The Effect of Family Size and Gender Composition on Parents’ Financial Support for Children’s School Sport

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Introduction
The family, particularly parents (Babkes & Weiss, 1999; Turman, 2007), plays a key role in children’s socialization into sport (Horn & Horn, 2007). Emotional and social support from coaches and peers affects children’s sport participation (Côté, 1999; Stevenson, 1990), but parents are highly influential, as they are the ones who financially support their children’s sport participation (Green & Chalip, 1998). In the United States, parents are increasingly asked to continue their financial support beyond youth sport. Many school districts now require students to pay to play school sports (Zdroik & Veliz, 2016). Consequently, parents are asked to shoulder more of the financial burden for their children’s school sports (Heinze et al., 2014). Parental financial support has more direct constraints than other forms of support, such as emotional and informational, because each household has a limited amount of financial resources that must be distributed to address the needs of all family members (Hanushek, 1992). Household spending on children can be influenced by several factors. First, the number of children in the household is often considered significant, because it determines the total amount of expenditure that parents are willing to spend for each child (Hoff & Mitchell, 2007). Second, the gender composition of children may come into play (Brunello & De Paola, 2013), as parents may choose whom to support and fund based on gender role beliefs (Fredricks & Eccles, 2005). Very few studies examine the relationship between these family structures and parental financial support for children’s sport participation. Therefore, the purpose of this study is to determine if parents spend differently on their children’s school sports based on family size and children’s gender. Two research questions were developed: (1) what is the effect of the number of children in the household on parents’ average sport spending per child? (2) what is the effect of the gender composition of children on parents’ average sport spending per child?

Literature Review
The relationship between family size and household expenditure has often been explained by “Quantity-Quality” model (QQ) framed by an economist Gary Becker (Becker, 1991). To illustrate, the model assumes “a trade-off between child investment and number of children in the family” (Cáceres-Delpiano, 2006, p.738). It predicts a negative effect of family size on each child’s educational outcome because more children in a household can lead to a parents’ decision to allocate fewer resources to each child, which is called “the dilution effect” (Blake, 1989). Previous literature tested this relationship across various spending categories. However, there are very few studies that determine the effect of family size on household expenditure on children’s leisure and sport participation. It is worthwhile to study this dynamic, given its practical implication for children’s participation in sport (Wüerth, Lee, & Alfermann, 2004). Scholarship also suggests that a child’s gender can influence household expenditures (Deaton, 1989). As societies have advanced, a gender gap in parental spending has been reduced in many contexts (Kornrich & Furstenberg, 2013). However, parent bias may still exist in choosing which activities to support for sons versus daughters (Heinze et al., 2014). For instance, Lundberg and Rose (2004) found that one-son families spent more money on categories, such as food, medical care, and sport equipment, compared to one-daughter families. Another study using a more recent US dataset (Heinze et al., 2014) showed that parents put more value on their son’s school sport; they were more likely to view $100 as expensive for supporting their daughter’s school sport than their son’s. Building on this work, we examine the relationship between the gender composition of children and parents’ actual spending on sport participation. This area of inquiry also has theoretical implication for parental gender role beliefs (Eccles, Jacobs, & Harold, 1990) and the gendered process of one’s sport socialization within a family context (Turman, 2007).
Method.
This study used the secondary data provided by the C.S. Mott Children’s Hospital National Poll on Children’s Health (NPCH). A nationally representative sample of US parents was drawn in January 2012 from GfK’s KnowledgePanel (GfK, LLC); the online NPCH survey was fielded the same month. Parents (N=814) of at least one child age 12-17 years (female=49.6%, White/non-Hispanic=74%) answered items on sports participation and related family expenditures; poll findings were reported previously. Additional data analyses related to family expenditures on sports were analyzed via Analysis of Covariance (ANCOVA). Two different ANCOVAs were conducted to examine the difference in parents’ average sport expenditure per child by 1) the number of children in the household and 2) gender composition (0 = families without any daughter, 1 = families with one daughter, 2 = families with two daughters). Family income was used as the covariate. Since there was not ample data on the sport expenditures for third children and fourth children, data analysis was limited to single-child and two-child families.

Results
The first ANCOVA showed a statistically significant difference in average sport expenditure per child between single-child and two-child families after accounting for parental income as a covariate (F [1, 225] = 4.327, p = .039, \( \eta^2 \) = .019). The estimated marginal means indicated that a child from a single-child family (Madj = $409.14, SDadj = $41.55) received greater financial support, as compared to a child from a two-child family (Madj = $288.69, SDadj = $40.10). However, the second ANCOVA revealed no statistically significant main effect of gender on average sport expenditure per child after controlling for family income (F [2, 115] = .909, p = .406, R2 = .016).

Discussion
Our results have implications for future studies on parents’ financial support and children’s sport participation. First, we expanded the QQ model’s applicability to the household expenditure on children’s sport participation from the evidence that parents tended to spend much less on each child’s school sport when they had two children. However, as each sport requires a different level of fees (Hoff & Mitchell, 2007), future work should examine if there is a relationship between family size and the type of sport each child plays, and how these factors contribute to a different pattern in parents’ financial support for children’s sport. Second, we did not find a main effect of gender composition of children for the average household sport expenditure per child. This finding was supported by some empirical studies that indicated recent gender indifference in parent spending (Kornrich & Furstenberg, 2013; Pollard & Morgan, 2002). However, given that there is still a gender gap in sport participation rates (Shifrer, Pearson, Muller, & Wilkinson, 2015), future research should investigate the role of parents’ financial support, with other forms of support such as emotional, in facilitating female children’s sport participation.