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Toward Understanding Youth Athletes' Fun Priorities: An Investigation of Sex, Age, and Levels of Play

Amanda J. Visek,

Department of Exercise & Nutrition Sciences, Milken Institute School of Public Health, The George Washington University, Washington, DC

Heather Mannix,

Department of Exercise & Nutrition Sciences, Milken Institute School of Public Health, The George Washington University, Washington, DC

Avinash Chandran,

Department of Exercise & Sport Science, The University of North Carolina at Chapel Hill, Chapel Hill, NC

Sean D. Cleary,

Department of Epidemiology, Milken Institute School of Public Health, The George Washington University, Washington, DC

Karen A. McDonnell,

Department of Prevention & Community Health, Milken Institute School of Public Health, The George Washington University, Washington, DC

Loretta DiPietro

Department of Exercise & Nutrition Sciences, Milken Institute School of Public Health, The George Washington University, Washington, DC

Abstract

Colloquial conjecture asserts perceptions of difference in what is more or less important to youth athletes based on binary categorization, such as sex (girls vs. boys), age (younger vs. older), and level of competitive play (recreational vs. travel). The fun integration theory's FUN MAPS, which identify 11 fun-factors comprised of 81 fun-determinants, offers a robust framework from which to test these conceptions related to fun. Therefore, the purposes of this study were to scientifically explore: (a) the extent to which soccer players' prioritization of the 11 fun-factors and 81 fun-determinants were consistent with the gender differences hypothesis or the gender similarities hypothesis, and (b) how their fun priorities evolved as a function of their age and level of play. Players' ($n = 141$) data were selected from the larger database that originally informed the conceptualization of the fun integration theory's FUN MAPS. Following selection, innovative pattern match displays and go-zone displays were produced to identify discrete points of consensus and discordance between groups. Regardless of sex, age, or level of play, results indicated extraordinarily high consensus among the players' reported importance of the fun-factors ($r = .90-.97$) and fun-determinants ($r = .92-.93$), which were consistently grouped within

strata of primary, secondary, and tertiary importance. Overall, results were consistent with the gender similarities hypothesis, thereby providing the first data to dispel common conceptions about what is most fun with respect to sex, in addition to age and level of play, in a sample of youth soccer players.

Keywords

concept mapping; enjoyment; fun integration theory; FUN MAPS; youth development

Fun is the primary determinant of youth athletes' continued sport participation (Gardner, Magee, & Vella, 2016; Petlichkoff, 1992; Scanlan, Carpenter, Schmidt, Simmons, & Keeler, 1993; Scanlan & Simmons, 1992; Tuffey, Medbery & Gould, 2006; Yungblut, Schinke, & McGannon, 2012); thus, from early childhood through adolescence, positive and fun sport experiences are among the chief needs for youth athletes (Bailey, Hillman, Arent, & Petipas, 2013; Snyder, 2014; Visek et al., 2015). Today, youth athletes have more organized, sport-based physical activity options available to them than ever before, ranging from recreational to highly select travel teams and Olympic-development programs. Recreational programs are generally lower-cost for families, emphasizing inclusive participation among all players. Conversely, competitive travel and Olympic development programs typically necessitate that players try out and be selected in order to train and play, and include more intense skill development and competition, thus requiring families invest greater time and financial resources in their children's sport development (Coakley, 2001; Dunn, Dorsch, King, & Rothlisberger, 2016; Green & Chalip, 1998; Hyman, 2012; Turman, 2007).

Background

Levels of Play

The markedly divergent pathways between more recreational versus competitive levels of play likely contribute to the perception that youth athletes' participation needs are a direct correspondence to the type of program in which they are participating. In fact, a commonly held perception within today's culture is what is fun for competitive travel players (e.g., winning games) is categorically different from recreational players (e.g., being with their friends). In fact, Côté and colleagues have noted it is routine for youth sport programs to focus on achieving one of the 3P's (i.e., *performance*, *participation*, or *personal development*) often at the expense of the other two (Côté & Hancock, 2014; Côté & Vierimaa, 2014). Clearly then, it may be surmised what is most fun for players in a recreational program, in which *participation* via equal playing time is emphasized, must differ from players engaged in a highly competitive program focused more on *performance* outcomes. Research to date, however, has not yet compared these two distinct groups of youth athletes to one another, relative to their fun priorities. This presents an opportunity for investigation that would further our understanding of the needs of recreational and competitive travel players and how to promote the most fun experiences possible for each of them and, in turn, aid in maintaining their sport participation in childhood and through their adolescence.

Age

Unfortunately, organized sport participation declines most sharply around the start of adolescence (Eime et al., 2016; Temple & Crane, 2016). Notably, the primary reason given for youth sport dropout is that it is not fun anymore (DuRant, Pendergrast, Donner, Seymore & Gaillard, 1991; Fraser-Thomas, Cote, & Deakin, 2008; Mork Armentrout & Kamphoff, 2011). Popular models providing guiding frameworks from sport sampling, to specialization, to life-long physical activity, such as the developmental model of sport participation (DMSP; Côté, Baker, & Abernethy, 2007; Côté, Strachan, & Fraser-Thomas, 2007) and long-term athlete development models (LTAD; Balyi & Way, 1995; Brooks, 2016), would presuppose us to posit what makes playing sports fun during players' childhood will naturally evolve and change in their adolescence as they develop and move through the youth sport system and advance athletically. Further, well-documented literature regarding distinctions in children's physical, cognitive, emotional, and social maturation in sport from mid-childhood to early and mid-adolescence (e.g., Knight, Harwood, & Gould, 2018; Smith & Smoll, 1996; Weiss, 2004), along with the child development literature (e.g., Bergeron et al., 2015; Brown, Patel, & Darmawan, 2017; Cameron, 2014), would seemingly support this supposition. For example, relationships with same-sex peers becomes increasingly important and more intimate as children transition to adolescence (Vernon, 2004; Weiss & Smith, 2002). Therefore, it would be reasonable to conclude the social aspects of fun, based on teammate relationships, may play a more vital role in the sport experiences of adolescent athletes compared to their younger counterparts. In addition to age-related differences, athletes' biological sex is also thought to influence factors in athletes' sport experiences.

Sex

Indeed, biological sex is often a cue from which people draw very quick inferences about others (Macrae & Bodenhausen, 2000), influenced by enduring binary gender stereotypes (Ito & Urland, 2003; Yungblut et al., 2012) that have long typecast females as social, cooperative, and relationship-oriented and males as competitive and task-oriented (LaVoi, 2011; Messner, 2011; Van Vugt, DeCremer, & Janssen, 2007; Webb, 2008; Yan & McCullagh, 2004). In sport, socially constructed binary sex categorization stems historically from inequality, when females were not permitted to participate, and later due to separate-but-equal Title IX policies (Messner, 2011). It has been posited that separating females and males from one another (Tokarz, 1985) may provide safer, fairer, and more developmentally matched playing experiences because of timing differences between the sexes in their growth and maturation (e.g., Channon, Dashper, Fletcher, & Lake, 2015; Eccles, 1999; Ford et al., 2012, 2011; Schorer, Cogley, Busch, Brautigam, & Baker, 2009; Till et al., 2010).

However, separating athletes by sex would appear to abet perceptions that girls and boys are more different from one another, rather than similar, in their athletic interests, needs, and abilities. For instance, research has documented adults are contented with the belief that girls and boys naturally differ from one another and exult in sideline talk about the ways in which they differ, thereby reinforcing and perpetuating perceptions of difference; and, coaches acknowledge treating girls and boys differently, believing it is justifiable given the natural biological differentiation between them (Messner, 2000). For example, females are perceived as lacking the 'killer instinct' and therefore considered to be less athletically

competitive than males (LaVoi, 2011). Girls are, therefore, according to LaVoi, compared to boys against what is considered to be the male norm, and in turn, feminine is secondary and marginalized to the masculine.

Conjecture that the two sexes are considerably different from one another was popularized by the works of Tannen (1991) and Gray (1992) and has been scientifically referred to as the gender differences hypothesis (Jones, 1990; see also Capranica et al., 2013; Fischer, Kret, & Broekens, 2018; Hyde, 2014; Koh & Wang, 2014; LaVoi, 2011; Maccoby & Jacklin, 1974; Telford, Telford, Olive, Cochrane, & Davey, 2016). Conversely, when studying females and males across psychosocial domains, it is the alternative gender similarities hypothesis that has yielded considerable scientific support (see robust meta-analysis and literature by Hyde, 2005 and Hyde, 2014, as well as a rigorous meta-synthesis of the literature performed by Zell, Krizan, & Teeter, 2015). That is, according to the scientific literature, females and males are consistently found to be more alike than different; and, in the case of differences, the magnitude of those differences is quite small. Consequently, in the face of binary gender stereotypes, this body of scientific research would suggest what makes playing sports fun will be more similar than different for girls and boys alike. The fun integration theory's FUN MAPS (Visek et al., 2015) offers a unique framework from which to conduct sex comparisons within the context of organized youth sport, and to further compare athletes on other binary categorizations germane to organized sport, such as age and level of competitive play.

The Fun Integration Theory's FUN MAPS

According to the fun integration theory's FUN MAPS (Visek et al., 2015), for children and adolescents participating in organized team sports, fun is the accumulation of immediate experiences derived from contextual, internal, social, and external sources of many fun-determinants (see also Visek, Mannix, Mann, & Jones, 2018 for further review). It was originally developed by engaging youth sport stakeholders in concept mapping (Kane & Trochim, 2007), an applied social research mixed methodology that used participant-driven grounded theory like activities (Willig, 2013) to inductively identify and conceptualize all of the things that make playing sports fun. The fun integration theory's FUN MAPS is the first-ever grassroots-derived framework for promoting fun through structured skill development and competitive play.

In brief, more than 200 hundred players, parents, and coaches from recreational and travel soccer teams were asked to brainstorm and list all of the things that make playing organized sports fun for youth athletes (Visek et al., 2015). Collectively, they identified 81 distinctly unique fun-determinants. To ascertain the interrelatedness of these determinants to one another, they conceptually sorted all 81 fun-determinants into thematic piles. Finally, using a Likert-type scale, they rated the importance of each fun-determinant relative to all the others. Using multidimensional scaling, a two-dimensional solution was applied that resulted in a series of micro- and macro-level concept maps called FUN MAPS, which illustrated the 81 fun-determinants within 11 factors representing contextual (*Games, Practices*), internal (*Trying Hard, Learning and Improving, Mental Bonuses*), social (*Positive Team Dynamics, Team Friendships, Team Rituals*), and external sources of fun (*Positive Coaching, Game*

Time Support, Swag). Among the 11 fun-factors, the results of that study indicated *Positive Team Dynamics, Trying Hard, and Positive Coaching* were of greatest importance. This finding, referred to as the youth sport ethos (i.e., the trifecta of fun-factors paramount for maximizing fun) was based on the combined input from players, parents, and coaches (Visek et al., 2015).

Efforts, however, to promote the most fun experiences for youth sport participants will require studies that examine their preferences and priorities independent from that of adults. Ideally, programs should be designed to meet youth athletes' needs and implemented by adults in ways that are consistent with athletes' prioritization of the fun-factors and respective fun-determinants. Therefore, identifying the exact points of consensus (agreement) and discordance (disagreement) among athletes will be critical to informing coach education and program planning for youth sport organizations. Fortunately, data from concept mapping studies, like those which informed the development of the fun integration theory, can produce pattern match displays that identify discrete points of consensus and discordance among players with respect to fun.

Pattern Match Displays

Pattern match displays are an innovative way of viewing permutations of data from concept maps (e.g., the FUN MAPS) in the form of ladder graphs, enabling independent stakeholder perspectives to be compared to one another (Kane & Trochim, 2007). For example, pattern match displays can determine the *overall consensus* of the relative importance of all 11 fun-factors among youth athletes across a number of attributes (e.g., sex, age, level of play), as well as identify exact fun-factors on which they agree and disagree. Thus, from pattern match displays, athletes can be compared to one another (e.g., girl players compared to boy players) to determine the extent to which the gender similarities hypothesis or gender differences hypothesis is observed and whether their prioritization of the fun-factors are more alike or different based on other factors such as age (e.g., younger players compared to older players) and level of play (e.g., recreational players compared to travel players). In addition, go-zone displays can be produced to further compare them to one another at the more specific fun-determinant level, which provides a more nuanced examination of the data.

Go-Zone Displays

Go-zone displays are bivariate x - and y -graphs that juxtapose the mean importance ratings of the 81 fun-determinants, as reported by two comparison groups. Along the x -axis (e.g., girls) and y -axis (e.g., boys), lines at the mean rating value for each group split the graph into four distinct quadrants. The upper-left quadrant identifies determinants rated below the mean for girls and above the mean for boys, whereas the bottom-right quadrant identifies those determinants rated above the mean by girls and below the mean by boys; these two quadrants are therefore helpful in identifying discriminate priorities between the two sexes. The bottom-left quadrant identifies determinants rated below the mean by both girls and boys and thus collectively identifies determinants of lesser importance, whereas the upper-right quadrant identifies the determinants rated above average for girls and boys, thus emphasizing specific, actionable items of highest priority toward creating fun youth sport

experiences. Together, the four quadrants provide distinctive, yet practically insightful information for making decisions regarding how to act on those determinants in youth sport settings. Very often, information contained within one of the four quadrants is of greater interest and will be designated the “go-zone” for action-oriented intervention or to inform program planning. For instance, a youth soccer coach who is working to be most efficient in her promotion of fun-determinants for her girls travel team, as well as her boys travel team, may examine the go-zone display juxtaposing girl travel players and boy travel players and choose to pay particular attention to the fun-determinants in the upper-right quadrant, the designated “go-zone”, which identifies for both girls and boys the fun-determinants of highest importance.

In sum, for any two select groups who contributed to the development of the FUN MAPS, pattern match displays provide direct comparison of the reported importance of the 11 fun-factors via ladder graphs and go-zone displays are bivariate graphs that compare the importance of the 81 fun-determinants. Pattern match displays and go-zone displays each provide unique, quantitative information from key stakeholders who conceptualized a concept map. As such, the purposes of this study were to conduct an exploratory, secondary analysis of the FUN MAPS used to originally conceptualize the fun integration theory by producing illustrative pattern match displays and go-zone displays to explore: (a) the extent to which players’ prioritization of the 11 fun-factors and 81 fun-determinants were consistent with the gender differences hypothesis or the gender similarities hypothesis, and (b) how their fun priorities evolved cross-sectionally as a function of their age and level of play.

Methods

Participants

For the purposes of this study, the data analyzed included those originally provided by youth soccer players ($n = 141$) in the development of the fun integration theory (see Visek et al., 2015). Participants included girls ($n = 69$) and boys ($n = 72$) playing at the recreational level ($n = 65$) and travel level ($n = 76$) that ranged in age from eight to 19 years (younger [U9–U13], $n = 95$; older [U14–U19], $n = 46$), of which 75.5% reported playing other sports, in addition to soccer.

Procedure and Data Analyses

The George Washington University Institutional Review Board for the Protection of Human Subjects approved this study. For a full overview of the qualitative and quantitative data collection procedures used in the original concept mapping of the FUN MAPS, see Visek et al. (2015). The Concept Systems® Global MAX license (Concept Systems, Inc., Ithaca, NY) that produced the FUN MAPS was also used to produce the pattern match displays and go-zone displays for this study. SPSS (version 20.0; IBM Corp., Armonk, NY) was used to generate descriptive statistics and for statistical hypothesis testing.

Pattern Match Displays.—A total of 27 pattern match displays were produced representing the most logical combination of two-group comparisons among players (e.g.,

girl players compared to boy players; girl travel players compared to boy travel players; younger girl travel players compared to older girl travel players, and so on), based on three levels of stratification: (a) sex (girls, boys), (b) age group (younger [U9–U13], older [U14–U19]), and (c) level of play (recreational, travel). For each pattern match display comparing any two select groups, a ladder graph was created, representing the perceived importance of the fun-factors with values ranging from 1 (*not as important*) to 5 (*extremely important*). Relative scales were used for the vertical axes of the ladder graphs. That is, the top and bottom of the vertical axes corresponded to the highest and lowest values observed within scores of both groups, rather than the absolute scale values of 1 and 5. Relative pattern match displays are more helpful for visually detecting differences between groups than are absolute displays (Kane & Trochim, 2007). Lines between the vertical axes of the ladder graphs create the “rungs”, which are representative of the different fun-factors. The rungs pictorially represent the relative agreement and or disagreement across two groups; meaning, the more horizontal the rungs are between the groups, the greater agreement (consensus) there is between them (see Figure 1 as an example). Concept Systems® calculated a Pearson product moment correlation coefficient to describe the aggregate relationship of all of the rungs between the two groups. In other words, the correlation coefficient measured the collective consensus or discordance between the two groups with coefficients closer to $r = 1.0$ indicating greater consensus (agreement) between the groups. For each pattern match display, Mann-Whitney U tests (MWU) were used to identify significant group differences in fun-factor ratings. To avoid inflating the likelihood of Type I error in the MWU comparisons, a Bonferroni correction was applied to account for the number of distinct comparisons; therefore, statistical significance was evaluated at $p = .002$ ($.05/27$).

Grouping Effect.—Among the pattern match displays produced, the fun-factors frequently appeared to be grouped together into three distinct strata of primary, secondary, and tertiary importance. Wilcoxon Signed Rank (WSR) tests were used to determine if ratings of the upper stratum (*Trying Hard, Positive Team Dynamics, Positive Coaching*) and bottom stratum (*Team Rituals, Swag*) were significantly different from each other, as well as the middle stratum (*Learning and Improving, Games, Practice, Team Friendships, Game Time Support, Mental Bonuses*). That is, each factor within the top and bottom strata were compared to each other, as well as to factors within the middle stratum. For these post-hoc analyses, statistical significance was evaluated at $p = .007$ ($.05/7$) to account for the number of distinct groups tested in these comparisons.

Go-Zone Displays.—For further evaluation, go-zone displays were produced using the same 27 group comparisons considered for the pattern match displays. Each axis of the go-zone graphs corresponded to one of the groups being compared and spanned the range of within-group ratings for the 81 fun-determinants. Lines demarcating the mean rating value for each group split the graph into its four distinct quadrants (see Figure 2 as an example). Similar to pattern match displays, Concept Systems® calculated a Pearson product moment correlation coefficient to describe the aggregate relationship of the reported importance of the 81 fun-determinants between the two groups. We again used MWU tests to identify significant group differences in importance ratings of the 81 fun-determinants. Similar to the pattern match displays, a Bonferroni correction was applied while evaluating the results of

the MWU tests ($p = .05/27 = .002$). For those fun-determinants that significantly differed between groups, the effect size of difference was calculated by $r = Z/\sqrt{N}$ and interpreted using Cohen's (1988) suggested parameters: 0.1, a small effect; 0.3, a medium effect; and 0.5, a large effect. Finally, the upper-right quadrant was used to identify determinants rated above average in importance for all comparisons, thus emphasizing specific, actionable items of highest priority toward creating fun youth sport experiences. Similarly, the lower-left quadrant was used to identify determinants rated below average in importance for all comparison groups, acknowledging items of lowest priority.

Results

Univariate statistics were used to assess all study variables. Table 1 lists the 11 fun-factors, in order of importance, from most important (i.e., *Trying Hard*) to least important (i.e., *Swag*) based on the aggregate mean for all players; and, within each fun-factor, the associated fun-determinants are also listed in order from most important to least important. Table 2 lists the 81 fun-determinants' rank-order from most important (i.e., *trying your best*) to least important (i.e., *getting pictures taken*), for all players, irrespective of its associated fun-factor.

Pattern Match Displays: Fun-Factors

From the 27 pattern match displays, comparisons by sex-only, age-only, and level of play-only represented the most parsimonious set of key findings, and as such, are reported here. Overall, high consensus ($r = .95$) was observed between girls and boys, with only one noted group difference. Among the 11 fun-factors, a higher mean response rating was observed among boys, compared to girls, for *Learning and Improving*; and, based on the results observed from the MWU test, there was sufficient evidence to suggest statistically significant group differences in the distribution of responses between the sexes for this fun-factor ($U = 1623, p = .001$; see Figure 1). The greatest consensus was observed when comparing players across age groups ($r = .97$) and identified no significant group differences between younger and older players (see Figure 3) in the response ratings of any of the fun-factors. Likewise, high consensus ($r = .95$) was observed among recreational and travel players; and again, no significant group differences were identified in response ratings based on level of play comparison (see Figure 4).

Supplemental Findings.—The other 24 stratified pattern match displays can be found in the Supplemental Materials [available online] of this paper. In sum, high consensus was observed among the groups compared ($r = .90-.98$), which included multiple, varied combinations of stratification by sex, age, and level of play (see Figures S1a–S1h, S3a–S3h, and S4a–S4h in the Supplemental Materials [available online]). MWU tests indicated only three instances of significant group differences in the distribution of responses between the comparison groups: (a) younger recreational players compared to older recreational players for *Team Friendships* ($U = 238, p = .001$; see Figure S3d in the Supplemental Materials [available online]); (b) older recreational players compared to older travel players for *Team Friendships* ($U = 99.5, p < .001$; see Figure S4d in the Supplemental Materials [available

online]); and (c) older boy recreational players and older boy travel players for *Games* ($U = 10, p = .001$; see Figure S4h in the Supplemental Materials [available online]).

Across the 27 pattern match displays (i.e., three reported in the main findings and 24 reported in the supplemental findings), in total, only four group differences were observed, which represents just 1.3% of the set of all potential group differences (i.e., 297). Therefore, the null (of no group differences) was most pervasive (98.7%) across all of the comparisons.

Grouping Effect.—Consistent with visual inspection, WSR tests indicated among the pooled sample of players the ratings observed at the upper stratum of fun-factors (*Trying Hard, Positive Team Dynamics, Positive Coaching*) were significantly different ($p = .007$) from the middle stratum (*Learning and Improving, Games, Practice, Team Friendships, Game Time Support, Mental Bonuses*), as well as the bottom stratum (*Team Rituals and Swag*) and even when stratified by age (among younger players), sex (among female players), and level of play (among both recreational and travel players). Similarly, ratings of the bottom stratum (*Team Rituals and Swag*) were significantly different ($p = .007$) from the middle stratum (*Learning and Improving, Games, Practice, Team Friendships, Game Time Support, and Mental Bonuses*) among the pooled sample and for all stratified subgroups of players by sex (girls, boys), age (younger, older), and level of play (recreational, travel). Table 1 displays the fun-factors and associated determinants within the upper stratum (primary importance), middle stratum (secondary importance), and bottom stratum (tertiary importance).

Go-Zone Displays: Fun-Determinants

Similar to the pattern match displays, three of the 27 go-zone displays represented the most parsimonious set of key findings and are therefore reported here. High consensus was observed between the sexes ($r = .93$, see Figure 2) and MWU tests indicated only six significant group differences in response ratings between girls and boys (see Table 3), meaning girls and boys agreed on the relative importance of ~93% of the 81 determinants. Similarly, high consensus was observed across the age groups (younger and older players, $r = .93$; see Figure 5), with response ratings significantly different between younger players and older players for only three of the 81 determinants (see Table 3), indicating they agreed on the relative importance of ~96% of the determinants. Likewise, high consensus was observed across levels of play (recreational and travel players, $r = .92$; see Figure 6), and again few statistically significant differences in response ratings were noted. Recreational and travel players differed significantly for only five of 81 fun-determinants (see Table 3), meaning they agreed on the relative importance of ~94% of the determinants. These results were visually reflected in the strong, positive, linear trend observed in all of the go-zone display comparisons (see Figures 2, 5, and 6). Further, across all 27 go-zone displays, 30 of the 81 fun-determinants (37.04%) were consistently observed in the upper-right quadrant (see Table 4); and, 22 of the 81-determinants (27.16%) were consistently observed in the lower-left quadrant (see Table 5). Collectively, regardless of how the player comparisons were stratified, these fun-determinants represent those of highest priority (upper-right quadrant) and lowest priority (lower-left quadrant) in this sample of youth soccer players.

Discussion

To date, the fun integration theory's FUN MAPS provide the only framework by which sex- and gender-stereotypes and other group comparisons, such as age and level of play, can be examined with regard to children's fun priorities. Invariably, the structure of the youth sport system, which sorts players on the basis of offering different types of sport experiences (e.g., recreational programs vs. competitive travel programs) and then further organizes players according to their binary sex classification and age, lends naturally to the formation of perceptions that players' fun priorities may differ based on the inherent ways in which they are categorized. The overall objective of this study was to examine players' fun priorities and determine whether those priorities are distinctly different or similarly equivocal. First, the extent to which players' perceptions of the importance of the fun integration theory's 11 fun-factors and 81 fun-determinants were consistent with the gender differences hypothesis or the gender similarities hypothesis, among girls and boys participating in organized youth soccer, was explored. Second, how their fun priorities evolved cross-sectionally as a function of their age (younger compared to older) and level of play (recreational compared to travel) was explored. Results provide novel findings and a more complete context in which to understand the literature in this area.

Similar Fun Priorities: Early Establishment of Youth Athletes' Fun Ethos

Findings from the youth soccer players who participated in this study indicated they are profoundly more similar to one another, rather than different, in their self-reported fun priorities across the 11 fun-factors and 81 fun-determinants. Younger players and older players (see Figure 3), as well as recreational players and travel players (see Figure 4), were remarkably similar across the 11 fun-factors, respectively. Likewise, girls and boys were incredibly more alike than different (see Figure 1), thereby consistent with the gender similarities hypothesis, which has, to date, garnered significant scientific support (e.g., see Hyde, 2005; Hyde, 2014; Zell et al., 2015) compared to its counterpart, the gender differences hypothesis. Additionally, when further stratified by varied combinations of sex, age, and level of play, the comparison groups of players were still exceptionally more similar, rather than different, across the fun-factors (see Supplementary Materials [available online]) and fun-determinants (see Figures 2, 5, and 6) in what was of greater or lesser importance (see also Tables 4 and 5 for precise uniformity across the fun-determinants regardless of sex, age, and level of play).

Notably, this study provided a more precise representation of players' comparative perceptions than was first understood from the original concept mapping study that conceptualized the FUN MAPS and discussed the multi-theoretical fun integration theory within existing theoretical frameworks (readers are referred to the original study for discussion of the fun integration theory relative to self-determination theory, achievement goal theory, competence motivation theory, and others; see Visek et al., 2015). In that study, *Positive Team Dynamics*, *Trying Hard*, and *Positive Coaching* were collectively coined the *youth sport ethos* (i.e., the trifecta of fun-factors of utmost importance) based on the combined input from players, parents, and coaches. The present study, which purposely examined the input from players' only, found the 11 fun-factors were clearly grouped

together by three distinct levels of importance: primary (*Trying Hard, Positive Team Dynamics, and Positive Coaching*), secondary (*Learning and Improving, Games, Practice, Team Friendships, Game Time Support, and Mental Bonuses*), and tertiary (*Team Rituals and Swag*). Given the findings of this study, the youth sport ethos may perhaps more appropriately be coined the *youth athletes' fun ethos*, which more completely and distinctly identifies the relative prioritization of *all* 11 fun-factors for youth soccer players across sex, age, and level of play, rather than simply the top three factors of primary importance, sans parent and coach influence of the ratings.

Given the social aspects of sport participation are thought to play a larger and more important role in the experiences of girls (e.g., Keathley & Himelein, 2013; Weiss & Smith, 2002; Yungblut et al., 2012) and based on meta-synthesis findings by Zell and colleagues (2015), which indicated peer attachment was one of the select variables on which females scored higher than males, it would have been reasonable to have expected sex differences on factors identified as socially *fundamental*, such as *Positive Team Dynamics, Team Friendships, and Team Rituals*. Remarkably, no differences were observed for the socially constructed fun-factors across any of the sex comparisons. Though, interestingly, these findings are consistent with an early review of more than 2,000 studies of gender differences which concluded popular beliefs, for example, that girls are more social than boys and lack competitive achievement motivation, were unfounded (Maccoby & Jacklin, 1974). As Weiss and Stuntz (2004) have noted, based on the recommendations of other researchers, consideration of the social context of peer interactions is important for understanding the significance of group relationships and one-to-one dyadic relationships among youth in specific behavioral settings. Overall, these findings suggest the relative importance of the social sources of fun, in sport, may be more comparable for girls and boys than they are different.

Limited Fun Differences

Although an overwhelming pervasiveness of similarity was found with respect to youth soccer players' fun priorities, discussion of the few differences observed is warranted. Among the 81 fun-determinants, six differences were observed between girls and boys, many of which largely correspond to the fun-factor *Learning and Improving*, the only significant difference observed among the fun-factors. Specifically, boys reported slightly more importance for: *using a skill learned in practice during a game, improving athletic skills to play at the next level, doing partner and small group drills, copying the moves/tricks of professional athletes, and competing*. Although these determinants were significantly different, *improving skills to play at the next level*, as well as *competing*, were both rated above average in importance for girls and boys (see Table 3) with both groups rating it more than '*really important*' with respect to the Likert-type scale used to assess relative importance. Consistent with gender stereotypes, girls in our study indicated higher importance for *doing a cool team cheer*, though it is important to note the scores observed for both girls and boys were only rated '*sort of important*'. Girls, especially adolescent girls, are often times pressured to conform to social norms and feminine "ideals" (Dwyer et al., 2006), particularly when it comes to competition and being competitive (Yungblut et al., 2012). In a study by Vu, Murrie, Gonzalez, and Jobe (2006), for girls, sports were viewed as

a less gender appropriate avenue for physical activity than for instance, dance, and girls' fear of negative perceptions from boys impacted girls' participation. Likewise, adolescent boys supported this notion by suggesting girls who play sports are "too aggressive" or "tomboys". In a recent paper by Hyde, Bigler, Joel, Tate, and Van Anders (2019), that explores the role in which the gender binary has shaped the history of psychological science and lay perceptions, while drawing on the scientific research which clearly challenges the gender binary, they concluded:

... social categorization research suggests that gender/sex emerges as a psychologically salient and meaningful dimension of human variation during childhood, not as the inevitable result of an innate mechanism, but instead as the result of societal practices that guarantee that children (over)learn to categorize the self and others into the binary categories of male and female. (p. 181)

As such, it is not surprising that the results of this study would observe differences consistent with sex- and gender-stereotypes that continue to permeate not only sport, but general societal expectations of girls and boys.

With respect to age, younger players indicated the fun-determinants, *having a coach participate with players in practice and playing different positions*, were more important than their older counterparts, whereas the inverse was observed for younger and older players relative to it *relieves stress*. From the vantage point of fostering overall athletic development, younger and less experienced players are likely to benefit from having a coach who can interact more overtly with them on the field during practices, while also being given opportunities to learn, practice, and play a variety of positions. One of several evidence-based recommendations for aligning sport programs with children's needs is allowing them to play all positions in a given sport, particularly those under the age of 13 (see Côté & Hancock, 2014). Indeed, the findings of our study underscore the importance doing so has in promoting more fun sport experiences for younger players, especially those in the sampling and early development years compared to older players, who have probably determined the position(s) they excel playing in and thus presumably prefer to play. Older players, too, may likely be more aware of the immediate and longer-term benefits of regular exercise and the role that playing sports, such as soccer, has in managing their stress and maintaining their cognitive health. In a like manner, determinants more typical of highly competitive programs, including *practicing with specialty trainers/coaches*, *going to sports camps*, *staying in hotels for games/tournaments*, *traveling to new places to play*, and *playing in tournaments* were observed to be of greater importance for travel players than recreational players.

Finally, among the more stratified subgroup comparisons by age and level of play, older recreational players compared to their younger recreational counterparts indicated greater importance for *Team Friendships*. Because relationships with same-sex peers is noted to become increasingly important and more intimate as children transition to adolescence (Vernon, 2004; Weiss & Smith, 2002), this finding was not unexpected. Likewise, older recreational players compared to older travel players also indicated greater importance for *Team Friendships*, and older boys playing at the recreational level indicated greater importance for *Games* compared to older boys playing at the travel level. When noting these

differences, rather than interpreting each observed difference as absolute, it is important to consider fun more wholly within the complete multivariable context of the fun integration theory's 11 fun-factors and 81 fun-determinants. That is, findings of this, and future studies, should be interpreted with regard to players' fun priorities, overall, or as previously discussed, within the context of an established fun ethos for a given group. Though differences were observed for *Team Friendships* and *Games*, the fun-factors rated more highly by the comparison groups were *Trying Hard* and *Positive Team Dynamics*, among other factors as well. Therefore, to conclude, for example, among older boys in this sample of players, that *Team Friendships* is more important to those playing recreational soccer compared to travel soccer is not incorrect. However, this conclusion, when given in isolation from the full context of the fun ethos, is more likely to perpetuate the commonly believed conjecture that *Team Friendships* are paramount to fun for recreational players and less so for travel players, when the data indicate across the many comparison groups that among the social aspects of fun, *Positive Team Dynamics* was consistently paramount to *Team Friendships*. Considering this, in light of the overall fun priorities of the players' who participated in this study, the social aspects of sport, including *Positive Team Dynamics* (primary importance), *Team Friendships* (secondary importance), and *Team Rituals* (tertiary importance) may be more stable across the sexes, from childhood to adolescence, and between levels of play than is perhaps observed in other life contexts.

Conclusion: Toward De-essentializing Differences

In our historical and current cultural milieu, categorical differences are expected between females and males even though research in the realms of neuroscience, behavioral neuroendocrinology, and developmental psychology continually challenge the gender binary (see Hyde et al., 2019 for a full review). Assumptions that females and males differ, and that this dichotomy has profound relevance to nearly every aspect of life, is commonly accepted as the basis for the gender differences hypothesis (Bem, 1981; Jones, 1990), and unfortunately remains the rule rather than the exception (Hyde et al., 2019). Despite this, gender, along with age and race, is most often the primary social cue influencing our initial perceptions of one another (Macre & Bodenhausen, 2000). Expected sex differences are a byproduct of gender stereotypes that are still very much relevant in today's culture (Schmalz & Kerstetter, 2006), particularly for sport, a domain that continues to be characterized as masculine (Chalabaev, Sarrazin, Fontayne, Boiché, & Clément-Guillotin, 2013) and is one of the only modern spaces in society in which gender classification is clearly institutionalized as a structural category separating women and men (Kamberidou & Patsadaras, 2007). Chalabaev and colleagues (2013) described the gender schema essentially as a cognitive filter through which we interpret the world around us and behave in ways that are consistent with our cultural norms, of which gender norms and expectations continue to be deeply entrenched as distinctively binary, even in today's postmodern era (Hyde et al., 2019).

Based on the findings of psychological science, the mere act of categorizing people can create inherent expectations of within-group similarities (e.g., recreational boy players), as well as expectations for between-group differences (e.g., recreational boy players compared to travel boy players, younger girl travel players compared to younger girl recreational

players, and so on). These differential expectations are learned early in life, from which societal practices reinforce gender binary perceptions, practices, and assumptions (Hyde et al., 2019). Both experimental and correlational studies of children have shown when people are explicitly sorted into categories on the basis of an identified trait (e.g., gender), categorization is underscored and prejudices and stereotypes are formed and preserved (see Bigler & Liben, 2006, 2007), which costs society vastly. Impeding children's achievement in areas deemed culturally inappropriate for their respective gender, be it in sport or other life contexts, essentially "... disempower people and limit human potential" (Hyde et al., 2019, p. 184).

The mere structure of organized sport inherently leads to binary associations because players are categorized by their sex (girls, boys), age (younger, older), and level of play (recreational, travel). When we conceptualize aspects of identity as a binary, there is the tendency to define one unit as the negative or lack of the other unit (Martin, 2015), which then assumes an inverse relationship between the two units, implying a difference. For example, recreational programs tend to be associated with where children play to have fun, thus presumably travel programs are not meant to be fun per se, and instead, are where children go to truly compete, implying recreational programs are void of opportunities for children to engage in competitive play. Similarly, the sentiment that girls are the social ones and play sports to be with their friends, and boys are the competitive ones and play to win, devalues the social-emotional role of peers in boys' sport experiences and minimizes the importance of competing for girls. Likewise, expected gender differences are also observed at the adult level, in which studies have shown a professional class gender ideology and gender category sorting system essentially directs men into coaching roles and women into roles as team moms (see Messner & Bozada-Deas, 2009). This, then, further creates culturally imposed gender divisions that reinforce our associative bond with what it means to be female versus male in sport.

Although studies unequivocally support the gender similarities hypothesis, Gill (2004), LaVoi (2011), and others have noted that the media and public attention are quite drawn to and captivated by the perception that gender differences abound, despite there being a lack of scientific evidence to support this contention (see Hyde et al., 2019). As Kahneman (2011) noted in his book, *Thinking, Fast and Slow*, media coverage is partisan toward novelty and stories of poignancy; lay judgements, he says, may explain the differences between expert science and public perception. Kahneman (2011) is well-known for his Nobel-prize winning work in regard to the quick judgements and decision-making errors humans make that stem from our established heuristics, schemas, and biases. He likened the process and speed by which we think and come to conclusions as made up of two fictional systems: system 1 which is automatic, fast, and intuitive; and system 2 which requires effort and is slow and deliberate. The division of cognitive labor between the two systems generally optimizes performance with minimal effort; however, system 2 has biases, which can lead us to making systematic errors. It should be noted that system 2, in which biases are harbored, cannot be turned off; thus, it is always on. Evidentiary support indicates that our socio-culturally created gender schemas, and thus gender biases, are not scientifically valid and therefore constrain girls and boys, on and off the playing field.

According to Martin (2015), by de-essentializing differences between the sexes we create opportunities for new ways of thinking and approaching sport. Practically speaking, doing so will require substantial system 2 effort, consistently over time, to begin to override our gender-constraining system 1 thinking to evolve cognitively in such a way that we are able to develop new gender schemas underscoring the more pronounced ways in which girls and boys are the same in sport. When considered within the global context of all of the fun-determinants, girls and boys who participated in our study agreed on the relative importance of 92.59% of the 81 determinants, thereby further substantiating the gender similarities hypothesis (i.e., what is fun for girls is the same for boys). Additionally, the findings of this study also provide early evidence that younger players and older players, as well as recreational players and travel players, are more similar to one another than they are different. In sum, if we are to be successful in promoting the fun ethos for all young athletes regardless of the binary ways in which sport categorizes its players by sex, age, and level of play, it will likely require de-essentializing (mis)perceived differences.

Limitations and Future Directions

By elucidating young athletes' fun priorities from adults, and examining those priorities according to sport's categorizing system, this study was an important step in discovering the consistency of players' fun priorities across their sex, age, and level of play. When considering the criteria of a good theory, generalizability is a key feature in that the wider application a theory has across different environments (e.g., recreational and travel competition settings) and across categories of people (e.g., girls and boys; children and adolescents), the greater its utility is considered (Lucas, 2003; Van Lange, 2013; Wacker, 1998). In essence, without generalizability of a theory, there would be no external validity (Lucas, 2003) or evidence-based practice (Polit & Beck, 2010).

To that end, as previously noted, this study's sample was limited to one geographic region of the United States and to soccer, a sport considered gender-neutral (see Schmalz & Kerstetter, 2006). This may have contributed to the lack of significant gender differences observed, though it is important to mention the majority of our study participants also reported playing other organized sports, as well. That said, to establish broader generalizability, future studies must include additional team-based sports from other geographic regions with a larger sample. The sample from the original concept mapping study from which this secondary analysis was derived was substantial for a mixed-method study; however, exploring group similarities and differences resulted in smaller subgroup samples for comparison. Doing so restricts the generalizability of this study's findings. Additional studies, with larger sample sizes, are needed to substantiate the results from this study. To do this efficiently, future research should aim to develop a player-centered measure of fun which would allow for quick testing across a more diversified, larger sample of sports to determine if the sex, age, and level of play findings from this study also hold across both gender-neutral and sex-typed team sports.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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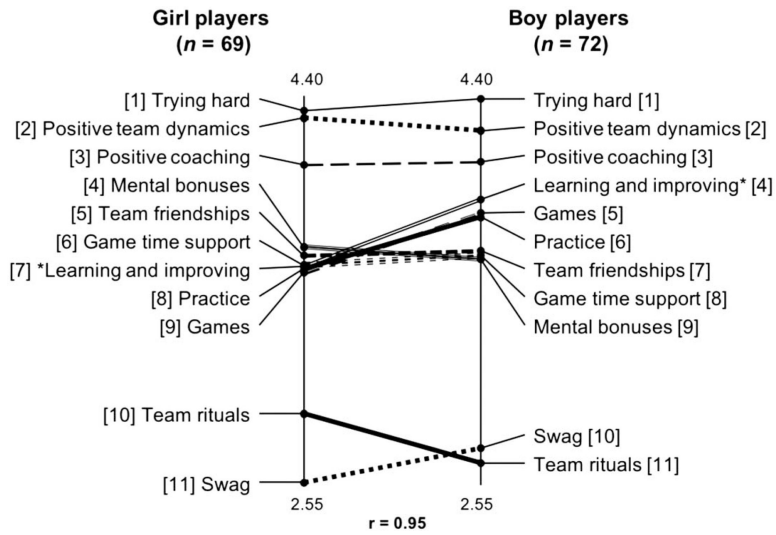


Figure 1 —. Pattern match displays, stratified by sex, comparing players reported importance of the 11 fun-factors to one another. Numbers in brackets represent the rank order of factors from most important [1] to least important [11]. * $p < .001$.

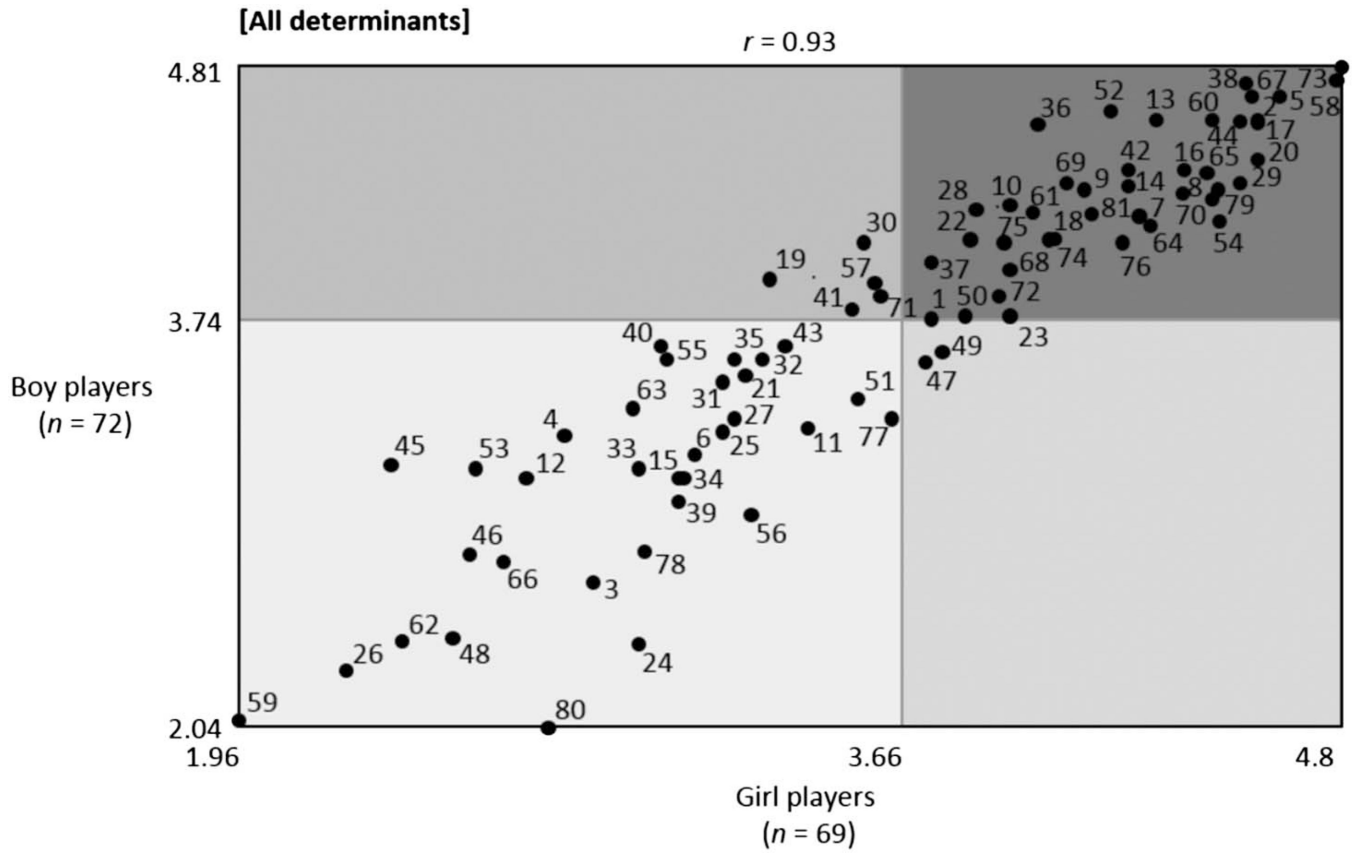


Figure 2 —
 Go-zone displays comparing mean importance ratings for each of the 81 fun-determinants across players stratified by sex. Lines demarcating the mean rating value for each group split the graph into four quadrants. The upper-right quadrant was designated the *go-zone*.

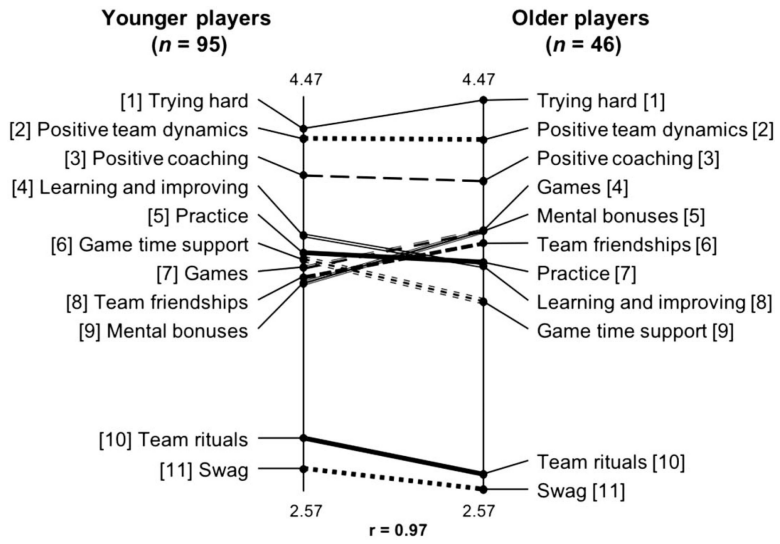


Figure 3 —. Pattern match displays, stratified by age, comparing players reported importance of the 11 fun-factors to one another. Numbers in brackets represent the rank order of factors from most important [1] to least important [11]. Younger players = U9–U13, older players = U14–U19.

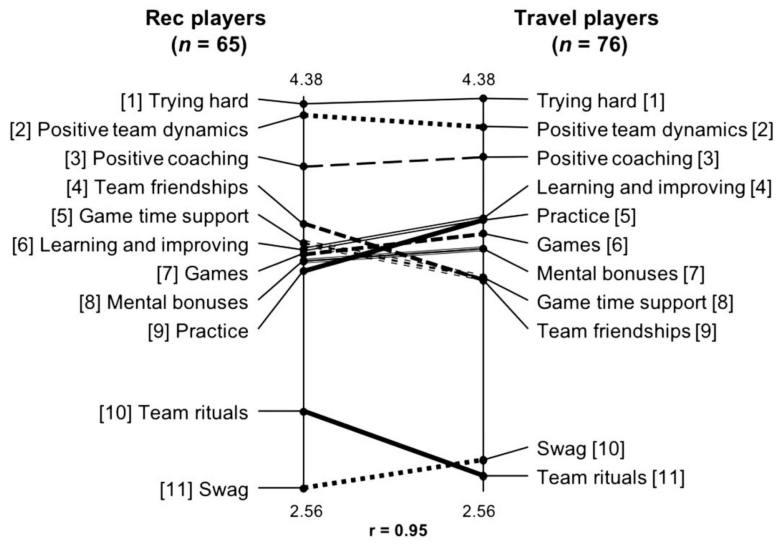


Figure 4 — Pattern match displays, stratified by level of play, comparing players reported importance of the 11 fun-factors to one another. Numbers in brackets represent the rank order of factors from most important [1] to least important [11].

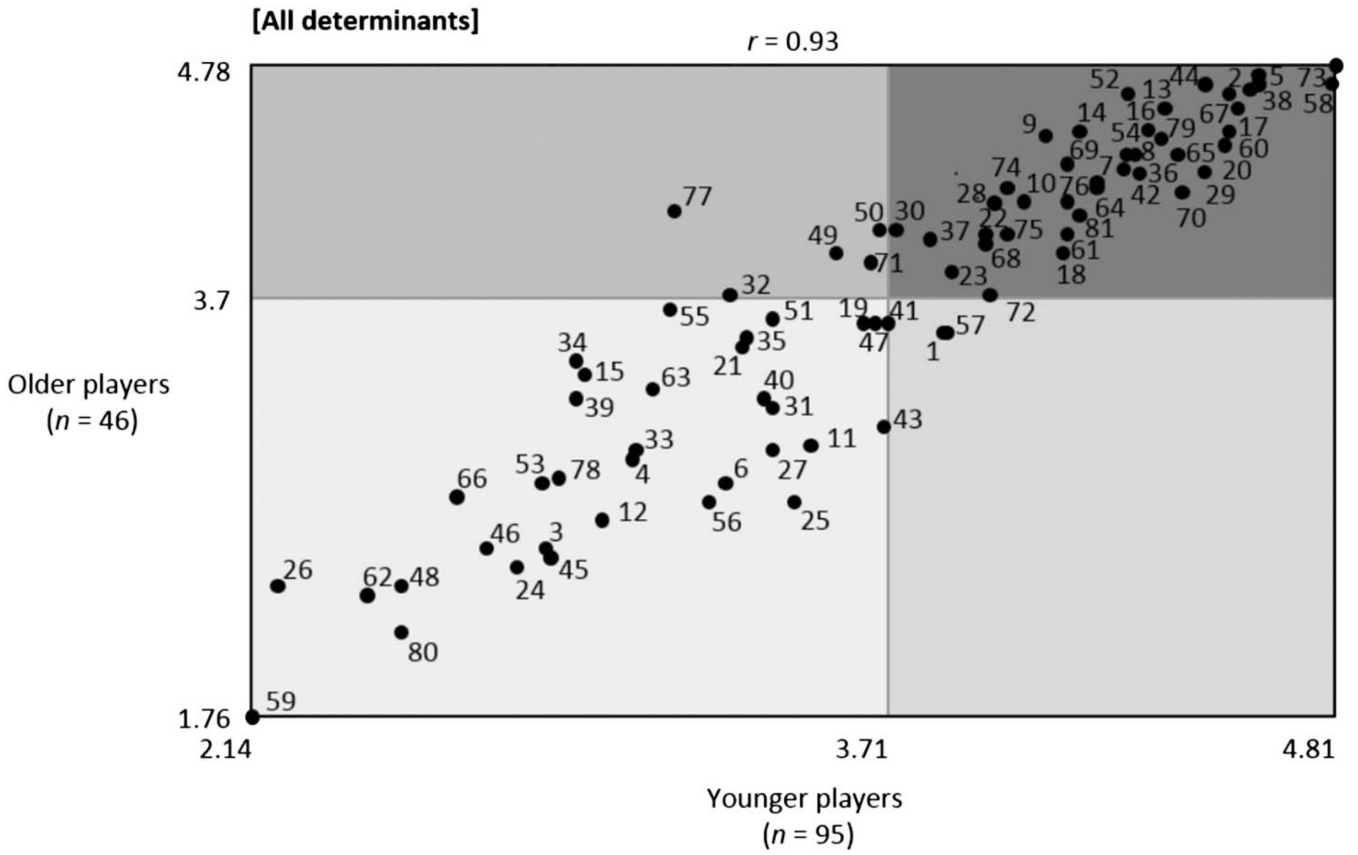


Figure 5 —. Go-zone displays comparing mean importance ratings for each of the 81 fun-determinants across players stratified by age. Lines demarcating the mean rating value for each group split the graph into four quadrants. The upper-right quadrant was designated the *go-zone*. Younger players = U9–U13, older players = U14–U19.

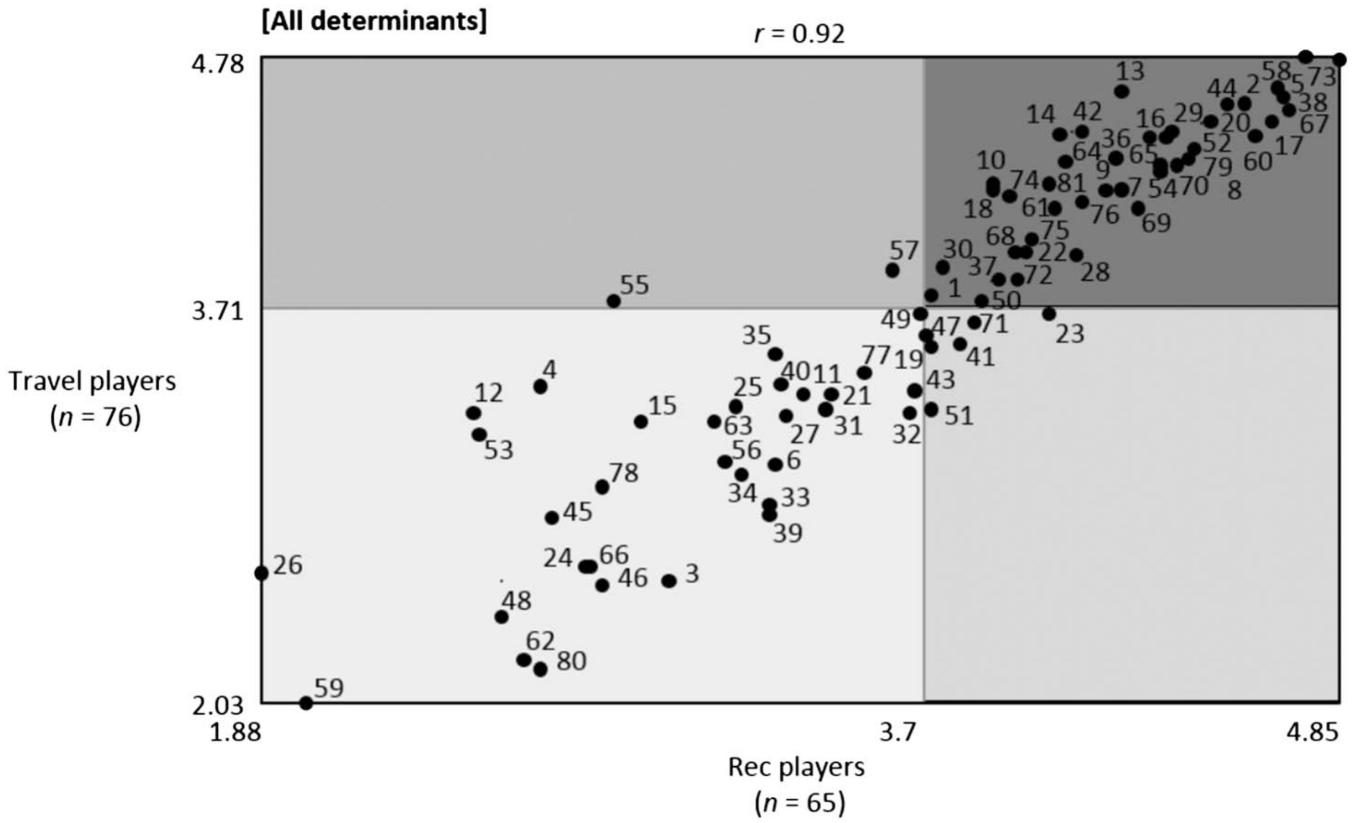


Figure 6 —.
 Go-zone displays comparing mean importance ratings for each of the 81 fun-determinants across players stratified by level of pay. Lines demarcating the mean rating value for each group split the graph into four quadrants. The upper-right quadrant was designated the *go-zone*.

Table 1

The Youth Athletes' Fun Ethos—Prioritization of the 11 Fun-factors

Primary Importance	Secondary Importance		
#1. <i>Trying Hard</i>	#4. <i>Learning and Improving</i>	Meeting new people (31)	3.35
Trying your best (73)	Being challenged to improve/get better at your sport (16)	Talking and goofing off with teammates (34)	3.09
Working hard (58)	Learning from mistakes (42)	#8. <i>Mental Bonuses</i>	3.65
Exercising and being active (5)	Improving athletic skills to play at the next level (36)	Keeping a positive attitude (29)	4.43
Getting/staying in shape (67)	Ball touches (dribbling, passing, shooting, etc.) (69)	Winning (30)	3.82
Playing well during a game (2)	Learning new skills (61)	It relieves stress (77)	3.48
Being strong and confident (20)	Using a skill learned in practice during a game (19)	Ignoring the score (78)	2.89
Competing (52)	Playing different positions (25)	#9. <i>Game Time Support</i>	3.62
Making a good play, scoring, making a big save (9)	Going to sports camp (12)	A ref who makes consistent calls (28)	4.02
Setting and achieving goals (74)	Copying the moves/tricks of professional athletes (45)	Parents show good sportsmanship (encouraging) (72)	3.88
Playing rough (15)	#5. <i>Games</i>	Being congratulated for playing well (41)	3.67
#2. <i>Positive Team Dynamics</i>	Getting playing time (60)	Having people cheer at the game (47)	3.65
Playing well together as a team (38)	Playing your favorite position (37)	Having your parent(s) watch your games (11)	3.35
Supporting my teammates (79)	Playing against an evenly matched team (71)	Getting complimented by other parents (6)	3.16
When players show good sportsmanship (70)	Being known by others for your sport skills (35)	Tertiary Importance	
Being supported by my teammates (54)	Playing on a nice field (21)	#10. <i>Team Rituals</i>	2.77
Getting help from teammates (75)	Playing in tournaments (55)	Showing team spirit (gear, ribbons, signs) (56)	3.10
Warming up and stretching as a team (68)	#6. <i>Practices</i>	High-fiving, fist-bumping, hugging (39)	3.04
#3. <i>Positive Coaching</i>	Having well-organized practices (10)	End-of-season/team parties (3)	2.76
When a coach treats players with respect (44)	Taking water breaks during practice (18)	Going out to eat as a team (66)	2.69
A coach who knows a lot about the sport (13)	Having the freedom to play creatively (22)	Doing team rituals (24)	2.68
Having a coach who is a positive role model (65)	Doing lots of different drills/activities in practices (57)	Carpooling with teammates to practice and games (46)	2.66
When a coach encourages the team (8)	Scrimmaging during practice (49)	Doing a cool team cheer (80)	2.39
Getting clear, consistent communication from coaches (14)	Partner and small group drills (40)	#11. <i>Swag</i>	2.63
A coach who listens/considers players' opinions (7)	Practicing with specialty trainers/coaches (4)	Having nice sports gear and equipment (27)	3.28
A coach who allows mistakes, stays positive (64)	#7. <i>Team Friendships</i>	Earning medals or trophies (63)	3.18
		Traveling to new places to play (53)	2.85

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A coach who you can talk to easily (81)	4.15	Getting along with your teammates (17)	4.57	Wearing a special, cool uniform (48)	2.46
A nice, friendly coach (76)	4.15	Being around your friends (23)	3.85	Eating snacks/treats after the game (62)	2.39
Getting compliments from coaches (1)	3.74	Having a group of friends outside of school (50)	3.79	Staying in hotels for games/tournaments (26)	2.26
When a coach participates w/ players during practice (43)	3.50	Hanging out with teammates outside of practice or games (51)	3.48	Getting pictures taken (59)	2.01
When a coach jokes around (33)	3.06	Being part of the same team year after year (32)	3.45		

Note. The players' fun ethos delineates the 11 fun-factors by primary, secondary, and tertiary importance based on the sample of all players (N = 141), collapsed across sex, age, and level of play. The numbers in the column to the right of the fun factors and determinants are the importance values, ranging from 1 (*not as important*) to 5 (*extremely important*), organized from most to least important. The numbers in parentheses denote the identifying number within the go-zone display.

Table 2

Rank Ordering of the 81 Fun-Determinants Based on Players' Reported Importance

Rank No. ^a	Fun-determinant ^b	M	SD	Fun-Factor
1	Trying your best (73)	4.80	0.50	TH
2	Working hard (58)	4.77	0.53	TH
3	Exercising and being active (5)	4.66	0.58	TH
4	Playing well together as a team (38)	4.65	0.55	PTD
5	Getting/staying in shape (67)	4.62	0.62	TH
6	Playing well during a game (2)	4.58	0.62	TH
7	Getting along with your teammates (17)	4.57	0.64	PTD
8	A coach treating players with respect (44)	4.56	0.67	PC
9	Getting playing time (60)	4.52	0.68	G
10	Being strong and confident (20)	4.50	0.71	TH
11	A coach who knows a lot about the sport (13)	4.45	0.71	PC
12	Keeping a positive attitude (29)	4.43	0.71	MB
13	Competing (52)	4.41	0.81	TH
14	A coach who is a positive role model (65)	4.40	0.75	PC
15	Supporting my teammates (79)	4.38	0.73	PTD
16	Being challenged to improve/get better at your sport (16)	4.38	0.78	LI
17	When players show good sportsmanship (70)	4.35	0.88	PTD
18	A coach encouraging a team (8)	4.33	0.70	PC
19	Being supported by my teammates (54)	4.32	0.76	PTD
20	Learning from mistakes (42)	4.31	0.86	LI
21	Improving athletic skills to play at the next level (36)	4.29	0.89	LI
22	Clear, consistent communication from coaches (14)	4.28	0.85	PC
23	A coach who listens and considers players' opinions (7)	4.23	0.80	PC
24	A coach who allows mistakes, while staying positive (64)	4.22	0.85	PC
25	Making a good play, scoring, making a big save (9)	4.21	0.84	TH
26	Ball touches (dribbling, passing, shooting, etc.) (69)	4.21	0.92	LI
27	A coach who you can talk to easily (81)	4.15	0.95	PC
28	A nice, friendly coach (76)	4.15	0.89	PC

Rank No. ^a	Fun-determinant ^b	M	SD	Fun-Factor
29	Learning new skills (61)	4.10	0.83	LI
30	Having well-organized practices (10)	4.08	0.88	P
31	Setting and achieving goals (74)	4.07	0.99	TH
32	Taking water breaks during practice (18)	4.06	1.11	P
33	A ref who makes consistent calls (28)	4.02	1.05	GTS
34	Getting help from teammates (75)	4.00	0.84	PTD
35	Having the freedom to play creatively (22)	3.96	0.97	P
36	Warming up and stretching as a team (68)	3.95	1.01	PTD
37	Parents showing good sportsmanship (encouraging, not yelling) (72)	3.88	1.06	GTS
38	Playing your favorite position (37)	3.87	0.90	G
39	Being around your friends (23)	3.85	1.07	TF
40	Winning (30)	3.82	1.04	MB
41	Having a group of friends outside of school (50)	3.79	1.15	TF
42	Doing lots of different drills/activities in practices (57)	3.75	0.97	P
43	Getting compliments from coaches (1)	3.74	0.97	PC
44	Playing against an evenly matched team (71)	3.73	1.06	G
45	Scrimmaging during practice (49)	3.69	0.99	P
46	Being congratulated for playing well (41)	3.67	1.06	GTS
47	Having people cheer at the game (47)	3.65	1.12	GTS
48	Using a skill you learned in practice during a game (19)	3.63	1.03	LI
49	A coach that participates with players in practice (43)	3.50	1.05	PC
50	It relieves stress (77)	3.48	1.32	MB
51	Hanging out with teammates outside of practice/games (51)	3.48	1.21	TF
52	Being part of the same team year after year (32)	3.45	1.18	TF
53	Being known by others for your sport skills (35)	3.41	1.16	G
54	Playing on a nice field (21)	3.39	1.20	G
55	Having your parent(s) watch your games (11)	3.35	1.18	GTS
56	Meeting new people (31)	3.35	1.09	TF
57	Partner and small group drills (40)	3.35	1.07	P
58	Playing in tournaments (55)	3.33	1.27	G
59	Having nice sports gear and equipment (27)	3.28	1.16	S

Rank No. ^a	Fun-determinant ^b	M	SD	Fun-Factor
60	Playing different positions (25)	3.24	1.15	LI
61	Earning medals or trophies (63)	3.18	1.22	S
62	Getting complimented by other parents (6)	3.16	1.26	GTS
63	Showing team spirit (gear, ribbons, signs) (56)	3.10	1.31	TR
64	Talking and goofing off with teammates (34)	3.09	1.35	TF
65	Playing rough (15)	3.09	1.28	TH
66	A coach that jokes around (33)	3.06	1.13	PC
67	Practicing with specialty trainers/coaches (4)	3.04	1.29	P
68	High-fiving, fist-bumping, hugging (39)	3.04	1.17	TR
69	Going to sports camp (12)	2.89	1.23	LI
70	Ignoring the score (78)	2.89	1.38	MB
71	Traveling to new places to play (53)	2.85	1.24	S
72	End-of-season/team parties (3)	2.76	1.22	TR
73	Copying the moves/tricks of professional athletes (45)	2.75	1.21	LI
74	Going out to eat as a team (66)	2.69	1.27	TR
75	Doing team rituals (24)	2.68	1.30	TR
76	Carpooling with teammates (46)	2.66	1.22	TR
77	Wearing a special, cool uniform (48)	2.46	1.24	S
78	Doing a cool team cheer (80)	2.39	1.35	TR
79	Eating snacks/treats after the game (62)	2.39	1.32	S
80	Staying in hotels for games/tournaments (26)	2.26	1.26	S
81	Getting pictures taken (59)	2.01	1.10	S

Note. *M* = mean, *SD* = standard deviation; Fun factor = the fun factor each determinant is categorized within (TH = Trying Hard, PTD = Positive Team Dynamics, PC = Positive Coaching, LI = Learning and Improving, G = Games, P = Practices, TF = Team Friendships, MB = Mental Bonuses, GTS = Game Time Support, TR = Team Rituals, S = Swag).

^aRanking no. = the rank importance order of each of the 81 determinants;

^bNumber in parentheses identifies the fun-determinant within the go-zone displays (see Figures 2, 5, and 6).

Table 3

Significant Group Differences Among Comparison Groups

Fun-determinant ^a	Girl Players <i>n</i> = 69		Boy Players <i>n</i> = 72		<i>r</i>	Fun-factor
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Using a skill learned in practice during a game (19)	3.32 *	1.07	3.92	0.91	0.28	LI
Improving athletic skills to play at the next level (36)	4.01 *	1.02	4.56	0.65	0.30	LI
Partner and small group drills (40)	3.04 *	1.05	3.64	1.01	0.28	P
Copying the moves/tricks of professional athletes (45)	2.35 *	1.12	3.14	1.18	0.32	LI
Competing (52)	4.20 *	0.87	4.62	0.70	0.28	TH
Doing a cool team cheer (80)	2.75 *	1.32	2.04	1.29	0.28	TR
Younger players^b <i>n</i> = 95						
Older players^c <i>n</i> = 46						
Playing different positions (25)	3.47 *	1.10	2.76	1.12	0.29	LI
A coach that participates with players in practice (43)	3.69 *	0.99	3.11	1.08	0.27	PC
It relieves stress (77)	3.18 *	1.31	4.11	1.12	0.34	MB
Rec players <i>n</i> = 65						
Travel players <i>n</i> = 76						
Practicing with specialty trainers/coaches (4)	2.65 *	1.41	3.37	1.09	0.27	P
Going to sports camp (12)	2.46 *	1.30	3.26	1.04	0.32	LI
Staying in hotels for games/tournaments (26)	1.88 *	1.15	2.58	1.26	0.30	S
Traveling to new places to play (53)	2.48 *	1.30	3.17	1.09	0.28	S
Playing in tournaments (55)	2.85 *	1.41	3.74	0.97	0.32	G

Note. Mann Whitney U tests of group comparisons were used to determine significant group differences. *M* = mean, *SD* = standard deviation; *r* = effect size of difference calculated using, $r = z / N$; Fun-factor = the fun-factor each determinant is categorized within (TH = Trying Hard, PC = Positive Coaching, LI = Learning and Improving, G = Games, P = Practice, MB = Mental Bonuses, TR = Team Rituals, S = Swag).

^aNumber in parentheses identifies the fun-determinant within the go-zone displays (see Figures 2, 5, and 6);

^b Younger players = U9–U13;
^c Older players = U14–U19;
* *p* .001.

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Table 4
Thirty Fun-Determinants in the Upper-Right Quadrant Regardless of Sex, Age, or Level of Play

Ranking No. ^a	Fun-determinant ^b	Min, Max ^c	Fun-Factor ^d
1	Trying your best (73)	[4.64, 5.00]	TH
2	Working hard (58)	[4.64, 4.91]	TH
3	Exercising and being active (5)	[4.43, 4.93]	TH
4	Playing well together as a team (38)	[4.38, 4.90]	PTD
5	Getting/staying in shape (67)	[4.38, 4.90]	TH
6	Playing well during a game (2)	[4.48, 4.80]	TH
7	Getting along with your teammates (17)	[4.46, 4.80]	TF
8	A coach treating players with respect (44)	[4.43, 4.80]	PC
9	Getting playing time (60)	[4.21, 4.73]	G
10	Being strong and confident (20)	[4.00, 4.64]	TH
11	A coach who knows a lot about the sport (13)	[4.00, 5.00]	PC
12	Keeping a positive attitude (29)	[4.00, 4.57]	MB
13	Competing (52)	[4.00, 4.90]	TH
14	A coach who is a positive role model (65)	[4.18, 4.55]	PC
16	Being challenged to improve/get better at your sport (16)	[4.24, 4.50]	LI
15	Supporting my teammates (79)	[3.82, 4.82]	PTD
17	When players show good sportsmanship (70)	[3.55, 4.61]	PTD
18	A coach encouraging a team (8)	[4.21, 4.77]	PC
19	Being supported by my teammates (54)	[3.73, 4.71]	PTD
20	Learning from mistakes (42)	[3.90, 4.67]	LI
21	Improving athletic skills to play at the next level (36)	[3.87, 4.70]	LI
22	Clear, consistent communication from coaches (14)	[3.70, 4.64]	PC
23	A coach who listens and considers players' opinions (7)	[3.82, 4.64]	PC
26	Ball touches (dribbling, passing, shooting, etc.) (69)	[3.79, 4.73]	LI
25	Making a good play, scoring, making a big save (9)	[3.95, 4.80]	TH
27	A coach who you can talk to easily (81)	[3.95, 4.37]	PC
28	A nice, friendly coach (76)	[3.90, 4.55]	PC
31	Setting and achieving goals (74)	[3.70, 4.36]	TH

Ranking No. ^a	Fun-determinant ^b	Min, Max ^c	Fun-Factor ^d
34	Getting help from teammates (75)	[3.55, 4.45]	PTD
36	Warming up and stretching as a team (68)	[3.64, 4.29]	PTD

Note. TH = Trying Hard; PTD = Positive Team Dynamics; TF = Team Friendships; PC = Positive Coaching; G = Games; MB = Mental Bonuses; LI = Learning and Improving.

^aRanking no. = the rank importance number of each of the 81 determinants;

^bNumber in parentheses identifies the fun-determinant within the go-zone displays;

^cMin and max correspond to minimum and maximum average ratings across all go-zone comparisons and are on a scale of 1 (*not as important*) to 5 (*extremely important*);

^dFun-factor = the fun-factor each determinant is categorized within.

Table 5

Twenty-two Fun-Determinants in the Bottom-Left Quadrant Regardless of Sex, Age, or Level of Play

Ranking No. ^a	Fun-determinant ^b	Min, Max ^c	Fun-Factor ^d
55	Having your parent(s) watch your games (11)	[2.36, 3.57]	GTS
56	Meeting new people (31)	[2.82, 3.64]	TF
59	Having nice sports gear and equipment (27)	[2.73, 3.50]	S
60	Playing different positions (25)	[2.60, 3.67]	LI
63	Showing team spirit (gear, ribbons, signs) (56)	[1.82, 3.43]	TR
65	Playing rough (15)	[2.81, 3.57]	TH
66	When a coach jokes around (33)	[2.43, 3.40]	PC
67	Practicing with specialty trainers/coaches (4)	[2.27, 3.60]	P
68	High-fiving, fist-bumping, hugging (39)	[2.55, 3.70]	TR
69	Going to sports camp (12)	[2.18, 3.47]	LI
70	Ignoring the score (78)	[2.48, 3.29]	MB
71	Traveling to new places to play (53)	[1.96, 3.50]	S
72	End-of-season/team parties (3)	[2.18, 3.14]	TR
73	Copying the moves/tricks of professional athletes (45)	[1.93, 3.60]	LI
74	Going out to eat as a team (66)	[2.26, 3.24]	TR
75	Doing team rituals (24)	[1.82, 3.26]	TR
76	Carpooling with teammates (46)	[2.07, 3.30]	TR
77	Wearing a special, cool uniform (48)	[2.00, 2.90]	S
79	Eating snacks/treats after the game (62)	[1.55, 3.00]	S
79	Doing a cool team cheer (80)	[1.36, 3.26]	TR
80	Staying in hotels for games/tournaments (26)	[1.55, 3.07]	S
81	Getting pictures taken (59)	[1.55, 2.33]	S

Note. GTS = Game Time Support; TF = Team Friendships; TR = Team Rituals; TH = Trying Hard; PC = Positive Coaching; P = Practice; MB = Mental Bonuses; LI = Learning and Improving; S = Swag.

^aRanking no. = the rank importance number of each of the 81 determinants;

^bNumber in parentheses identifies the fun-determinant within the go-zone displays;

^cMin and max correspond to minimum and maximum average ratings across all go-zone comparisons and are on a scale of 1 (*not as important*) to 5 (*extremely important*);

$F_{\text{Fun-factor}} = p$ the fun-factor each determinant is categorized within.

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