-test, no control | Mixed | 193 youth ( $43.5 \%$ females, aged 9 to 16, Mage $=11.93, \mathrm{SD}$ $=1.64$ ) | Not specified | Perceived Social Competence Scale (Anderson-Butcher et al., 2008) and site observations |

7 AndersonButcher et al.,

8 Baena-
Extremera et
al., 2012

9 Bean and
Forneris, 2016

Sports

Sports Canada

Pre-test, post-test, Quantitative no control

287 youth ( 118 females, 169 males, aged 9 to 16 , Mage $=$ $11.85, \mathrm{SD}=1.54$ )

10 Bean, Whitley Sports USA and Gould, 2014

11 Bignold, 2013 Sports Multiple countries

Cross-sectional
Quantitative
Quasi-
experimental

## Cross sectional

m
15

Quantitative

Case study

125 students ( 66 females, 59 males, aged 15 to 16, Mage $=$ $15.67, \mathrm{SD}=.71$ )

377 youth ( 225 females, 152 males, aged 9 to 18 , Mage $=$ $14.19, \mathrm{SD}=2.15$ )

Cross-sectional
Qualitative

Mixed

Not specified
Modified version of the Perceived Social Competence Scale (AndersonButcher et al., 2008), The commitment subscale of the Multidimensional Sportspersonship Orientations Scale (Vallerand et al.,1997), The Teamwork Scale (Anderson-Butcher et al., 2010), Social responsibility using three items that measure participants' thoughts about helping others in their community (Anderson-Butcher et al., 2010)

Spanish version (Moreno, GonzálezCutre, \& Sicilia, 2007) of the Social Goal Scale Physical Education of
Guan, McBride, and Xiang (2006)

Not specified
Youth Program Quality Assessment,
Youth Program Quality Survey
(Silliman and Schumm, 2013) and
Positive Youth Development Inventory-Short (Arnold et al., 2012)

Semi-structured interviews

Survey and focus groups

| 12 | Bower and Carroll, 2015 | Sports | Australia | Cross-sectional | Quantitative | 107 high school students (57 females, 50 males, aged 12 to 17) of which 39 no ECA, 39 only Sports, 15 art, music or other cultural ECA, and 14 combination Sports/cultural | Not specified | Contextualized Assessment Tool for Risk and Protection Management |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | Bruening, <br> Dover and <br> Clark, 2009 | Sports | USA | Case study | Qualitative | 5 'preadolescent girls of colour' (aged 9 to 13) and their parents, and 3 co-investigators (all women) | Data was collected from 5 girls who participated in the programme. While 8 girls participated during that time, only 5 completed every stage of data collection. | Interviews, participant journals, researchers' reflective journals, team discussions |
| 14 | Bruner, Hall and Côté, 2011 | Sports | Canada | Cross-sectional | Quantitative | 212 male athletes (aged 14 to 17 , Mage $=15.27, \mathrm{SD}=1.04$ ) of which 129 basketball players ( Mage $=14.97, \mathrm{SD}=0.95$ ) and 83 middle-distance runners $($ Mage $=15.75, \mathrm{SD}=0.99)$ | Participants were initially contacted through coaches. If coaches were interested in having their athletes participate prospective participants were contacted. | Youth Experiences Survey 2.0 <br> (Hansen and Larson, 2005), Survey composed from existing scales (Van der Vegt et al., 2001) |
| 15 | Burnett, 2015 | Sports | South Africa | Cross-sectional | Mixed | 309 youth (questionnaires) (164 females, 138 males, grade 6) and 176 youth (focus group sessions) ( 94 females, 82 males), 159 teachers (questionnaires) and 75 teachers (focus group sessions), interviews with 12 principals, 3 deputy principals, 5 cluster coordinators, and 15 school coordinators | Purposive quota sampling | Interviews, focus group sessions with teachers and learners, questionnaires and site observations |
| 16 | Camiré and <br> Trudel, 2010 | Sports | Canada | Cross-sectional | Qualitative | 20 student athletes from four sports ( 10 females, 10 males, aged 13 to 17, Mage $=15.05$ ) | Purposeful sampling | Interviews |
| 17 | Camiré and <br> Trudel, 2013 | Sports | Canada | Cross-sectional | Qualitative | 9 male coaches (aged 23 to 52, Mage $=35$ ) and 18 male students (aged 14 to 16, Mage $=$ | Purposeful sampling | Individual and focus group interviews |

18 Camiré et al 2009a

19 Camiré et al., Sports Canad 2009b

20 Choi et al., 2015

21 Cortese, 2013 Sports Italy

22 Cryan and
Sports USA
Martinek, 2017

23 DeBate and
Bleck, 2016
Sports
USA
Mixed
Cross-sectional
Mixed

## Mixed

Qualitative
6 mentees ( 2 girls, 4 boys, aged female, 4 male, aged 21 to 29)

589 male soccer players (aged 8 to 20 , Mage $=13.42$, SD = 3.89), of which 299 professional and 290 amateur players.

14 male students (aged 11 to The classroom teachers 12), 1 programme director, 6 programme staff (students from local university) and 10 sixth grade classroom teachers

Pre-test, post-test, Quantitative 384 third to fifth grade girls no control

24 Draper and Sports South Coalter, 2016

Programme participants were recruited via selfselection into the programme.

| Maximum variation <br> purposeful sampling <br> technique | Interviews |
| :--- | :--- |
| Purposeful sampling | Interviews |

Purposeful sampling
Open-ended questionnaires, individual interviews, reflective journal entries by mentors, and observation of mentoring sessions

Focus groups

Personal and Social Responsibility Questionnaire (Li et al., 2008), field notes and post programme focus group-type interviews

Survey created using items of existing questionnaires including: The Peer Relations Questionnaire Short Version (Rigby and Slee 1993), the Bullying Behaviour Scale (Austin and Joseph 1996), the Perceived Competence Scale for Children (including social competence) (Harter 1982), the Youth Experiences Survey 2.0 (Hansen and Larson 2005), the Eisenberg Sympathy Scale (Eisenberg et al. 1996)

| 25 | $\begin{aligned} & \text { Driska et al., } \\ & 2017 \end{aligned}$ | Sports | USA | Longitudinalobservational | Mixed | 70 wrestlers ( 1 female, 69 males, aged 14 to 18 ), of which 8 ( 1 female, 7 males) purposively selected for interviews, programme staff and programme founder | Purposeful selection for additional interview | The Athletic Coping Skills Inventory-28 (Smith et al., 1995), The State Hope Scale (Snyder et al., 1996), interviews and observations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26 | $\begin{aligned} & \text { Escartí et al., } \\ & \text { 2010a } \end{aligned}$ | PE | Spain | Quasiexperimental | Mixed | 42 students ( 20 females, 22 males, aged 11 to 12 ), of which 21 intervention group (10 females, 11 females) and 21 control group ( 9 females, 12 males), and the intervention group PE teacher | Not specified | Semi-structured interview |
| 27 | Escartí et al., 2010b | PE | Spain | Mixed | Mixed | 30 adolescents ( 7 females, 23 males, aged 13 to 14, Mage = $13.20, \mathrm{SD}=0.40$ ), of which 15 intervention group ( 3 females, 12 males) and 15 control group ( 4 females, 11 males), and 5 teachers | Random allocation of groups | Interviews |
| 28 | Ferguson and Shapiro, 2016 | Sports | USA | Longitudinalobservational, (multiple-baseline across skills) | Quantitative | 6 children (aged 8 to 12 ) and parents | Not specified | Survey including the Social Skills Improvement System-Rating Scale (Gresham \& Elliott, 2008), the SelfPerception Profile for Children (Harter, 1985), sportsmanship skills |
| 29 | Fernández-Río and Suarez, 2016 | PE | Spain | Cross-sectional | Qualitative | 26 students ( 12 females, 14 males, aged 11 to $12, \mathrm{M}$ age $=$ $11.4, \mathrm{SD}=0.6$ ) | Not specified | Questionnaire |
| 30 | Findlay and Coplan, 2008 | Sports | Canada | Longitudinalobservational | Quantitative | 355 children at Time 1 (174 females, 181 males) and 201 children at Time 2 (105 females, 96 males) (at Time 1 aged 8.9 to 11.8, Mage = 10.1, $\mathrm{SD}=0.6$ ), and parents | Participants were recruited from public elementary schools. | Social Skills Rating Scale (Gresham and Elliot, 1990) |

31 Folleto et al., PE 2016

Canada

## Cross-sectional

anada

## Cross-sectional

Longitudinalobservational

Spain Quasiexperimental

Pre-test, post-test, no control
New $\quad$ Mixed
Zealand

Pre-test, post-test, Mixed no control

16 children ( 8 females, 8 males, Intentional selection aged 6 to 8 ), parents and
classroom teacher
the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter and Pike, 1984), semi-structured interviews

33 Fraser-Thomas Sport and Côte, 2009

34 Fuller et al., Sports 2013

35 García-Calvo et PE al., 2016

36 García-López PE and Gutiérrez, 2015

37 Gordon, 2010 PE

32 Forneris et al., Sports 2015

239 high school students (57\% female, aged 14 to 18), of which 87 only sports, 24 extracurricular activities other than sports, 85 both sports and other extracurricular activities, and 43 no involvement in any extracurricular activities

22 swimmers (17 females, 5 males, aged 14 to 18 at time of competing, Mage $=16.6, \mathrm{SD}=$ 1.5), of which 10 engaged and 12 dropout swimmers

8 sixth to eight grade boys (aged 10 to 14), of which 6 completed the exit interview, and their parents

777 students ( 400 females, 377 Purposeful selection males, aged 12 to 16 , Mage $=$ 12.81, $\mathrm{SD}=0.93$ ), 20 PE teachers (aged 29 to 48, Mage $=$ $35.2, \mathrm{SD}=2.32$ )

154 youth ( 78 females, 76 males, aged 11 to 14) and 6 teachers ( 1 female, 5 males)

Qualitative

Participants were recruited throughout high schools.

Purposeful sampling

Typical case sampling
$=$

Not specified or specified

Questionnaire, including
Developmental Assets Profile (Search Institute, 2008)

Semi-structured interviews

Semi-structured interviews

Questionnaire of Positive Behaviours in PE (Sanchez-Oliva et al., 2013), and a teacher adaptation of the CCPEF (Sanchez-Oliva et al., 2013)

The Empathy Questionnaire (Garaigordobil 2009), and The Children's Assertiveness Behaviour Scale (Michelson and Wood, 1982)

Interviews, non-participant observations, and student reflection
sheets
Qualitative (aged 1 assistant principal and 1 social worker from the middle-school, and 2 university students

| Quantitative | 48 secondary school senior year |
| :--- | :--- |
|  | students, of which 24 |
| intervention group and 24 |  |
| control group |  |

130 students from elementary and second year junior high ( Mage $=12, \mathrm{SD}=$ 0.5 and Mage $14, \mathrm{SD}=0.5$ ), of which 69 intervention group and 61 control group

| Qualitative | 86 6th and 8th grade students |
| :--- | :--- |
|  | (46 girls, 40 boys) and their PE |
| teacher |  | teacher

Quantitative

114 sixth grade students, of which 57 intervention group ( 28 females, 29 males) and 57 control group ( 27 females, 30 males)

Quantitative 3768 youth ( $51 \%$ males, aged 14 to 17)

Quantitative
44 female ninth grade students, of which 22 intervention group and 22 control group

## Random selection and

 random allocation of groupsNot specified
Purposeful sampling

Purposeful sampling

Not specified

Single population-based sampling

Purposive sampling and random selection

Problem solving Inventory for Primary School Children (Serin et al., 2010)
Interviews, TPSR fidelity checklist, and field notes

Knowledge test: modified version developed by Papcharisis (2004), self-beliefs: modified version of a test developed by Papcharisis (2004)

Students' interviews, field notes of participant observation and students' notebooks

Greek version of Multisource Assessment of Children's Social Competence (Magotsiou et al., 2006), Greek version of Feelings Toward Group Work scale (Goudas et al., 2009)

Canadian National Longitudinal Survey of Children and Youth

Social Skills Inventory (Riggio, 1989)

The Youth Experience Survey, 2.0 (YES) (Hansen \& Larson, 2005)

| 46 | Hardcastle et al., 2015 | Sports | Australia | Cross-sectional | Qualitative | 54 athletes (aged 13 to 18), of which 10 squashers, 8 softballers, 8 baseballers, 10 netballers, 8 triathlon athletes, and 8 surfers, and 8 parents, 4 lead facilitators of the programme, 4 coaches and 4 representatives | Opportunistic sampling | Focus groups and semi-structured interviews |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47 | Harrist and <br> Witt, 2015 | Sports | USA | Cross-sectional (phenomenological study) | Qualitative | 31 female basketball players $($ aged 12 to 16, Mage $=14)$ | Not specified | Focus groups |
| 48 | Harwood et al., 2015 | Sports | UK | Longitudinalobservational | Mixed | 5 Under-13 players (Mage = $12.58, \mathrm{SD}=0.23$ ), their parents (all male, Mage $=45.9, \mathrm{SD}=$ 7.17) and their 38 -year-old male coach | Purposeful sampling | 5C post-training questionnaires (Based on Harwood's (2008) specific measure of the 5C's) and a postintervention social validation form (Page and Thelwell, 2013) |
| 49 | Hayden et al., $2012$ | Sports | USA | Cross-sectional | Qualitative | 28 9th to 12th grade students (6 females, 22 males) and 9 advisors | Convenience sampling | Interviews and focus groups |
| 50 | Hemphill and Richards, 2016 | Sports | USA | Cross-sectional | Mixed | 21 sixth to eight grade youth and adults (i.e. 2 school counsellors, 1 math teacher, 7 parents ( 6 females, 1 male), 3 staff and 3 undergraduate volunteers) | Not specified for youth participants. The school counsellors and math teacher were selected because of their in-depth knowledge of the PYD-programme and its youth participants. | Interviews and focus groups |
| 51 | Hodge et al., 2017 | Sports | USA | Longitudinalobservational | Qualitative | 36 youth ( 9 females, 27 males, aged 7 to 15 , Mage $=11.3$ ) and 4 parents | Participants were recruited from among 42 youth members of a local Boys \& Girls Club who had been invited to participate in the annual HIFE programme. | Online survey and semi-structured interviews |
| 52 | $\begin{aligned} & \text { Holt et al., } \\ & 2008 \end{aligned}$ | Sports | Canada | Case study (longitudinalobservational) | Qualitative | 12 male student-athletes (Mage $=17.1, \mathrm{SD}=1.00$ ) and 1 head soccer coach | Purposeful sampling | Fieldwork (notes from direct observations, informal and formal conversations, and documents) and interviews |


| 53 | Holt et al., $2011$ | Sports | Canada | Cross-sectional | Qualitative | 17 parents ( 15 mothers, 2 fathers, Mage $=44.5$, $\mathrm{SD}=7.9$ ) and 18 children ( 7 females, 11 males, Mage = $12.5, \mathrm{SD}=2.5$ ) | Purposeful sampling | Semi-structured interviews |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 54 | $\begin{aligned} & \text { Koh et al., } \\ & 2017 \end{aligned}$ | PE and sports | Singapore | Cross-sectional (two-year followup) | Qualitative | 12 students ( 2 females, 10 males, aged 12), 1 male PE teacher and 2 male coaches (aged 34 to 35 ), and 3 parents ( 2 females, 1 male, aged 38 to 45) | Snowball sampling | Interviews |
| 55 | $\begin{aligned} & \text { Koh et al., } \\ & 2016 \end{aligned}$ | PE and sports | Singapore | Cross-sectional | Qualitative | 32 youth ( 10 females, 22 males, aged 10 to 12, Mage $=11.7$, SD $=0.99$ ), of which 16 PE students and 16 athletes, and 3 PE teachers and 3 sport coaches (aged 26 to 38, Mage $=32$, SD $=2.2$ ) | Purposeful selection | Interviews and focus-groups |
| 56 | $\begin{aligned} & \text { Lang et al., } \\ & 2016 \end{aligned}$ | PE | Switzerland | Experimental: <br> Cluster RCT | Quantitative | 131 vocational students ( $35.2 \%$ female, Mage $=16.22, \mathrm{SD}=$ 1.12), of which 67 intervention group and 64 control. Complete data of 112 students, of which 56 intervention ( $32.4 \%$ female, Mage $=15.96, \mathrm{SD}=1.04$ ) and 56 control ( $31.7 \%$ female, Mage $=16.44, \mathrm{SD}=1.09$ ) | Randomization of clusters/classes | Adolescent Stress Questionnaire (Byrne et al., 2007) and Coping Questionnaire for Children and Adolescents (Hampel et al., 2001) |
| 57 | Lee et al., 2017 | Sports | Korea | Longitudinalobservational | Qualitative | 6 fourth to fifth grade children $(2$ females, 4 males, Mage $=$ 11.5 ) and 2 male programme instructors | Not specified | Interviews |
| 58 | Light, 2010 | Sports | Australia | Case study (3month ethnographic study) | Qualitative | 33 youth (aged 9 to 12), of which 20 were selected for interviews ( 14 females, 6 males), and 20 parents and 4 coaches | Random selection | Questionnaire and interviews (and auto photography) |

59 Linver et al., Sports 2009

60 Luptáková and Antala, 2017

61 Malinauskas Sports and Juodsnukis, 2017

62 Mead et al., Sports 2017

63 Molinuevo et Sports Spain al., 2010
$64 \mathrm{Na}, 2015$
PE and sports

65 Nathan et al., Sports 2013

Longitudinalobservational

## Quantitative 1711 adolescents ( $50 \%$ female, Not specified <br> $$
\begin{aligned} & \text { aged } 10 \text { to } 18, \text { Mage }=13.8, \mathrm{SD} \\ & =2.3) \end{aligned}
$$ aged 10 to 18, Mage = 13.8, SD aged 10 to 18, Mage = 13.8, SD $=2.3$ )

 $=2.3$ )}Losservationa (Ethnographic, person-centred study)

Cross-sectional Cross-sectional

## Quasi-

 experimental| Mixed | 94 students ( 46 females, 48 males, aged 11 to 15) |
| :---: | :---: |
| Quantitative | 52 male football sport school students, of which 26 intervention group $($ Mage $=$ 15.68, $\mathrm{SD}=0.29$ ) and 26 control group $($ Mage $=15.76$, $\mathrm{SD}=0.32$ ) |
| Qualitative | 4 male high school basketball team captains (aged 17 to 18) and 1 male coach (aged 30) | tudents, of which 26 , control group $($ Mage $=15.76$, $\mathrm{SD}=0.32$ ) and 1 male coach (aged 30) of the season.

Quantitative
867 families with at least one Stratified multistage child enrolled in the 2nd, 4th, or sampling. Schools were 6 th grade ( 428 females, Mage $=$ selected randomly. $9.67, \mathrm{SD}=1.63$ ) ( 439 males, Mage $=9.63, \mathrm{SD}=1.67$ )

Qualitative
41 parents (aged 34 to 47 , children aged 12 to 15), of which 10 parents participated in interviews

Mixed
142 youth ( 3 females, 139
Purposeful sampling
males, Mage $=14.7, \mathrm{SD}=2.4$ ),

All team captains were elected through a weighted vote prior to the beginning
of which 79 participated in interviews ( 18 females, 61 males, aged 11 to 18)
the Social Well-Being scale (Keyes, 2006), Peer connectedness and prosocial behaviours using items developed for the CDS-II, Items selected from the Polit (1998) 25item Positive Behaviour Scale, the Behaviour Problems Index (Peterson and Zill, 1986)

Questionnaire
(Modified) Social Responsibility Questionnaire (Li et al., 2008)

Interviews, observations and participant journals
the Strengths and Difficulties Questionnaire (Goodman, 1997), School Social Behaviour Scales (Merrell, 2002)

Phenomenological interviews and qualitative questionnaires

Survey and interviews

66 Neely and Holt, Sports 2014

Canada

Cross-sectional
Qualitative

22 parents, of which 12 mothers Purposeful sampling (Mage $=39.0$ years, $\mathrm{SD}=4.7$ ), and 10 fathers $($ Mage $=38.8$ years, $\mathrm{SD}=5.8)$. In total, the parents had 32 children ( 8 females, 24 males, aged 5 to 8 , Mage $=6.15, \mathrm{SD}=1.14$ )

| 67 | Newin et al., <br> 2008 | Sports | Canada | Longitudinal- <br> observational |
| :--- | :--- | :--- | :--- | :--- |
| 68 | Parise et al., Sports <br> 2015 | Italy | Quasi- <br> experimental |  |

2017

70 Riley and
Sports USA
Anderson-
Butcher, 2012
71 Riley et al.,
2017
experimental

Experimental

Cross-sectional

Pre-test, post-test, no control
$\begin{array}{ll}\text { Qualitative } & 8 \text { Peewee-level ice hockey } \\ \text { coaches (players aged } 11 \text { to } 13)\end{array}$

Quantitative
103 adolescents (aged 11 to 15), of which 63 intervention group ( $87 \%$ male, Mage $=$ 13.28, $\mathrm{SD}=0.97$ ) and 40 control group ( $50 \%$ male, Mage $=13.84, \mathrm{SD}=0.88$ )

Quantitative
48 children ( 24 females, 24 males), of which 12 multicultural children who participated in PEC (Mage $=$ 11.60, SD = 0.84), 13 multicultural children who did not participate in PEC (Mage = $12.10, \mathrm{SD}=0.56$ ), 11 singlecultural children who participated in PEC (Mage $=$ $12.50, \mathrm{SD}=0.52$ ), and 12 single-cultural children who did not participate in PEC (Mage $=$ $12.50, \mathrm{SD}=0.70$ )

10 parents ( 9 females, 1 male, aged 31 to 58 , children aged 11 to 13)

329 youth ( 120 females, 209 males, aged 9 to 15 , Mage $=$ 11.52, $\mathrm{SD}=1.46$ ) and staff participants, i.e. 23 coaches ( 8 females, 15 males, majority between 21 and 24 years of age)

Semi-structured interviews

Pre- and postintervention forms, observational evaluations and interviews

Prosocial Behaviour Scale (Caprara et al., 2005)

Survey including sociality scale

Purposeful sampling and random selection

Stratified sampling by age and random allocation
the Social Skill Improvement System (Greshem and Elliot, 2008)

| 72 | Rodríguez et al., 2016 | Sports | Costa Rica | Longitudinalobservational | Quantitative | 28 male adolescents, (Mage $=12.75, \mathrm{SD}=1.40)$ | Not specified | Observations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 73 | Salazar et al., $2016$ | Sports | Mexico | Cross-sectional | Quantitative | 46 children ( 23 females, 23 males, aged 6 to 16) | Not specified | Survey |
| 74 | Schaillée, et al., 2017 | Sports | Belgium | Longitudinalobservational | Qualitative | $\begin{aligned} & 25 \text { female youth (aged } 11 \text { to } 19 \text {, } \\ & \text { Mage }=13.8, S D=2.14 \text { ) } \end{aligned}$ | Purposeful sampling and field survey approach | Observations and interviews |
| 75 | $\begin{aligned} & \text { Senécal et al., } \\ & 2008 \end{aligned}$ | Sports | Canada | Mixed | Quantitative | 86 female high school senior basketball players (aged 14 to 18, Mage $=15.71, \mathrm{SD}=0.96$ ) | Purposeful sampling and random allocation of groups | Group Environment Questionnaire (Carron et al., 2002), Postintervention Manipulation Check |
| 76 | Sinelnikov and Hastie, 2008 | PE | Russia | Longitudinalobservational | Qualitative | 42 ninth grade students (30 females, 12 males, Mage = 14.3) | Random selection of groups | Video records, interactive student journals, and group and individual interviews |
| 77 | Ullrich-French et al., 2012 | Sports | USA | Pre-test, post-test, no control | Quantitative | 197 youth ( 102 females, 95 males, aged 9 to 16, Mage $=$ 11.8, $\mathrm{SD}=1.6$ ) | All campers were invited to participate in the study. | Social competence subscale from Harter's (1985) Self Perception Profile for Children |
| 78 | Vidoni and <br> Ward, 2009 | PE | USA | Longitudinalobservational | Qualitative | 7 8th grade students (4 girls, 3 boys, aged 12 to 13) and their teacher (female) | Purposeful sampling | Direct and videotaped observations |
| 79 | Vierimaa et al., 2017 | Sports | Canada | Cross-sectional | Qualitative | 12 volunteer coaches ( 6 females, 6 males, aged 16 to 59, Mage $=39.5$ ). The coaches' league is home to children aged 8 to 14 . | Purposeful sampling | Semi-structured interviews |
| 80 | Villarreal and Gonzalez, 2016 | Sports | USA | Cross-sectional | Quantitative | 186 sixth to seventh grade students ( $47.3 \%$ female) | Participants were originally recruited from one of three school districts in Texas across two sequential cohorts in first grade during the fall of 2001 and 2002. | Psychological Sense of School Membership scale (Goodenow, 1993), questions adapted from a survey of Mahoney and Stattin (2000), and the Strengths and Difficulties Questionnaire (Goodman, 1997), and interviews |

81 Walsh

2016 (study 1)

Cross-sectional
ross-sectional

## Cross-sectional

Cross-sectional


Longitudinalobservational

## Quasi-

 experimentalSpas

Qualitative $\quad$| 13 youth (2 females, 11 males, Not specified |
| :--- |
| aged 9 to 11$), 2$ classroom |
| teachers, and 1 programme |
| director |

Quantitative 564 youth (aged 10 to 17), of which 405 intervention group (104 females, 301 males, Mage $=12.6, \mathrm{SD}=1.8)$ and 159 control group ( 66 females, 93 males, $12.4, \mathrm{SD}=1.5$ )
Quantitative

Longitudinal sample of 192
youth ( 53 females, 139 males), aged 10 to 17 at Time 1 (Mage $=12.5, \mathrm{SD}=1.8$ ), aged 10 to 18 at Time $2(13.4, \mathrm{SD}=1.8)$, and aged 11 to 19 at Time 3 (14.4, $\mathrm{SD}=1.8$ )

1076 youth (aged 11 to 14 ), of which 331 intervention group (156 females, 172 males, Mage $=12.5, \mathrm{SD}=0.98)$ and 745 control group ( 368 females, 375 males, Mage $=13.0, \mathrm{SD}=$ 0.96). 5 students did not report gender.
Qualitative
22 female gymnasts (aged 10 to 16 , Mage $=12.5$ ) and 7 coaches $($ aged 18 to 30, Mage $=22.14)$ First Tee.

Purposeful sampling

Eligible participants were at least 10 years old and had been participating in The First Tee or their specified activity for at least one season.

Semi-structured interviews, documents and artefacts from the programme (lesson plans and participant journals), and field notes (reflective journal)

LSTS (Weiss et al., 2014), Social Acceptance subscale of Harter's (1988) Self-Perception Profile for Adolescents, Behavioural Conduct subscale of Harter's (1988) SPPA, a rating scale created for assessing character development in youth sports programmes, Self-Regulated Learning subscale of Bandura's (1990) Multidimensional Scales of Perceived Self-Efficacy, the Preference for Challenge subscale of the Motivational Orientation in Sport Scale (Weiss et al., 1985)

The longitudinal sample
LSTS (Weiss et al., 2014)
included youth who were
actively participating in The
the Self-Perception Profile for Adolescents (Harter, 1988)

Semi-structured interviews

| 85 | Whitley et al., 2016 | Sports | South Africa | Cross-sectional (phenomenological study) | Qualitative | 19 athletes (8 females, 11 males, aged 9 to 20, Mage $=$ $16.2, \mathrm{SD}=3.0$ ), 10 coaches ( 1 female, 9 males, aged 22 to 37 , Mage $=(\mathrm{M}=28.4, \mathrm{SD}=7.0)$ and 11 community members ( 6 females, 5 males, aged 20 to 69 , Mage $=42.0, \mathrm{SD}=15.8$ ) | Snowball sampling and purposeful selection | Semi-structured interviews |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 86 | Wilkes and Côté, 2010 | Sports | Canada | Cross-sectional | Mixed | 212 female basketball players (aged 14 to 15 ) from a school team ( $\mathrm{n}=70$, Mage $=14.41$, $\mathrm{SD}=0.60$ ), a competitive team ( $\mathrm{n}=68$, Mage $=14.45, \mathrm{SD}=$ 0.61 ) and a recreational team ( n $=74$, Mage $=14.30, \mathrm{SD}=0.52$ ) and 16 programme respondents | Principal researcher contacted programme coordinators or executive directors of school and community-based basketball programmes for 14 and 15-year-old females. | The Youth Experiences Survey 2.0 (Hansen \& Larson, 2005) and interviews |
| 87 | Wright and <br> Burton, 2008 | PE | USA | Mixed | Qualitative | 23 students ( 14 females, 9 males, Mage $=14.8$ ), the Lifetime Wellness instructor and the school principal | Class selection based on scheduling convenience | Semi-structured interviews, observations and reflective practitioner journals, session plans, responsibility logs, written reflections, learner assessments, programme evaluation |
| 88 | $\begin{aligned} & \text { Wright et al., } \\ & 2010 \end{aligned}$ | PE | USA | Mixed | Mixed | 122 students ( 65 females, 57 males, aged 14 to 18 , Mage = 14.8 ), of which 11 students ( 5 females, 6 males) were selected for focus groups | Researchers assigned two class sections to the treatment condition and two to the comparison condition based on scheduling convenience. For the focus groups, 11 participants were purposefully selected. | Documentation (written plan before each lesson, post teaching reflection, field notes), Teaching for Personal and Social Responsibility programme evaluation and implementation checklist, and focus groups |

${ }^{1}$ For the purpose of this review only the instruments of interest, i.e. related to personal and social development, are presented. The reference list of these instruments can be found in Supplementary file 2.
Note: With regard to sampling, it must be noted that 21 studies did not specify the selection and allocation of participants.

