



Individual, relationship, and context factors associated with parent support and pressure in organized youth sport



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ABSTRACT

Objectives: We examined the association of multiple process, person, and context factors (Bronfenbrenner, 2005) with parents' involvement (support and pressure) in sport. Specifically, we examined (a) the concordance among self, partner, and child reports of fathers and mothers for key study variables, and (b) prediction of parent support and pressure in youth sport by warmth and conflict in the parent–child relationship, parent positive and negative affect, and mastery and ego dimensions of the coach-created motivational climate.

Design: Cross-sectional survey.

Method: Self-reports of study variables were collected from athletes (ages 11–13 years) and parents from participating families (final $N = 201$). Multitrait-multimethod analysis was used to address the first study aim and multivariate multiple regression analysis for the second aim.

Results: Values for concordance among reporters were largely significant and in hypothesized directions, yet were of modest magnitude and suggested low reporter agreement (Cohen's κ range = $-.07$ – $.35$). Multivariate relationships were significant and were of low to moderate magnitude (R_d range = $.04$ – $.22$). Canonical loadings showed that warmth, positive affect, and mastery climate positively associate with support, whereas conflict, negative affect, and ego climate positively associate with pressure from fathers and mothers. Conflict and positive affect positively associated with support and pressure in some functions, suggesting complexity in interpretations of parent involvement.

Conclusion: Findings support the adaptive role of parent–child warmth, positive parent affect, and coach-created mastery motivational climate in youth sport; however, low concordance of reporter perceptions must be considered when pursuing family-related questions in sport.

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Nearly ninety percent of American youth participate in organized sport during childhood and/or adolescence (USDHHS, 2010). Parents are important contributors to this participation, as they typically initiate children's sport involvement and provide functional and emotional support for children over the course of their youth sport careers (Fredricks & Eccles, 2005; Howard & Madrigal, 1990). At the same time, the nature of parent involvement in organized youth sport is often critiqued (Jellineck & Durant, 2004), pointing to a need to better understand parent involvement in this developmental context.

Parent involvement is a multidimensional construct consisting

of parent support and pressure behaviors (Leff & Hoyle, 1995; Stein, Raedeke, & Glenn, 1999). Parent support is behaviors or comments (e.g., providing opportunity and materials, attending practices and competitions, demonstrating pleasure, offering praise or performance contingent feedback) that facilitate sport outcomes that are important to the child (Fredricks & Eccles, 2004; Holt, Tamminen, Black, Sehn, & Wall, 2008; Kidman, McKenzie, & McKenzie, 1999). Parent support has been linked to adaptive outcomes such as child enjoyment and enthusiasm, autonomy, and self-perception of sport skill (Gagné, Ryan, & Bargmann, 2003; McCullagh, Matzkanin, Shaw, & Maldonado, 1993; Scanlan & Lewthwaite, 1986). Parent pressure is behaviors or comments “designed to prompt athlete responses and outcomes that are important to the parent” (O'Rourke, Smith, Smoll, & Cumming, 2011, p. 400). Parent pressure has been linked to maladaptive outcomes such as perceptions of a

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threatening sport performance environment, discontent with sport performance, and performance anxiety and negative affect (Gould, Lauer, Rolo, Jannes, & Pennisi, 2008; Lewthwaite & Scanlan, 1989; O'Rourke et al.). Less well understood are the potential antecedents of parent support and pressure.

Although past quantitative work has not been explicitly designed to enhance understanding of the potential antecedents of parent support and pressure perceptions in sport, theory offers one potential starting point. Specifically, through a family systems theory lens (Broderick, 1993), one might interpret parent involvement (i.e., support and pressure) as informed by broader perceptions of the parent–child relationship (i.e., warmth and conflict). For example, it is conceivable that parents who express more warmth would be more supportive while parents who are a source of conflict would be more pressuring. A number of qualitative studies (e.g., Dorsch, Smith, & McDonough, 2015; Harwood & Knight, 2009) also suggest that parents' emotions may be linked to support and pressure. Finally, through social learning processes such as observational learning (Bandura, 1999), the coach-created motivational climate may shape parent support and pressure. That is, parents may take cues from coaches that subsequently impact their involvement behaviors (Atkins, Johnson, Force, & Petrie, 2015; Dorsch, Smith, & McDonough, 2015).

In line with these presuppositions, investigators have called upon sport scholars to adopt an ecological approach in addressing relational, personal, and sport-specific factors that may shape parent involvement in organized youth sport (e.g., Holt et al., 2008). An appropriate framework to answer this call is Bronfenbrenner's (2005) process-person-context-time (PPCT) model. The PPCT model suggests that human behavior and development are related to the repeated social and cognitive processes a person experiences, the characteristics of the person, and the social context(s) in which they interact. Although broad in scope, this model highlights the potential for multiple, simultaneous contributors to parent support and pressure behavior.

Within the PPCT framework, processes are described as the repeated and increasingly more complex social interactions that individuals encounter in their immediate social milieu (Bronfenbrenner & Morris, 1998). According to Bronfenbrenner (2005), interactions between individuals that take place in the changing environments in which they constantly live and grow result in progressive accommodation (i.e., socialization; Parke & Buriel, 2006) throughout the lifespan. As such, the parent–child relationship may be conceptualized as a process-related factor that is marked by continuous interactions that evoke a range of experiences such as closeness, struggle, sensitivity, and power (Darling & Steinberg, 1993). Laursen and Collins (2009) argue that researchers may gain a clearer picture of the parent–child relationship by addressing this span of experiences, simultaneously measuring individuals' perceptions of warmth and conflict. Warmth is the tendency for the parent–child relationship to be imbued by supportive, affectionate, and sensitive interactions, whereas conflict is the struggle for agency or power within the relationship (Darling & Steinberg). In sport, the link between the parent–child relationship and parent involvement behavior is not well understood; however, an association has been established between parent–child relationship quality and young athletes' sport enjoyment and motivation (Horn & Horn, 2007; Ullrich-French & Smith, 2006). Therefore, examining the relationship of warmth and conflict with parent support and pressure could benefit understanding of sport parenting.

Person characteristics are the biopsychosocial features of the developing individual that influence her or his trajectory of development (Bronfenbrenner, 2005). According to ecological theory, a multitude of person characteristics influence how

individuals interact with and are perceived by others in their environment. One such person characteristic is affect, described as the emotions, feelings, and mood of an individual (Vallerand & Blanchard, 2000). In organized youth sport, a parent's enduring affective experience of the setting may impact involvement behavior. Parent affect in youth sport is understudied, though parents cite its importance to their experiences in this setting (Dorsch, Smith, & McDonough, 2009, 2015). Thus, examining if parent experiences of positive and negative affect in organized youth sport relate to parent support and pressure could meaningfully extend the literature.

Context is defined by four interrelated systems (micro-, meso-, exo-, and macro) of an individual's environment that influence the course and consequences of development (Bronfenbrenner, 2005). One of the many salient contexts for athletes and sport parents is the coach-created motivational climate, which can be distinguished as mastery-focused or ego-focused (see Harwood, Keegan, Smith, & Raine, 2015). When coaches define success in terms of individual effort and improvement, and encourage new learning strategies, the motivational climate is considered mastery-focused. In contrast, when coaches define success in terms of normative standards and are inflexible in allocating time for learning, the motivational climate is considered ego-focused (Harwood, Spray, & Keegan, 2008). Athletes' perceptions of a mastery-focused climate have been linked to high intrinsic interest and satisfaction, whereas perceptions of an ego-focused climate have been associated with negative attitudes toward activities and boredom (Harwood et al., 2015; Ntoumanis & Biddle, 1999). For parents, perceptions of mastery- or ego-focused motivational climates may influence their goals, intentions, or behavior, which may in turn have an impact on their children's participation experiences. As parents take cues from coaches in the youth sport context, they may reinforce the mastery or ego climates in which their children perform and alter the parent–child microsystem as it exists in the youth sport setting (Atkins et al., 2015). A mastery-focused climate may incite parent behaviors aimed at enhancing the child's experience and/or process of learning, yet it could also result in behaviors aimed at enhancing the child's performance outcomes if the parent holds differing views from the coach on the purposes of youth sport. Similarly, an ego-focused climate may foster parent behaviors aimed at enhancing the child's ability and/or outcomes, or compensatory behaviors to enhance skill mastery and enjoyment. Therefore, how coach-created climates associate with parent support and pressure in youth sport requires attention.

Understanding how process, person, and context factors may impact parent involvement in organized youth sport likely also would benefit from recognizing the perceptions of multiple family members (McHale, Amato, & Booth, 2014). Though family members' perspectives could be expected to overlap considerably in a shared context, this overlap is determined by the extent to which individuals perceive and interpret a similar reality. Numerous studies show parents and children to have moderate-to-low agreement when reporting on parent behavior, attributions, and values (e.g., Babkes & Weiss, 1999; Cashmore & Goodnow, 1985; Kanter, Bocarro, & Casper, 2008; Knafo & Schwartz, 2003; Tein, Roosa, & Michaels, 1994). Further, fathers and mothers have been shown to have discrepant viewpoints of social influences, both in and out of sport (Greendorfer, 2002; Simpkins, Fredricks, & Eccles, 2015). Thus, understanding distinct parent and child perceptions, whether similar or dissimilar, is a vital step toward understanding parent involvement in organized youth sport.

In the interest of improving understanding of parent involvement in sport, two primary purposes were pursued in the present study. The first purpose was to assess the concordance among self, partner, and child reports of fathers and mothers. Because

parent–child relationships are experienced proximally by parents and children, moderate-to-large concordance was expected for warmth and conflict reports. Because parent affect may not be overtly displayed (i.e., more private to the individual), small-to-moderate concordance was expected for positive and negative affect reports. Finally, because coach-created motivational climates are experienced distally by parents and children, moderate concordance was expected for mastery and ego climate reports. Based on previous research (e.g., Babkes & Weiss, 1999; Kanters et al., 2008) it was also expected that moderate concordance would be observed among self, partner, and child reports of parent involvement behavior (i.e., support and pressure). Our second purpose was to examine warmth and conflict in the parent–child relationship, parent positive and negative affect, and mastery and ego dimensions of the coach-created motivational climate as collective predictors of father and mother involvement in organized youth sport. Guided by extant work, it was hypothesized that parent and child perceptions of warmth, positive affect, and a coach-created mastery-focused motivational climate would be positively associated with perceptions of parent support and negatively associated with perceptions of parent pressure. Conversely, it was expected that parent and child perceptions of conflict, negative affect, and a coach-created ego-focused motivational climate would be negatively associated with perceptions of parent support and positively associated with perceptions of parent pressure.

1. Method

1.1. Participants

Two hundred twenty-six families were recruited through interscholastic and club/recreational teams in northern Utah, southern Idaho, and central Indiana. Of the 226 participating families, 109 provided data from the child and both parents, 85 provided data from the child and mother only, and 32 provided data from the child and father only. The 335 participating parents (141 fathers, 194 mothers) ranged in age from 25 to 59 years ($M = 40.86$, $SD = 5.50$). Most of the parents were married (89.8%), identified as the athletes' biological parents (94.3%), and were of White race (88.7%). The majority of parents (56.1%) reported possessing at least one college degree, being employed for wages or self-employed (79.1%), and having annual household earnings between \$50,000 and \$99,999 USD (54.8%). The 226 participating children (one per family; 90 female, 136 male) were drawn from American football ($n = 103$), soccer ($n = 85$), volleyball ($n = 15$), softball ($n = 13$), and hockey ($n = 10$). They ranged in age from 11 to 13 years ($M = 12.23$, $SD = .84$). Most (85.8%) lived in a home with two or more adults (i.e., parents, grandparents, and/or adult children) and the number of children in the home ranged from 1 to 8 ($M = 2.96$, $SD = 1.29$).

1.2. Measures

Parent–child warmth in sport was assessed via self, partner, and child reports using an 8-item, sport-adapted version of the acceptance scale of the Child's Report of Parental Behavior Inventory (CRPBI; Schwarz, Barton-Henry, & Pruzinsky, 1985). Items were modified to reflect perceptions of warmth in the parent–child sport relationship during the current season (e.g., *self report item*: "I tell or show my child I like her/him just the way he/she is as an athlete."; *partner report item*: "My spouse/partner tells or shows our child he/she likes her/him just the way he/she is as an athlete."; *child report item*: "My father/mother tells or shows me that he/she likes me just the way I am as an athlete.") and were rated on a scale

from 1 (*really unlike* the relationship) to 4 (*really like* the relationship). In the present study, internal consistency reliability of scores for the adapted measure was .80 (father self report), .69 (mother self report), .88 (partner report of fathers), .89 (partner report of mothers), .88 (child report of fathers), and .84 (child report of mothers).

Parent–child conflict in sport was assessed via self, partner, and child reports using a 3-item, sport adapted version of the conflict subscale from the Sport Friendship Quality Scale (SFQS; Weiss & Smith, 1999). The SFQS has been contextualized to the parent–child relationship (Ullrich-French & Smith, 2006), and items were further adapted to reflect self and partner reports of parent–child conflict during the current sport season (e.g., *self report item*: "Me and my child have arguments about sport."; *partner report item*: "My spouse/partner and our child have arguments about sport."; *child report item*: "My father/mother and I have arguments about sport."). Participants rated the accuracy of the statements on a five-point scale from 1 (*not at all true*) to 5 (*really true*). In the present study, internal consistency reliability of scores for the adapted measure was .78 (father self report), .85 (mother self report), .89 (partner report of fathers), .86 (partner report of mothers), .82 (child report of fathers), and .80 (child report of mothers).

Parent positive and negative affect were assessed via self, partner, and child reports using 20 items from the general dimension scales of the expanded version of the Positive and Negative Affect Schedule (PANAS-X; Watson & Clark, 1994). Items in the child survey and in the partner portion of the parent survey were adapted to reflect perceptions of another individual's affective experience (e.g., *self report item*: "To what extent have you felt angry this season as a result of your child's sport participation?"; *partner report item*: "To what extent do you think your spouse/partner has felt angry this season as a result of your child's sport participation?"; *child report item*: "To what extent do you think your father/mother has felt angry this season as a result of your sport participation?"). Participants responded on a Likert-type response set of 1 (*very slightly or not at all*) to 5 (*extremely*). In the present study, internal consistency reliability of scores for the adapted positive and negative affect scales, respectively, was .89 and .79 (father self report), .85 and .82 (mother self report), .93 and .81 (partner report of fathers), .92 and .87 (partner report of mothers), .90 and .78 (child report of fathers), and .90 and .87 (child report of mothers).

Coach-created motivational climate was assessed via father, mother, and child reports using The Motivational Climate Scale for Youth Sports (MCSYS; Smith, Cumming, & Smoll, 2008). The 12-item MCSYS has two scales that assess the coach-created mastery and ego climates in sport. The mastery-involving climate scale consists of six items (e.g., "... the coach makes players feel good when they improve a skill.") and the ego-involving climate scale consists of six items (e.g., "... the coach tells players to try to be better than their teammates."). Identical items were answered by parents and children on a five-point scale, relative to the current season, with the following anchors: 1 (*not true at all*), 3 (*somewhat true*), and 5 (*very true*). Because fathers and mothers from the same family parented in the same motivational climate, parent respondents were not asked to complete a partner version. Internal consistency reliability of scores for the adapted mastery and ego scales, respectively, was .87 and .69 (father report), .92 and .80 (mother report), and .85 and .75 (child report).

Parent support and pressure in sport were assessed via self, partner, and child reports using a modified version of the Parental Involvement in Activities Scale (Anderson, Funk, Elliott, & Smith, 2003) with 16 sport-adapted items. The support scale consisted of six items (e.g., *self report item*: "I listen to my child when he/she

says he/she wants to talk about sport.”; *partner report item*: “My spouse/partner listens to our child when our child says he/she wants to talk about sport.”; *child report item*: “My father/mother listens to me when I say I want to talk about sport.”) and the pressure scale consisted of 10 items (e.g., *self report item*: “I get upset when my child doesn’t do as well as I would like her/him to do.”; *partner report item*: “My spouse/partner gets upset when our child doesn’t do as well as he/she would like our child to do.”; *child report item*: “My father/mother gets upset when I don’t do as well as he/she would like me to do.”). Items were rated relative to the current season on a four-point scale of 1 (*strongly disagree*) to 4 (*strongly agree*). One item from the pressure scale was removed because of lack of variability in responses and an additional four items were removed due to complex loadings in exploratory factor analyses of item scores. Internal consistency reliability of scores for the adapted support (six items) and pressure (five items) scales, respectively, was .69 and .66 (father self report), .65 and .65 (mother self report), .78 and .75 (partner report of fathers), .74 and .76 (partner report of mothers), .76 and .76 (child report of fathers), and .71 and .78 (child report of mothers).

Demographics were obtained from parent participants. Fathers and mothers responded to items on parent and child age and sex, parent relationship to child (and the duration of that relationship), parent relationship status (i.e., married, divorced, etc.), parent education and employment, child’s current and past sport participation, parent ethnicity and race, family annual household income, and family composition (i.e., children and adults living in the home).

1.3. Procedure

After approval by an institutional review board and obtaining appropriate authorizations, coaches were e-mailed the details of the study and permission was requested to survey parents and children. In-person meetings were scheduled (prior to practices or competitions) at least four weeks into the competitive season to ensure respondents could offer responses relative to the current sport season. Informed consent/assent was obtained and a brief introduction with standardized instructions was administered by the first author; then fathers, mothers, and children were directed to separate locations to complete surveys. Survey completion took approximately 15 min. Parents were asked to report on themselves and their partner, and children were asked to report on both parents (when applicable), resulting in self, partner, and child reports of fathers and mothers. An online survey completion option (with identical items) was provided for parents not present at these meetings. E-mail reminders were sent to these parents at two and four weeks subsequent to data collection, after which data were considered missing. Of the 335 participating parents, 275 completed the survey in person and 60 completed it online.

1.4. Data analysis

Data screening procedures were conducted and descriptive statistics were calculated on parents from the initial sample of 226 families. Because missing data in single-parent families was tantamount to *non-involvement*, data from these households ($n = 15$ families) were excluded from main analyses, as were data from an additional 10 families because of multivariate outliers. Thus, 201 families with two involved parents were retained for the final analysis.

To address the first study aim, multitrait-multimethod analyses (MTMM; Brown, 1984; Campbell & Fiske, 1959) were conducted for fathers ($n = 201$) and mothers ($n = 201$). MTMM analyses are most widely used to facilitate the interpretation of convergent and

discriminant validity. This is accomplished by measuring several constructs (regarded as different “traits”) via multiple reporters (regarded as different “methods”) and comparing scores across methods. In the present study, correlations of self, partner, and child reports of warmth and conflict in the parent–child relationship, parent positive and negative affect, the coach-created mastery and ego climate, and parent support and pressure involvement were compared in separate matrices for fathers and mothers. It was expected that coefficients in the reliability (monotrait-monomethod) diagonals would consistently be the highest in the respective matrices, and that coefficients in the validity diagonals (monotrait-multimethod) would be significantly different from zero and higher than values lying in the same columns and rows within the multimethod blocks. It was also expected that coefficients in both matrices would exhibit the same pattern of trait interrelationship in multitrait-monomethod triangles, a result of trait effects being stronger than the potentially confounding method effects in study data. Finally, it was expected that non-corresponding (multitrait-multimethod) coefficients would be of the lowest magnitude in both MTMM matrices, confirming that there are no spurious or unexpected relationships in the data.

To address the second study aim, multivariate multiple regression models were employed with warmth, conflict, positive affect, negative affect, mastery climate, and ego climate constituting the predictor variable set and support and pressure constituting the criterion variable set. Analyses were conducted for (a) self, (b) partner, and (c) child report of both father and mother, respectively, to ascertain the strength of association between the predictor and criterion sets as well as the particular variables contributing to the overall multivariate relationships.

2. Results

2.1. Descriptive statistics

Means and standard deviations for self, partner, and child reports of the eight study variables appear in Table 1a (father) and b (mother). Overall, participants perceived moderate to high levels of warmth in the parent–child relationship, positive parent affect,

Table 1

(a) Descriptive statistics for self, partner, and child reports of fathers ($n = 201$).
(b) Descriptive statistics for self, partner, and child report of mothers ($n = 201$).

	Range	Self		Partner		Child	
		M	SD	M	SD	M	SD
(a)							
Warmth	1–4	3.41	.38	3.47	.47	3.46	.52
Conflict	1–5	1.55	.60	1.38	.56	1.56	.75
Positive affect	1–5	3.87	.70	3.95	.84	3.87	.83
Negative affect	1–5	1.57	.47	1.37	.44	1.45	.47
Mastery climate	1–5	3.99	.77	–	–	4.51	.65
Ego climate	1–5	2.54	.73	–	–	2.27	.85
Support	1–4	3.79	.28	3.79	.33	3.68	.42
Pressure	1–4	1.99	.58	1.76	.62	1.91	.68
(b)							
Warmth	1–4	3.49	.33	3.56	.39	3.57	.46
Conflict	1–5	1.29	.54	1.32	.51	1.24	.50
Positive affect	1–5	3.97	.64	3.75	.79	3.70	.94
Negative affect	1–5	1.56	.47	1.70	.59	1.55	.58
Mastery climate	1–5	4.09	.84	–	–	4.51	.65
Ego climate	1–5	2.46	.89	–	–	2.27	.85
Support	1–4	3.84	.27	3.69	.39	3.65	.44
Pressure	1–4	1.73	.52	1.77	.60	1.77	.69

Notes. Father self reports based on $n = 130$ to 132; Mother self reports based on $n = 170$ to 174; Partner reports of fathers based on $n = 168$ to 174; Partner reports of mothers based on $n = 128$ to 132; Child reports of fathers based on $n = 198$ to 201; Child reports of mothers based on $n = 196$ to 201.

coach-created mastery climate, and support. Participants perceived relatively low levels of conflict in the parent–child relationship, negative parent affect, coach-created ego climate, and parent pressure. For most subscale means, parent and child perceptions were similar; however, children perceived the coach-created motivational climate as more mastery-focused ($M = 4.51$, $SD = .65$) and less ego-focused ($M = 2.27$, $SD = .85$) than both fathers ($M = 3.99$, $SD = .77$ and $M = 2.54$, $SD = .73$, respectively) and mothers ($M = 4.09$, $SD = .84$ and $M = 2.46$, $SD = .89$, respectively) ($ps < .01$). Also, for most subscale means, self, partner, and child reports of mothers and fathers were similar; however, father self reports were higher for conflict ($M = 1.55$, $SD = .60$) and pressure ($M = 1.99$, $SD = .58$) than mother self reports ($M = 1.29$, $SD = .54$ and $M = 1.73$, $SD = .52$, respectively) ($ps < .01$).

2.2. MTMM results

To address the first study purpose, coherence among self, partner, and child reports of fathers and mothers was examined. Table 2a and b displays the full MTMM matrices for the father and mother samples, respectively. Coefficients in the reliability (monotrait-monomethod) diagonal were consistently the highest in the matrix. Cronbach alphas in the father matrix ranged from .66 to .89 for self report data ($M = .77$), from .75 to .93 for partner report data ($M = .85$), and from .75 to .90 for child report data ($M = .81$). Cronbach alphas in the mother matrix ranged from .65 to .92 for self report data ($M = .78$), from .69 to .92 for partner report data ($M = .83$), and from .71 to .90 for child report data ($M = .82$). All coefficients in the validity diagonals (monotrait-multimethod) of the father matrix were significantly different from zero ($p < .01$). Mean correlations between corresponding self, partner, and child reports were $r = .29$ for warmth, $r = .36$ for conflict, $r = .36$ for positive affect, $r = .30$ for negative affect, $r = .44$ for mastery climate, $r = .42$ for ego climate, $r = .25$ for support, and $r = .36$ for pressure. All but four coefficients in the validity diagonals (monotrait-multimethod) of the mother matrix were significantly different from zero ($p < .01$). Mean correlations between corresponding self, partner, and child reports were $r = .13$ for warmth, $r = .27$ for conflict, $r = .24$ for positive affect, $r = .24$ for negative affect, $r = .43$ for mastery climate, $r = .40$ for ego climate, $r = .22$ for support, and $r = .29$ for pressure. In the majority of cases, validity coefficients were higher than values lying in the same column and row within the multimethod blocks of the respective father and mother matrices.

Data in both matrices exhibited the same pattern of trait interrelationship in multitrait-monomethod triangles. For fathers, mean correlations were $r = .20$ (range = .00–.49) for self report, $r = .18$ (range = .01–.67) for partner report, and $r = .23$ (range = .01–.55) for child report. For mothers, mean correlations were $r = .18$ (range = .01–.68) for self report, $r = .19$ (range = .01–.50) for partner report, and $r = .19$ (range = .01–.50) for child report. This emphasizes that trait effects were stronger than the potentially confounding method effects in these data. Non-corresponding (multitrait-multimethod) coefficients were of the lowest magnitude in both MTMM matrices. The mean correlation between non-corresponding scales for fathers was $r = .20$ (range = .00–.50) for self report, $r = .18$ (range = .00–.50) for partner report, and $r = .23$ (range = .00–.42) for child report. The mean correlation between non-corresponding scales for mothers was $r = .18$ (range = .01–.50) for self report, $r = .19$ (range = .01–.50) for partner report, and $r = .19$ (range = .02–.42) for child report. This emphasizes that there were no spurious or unexpected relationships in the data for either sample.

The MTMM findings are largely in line with study hypotheses, supporting the convergent and discriminant validity of study

constructs. Although the MTMM matrices yielded statistically significant correlations among self, partner, and child report subscales (range: $r = .20$ –.60, $M = .35$ for fathers and range: $r = .17$ –.60, $M = .31$ for mothers), the magnitude of these correlations suggests that within-family reporters have discrepant views of study variables. Because there are no accepted cutoffs for meaningful associations in an MTMM design (Brown, 1984), subsequent steps were undertaken to further assess the statistical agreement among self, partner, and child reports. Kappa (κ) values were calculated to assess inter-rater agreement and are presented alongside Pearson correlations in Table 3a (fathers) and b (mothers). The coefficient κ represents the proportion of agreement that occurs after accounting for chance agreement (Cohen, 1960). Because κ is only capable of measuring inter-rater agreement between two reporters, separate coefficients were calculated for agreement between self and partner, self and child, and partner and child. Landis and Koch (1977) describe coefficients between .00 and .20 as slight, .21 and .40 as fair, .41 and .60 as moderate, .61 and .80 as substantial, and $>.81$ as near perfect. In the present study, κ coefficients ranged from $-.07$ (representing less-than-chance agreement) to .35 indicating overall a relative lack of statistical agreement across raters.

2.3. Multivariate multiple regressions

To address the second study purpose, multivariate multiple regressions were conducted to examine warmth and conflict in the parent–child relationship, parent positive and negative affect, and mastery and ego dimensions of the coach-created motivational climate as collective predictors of parent support and pressure in organized youth sport. Relationships were examined separately for: (a) father self report, (b) partner report of father, and (c) child report of father, as well as (d) mother self report, (e) partner report of mother, and (f) child report of mother.

For father self report, a significant multivariate relationship emerged, Wilks' $\lambda = .48$, $F(12, 238) = 8.86$, $p < .001$, with two significant canonical functions ($R_c = .64$ and .44). Using $|\lambda| > .30$ as a criterion value (Tabachnick & Fidell, 2007), the canonical loadings of the first function showed that perceived warmth, conflict, negative affect, mastery climate, and ego climate associated significantly with perceived father support and pressure (see Table 4). For this pressure-dominant function, the direction of associations was in line with hypotheses. In the second function, perceived conflict, positive affect, and mastery climate associated significantly with perceived father support and pressure. The direction of associations was positive for all variables contributing to the multivariate relationship, which was support dominant. The redundancy statistic (R_d) revealed that 18.5% and 10.5% of the variance in the criterion variables was explained by the predictor variable sets for functions 1 and 2, respectively.

For partner report of father, a significant multivariate relationship emerged, Wilks' $\lambda = .49$, $F(12, 242) = 8.60$, $p < .001$, with two significant canonical functions ($R_c = .65$ and .39). The canonical loadings of the first function showed all predictor variables to associate significantly and in expected directions with perceived father support and pressure (see Table 4). In the second function, perceived conflict, positive affect, and negative affect were significantly and positively associated with perceived father support and pressure. The R_d revealed that 22.3% (function 1) and 7.2% (function 2) of the variance in the criterion variables was explained by the predictors.

For child report of father, a significant multivariate relationship emerged, Wilks' $\lambda = .41$, $F(12, 376) = 17.44$, $p < .001$, with two significant canonical functions ($R_c = .67$ and .51). The canonical loadings of the first function showed that perceived warmth, conflict, positive affect, and negative affect associated significantly

Table 2
(a) MTMM matrix for self, partner, and child reports of fathers ($n = 201$). (b) MTMM matrix for self, partner, and child reports of mothers ($n = 201$).

	Self report								Partner report								Child report								
	S1	S2	S3	S4	S5	S6	S7	S8	P1	P2	P3	P4	P5	P6	P7	P8	C1	C2	C3	C4	C5	C6	C7	C8	
(a)																									
Warmth	S1	(.80)																							
Conflict	S2	-.19**	(.78)																						
Pos. affect	S3	.24**	.05	(.89)																					
Neg. affect	S4	-.20**	.29**	.04	(.79)																				
Mast. climate	S5	.28**	-.08	.39**	-.21*	(.87)																			
Ego climate	S6	-.16	.12	-.01	.23**	-.49**	(.69)																		
Support	S7	.21**	-.00	.42**	-.17	.19*	-.09	(.69)																	
Pressure	S8	-.27**	.43**	.11	.46**	-.07	.26**	.11	(.66)																
Warmth	P1	.38**	-.17	-.10	-.04	-.12	-.08	-.13	-.39**	(.88)															
Conflict	P2	-.13	.39**	.10	.18	.03	.22*	.04	.31**	-.44**	(.89)														
Pos. affect	P3	.18	-.04	.42**	.18	.09	.11	.35**	.17*	.25**	.13	(.93)													
Neg. affect	P4	-.02	.22*	.16	.34**	.06	.08	.18	.30**	-.18*	.30**	.10	(.81)												
Mast. climate	P5	.22*	.01	.19	-.16	.60**	-.50**	.03	-.14	.11	-.02	.20**	.07	(.92)											
Ego Climate	P6	-.20*	-.00	-.19*	.04	-.50**	.52**	-.05	.05	-.08	.12	.03	-.08	-.67**	(.80)										
Support	P7	.10	.04	.08	-.04	-.15	.10	.19*	-.06	.37**	.02	.45**	-.04	.01	.03	(.78)									
Pressure	P8	-.19	.25**	.20*	.14	.11	.16	.26**	.39**	-.42**	.34**	.09	.20*	-.03	.04	.02	(.75)								
Warmth	C1	.23**	-.09	-.17*	-.18*	.07	-.07	.22*	-.09	.26**	-.14	.24**	-.10	.08	.02	.13	-.10	(.88)							
Conflict	C2	-.12	.41**	.19*	.27**	-.09	.13	.05	.30**	-.22**	.40**	.10	.22**	-.10	.04	.09	.27**	-.32**	(.82)						
Pos. affect	C3	.06	.07	.27**	.11	.04	.06	.16	.10	.09	-.05	.32**	.07	.17*	-.09	.10	.09	.40**	-.07	(.90)					
Neg. affect	C4	-.12	.21*	-.03	.34**	-.09	.04	-.18*	.29**	-.07	.18*	-.02	.26**	-.01	-.05	.03	.13	-.31**	.48**	-.03	(.78)				
Mast. climate	C5	.12	-.01	.17	.04	.23**	-.28**	.02	-.08	.15	-.09	.23**	-.03	.42**	-.24**	-.03	-.06	.19**	-.09	.35**	-.10	(.85)			
Ego climate	C6	-.22*	-.04	-.03	.08	-.28**	.36**	.00	.09	-.09	.09	-.05	.02	-.42**	.42**	.07	.13	-.09	.17**	-.02	.11	-.46**	(.75)		
Support	C7	.07	.04	.28**	-.00	.00	.02	.24**	-.01	.16*	-.06	.24**	-.07	.02	.12	.18*	.06	.55**	-.16*	.48**	-.29**	.18**	.09	(.76)	
Pressure	C8	-.21*	.27**	.11	.26**	-.07	.18*	.05	.41**	-.24**	.30**	.07	.02	-.17	.14	-.12	.43**	-.14	.45**	.00	.18*	-.01	.29**	.03	(.76)
(b)																									
Warmth	S1	(.69)																							
Conflict	S2	-.28**	(.85)																						
Pos. affect	S3	.29**	.08	(.85)																					
Neg. affect	S4	-.11	.43**	.03	(.82)																				
Mast. climate	S5	.06	.08	.28**	.09	(.92)																			
Ego climate	S6	.07	.04	.01	.01	-.68**	(.80)																		
Support	S7	.28**	-.08	.32**	-.17*	.05	.02	(.65)																	
Pressure	S8	-.22**	.23**	.07	.21**	.05	.07	.00	(.65)																
Warmth	P1	.17	-.08	.29**	-.01	.26**	-.19	.25**	-.19	(.89)															
Conflict	P2	-.12	.47**	.02	.30**	.14	-.09	-.14	.27**	-.35**	(.86)														
Pos. affect	P3	.07	.01	.23*	-.04	.16	-.20*	.18	.01	.41**	-.07	(.92)													
Neg. affect	P4	-.05	.11	.15	.39**	-.08	.08	-.10	.13	-.15	.30**	.07	(.87)												
Mast. climate	P5	-.07	.01	.05	.03	.60**	-.50**	-.06	.07	.29**	-.12	.35**	-.16	(.87)											
Ego climate	P6	.03	.02	-.02	-.01	-.49**	.52**	-.08	.02	-.31**	-.01	-.18*	.20*	-.50**	(.69)										
Support	P7	.11	-.08	.11	-.06	.15	-.11	.20*	.16	.41**	-.09	.44**	-.20*	.23*	-.22*	(.74)									
Pressure	P8	-.12	.23*	.15	.14	-.11	.09	.04	.42**	-.32**	.32**	-.01	.34**	-.06	.29*	-.06	(.76)								
Warmth	C1	.14	-.07	.12	-.01	.13	-.05	-.00	.03	.17*	-.08	.11	-.04	.08	-.15	.23**	.01	(.84)							
Conflict	C2	-.16*	.24**	.04	.06	.03	.07	.14	.09	-.10	.12	.04	.00	-.06	.02	-.06	.06	-.25**	(.80)						
Pos. affect	C3	.07	-.01	.25**	-.05	.20*	-.13	.11	.17*	.11	.00	.22*	.04	.11	-.13	.11	.08	.45**	.01	(.90)					
Neg. affect	C4	-.10	.07	.04	.19*	-.10	.06	-.09	.03	-.10	.10	-.10	.10	-.07	.07	-.18*	.06	-.15*	.31**	.01	(.87)				
Mast. climate	C5	-.01	-.01	.26**	-.01	.42**	-.24**	.05	.12	.08	-.01	.24**	-.04	.23**	-.27**	.13	.02	.20**	-.01	.32**	-.13	(.85)			
Ego climate	C6	.12	-.12	-.06	.02	-.42**	.42**	.02	-.05	-.11	-.13	-.04	.02	-.28**	.35**	-.10	.07	-.13*	.11	-.11	.17*	-.45**	(.75)		
Support	C7	.13	-.07	.21**	-.15*	.11	.06	.24**	.11	.18*	.01	.15	.04	.01	-.15	.22*	.04	.50**	-.04	.43**	-.12	.17*	-.08	(.71)	
Pressure	C8	-.06	-.03	.01	-.02	-.11	.12	-.16	.34**	-.27**	.09	-.07	.09	-.04	.16	-.07	.29**	-.07	.20**	.05	.23**	-.06	.19**	.04	(.78)

Notes. Pairwise deletion used in calculating correlations. Bolded and parenthetical coefficients lie on the reliability (monotrait-monomethod) diagonal and represent within-reporter scale reliabilities. Bolded coefficients lie on the validity (monotrait-multimethod) diagonals and represent the between-reporter correlations of scale means. Non-bolded coefficients (multitrait-monomethod and multitrait-multimethod triangles) represent between-reporter and between-scale interrelationships. Self reports of the partner for mastery climate and ego climate are used as “partner” reports for this analysis.

Table 3

(a) Correspondence among self, partner, and child reports of fathers. (b) Correspondence among self, partner, and child reports of mothers.

	Pearson's <i>r</i>	Cohen's κ		Pearson's <i>r</i>	Cohen's κ
(a)					
<i>Warmth</i>			<i>Conflict</i>		
Self-Partner	.01–.38	.01–.18	Self-Partner	.25–.39	.15–.23
Self-Child	.05–.29	.02–.17	Self-Child	.16–.41	.01–.19
Partner-Child	.14–.26	.00–.19	Partner-Child	.20–.40	.12–.14
<i>Positive affect</i>			<i>Negative affect</i>		
Self-Partner	.05–.42	.00–.21	Self-Partner	.05–.34	.08–.20
Self-Child	.09–.27	(–.01) – .14	Self-Child	.05–.34	.07–.12
Partner-Child	.07–.32	(–.00) – .15	Partner-Child	(–.04) – .26	(–.07) – .16
<i>Mastery climate</i>			<i>Ego climate</i>		
Self-Partner	.26–.60	.05–.35	Self-Partner	.09–.52	.04–.22
Self-Child	.12–.23	.01–.14	Self-Child	.11–.36	.01–.10
Partner-Child	.14–.42	.03–.13	Partner-Child	.08–.42	.04–.10
<i>Support</i>			<i>Pressure</i>		
Self-Partner	(–.01) – .19	.06–.30	Self-Partner	(–.04) – .39	.07–.17
Self-Child	.08–.24	.07–.29	Self-Child	.05–.41	.10–.18
Partner-Child	.05–.18	.14–.21	Partner-Child	.12–.43	.09–.15
(b)					
<i>Warmth</i>			<i>Conflict</i>		
Self-Partner	.05–.17	.03–.17	Self-Partner	.25–.47	.15–.23
Self-Child	.01–.33	.02–.18	Self-Child	.17–.24	.11–.19
Partner-Child	.11–.28	(–.03) – .17	Partner-Child	.11–.36	.03–.16
<i>Positive affect</i>			<i>Negative affect</i>		
Self-Partner	.05–.23	.02–.21	Self-Partner	.04–.39	.02–.20
Self-Child	.03–.25	(–.00) – .14	Self-Child	.05–.19	.04–.12
Partner-Child	.09–.22	.02–.15	Partner-Child	.13–.24	.05–.16
<i>Mastery climate</i>			<i>Ego climate</i>		
Self-Partner	.26–.60	.05–.33	Self-Partner	.09–.52	.04–.22
Self-Child	.10–.42	.03–.14	Self-Child	.05–.42	.07–.10
Partner-Child	.14–.23	.04–.14	Partner-Child	.08–.35	.01–.10
<i>Support</i>			<i>Pressure</i>		
Self-Partner	(–.01) – .20	.22–.30	Self-Partner	(–.04) – .42	.06–.19
Self-Child	.07–.24	.11–.28	Self-Child	.05–.34	.06–.18
Partner-Child	.05–.32	.01–.21	Partner-Child	.12–.31	.09–.25

Notes. The range of Pearson's *r* and Cohen's κ coefficients observed for each subscale by self, partner, and child report comparisons are presented. When obtained agreement equals chance agreement, $\kappa = 0$. Self reports of the partner for mastery climate and ego climate are used as "partner" reports for this analysis.

with perceived father support (see Table 4) in directions consistent with hypotheses. In the second function, perceived conflict and ego climate associated significantly with perceived father pressure. The direction of associations was in line with hypotheses. The R_d revealed that 22.1% and 12.9% of the variance in the criterion variables was explained by the predictors for functions 1 and 2, respectively.

For mother self report, a significant multivariate relationship emerged, Wilks' $\lambda = .74$, $F(12, 320) = 4.24$, $p < .001$, with two significant canonical functions ($R_c = .43$ and $.29$). The canonical loadings of the first function showed that perceived warmth, conflict, positive affect, and negative affect associated significantly and in hypothesized directions with perceived mother support and pressure (see Table 4). This function was support dominant. In the second function, perceived conflict and positive affect associated significantly with perceived mother support and pressure. The direction of associations was positive for the variables contributing to the multivariate relationship, which was pressure dominant. The R_d revealed that 9.3% (function 1) and 4.2% (function 2) of the variance in the criterion variables was explained by the predictors.

For partner report of mother, a significant multivariate relationship emerged, Wilks' $\lambda = .54$, $F(12, 308) = 9.24$, $p < .001$, with two significant canonical functions ($R_c = .58$ and $.43$). The canonical loadings of the first function showed that perceived warmth and positive affect associated significantly and in expected directions with perceived mother support and pressure (see Table 4). This function was support dominant. In the second function, perceived warmth, conflict, positive affect, and negative affect associated significantly with perceived support and pressure. The direction of

associations was positive for all variables contributing to the multivariate relationship, with the exception of warmth, which was inversely associated with support and pressure. This function was pressure dominant. The R_d showed 16.3% (function 1) and 9.6% (function 2) of the variance in the criterion variables was explained by the predictors.

For child report of mother, a significant multivariate relationship emerged, Wilks' $\lambda = .61$, $F(12, 372) = 8.78$, $p < .001$, with two significant canonical functions ($R_c = .58$ and $.30$). The canonical loadings of the first function showed perceived warmth, positive affect, and mastery climate to associate significantly and in expected directions with perceived mother support (see Table 4). In the second function, perceived conflict, positive affect, negative affect, and ego climate associated significantly with perceived mother pressure. Associations were in line with hypotheses except for positive affect. The R_d revealed that 16.4% (function 1) and 4.6% (function 2) of the variance in the criterion variables was explained by the predictors.

3. Discussion

We examined the association of multiple process, person, and context factors (Bronfenbrenner, 2005) with parents' involvement (support and pressure) in organized youth sport. Based on calls for a more family-oriented understanding of youth sport (Babkes & Weiss, 1999; Bremer, 2012; White, 1998), our first aim was to assess the concordance among self, partner, and child reports of fathers and mothers for the core study variables. Studies addressing parents and children in social contexts typically rely on the reports

Table 4

(a) Canonical loadings for the relationship of warmth, conflict, positive affect, negative affect, mastery climate, and ego climate with support and pressure in fathers. (b) Canonical loadings for the relationship of warmth, conflict, positive affect, negative affect, mastery climate, and ego climate with support and pressure in mothers

Variable	Loading					
	Father report of self (n = 127)		Partner report of father (n = 162)		Child report of father (n = 196)	
	f(1)	f(2)	f(1)	f(2)	f(1)	f(2)
Predictor Set						
Warmth	-.57	.17	.83	.14	.86	-.12
Conflict	.60	.42	-.47	.44	-.36	.81
Positive affect	-.19	.93	.50	.77	.71	.12
Negative affect	.79	.09	-.52	.34	-.49	.24
Mastery climate	-.32	.33	.31	.27	.27	.01
Ego climate	.46	.02	-.55	.16	.07	.59
Criterion set						
Support	-.39	.91	.77	.64	.99	.15
Pressure	.86	.50	-.69	.72	-.13	.99
R _c	.64	.44	.65	.39	.67	.51
R _d	.19	.11	.22	.07	.22	.13

Variable	Loading					
	Mother report of self (n = 168)		Partner report of mother (n = 129)		Child report of mother (n = 194)	
	f(1)	f(2)	f(1)	f(2)	f(1)	f(2)
Predictor Set						
Warmth	.80	-.08	.90	-.39	.91	-.09
Conflict	-.46	.53	-.26	.69	-.12	.63
Positive affect	.49	.81	.60	.69	.73	.32
Negative affect	-.55	.25	-.26	.33	-.26	.72
Mastery climate	.01	.27	.06	-.07	.32	-.13
Ego climate	-.03	.20	.02	.12	-.17	.57
Criterion set						
Support	.83	.55	.84	.54	.99	.14
Pressure	-.54	.84	-.51	.86	-.10	1.00
R _c	.43	.29	.58	.43	.58	.30
R _d	.09	.04	.16	.10	.16	.05

Note. Self reports of the partner for mastery climate and ego climate are used as "partner" reports for this analysis.

of parents or children, but not both. A major advantage of seeking reports from multiple family members is to mitigate social desirability biases (Moskowitz & Schwarz, 1982), as parents tend to report more accurately when they know that other informants will also report on the same items (Morsbach & Prinz, 2006). This noted, our findings show relatively modest correspondence among fathers, mothers, and children on the variables of interest. This supports previous work showing parents and children to have distinct perceptions of each other's behavior (Babkes & Weiss, 1999; Cashmore & Goodnow, 1985) and extends this observation to parent-child agreement on relationship warmth and conflict, parent positive and negative parent affect, and the coach-created motivational climate. The considerable lack of agreement across raters suggests that sport experiences fall on a continuum from more to less shared, with greater correspondence on perceptions of context than perceptions at the process or person level. Moving forward, considering the "sharedness" of experience is important for researchers who wish to aggregate different family members' perceptions of youth sport.

The second purpose of this study was to examine warmth and conflict in the parent-child relationship, parent positive and negative affect, and mastery and ego dimensions of the coach-created motivational climate as collective predictors of father and mother involvement (e.g., support and pressure) in organized

youth sport. This purpose was guided by Bronfenbrenner's (2005) PPCT model, which suggests that parenting behavior may be related to the repeated social and cognitive processes parents experience in sport, the characteristics of the parent, and the sport context(s) in which parents interact over time. We examined the parent-child relationship as a process-related factor marked by continuous interactions that evoke subjective feelings of warmth and conflict, parent experiences of emotion as a person-related factor marked by positive and negative affect, and the coach-created motivational climate as a context-related factor marked by mastery- and ego-focused coaching behaviors. These variables were selected because they are important, simultaneously experienced features of the youth sport experience with much potential to impact parent involvement, operationalized as a multidimensional construct consisting of parent support and pressure behaviors (Leff & Hoyle, 1995; Stein et al., 1999). Indeed, these features were shown to collectively associate with parent involvement, speaking to the value of considering a breadth of ecological systems in sport parenting research.

Father self reports were higher for conflict and pressure than mother self reports. This illuminates the potential for fathers to experience more conflict than mothers in the parent-child relationship and to also judge themselves as more pressuring than mothers in youth sport. These findings align with work showing that mothers offer more praise and understanding whereas fathers engage in more directive behavior in youth sport (Wuerth, Lee, & Alfermann, 2004). Despite the advantages of comparing father and mother reports, it is important to pursue a better understanding of children's reports of parent involvement as well. Indeed, it has been suggested that parent behavior impacts the child through the child's perception of that behavior (Stein et al., 1999). Interestingly, in the present study, children's perceptions were more in line with father self reports than with partner (mother) reports of fathers. One explanation for this finding could be that children necessarily experience all of their parents' involvement whereas partners may not always be present with the other parent. This is particularly relevant to concordance of perceptions when one parent is disproportionately engaged in a child's sport experiences, which is more often true for fathers, especially as children move from the initiation to the development and mastery stages of participation (Coakley, 2006; Stein et al., 1999; Wuerth et al., 2004). This hypothesis, combined with the low statistical agreement among reporters in the present work, represents an interesting problem for future researchers attempting to amalgamate self, partner, and child reports of parent sport involvement variables.

Consistent with hypotheses, higher parent and child ratings of warmth, positive affect, and mastery climate were positively associated with perceptions of support, whereas higher parent and child ratings of conflict, negative affect, and ego climate were positively associated with perceptions of pressure. This builds on previous work examining parent involvement behavior (Hoyle & Leff, 1997; Leff & Hoyle, 1995; Stein et al., 1999) and affirms that the potential antecedents of parent involvement warrant further attention by researchers and practitioners. Whereas children seemed to view these variables as distinct, with canonical functions driven either by support or pressure, a unique finding was that parent reports showed complexity with secondary canonical functions comprised of variables predicting support and pressure in the same direction. In fathers this showed, for example, conflict to positively associate with both support and pressure in self reports and positive affect to positively associate with both support and pressure in partner reports. Also, parents, partners, and children perceived complexity in the relationship between positive affect and pressure in mothers. These findings highlight the potential

difficulty in associating parental engagement to perceptions of positive parenting practices (see Knight & Holt, 2013). Findings should be cautiously interpreted, as they come from secondary functions with modest effect sizes; however, they speak to the dynamic nature of parenting, whereby high levels of warmth, conflict, and positive affect may foster feelings of being supported and pressured in young adolescent athletes. Indeed, children have been shown to interpret parent support both as a good thing and as over involvement, with implications for their enjoyment of sport (Stein et al., 1999).

The coach-created motivational climate was generally related to parent support and pressure in hypothesized directions. Specifically, coach-created mastery climate was positively related to support and coach-created ego climate was positively related to pressure. Building from these findings, an interesting direction to explore is the interaction between coach-created motivational climate and parent involvement in predicting child outcomes. O'Rourke et al. (2011) observed an interaction of parental pressure and motivational climate such that the highest levels of athlete anxiety occurred when parental pressure was high and ego climate was high and/or mastery climate was low. In contrast, children who experienced high pressure and high mastery climate behaviors reported lower anxiety. These findings imply that a high mastery climate may buffer children's negative outcomes in sport. This has important implications at a policy level, as some youth sport leagues have proposed limiting parent involvement in children's sport participation (O'Sullivan, 2014). Such a solution implies that parent involvement in youth sport has primarily negative consequences. Instead, youth sport leagues should encourage coaches to promote individual effort and improvement in children. This would have the potential to buffer negative parent involvement (i.e., pressure), and based on the results of the present work may also engender more supportive behaviors from parents.

Researchers can build upon the contributions of the present work by addressing study limitations. The primary limitation of this study lies in the fact that the present sample was delimited to parents of team sport athletes at a single developmental level (i.e., 11–13 years). These ages were targeted because they correspond with a transitional period in human development and the sport context where dynamics in parent–child, coach–child, and child–peer relationships may influence parent involvement behavior. This noted, the developmental level of the child, and the child's stage in youth sport (i.e., recreational vs. elite), have been shown to play a role in the expression of sport parenting roles (Côté, 1999; Holt, Tamminen, Black, Mandigo, & Fox, 2009; Shields, Bredemeier, LaVoi, & Power, 2005). In adhering to the time component of Bronfenbrenner's (2005) PPCT model, researchers could extend the present work by assessing parent support and pressure over the developmental course of a child's athletic development and investment, such as across the sampling and specializing years (see Côté, Baker, & Abernethy, 2007), as well as over life stages and parenting experience of parents.

A second limitation is the correlational design. While correlational studies suggest relationships between two variables – or in the present study two sets of variables – they do not allow for causal inference. This will be a necessary step to better understand whether constructs such as parent–child relationships, parent affect, and the coach-created motivational climate impact parent involvement over time. Alternatively, it could be that parent involvement (i.e., perceptions of pressure and support) influence some aspects of the parent–child relationship, the way parents experience affect in the sport environment, and perhaps even carry some weight in how coaches create motivational climates. To address this question of directionality, future work could focus on field-based interventions that help us better understand if the

knowledge from the present study can be translated in an actionable way.

A final limitation ties to present understanding of parent involvement in youth sport being grounded in middle class values (see Lightfoot, 2004), whereby parents have the time and resources to be involved in their children's sport endeavors. Indeed, the present study was inherently biased toward these parents, as parents who attended practice and consented to participate were necessarily “involved” parents. Non-involved parents were not of primary concern, yet finding ways to study them could meaningfully enhance the knowledge base. Because we sought to examine the concordance among self, partner, and child reports of fathers and mothers, the final sample was delimited to families with two involved parents. It is plausible that the expression of parent involvement behavior is distinct in alternative family structures (see Fredricks & Eccles, 2004), and given the changing demographics of U.S. families (U.S. Census Bureau, 2008) studies are needed that explore how different types of families are involved in and shape experiences of young athletes.

Despite restrictions to the generalizability of the present findings that are inherent in these (de)limitations, this work meaningfully contributes to the parent involvement knowledge base by answering calls for an empirical focus on athlete families and their relationship dynamics (Bremer, 2012) and parental behavior in youth sport (Babkes & Weiss, 1999; Dorsch, Smith, Wilson, & McDonough, 2015; White, 1998). Accordingly, the present research deepens knowledge of factors that may contribute to parent support and pressure, an area of work with considerable promise for extending our understanding of the role of parents in organized youth sport. With continued attention to the important issue of sport parenting, much potential exists to generate strategies for enhancing both parent and child experiences in youth sport.

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