

OUR SCOREBOARDS REVEAL OUR PRIORITIES

Theodore Wohlfarth
EnTeam Organization

Satabdi Samtani
Louisiana State University

In this article, we present a reconceptualization of sport as a series of collaborative contests with players on different teams scoring goals cooperatively: players on both sides lose or both sides win together depending on whether they can improve the scores they earn in overcoming limitations and obstacles by working with the other team. When teams play multiple rounds of a contest that measures their performance as collaborators attempting to improve relative to an objective standard of excellence, sport gives players experience measuring positive interdependence between teams. To illustrate the potential impact on moral development, we contrast two versions of one sport (volleyball) and analyze the character development implications of using collaborative sport to develop moral behavior. We contend that both traditional win-lose sports and collaborative sports (that keep score on a win-win-or-lose-lose basis) tend to develop positive – but different – character attributes. Examples from two programs give preliminary evidence that collaborative sport helps to strengthen moral behavior, but more thorough research is needed.

Keywords: collaborative sport, positive interdependence, moral behavior, character development, competitive contest, deception, volleyball

Traditionally, competition in team sport has been framed as win-lose contests in which people are arranged into opposing teams and are evaluated by comparing the number of points each team scores. In 2018, scholars studying the relationship between sport and character development observed that “Prioritizing character in sport may involve reconceptualizing the definition of competition.” (Ettekal et al., p. 38). In the present article, we offer a reconceptualiza-

tion of competition including a scoring system that uses an alternative win-win-or-lose-lose scorekeeping process. After reviewing literature and presenting a variation on one sport (volleyball), we contrast the implications for moral behavior of two approaches to scoring performance in sport. We then describe two examples where young people played several sports in which players on different teams score points collaboratively.

• **Correspondence concerning this article should be addressed to:** Theodore Wohlfarth, ted@enteam.org

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The premise of this article is that all sports are human inventions that people are free to redesign and reconfigure to achieve various objectives – including the objective of prioritizing the development of moral behavior. Our central question is whether moral behavior can be enhanced by athletic contests using a scoring process in which scores tend to improve when players on different teams help each other develop strategies collaboratively, communicate openly and honestly, resolve conflicts peacefully, respect property rights, and coaches recruit players with a wide variety of abilities to play as full participants on the team. This collaborative version of sport includes a redesign of the scoring process because different scoring systems measure different forms of success: win-lose scoring measures success based on negative-interdependence between teams and win-win-or-lose-lose scoring measures success based on positive-interdependence between teams.

A unified line of questioning drives this reconceptualization of sport:

- How well do the scoring systems currently used in traditional team sports nurture moral behavior toward other teams as well as teammates?
- Could sport become more effective in developing moral character by relaxing the assumption that one side can win only if the other side loses?
- What happens when athletes receive objective metrics that show whether they are improving in their collaboration with diverse players – including players on the opposite team?
- How can players on one team learn to win together with players on other teams?

Seeking answers to the questions above invites a reconceptualization of the scoring systems used in sport along with reframing of the objective outcomes expected from sport.

To explore these questions, imagine a sport in which players score points collaboratively

with players on the other team, and their objective is to improve their ability to overcome challenges together. For example, imagine a version of volleyball designed to develop players' ability to resolve conflicts peacefully, learn from different teams, and nurture positive interdependence. In this reconceptualized design, players from both teams are on either side of the net. The objective is to hit the ball so it can be returned as many times as possible in three minutes. The scoring system counts the number of times the ball crosses the net after every player on the receiving side has hit the ball once but not twice in a row. When the ball crosses the net, the teams score one point, and both teams own that point because players on both teams worked together to score it. After three minutes, the round is over and both teams have the same score. Then their challenge is to plan how to improve their joint score in the next round of play.

The more three-minute rounds they play, the more challenging it becomes to improve their joint score. Feeling the pressure to improve within the time limit of three minutes, players may make mistakes. Conflicts may arise. Players may vent their frustrations if the scores are not improving during each round of play. If the players can resolve these issues constructively, the result may show up on the scoreboard.

Between rounds, players from both teams reflect on their performance together. As they talk about what happened in the previous round, the players identify what they learned about working together. Then they plan how they can improve their collaboration in the next round. The coaches ask players on both teams questions that encourage the players to develop more effective strategies for scoring additional points together.

Discussion amongst the players between rounds may extend beyond their performance in the game and explore implications for resolving conflicts in life outside the athletic contest. Coaches can encourage the players to think together about how they can apply the principles of conflict resolution that they are

using in volleyball to resolve conflicts in the community.

Although the version of volleyball described above is not common yet, its potential for strengthening moral behavior in players aligns with ideas found in the research cited below.

Research on Sport and Moral Behavior

An extensive body of research examines the potential for using sport as a context for developing moral behavior (Boardley, 2020; Schulenkorf et al., 2014). A meta-analysis on the relation between the moral climate of sports and the moral behavior of young athletes found that a prosocial moral climate in sport – defined as shared norms, interpersonal warmth and support, listening, respect, and other aspects of human caring – has a significant positive correlation with prosocial behavior and a negative correlation with antisocial behavior. Additionally, it found an even stronger correlation between antisocial moral climate and antisocial behavior in sport and beyond sport (Spruit et al., 2019).

The bulk of the research on moral behavior in sport presumes that scorekeeping is on a zero-sum, win-lose basis (MacRae, 2018; Shields et al., 2016; Spruit et al., 2019). However, several scholars have suggested that a redesign of the contests could be helpful. For example, Nguyen described a need for a “conversion in the mental attitudes” of players and stated that this development will “depend on architectural features: features of game structure and design, and social and institutional features of a game’s setting” (p. 124).

Similarly, MacRae stated (p.55):

Just as we can conceive of competitions in which there are many competitors and only one winner and many competitors and everyone wins, we can also conceive of ones where the winners include any subset of the original set of competitors. These possibilities can arise artificially as a result of the intentional construction of a contest or a game.

Unfortunately, neither of these scholars provided sport examples of the redesign they had in mind. In fact, MacRae asserted, “One simply cannot have sports competitions in the contest sense in which all the competitors produce excellence results *relative to each other.*” (p.58). He explained this assertion by distinguishing between competition in a “process sense” and the “contest sense.” The former referred to sport as a means to an end: “a process involving at least two agents employing mutually recognized oppositional striving... and the end for which it occurs can include a continuum of possibilities.” (p.54). By the *contest sense* of competition, he referred to competitors in a win-lose event seeking a mutually exclusive end; “a winner is usually selected from among two or more contestants.” (p.54). MacRae noted that the process sense of competition overlaps with the contest sense. To clarify, he distinguished between competing in a zero-sum contest for rivalrous goods (such as food) and competing for non-rivalrous goods (such as truth) in a non-zero-sum contest. Examples that illustrate these ideas would help clarify the distinctions.

Fortunately, children provide examples of non-zero-sum contests whenever they play a series of rounds of catch and in each round count how many times they can throw and catch without dropping the ball. In this simple contest, both players win if they can increase the number of successful catches, and they both lose if they cannot increase the number of successful catches. As shown below, sport designers can extend the children’s example into more complex team sports to reconceptualize win-lose contests into collaborative contests in which both teams lose or both win depending on whether they can improve their combined performance in a series of rounds of play. Perhaps MacRae would reconsider his assertion about the unfeasibility of a contest in which all competitors produce excellent results relative to each other’s performance if he played a sport (such as collaborative volleyball described below) in which teams compete in a contest that keeps score of improvements in

the results they achieve in pursuit of “non-rivalrous goods,”

Numerous scholars who study sport have emphasized that teams competing against each other are indeed cooperating, since the athletes agree to play together for their mutual benefit within a structure of rules and strive for excellence as measured by scores that determine the teams that win and lose (Boardley, 2020; MacRae, 2018; Nguyen, 2017; Rudd, 2005; Shields et al., 2016; Shields & Bredemeier, 2009). The agreement to cooperate in win-lose sport includes some remarkable moral anomalies that have not received adequate attention.

For example, Morris noted that “While a great deal of moral philosophy has been committed to (1) lying and deception, generally, and (2) moral philosophy in sports, surprisingly, very little of the academic discourse has combined the two” (Morris, 2013, p. 179). Obviously, deceptive communications – such as head fakes and other feigns – are accepted practice in sport. One of the few researchers who has addressed this issue of deception in sport is Pearson who bifurcates it into *strategic deception* by which she means situations, such as team sports, in which both sides know in advance and agree that players will try to deceive and mislead opposing players and *definitional deception* which pertains to the principle that telling the truth is moral and deception is immoral (Pearson, 1973). If sport is to achieve its potential as a context for developing moral behavior, the issue of honesty between players on different teams deserves more consideration and explication. Social interdependence theory provides a framework for examining strategic deception and definitional deception.

Social Interdependence Theory

Social interdependence theory defines competition and cooperation in terms of goal attainment and divides human interaction into three categories: negative interdependence, positive interdependence, and independence (Deutsch, 1949, 1982, 2011; Johnson & John-

son, 2013). For example, sports that define winning by comparing the number of goals that one team attains against another team create negative interdependence between the teams. In this negative-interdependence conceptualization of sport, one team can win only if the other team has a lower score on the scoreboard. Alternatively, sports that compare the number goals that two teams score collaboratively quantify positive interdependence between the teams by measuring performance on a win-win-or-lose-lose basis in which both teams benefit when either team achieves a mutually beneficial goal. The different scoring systems create different social relationships between the teams and different moral paradigms.

Moral behavior in sport contests that keep score on a win-lose basis includes deception of players on opposing team because conveying false information advances the prosocial objective of strengthening the level of performance of opponents and increases the potential for one side to achieve its goal: to outscore their opponent. Moral behavior in sport contests that keep score on a win-win-or-lose-lose includes candor with players on the other team because accurate information advances the prosocial objective of cooperation among different groups and increases the potential for the teams to achieve their goal: increase their combined score in a series of rounds of play.

By giving athletes experiences playing in both types of contests, players engage in different moral realms and can judge for themselves when it is moral to deceive people on other teams and when candor with people on different teams is moral. Scholars studying character development describe the process of developing positive attributes of character as a complex interplay of individual character and the context in which the individuals must make choices (Lerner et al., 2022). What are the implications for moral development of players if they only experience negative interdependence between teams? Could moral development be enhanced by playing both types of sport and giving players opportunities to com-

pare moral behavior in win-lose sport in contrast to moral behavior in win-win-or-lose-lose sport? Another body of research based on game reasoning theory is helpful in exploring these questions.

Game Reasoning Theory and Contesting Theory

Game reasoning theory is based on research exploring the moral reasoning of athletes, and it contends that during sporting events players practice "bracket morality" by suspending moral obligations in their treatment of other people allowing them to deceive, steal, and manipulate opponents in ways that the athletes would otherwise consider immoral in daily life (Bredemeier & Shields, 1986; Long et al., 2006). This research has found that high school students who are athletes and students who are non-athletes both have similar levels of moral reasoning; however, with college students the "nonathletes' moral reasoning was significantly more mature than was athletes'" (Bredemeier & Shields, 1986 p.7). These findings raise questions about the long-term effect of immersion in a paradigm of bracketed morality: do players become less sensitive to moral principles the longer they play? The potential for developing prosocial mental models while participating in win-lose sport contests is the focus of contesting theory.

Research grounded in contesting theory examines how the "conceptual metaphors" that athletes hold in thought affect their choices and actions (Shields & Bredemeier, 2009; Shields et al., 2015; Shields & Bredemeier, 2011). Contesting theory distinguishes between *true competition* and *decompetition*: true competition occurs when athletes strive together and impelling each other to excellent performance within the context of win-lose sport, and decompetition occurs when players perceive opponents as enemies to be defeated. This "true competition" approach retains the win-lose scoring system and encourages players and coaches to appreciate how a strong opponent challenges the players on both sides

to excel. In self-report surveys of athletes in various sports, prompting players to form conceptual metaphors of a partnership, – rather than imagining sport as a war between enemies – players perceive the contest as an opportunity to nurture moral behavior within the athletic contest and in life outside of sport (Bredemeier & Shields, 2019).

For example, John Sugden led teams of coaches and volunteer assistants in the use of football (soccer) in Northern Ireland, Israel, and South Africa to promote peacemaking skills (Sugden & Tomlinson, 2017). This approach for moral development combined training in football techniques while simultaneously giving players instruction in moral principles related to peacemaking and subsequently having observers grade moral behavior during win-lose games using observation-scoring charts (Sugden & Wohlfarth, 2022).

The question we are raising here is whether athletes – and society – can also benefit from playing sports that keep score on a non-zero-sum basis. If athletes had opportunities to play both kinds of sport, contests keeping score based on positive interdependence between teams as well as contests with scoring based on negative interdependence between teams, would players become stronger in their practice and understanding of moral behavior?

In summary, researchers have suggested several possibilities that for strengthening the use of sport as a vehicle for developing moral behavior:

1. Reconceptualize the definition of competition to prioritize moral behavior.
2. Design variations of sport that encourage moral behavior among players.
3. Use sport as a context for comparing moral behavior when teams have positive interdependence or negative interdependence.

What forms of sport could address these possibilities? What about a sport in which scores tend to increase when players improve both athletically and morally? Could the develop-

ment of moral behavior be strengthened if players experienced playing one sport in different ways, sometimes playing with win-lose scoring (zero-sum) and other times playing with win-win-or-lose-lose scoring (non-zero-sum)? Before offering an example of a variation in a sport designed to strengthen players socially and physically, it is helpful to define the relevant terms.

Defining Moral Behavior and Sport

Moral behavior includes “actions that have either positive or negative repercussions for others” (Boardley, 2020, p. 391). Our focus on reconceiving sport to strengthen prosocial moral behavior prioritizes one aspect of character development which includes both *performance character*, the capacity to succeed in an endeavor, and *moral character*, the capacity to behave ethically (Berkowitz, 2012, 2021; Davidson et al., 2014; Seider et al., 2013). While researchers bifurcate moral behavior broadly into prosocial actions intended to help or benefit another and antisocial actions intended to harm or disadvantage another (Spruit et al., 2019), we are concerned primarily with specific aspects of prosocial moral behavior that pertain to team sport and the scoring systems used to measure success or failure including:

- Respectful collaboration with other people
- Objective evaluation of performance
- Honest communication
- Capacity to resolve conflicts peacefully
- Fair opportunities to participate
- Equitable inclusion of people with differing abilities
- Respect for other people's property

Although prosocial moral behavior includes many other actions, we submit this short list as relevant to the comparison of sports that keep score on a zero-sum basis and sports that keep score on a non-zero-sum basis.

Sport defined broadly is “all forms of physical activity which, through organized or casual play, aim to express or improve physical fitness and mental well-being” (Aspen Institute, 2015, p. 3). A narrower definition of sport is “an activity involving physical exertion and skill in which an individual or team competes against another or others for entertainment” (Online Oxford Dictionary). The narrow definition restricts sport to a win-lose framework and implies that sport must be scored as a zero-sum contest in which people on one side can win only if other people are losing. The broader definition of sport presents the opportunity for reconceptualization of sport on a win-win-or-lose-lose basis in which both sides lose—or both sides win—depending on whether they can improve their combined score in a series of rounds. The latter sport can be termed *collaborative sport* in which players who are on different teams cooperate to score points that both teams own together.

If players on both teams are working together, who or what is their opponent or challenge? Consider the competition that people have against an impersonal opponent such as coronavirus. The disease appears to behave like a clever athlete who changes its game plan and mutates to defeat people. Another example of an impersonal opponent is alcoholism, which often is characterized as a demon that pulls people down. Impersonal opponents (such as disease, time, poverty, prejudice, injustice, addiction, fear, and other forms of limitation) are obviously different from human opponents, yet the analogy is useful for reconceptualizing competition in sport as a means for preparing players for the work of overcoming problems that limit social progress or oppress communities. Collaborative sport is a safe arena where diverse players can repeatedly experiment, explore, and encourage each other in moral practices to overcome impersonal opponents on the field so they are conditioned to make moral choices off the field.

Cooperation among teammates who strive to help each other score goals is inherent in traditional win-lose sport. Assisting players on an

opposing team in their efforts to score goals is essential to collaborative sport and antithetical to win-lose sport.

Sport as defined by Loy and Coakley has seven characteristics: "Sport is an embodied, structured, goal-oriented, competitive, contest-based, ludic, physical activity" (2015 p. 4651). In their definition, Loy and Coakley distinguished three forms of competitive sport:

- Direct competition with opposing sides directly confronting each other (as in football or tennis)
- Parallel competition with opponents taking turns (as in golf or bowling) or competing in separate lanes (as in track and swimming)
- Competition against a standard (as in exceeding one's personal best time or achieving a qualifying time for an Olympic race)

Although researchers analyze "competition against a standard" less frequently than direct competition or parallel competition, competition against a standard accommodates positive interdependence between teams that impacts their behavior by shaping their psychological orientation: the "more or less consistent complex of cognitive, motivational, and moral orientations to a given situation that serve to guide one's behavior and responses in that situation" (Deutsch, 1982, p. 237). The orientation of positive interdependence between teams fostered by competition against a standard is in contrast with the orientation of negative interdependence fostered by contests in which one team can win only if the other team loses.

When teams play in contests where scores of cooperative performances are kept in a series of rounds of play, people have objective standards for assessing their progress in achieving goals that require collaboration. Players on different teams working together in a contest to outperform their previous performance use the score as evidence of whether they are improving their joint performance.

The previous performances become the standards against which subsequent performances can be measured and progress assessed.

Finally, it is helpful to distinguish three approaches to keeping score and winning in sport:

- Traditional sport that keeps score on a win-lose basis;
- Recreational sport that does not emphasize scoring;
- Collaborative sport that keeps score on a win-win-or-lose-lose basis.

The intransitive verb *win* has two definitions: (1) to gain the victory in a contest; and (2) to succeed in arriving at a place or a state (<https://www.merriam-webster.com/dictionary/win>). Both definitions are relevant for this article because the first definition aligns with the scoring systems used in win-lose sport contests, and the second with the scoring systems used in collaborative sport contests.

In the following section, we use these definitions to describe one of several sports that can be played as a traditional sport that keeps score on a win-lose basis or as a collaborative sport that keeps score on a win-win or lose-lose basis. The purpose of a collaborative sport is to nurture moral behavior and athletic excellence simultaneously.

Sport Designed to Nurture Moral Behavior and Athletic Excellence

As noted above, we define a collaborative team sport as an athletic contest in which both teams lose or win depending on whether they can increase the number of goals they score together in a series of rounds. Both teams have a common opponent, but the opponent in collaborative sport is not the other team. The opponents are the obstacles that the teams must overcome together if they are going to improve their joint score each time they play. The opponents may be any form of limitation such as time, distance, fear, prejudice, or other

impediments to the improvement of the number of goals the teams can score together.

A benefit from playing collaborative sports is that players on different teams strengthen their capacity to improve their combined performance. When players on different teams listen to each other and share ideas for increasing the number of goals they can score in subsequent rounds of play, players become more aware of each other's strengths and weaknesses. If players learn to build on the strengths of players on other teams and offset each other's weaknesses, their teams increase the chance of winning together by increasing their joint score.

To illustrate, consider an example of a collaborative sport, collaborative volleyball, as one of many sports that can be reconceptualized to keep score on a win-win-or-lose-lose basis in contrast to traditional sports in which teams contend as rivals on a win-lose basis. Like standard volleyball, collaborative volleyball is played on a court with a net, a ball, and two teams in competition. The differences in these two versions of volleyball are contrasted in Table 1.

Although these contests differ in the ways described in Table 1, both versions of volleyball have the seven defining characteristics of sport identified by Loy and Coakley: "embodied, structured, goal-oriented, competitive, contest-based, ludic, physical activity" (2015, p.4651). These two versions of volleyball illustrate the general differences between traditional win-lose sport and collaborative sport which keeps score on a win-win-or-lose-lose scoring system.

To compare the implications for moral behavior, consider the behaviors sanctioned by the rules of two types of team sports presented in Table 2. The moral behaviors we listed in the table are merely a subset of all moral behaviors and are presented to highlight differences in the conception of sports that keep score on a zero-sum basis in comparison to sports that keep score on a non-zero-sum basis. Although reasonable people may disagree about what constitutes moral behaviors, the

authors offer the list of candidates in Table 2 as prosocial actions "intended to help or benefit another" (Spruit et al., 2019 p. 229).

Table 2 contrasts aspects of moral behavior nurtured by the different conceptualizations of sport. Despite the differences, both forms of sport may benefit players. Win-lose skills may help in making a choice among mutually exclusive options such as several vendors competing for the same contract or when multiple departments are competing for their shares of a fixed budget. Win-win skills may strengthen positive-interdependent relationships such as parent-child, student-teacher, buyer-seller, physician-patient, business partnerships, marriage partnerships, and other mutually beneficial relationships.

We assert that by playing sports that challenge teams to score points collaboratively and reflecting between rounds, players can strengthen their moral agency by strengthening their capacity to overcome limitations and solve problems to their mutual benefit – and simultaneously strengthen their athletic abilities. We present a few instances where young people have participated in collaborative sport programs. Data from these programs provide preliminary evidence regarding the efficacy of collaborative sport as a means for developing moral behavior by encouraging players to think together about how they are going to improve their joint performance.

Examples of Collaborative Sport-Based Character Education Initiatives

We describe two character-education programs that we facilitated using sports that keep score on win-win-or-lose-lose basis. Both programs discussed here had components of program evaluation and improvement for the purpose of internal program assessment and quality improvement. Although both studies followed the standards of ethical research including informed consent, freedom not to participate, and freedom to withdraw from participation, neither of the studies were done with oversight by an Institutional Review

TABLE 1
Distinguishing Characteristics of Two Versions of Volleyball

Characteristics	Standard Volleyball	Collaborative Volleyball
Position	Players from opposing teams are positioned on opposite sides of the net.	Players from both teams are positioned on either side of the net.
Objective	Score points by sending the ball over the net so the ball is grounded and cannot be returned.	Score points by sending the ball over the net as many times as possible in three minutes.
Scoring	One team scores one point when they hit the ball so that the other team cannot return it before the ball touches the ground.	Both teams score one point when they hit the ball over the net provided everyone on the sending side has hit the ball at least once but not twice in a row.
Winning	The first team to score 25 points (with at least a two-point advantage) wins the game. When one team wins the other team must lose.	Both teams win, or both teams lose, depending on whether they can increase their joint score in a series of rounds of play.
Time	There is no time limit.	The time limit is three minutes per round. There is no limit to the number of rounds. The more rounds the teams play the more challenging it becomes to continue to improve the score.
Opponent	The opponent is the players on the other team.	The opponent is anything that limits the ability of the teams to score points together, for example, time.
Skill level	The relative skill of the two teams must be approximately equal for the contest to be meaningful.	The relative skill of the two teams can be extremely different and the contest is still meaningful because each team has players on either side of the net and both teams are trying to improve their combined performance.
Communication	Players share information accurately within their own team. Players give deceptive or misleading information to the other team (such as a head fake). Players try to keep their team's strategy secret from the other team. Players expose their strengths and conceal their weaknesses.	Players share information accurately between both teams. Both teams benefit by giving accurate and complete information about their strengths and weaknesses to players on the other team. Players share strategies for improving their combined performance.
Relationships	Players tend to increase their score if they can encourage their teammates and discourage opponents.	Players tend to increase the joint score if they can encourage players on both teams and help each other overcome whatever discourages them.
Collaboration	Players adjust strategy with their coaches and teammates during timeouts. Coaches only share strategy within their team.	Players from both teams adjust strategy together with the coaches from both teams between rounds. Coaches and players from both teams collaborate and share strategies for improving their combined score.

Board. Before any conclusions can be generalized to a larger population, more research must be undertaken to assess the merits of using sports that keep score on a non-zero-sum basis. The collaborative sports in these examples were provided by EnTeam Organization, a non-profit organization that works in the field of children's character education through collaborative games (www.enteam.org).

Example 1: Sport Intervention in a League of Faith-Based Schools

Operation Cooperation (OC) was a program designed to give students who attended one faith-based school the experience of accomplishing goals in collaboration with students from different faith-based schools. The faith groups of the four participating schools were Catholic Christian, Islamic, Jewish, and Prot-

TABLE 2
Comparison of Moral Behaviors Nurtured by Two Types of Competitive Contests

<i>Moral behaviors</i>	<i>Moral behaviors in win-lose team contests</i>	<i>Moral behaviors in win-win-or-lose-lose team contests</i>
Collaborate with other people	Collaborate with teammates to score more goals than the opposing team and preventing the other team from scoring goals.	Collaborate with players on the other team to increase continuously the number of goals the teams can score together.
Evaluate performance objectively	Evaluate performance by keeping score on a zero-sum basis: one team can win only if the other team loses.	Evaluate performance by keeping score on a non-zero-sum basis: both teams lose or both win depending whether they can increase their joint performance.
Communicate honestly	Teammates share accurate information internally. Teams maximize their score by keeping strategic information private. One team does not share strategies with the other team. Players on both teams agree to give misleading information (such as head fakes) to deceive opposing players as part of the game.	Teammates share accurate information externally. Teams maximize the improvement in their scores by sharing strategic information with the other team. Players on different teams share accurate information with the other team it helps them improve their joint score.
Resolve conflicts peacefully	Players and coaches promote conflict resolution and cooperation within their team because their teamwork increases the possibility of outperforming and defeating the other team.	Players and coaches promote conflict resolution and cooperation between teams because the teams increase the possibility of raising the scores if they work together.
Select players fairly	Coaches are just and fair in selecting the players who are most capable of maximizing the team's score. Teams become stronger if coaches cut less capable players from the team.	Coaches are just and fair in selecting players who have the potential to improve -- or help others improve -- because teams win by improving the score.
Include people with differing abilities equitably	Players with disabilities are included on teams with others who have comparable abilities. Players on different teams need similar levels of ability for a win-lose contest to be equitable.	Players with disabilities play as equal contributors with those who are not considered disabled because anyone who can improve can increase the joint score of the teams.
Respect property rights	The rules of the game explain when and how players may take property from opposing teams (such as stealing the ball from an opposing player).	The rules of the game are silent on property rights and allow the players to learn experientially the benefits of respecting other people's property.
Encourage and uplift each other	Coaches encourage their own players and rarely speak to players on the other team. Players encourage their teammates and may discourage or disparage opponents because the objective is to improve their own team's score.	Coaches encourage players on both teams and share ideas together. Players encourage their own teammates as well as players on the other team because the objective is to improve their joint score.

stant Christian. The OC league ran consistently in-person using collaborative sport for eighteen years (despite changes in administrations, mergers, and substitutions) until the pandemic in 2020. The program began shortly after 9/11/2001 with introductory workshops and planning sessions with parents and educators. Four OC events were held each year, and each of the four schools took a turn being host to students aged 8 to 10 years, parents, and teachers from the other three schools. OC expanded to include middle school students

from the Muslim and Jewish schools in 2018. The middle school students played collaborative volleyball. OC events were facilitated by staff from EnTeam Organization.

OC events were about two hours in the morning during four school days each year and were held in the gym or multi-purpose room at the host school. Each student was assigned to a team of about seven or eight students and each of the four schools was represented as equally as possible on each of the teams. The OC events had three primary elements:

1. An icebreaker – students and adults became better acquainted with teammates.
2. A sport event – The sport events—such as Net Catch, EnTeam Volleyball, and Keep on Track (Wohlfarth, 2019)—were brief so multiple rounds could be played. After each game, all the team scores were added together, and the league total was announced. Players lost together if the league score did not improve each time they played and won together if the score improved. Before the next round, the students had time to identify what worked well and what needs to be improved. Parents with each team asked questions from a list designed to nurture students' moral reasoning and encourage students to think together about how they could cooperate more effectively and improve their scores. Students shared their ideas for helping all the teams improve their performance.
3. Snack—After playing the series of games, players and adults had snacks and social time together. In closing comments, the facilitator encouraged students to reflect on how the game was an example of people – including those on other teams – benefiting from helping each other succeed.

The workshops were designed to focus on cooperation, not religious dialogue or political debate. The differences in religious orientation of the four faith-based schools were obvious but not emphasized since the purpose was to prepare students to accomplish goals collaboratively with people from diverse backgrounds.

OC was evaluated using a participatory approach with qualitative study methods (Minkler & Wallerstein, 2008). Three study questions were pursued by conducting interviews of students and adults (parents and educators) who experienced OC (Neufeld et al., 2011):

1. How do the participants (elementary, middle school, and high school youth alumni

of OC, parents, and school personnel) describe experiences and value of OC?

2. How do participants describe benefits from their OC experiences?
3. What do participants recommend to enhance the experience and impact from OC?

The evaluation was based on grounded theory (Charmaz, 2006) using an iterative process of constant comparisons of content from interviews and meetings with an advisory panel of parents and educators held during the study. Although 35 interviews were completed, two were not included due to insufficient documentation. Of the 33 interviews included, 14 were adults, and 19 were youth, and all four schools were represented. Four themes emerged from the interviews (Neufeld et al., 2011), among which the first two indicate attributes of prosocial moral behaviors:

1. People of different religions can work together.
2. Participants learned to work in teams.
3. Did not hear as much as I would have liked about Operation Cooperation
4. Extend Operation Cooperation over several years so students can remember it as they grow older.

The evaluators of the program noticed increases in attributes of moral behavior from the interviews: “The most frequent responses from parents and youth about Operation Cooperation (OC) benefits were that youth gained respect and open-mindedness about others who are different from them. Parents highly valued these attitudes. They particularly noted (and with high regard) that children became more comfortable talking and interacting with students from other religious schools during OC.” (Neufeld et al., 2011, p.14). The evaluators of the study found that a predominant belief of student alumni and parents was that OC enhanced the children's collaborative problem-solving, teamwork, respect, and comfort when interacting with other students from

diverse faiths. Although, further research would be needed to understand the long-term impacts and effectiveness of OC, such an application of collaborative games is one example - that could be used to potentially influence moral behavior among children and youth during their formative years.

Example 2: Using Sport to Strengthen Conflict-Resolution Skills in After-School Programs

A consortium of twenty-seven after-school sites participated in an intervention provided by EnTeam Organization using collaborative sports to strengthen students' ability to resolve conflicts peacefully and reduce the need for adults to intervene to settle disputes among students. The program objective was to prepare 78 after-school staff to use collaborative sports independently after the intervention.

Four workshops—with students and staff participating together—were led by EnTeam-certified collaborative-sport facilitators at each of the twenty-seven after-school sites. The first three workshops were held on consecutive days. The fourth workshop took place about two weeks later and included an opportunity for the staff to demonstrate leading a collaborative sport, ask questions about any issues they had using the collaborative scoring, and complete a follow-up survey.

Staff took surveys at the start of the first workshop and during the fourth workshop. Each site received the equipment needed to continue playing the collaborative sports and a digital instruction manual (Wohlfarth, 2019) for staff.

During the first three workshops the students and after-school program staff played collaborative sports that challenge players to increase the number of goals they could score collaboratively: Net Catch (a collaborative version of catch with four students throwing and catching using 2'x3' nets) and Keep on Track (a collaborative relay contest against time) (Wohlfarth, 2019).

A program evaluation examined the 2019-2020 school year where 78 after-school program staff and 736 students ranging in age from 6 to 12 years participated in the after-school character education program. The 27 urban sites participating in this after school conflict resolution program were assessed based on initial and final surveys of the site staff. In the final survey, 87% of the staff agreed with the statement that the collaborative sport “activities helped students learn to resolve conflicts peacefully.” Staff were asked to complete initial and final surveys in the following five areas of moral behavior.

A total of 78 site staff took the initial survey and 65 responded to the final survey. Among those, 48 of the responses could be matched as part of the outcome evaluation process.

The evaluation process compared before and after responses and conducted a paired *t*-test for the analysis, presented in Table 4.

The *t*-test results indicate that site staff who participated in the entire intervention provided by EnTeam Organization observed a significant increase in children's overall conflict-resolution ability after playing collaborative games several times. Continued intervention and research to determine program impact on these increases (e.g., by including a comparison sample to determine effects of the program specifically) might help us to examine what specifically supported such changes in moral behaviors and whether they are sustainable.

Table 5 presents a sample of staff members' responses to an open-ended question regarding the use of collaborative sports. Four out of five of the site staff members said they plan to use collaborative games in the future with children.

The evaluations of OC and the conflict resolution interventions described above were designed to assess the program effectiveness and explore opportunities to improve the programs. To compare the relative impact on moral behavior, we need a comparison of individuals who play the different sports. Such research would be a more ambitious undertaking.

TABLE 3
Site Staff Responses About Students Participating in EnTeam Games

<i>Do you agree with the following statement?</i>	<i>Before EnTeam Program</i>	<i>After EnTeam Program</i>
Students are skillful in their ability to stop other students from being mean.	51.2%	79.7%
Students are skillful in their ability to talk another student out of trying to fight.	52.5%	76.5%
Students are skillful in their ability to resist peer pressure to fight.	44.9%	82.9%
Students are skillful in their ability to stop teasing.	39.7%	78.2%
Students have ways to control anger.	35.9%	79.7%

A total of 78 site staff took the initial survey and 65 responded to the final survey, among those 48 of the responses could be matched as part of the outcome evaluation process.

TABLE 4
Response Comparisons (Paired *t*-test results), *N* = 48

Children's Conflict Resolution Items	Pre-test (<i>M</i>)	Post-test (<i>M</i>)	<i>t</i> -value	<i>df</i>
Students increased in their ability to stop other students from being mean.	2.40	3.00	4.35***	47
Students increased their ability to talk another student out of trying to fight.	2.44	3.04	4.35***	47
Students increased in their ability to resist peer pressure to fight.	2.35	3.17	6.90***	47
Students increased in their ability to stop teasing.	2.15	2.98	6.37***	46
Students have more ways to control anger	2.17	3.04	5.64***	45

****p* ≤ 0.001

Discussion, Future Research, and Conclusion.

Our central question was whether a reconceptualization of sport as a contest that is scored by measuring improvements in collaboration between teams can strengthen the efficacy of sport as an arena for nurturing moral behavior. Three possibilities for strengthening sport as a vehicle for developing moral behavior were drawn from prior researchers:

1. Reconceptualize the definition of competition to prioritize moral behavior.
2. Design variations of sport that encourage moral behavior among players.
3. Use sport as a context for comparing moral behavior when teams have positive interdependence or negative interdependence.

To illustrate one reconceptualization of sport, we described a version of volleyball

TABLE 5
Site Staff Responses to the Question: “Why use EnTeam games in the future?”

“Keeps kids engaged and helps them practice team building skills.”
“I plan to use the enteam strategies because the students have to stop and think before reacting.”
“It was nice to see young kids trying to work together as a team instead of being frustrated.”
“The games are simple enough to benefit a variety of ages and teaches/reinforces important ideas and skills.”
“The activities were fun and taught valuable lessons.”
“The Enteam gives students ways to increase their ability to solve conflicts.”

*** $p \leq 0.001$

including a scoring process to give players quantitative feedback on the scoreboard measuring their performance as collaborators with players on other teams. Generalizing from the volleyball example to sport more broadly, we contrasted moral behavior in win-lose contests with moral behavior in win-win-or-lose-lose contests. The inference is that both win-lose sport and win-win-or-lose-lose sport are valuable, but they develop different aspects of moral behavior.

The two examples discussed above suggest that collaborative sports that keep score on a win-win-or-lose-lose basis may strengthen moral behavior when players debrief between games and use moral reasoning to improve their collaborative efforts, but additional research (e.g., with a comparison group) is needed to understand causal mechanisms, processes, and whether engagement in collaborative sport is associated with future (e.g., long-term) changes in moral behavior. The examples we cite focused on specific aspects of moral behavior: conflict resolution skills and interfaith collaboration. Future research could address other applications of collaborative sport and answer related questions: what would happen if young people had opportunities to play win-win-or-lose-lose sport at least as often as they play win-lose sport? If sport is

structured to keep score of improvements in collaborative performance among teams and players are encouraged to debrief their joint performance, could sport provide low-risk opportunities to practice collaborating with diverse groups? If players from different teams talk together and experiment with alternative strategies for improving their joint scores, do they strengthen their capacity to collaborate with people from diverse backgrounds? Do players gain insights into moral aspects of deception and social justice? These questions invite additional research, exploration, and investigation.

Some of the research questions pertain to the sports themselves. For example: Which of the collaborative sports are more effective at developing moral behavior? Which of the collaborative sports are most effective at engaging players consistently? How can results from the two examples of programs be replicated and analyzed more rigorously? Will prosocial behavior increase, and antisocial behavior decrease, during sport contests and in life outside of sport events? Can this process be expanded to other sports – basketball, tennis, relays, baseball, etc.?

Other questions may address the impact on moral behavior off the athletic field. For example: After playing collaborative sports, do

players make moral choices more frequently than those who play traditional sports? What realms of behavior are most or least impacted? Seeking answers to questions about the use of collaborative sport to strengthen moral behavior could lead to more ways to give players a balanced understanding of winning and develop additional strategies for reconceptualizing sport.

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