

ABSTRACT

BARNES, EILEEN REBECCA. Motivations and Behaviors of Youth Sports Parents. (Under the direction of Dr. Jason Bocarro.)

Recreation sports provide a potentially rich learning environment for children. However, that environment can be positively or negatively impacted by parents who influence their child's development, knowledge, and skill acquisition. The purpose of this research was to explore the relationship between parents' (a) motivational beliefs, (b) perceptions of invitation for involvement, and (c) perceived life context and parent involvement in youth recreational sports programs. Levels 1 and 2 of The Hoover-Dempsey and Sandler Model of the Parental Involvement Process (2005) was used to conceptualize the research. The Parental Involvement Scale employed in the original research was modified to a youth sports context through initial revision, expert review, and pilot testing with a focus group. Ultimately, parents ($n = 302$) of children in recreational sports leagues for 7- to 12-year-olds completed a 64-question instrument measuring model constructs. First, exploratory factor analysis was employed to ensure that survey items on the revised Parental Involvement Scale grouped as expected. Second, bivariate correlations were employed to test the relative strength of relationships between (1) parental motivations and involvement behaviors and (2) involvement behaviors and learning mechanisms employed by parents. Results indicate that parental competencies and skills (PCS) has the strongest influence on parental involvement, followed by time and energy (TE) and specific coach invitations (COI). When parents are involved they are most likely to exhibit behaviors of encouragement (ENC) and modeling (MOD). Results provide greater understanding of the motivations and behaviors of parental involvement in youth recreational sports environments. Further, results provide a foundation for future research into how parental behaviors influence youth outcomes in sport and how

programmers can engage parents to achieve positive child-oriented outcomes.

Motivations and Behaviors of Youth Sports Parents

by
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A thesis submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the degree of
Master of Science

Parks, Recreation and Tourism Management

Raleigh, North Carolina

2015

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BIOGRAPHY

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ACKNOWLEDGEMENTS

Thank you to all of the kids and parents everywhere who keep sports fun and focused on what matters, everything but the score. Particularly, thank you to the families I have worked with in both Palos Park, IL, and Orange County, NC. So many of you both knowingly and unknowingly helped me frame my concept of what a good sport parent is and can be.

I owe a tremendous debt of gratitude to my friends and colleagues at Orange County Department of Environment, Agriculture, Parks and Recreation, particularly the Recreation Division, who permitted me the flexibility to pursue this exercise in intellectual curiosity while working full-time. Thank you all for putting up with me on busy and stressful days.

To the faculty and staff of the North Carolina State University Department of Parks, Recreation, and Tourism Management, thank you for supporting and indulging me in this insane endeavor. As if one graduate degree wasn't crazy enough, you all challenged me to take on a second program to meet my personal and professional needs and then supported me through the process. It has been a long, slow haul, but at the end of the road, I am grateful for you all pushing me through it. I hope to remain of service to the Department and repay the debt over time.

Brian, Beckett, Zeke, and Dinga, while I probably still won't be able sit still when all this is over, I do promise to spend more time at home and give you all more time and attention. Cookies for everyone!

Most importantly, thank you to my own "sports parents", Mom, Dad, Grandma,

Mike, and Marianne. You all laid the foundation for this project from childhood, nurturing both my academic and athletic pursuits, with an emphasis on striving for my own personal best. In particular, my mother has always been and continues to be my ultimate role model, fostering an environment that emphasizes responsibility for self, service to others, and enjoyment, all in equal measure.

I played hard. I had fun. I brought home a trophy.

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Introduction

Classrooms are the traditional setting for youth learning and skill acquisition. However, children are constantly learning and every new experience is an opportunity for intellectual, social, physical, and emotional growth. In 2010, approximately 20.5 million U.S. children aged seven to eleven participated in youth sports programs (National Sporting Goods Association, 2011). A child's experiences in both classrooms and sport facilities can be positively or negatively influenced by parents who guide in their child's development, knowledge, and skill acquisition. How parents are motivated and behave in assisting their children through educational environments can, in turn, affect the learning outcomes of their children.

Parental involvement has been positively associated with various measures of academic achievement and social development (e.g., Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Hill & Craft, 2003; Sheldon & Epstein, 2005). Grolnick and Slowiaczek (1994) found that parental involvement can take various forms that independently affect their child's learning outcomes. Specifically, the ways parents become involved may vary according to background and personal traits. A comprehensive meta-analysis of parental involvement in academic achievement found that home supervision had the weakest relationship with student academic performance. Instead, parental aspirations and expectations of the child had the strongest relationship with academic achievement (Fan & Chen, 2001). Regardless of form of involvement, parents significantly influence child learning outcomes.

Classrooms are not the only environment for knowledge and skill acquisition. Young

people spend only 20% of their waking hours in school (Corporate Voices for Working Families, 2004). What they do in the other 80% can have an influence on the child and society as a whole. As has been noted, “the role of out-of-school-time programs is essential in the development of youth” (Outley, Bocarro, & Boleman, 2011, p. 60). Just as parents can play an integral role in the learning outcomes in education, parents may be equally important in a child’s learning during their leisure-time experiences. Much of the research in this dynamic has focused on sport-related activities.

Out-of-school recreational activity has been associated with a number of positive youth development outcomes. Past research has shown greater academic outcomes such as school commitment, higher educational aspirations, and lower dropout rates (Cooper, Valentine, Nye, & Lindsay, 1999; Eccles & Barber, 1999; Eccles, Barber, Stone, & Hunt, 2003; Mahoney & Cairns, 1997). Other research has linked extracurricular activity to psychological benefits such as increased self-esteem, lower rates of depression, and increased sense of identity (Barber, Eccles, & Stone, 2001; Caldwell & Witt, 2011; Larson, 2000; Mahoney, Schweder & Stattin, 2002; Marsh & Kleitman, 2002). Involvement in prosocial activities such as those afforded by extracurricular opportunities has been linked to reduced negative behavior such as alcohol and drug use and criminal activity (Eccles & Barber, 1999; Eccles, Barber, Stone, & Hunt, 2003; Mahoney, 2000) and increased civic engagement (Caldwell & Witt, 2011; Youniss, McLellan, & Yates, 1997; Zaff, Moore, Papillo, & Williams, 2003). Further, participation in extracurricular activity has been shown to have health benefits such as reduced rates of obesity (Elkins, Cohen, Koralewicz, & Taylor, 2004). Collectively, this line of research demonstrates that out-of-classroom activity

has academically, socially, psychologically, and physically beneficial to youth development.

Family also has been shown to be a positive influence on child and adolescent sport participation (Seabra, Mendonça, Thomis, Peters, & Maia, 2007). Some studies have examined forms of parental involvement such as parents supporting youth at sport activities (Kanters, Bocarro, & Casper, 2008; Wirmsma & Fifer, 2008), and volunteering to coach their children's teams (Barber, Sukhi, & White, 1999; Weiss & Fretwell, 2005). Because parents may have a positive impact on their child's sport experience and because sport participation has been shown to have positive long-term impacts for children, program providers should strive to provide youth sport experiences that are conducive and welcoming to parent participation. This research aims to develop an understanding of why and how parents become involved in order to aid programmers in this effort and provide a basis for further research into parental involvement motivations and behaviors.

The field of leisure studies has consistently borrowed theory from other fields, and education research has provided valuable insights to leisure research. Education and leisure both provide context for youth development; both have roles for parents, instructors, and children; and both fields share theoretical underpinnings, including motivational theories. The research presented here borrows heavily from one particular theory from the educational field, employing levels 1 and 2 of the revised Hoover-Dempsey and Sandler (2005) Model of the Parent Involvement Process in an attempt to build upon what is known about parent involvement in education and determine whether it provides insights to parental involvement in a youth sports context (Figure 1).

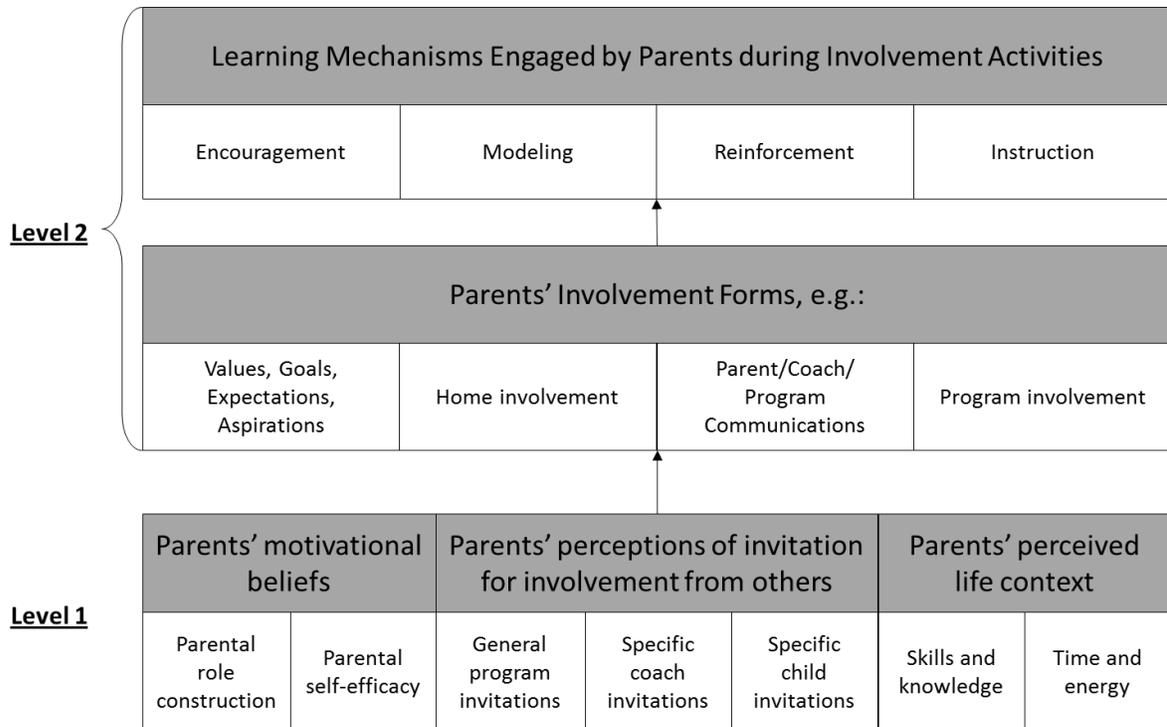


Figure 1. Levels 1 and 2 of the revised Hoover-Dempsey and Sandler model of the parent involvement process as re-conceptualized for youth recreational sports (Hoover-Dempsey & Sandler, 2005).

This model will be explored further in the literature review, but it provides an appropriate framework because of its unique combination of internal motivational factors (e.g. role construction and self-efficacy), external motivational factors (from program, coach, and child), and individual life context (time and energy, skills and knowledge). These individual factors have been shown to influence parental involvement in education and some have been studied in the context of leisure studies. A strength of this model is its combination of several individual factors with already-proven relationships to parent involvement and child-

centered outcomes. Further, this model has been employed frequently in the field of education research, but has yet to be applied to out-of classroom learning environments such as recreational sports.

The research presented here attempts to employ this model as a means to fill a gap in the existing literature related to parental involvement in the particular recreational context of youth sports. Parental involvement in education has been shown to have positive associations with academic achievement and social development. Just as parental involvement influences school outcomes, it may also influence sport outcomes. While research has explored what motivates parents to become involved in children's academics and how they become involved, less is known about the motivations and behaviors of parents in sport settings. The fundamental questions guiding this research focus on the relationship between parents' (a) motivational beliefs, (b) perceptions of invitation for involvement, and (c) perceived life context and parent involvement in youth recreational sports programs. Applying the revised Hoover-Dempsey and Sandler (2005) Model of the Parent Involvement Process to an out-of classroom learning environment such as youth sports presents four hypotheses:

1. Parents' motivational beliefs will be positively related to the forms of involvement they take in their child's youth sports experiences.
2. Parents' perception of invitation for involvement from the program, their child's coach, and the child him- or herself will be positively related to the forms of involvement they take in their child's youth sports experiences
3. Parents' skills and knowledge of the sport and time and energy available to give

to their child will also be positively related to the forms of involvement they take in their child's youth sports experiences.

4. Parents with higher levels of involvement in their child's youth sports experiences will also engage in learning mechanisms to a higher degree than parents with lower levels of involvement.

No hypothesis is made regarding which motivations, if any, correlate to specific behaviors or which involvement activities correlate to specific learning mechanisms. However, these relationships will be explored.

Literature Review

Life is a growth process. With every novel experience, individuals acquire new knowledge and skills. While schools are institutions of learning, people generally and children specifically are also engaged in learning processes outside of classrooms. Leisure studies scholars argue that a significant role of leisure in society is in personal growth and development. As in classroom learning, parents play a vital role in aiding and moderating their child's leisure-based learning experience. The purpose of this study is to test the applicability of an empirically validated model for parent involvement in the education process to the out-of-classroom learning environment of youth sports.

This literature review will discuss the similarities of leisure and educational theory, the role of parents in both environments, and the applicability of one educational model to leisure-based learning. First, we will explore the role that education research has played in our understanding of leisure studies. For children, trusted adults moderate the learning experience. Parents influence which opportunities are available to their children, guide their

children through the experience, and assist their children in interpretation and understanding. Second, we will explore the role parents play in the knowledge and skill acquisition of children. Third, we will review the development of one model – the revised Hoover-Dempsey and Sandler (2005) theoretical model of the parent involvement process – which attempts to explain the effects of process variables in parental motivations and behavior for involvement in their child’s schooling. Finally, in the tradition of research which interweaves education and leisure theory, we will apply this process model to out-of-classroom learning experiences afforded by youth recreational sports.

Education and Leisure Studies

In part due to the learning objectives of both academic and recreation experiences, educational theories have frequently been applied to leisure studies. While classrooms focus on academic achievement and youth sports emphasize tactical and technical skills, both share a role in developing social skills. The similarities between the objectives, delivery, and characteristics of both leisure and educational experiences lead to body of knowledge that is often shared and applied across both disciplines. Theories developed for and by the study of classroom learning have frequently been applied in the study of out-of-classroom learning environments.

Leisure behavior and academic settings both involve knowledge and skill acquisition, generally assumed to exist on a continuum from novice to expert. Elementary classrooms are designed to teach fundamental skills in subjects colloquially referred to as “the three Rs”: reading, writing, and arithmetic. Secondary education hones knowledge on these subjects, introduces new perspectives on more specific topics, and enhances problem solving and

complex thinking skills. Post-secondary education is intended to develop expertise, focus knowledge, and refine skills. Similarly, leisure experiences focus on skill development from basic fundamental skills to expert knowledge and strategy. Beginners in basketball learn the basics of how to dribble, pass, and shoot before attempting to implement a motion offense. In leisure studies, this concept of a specialization continuum has been used to study any manner of leisure-related concepts, including participant commitment, service delivery, resource management (see Kuentzel & Heberlein, 2006 for a full discourse). This trajectory from beginner to expert is a learning course shared by both education and leisure participation.

Along the path from novice to expert, both educational attainment and leisure-related outcomes benefit from higher rates of success with increased work ethic, patience, practice and persistence. Motivational theories have been applied to both fields as a means of understanding the factors which promote these traits and ultimately lead to achievement, whether measured as good grades in school or success on the sports field. Self-efficacy (Bandura, 1997) is defined as an individual's confidence in his own ability to organize behavior, execute action, and solve a problem or accomplish a task. Self-efficacy theory posits that an individual who believes he has the ability to control his own success or outcome will persist and sustain effort even in the face of failure. Consequently, self-efficacy has been shown to be a highly effective predictor of motivation and student learning outcomes (Zimmerman, 2000). This concept has also been applied to research into leisure behavior (Orsega-Smith, Payne, Mowen, Ho, & Godbey, 2007) and athletic performance (Moritz, Feltz, Fahrback, & Mack, 2000). Other motivational theories such as self-determination theories (Chatzisarantis & Hagger, 2009; Deci, Vallerand, Pelletier, & Ryan,

1991) and expectancy-value theories (Eccles & Harold, 1991; Fredericks & Eccles, 2005; Goodenow & Grady, 1993) have also been applied to both educational and leisure research.

Finally, research on youth sport has shown that in both education and leisure settings, success is attained through navigating complex social interactions and is measured by social comparison. While classrooms emphasize academic achievement, students must also integrate into social networks and develop interpersonal relationships. It has been shown that those children who are better able to navigate the social dynamic of school are also more likely to achieve academic success (Wentzel, 1998). Similarly, in leisure settings, success occurs in part due to one's ability to foster teamwork and collaboration with others. For example, Hansen, Larson, and Dworkin (2003) employed a Youth Experiences Survey to inventory adolescents' experiences in organized youth activity across three domains of personal development, three domains of interpersonal development, and one domain of negative experiences. The researchers found adolescents self-reported more frequent experiences for interpersonal development which included domains such as teamwork and social skills as a result of their participation.

The measurements for success in both school and leisure are often relative to the achievements of others. Success in the classroom is measured by indicators such as GPA and test scores, which are themselves constructed based on the achievement of others. One's percentile or class rank is a direct measure of comparison to other students. The Big-Fish-Little-Pond effect suggests that self-concept is positively predicted by one's achievement but negatively predicted by the average achievement of others. In academic environments, this effect has been shown to reduce the self-concept over time of students in academically gifted

and talented programs (Marsh, Chessor, Craven, & Roche, 1995). Similar effects have been shown in athletic environments (Chanal, Marsh, Sarrazin, & Bois, 2005). Athletic success is measured by scores and wins. Other leisure experiences that are not athletic in nature have also incorporated contests, such as robotics events or quiz bowls, which provide a means of scoring and comparing oneself to others. Both in and out of classrooms, success is determined in part based on where one stands relative to others.

As evidenced by the similarities between academic and leisure environments, the application of educational theory to leisure studies is appropriate. Both fields involve skill acquisition, achieve progress through motivation, foster social as well as technical skills, and involve measures of success based on social comparison.

Parental Involvement in Education

Parents serve as mediating influences on their children's academic achievement. Parental involvement in learning outcomes has been often studied in the field of educational research. Studies of elementary, middle, and high school students have shown that parental involvement leads to positive educational outcomes including self-efficacy for learning and perception of personal control over school outcomes (e.g., Bandura et al., 1996; Green, Walker, Hoover-Dempsey, & Sandler, 2007; Grolnick & Slowiaczek, 1994; Hill & Craft, 2003; Sheldon & Epstein, 2005; Zellman & Waterman, 1998).

A seminal meta-analysis of educational research conducted by Fan and Chen in 2001 concluded that although parental involvement in a child's education is intuitively appealing, empirical results are inconsistent. Parental involvement when defined as involvement at home has the weakest relationship with academic achievement of the factors studied; parental

involvement in the form of defining aspirations and expectations has the strongest relationship with academic achievement of the factors studied. Any relationship between parental involvement and academic achievement is strongest when achievement is measured globally (such as by GPA or class rank) as opposed to being measured specifically (such as by a single test score or course grade).

Parental involvement can also be studied as it relates to parental characteristics. Family and parent status variables such as income level; educational attainment; race, ethnicity, or country-of-origin; family size and structure; employment status; and more have all been shown to affect both parental involvement and children's academic outcomes. Using samples of biological and adopted children to control for inherited intellectual capacity, Plug and Vijverberg (2005) found that income level has a significant impact on a child's academic attainment level. In a meta-analysis of research relating parental involvement to ethnic groups, Jeynes (2003) concluded that parental involvement improved academic outcome measures for African-Americans and Latinos more than for Asian-Americans. Desimone (1999) explored the relationship between parent involvement and student achievement, finding that one parent-involvement model was a better predictor of children's academic outcomes for White, Asian, and middle-income students than for Hispanic, Black, and low-income students, suggesting that these demographic factors mediate any influence of parental involvement behaviors on a child's academic achievement. Other research has identified differences in parental involvement based on family structure including single- versus two-parent households (e.g., Aston & McLanahan, 1991). Yet, not all research is in agreement, with Sui-Chi and Willms (1996) concluding "our findings provide little support

for the conjecture that parents with high SES and parents in two-parent families are more involved in their children's education" (p. 137).

The Hoover-Dempsey & Sandler Model of the Parent Involvement Process

One model attempting to understand and explain parental involvement in children's education is the revised Hoover-Dempsey and Sandler theoretical model of the parent involvement process (Hoover-Dempsey & Sandler, 2005). The model was first proposed in 1995 focusing on two research questions: (1) *why* parents get involved in their child's learning and (2) *how* parents act on these motivating influences to affect child-centered academic outcomes. Researchers focused on process variables potentially subject to school-initiated intervention as opposed to status variables outside the influence of schools and teachers. Ongoing research resulted in a revised model as presented to the United States Department of Education in 2005 (Hoover-Dempsey & Sandler, 2005).

The revised Hoover-Dempsey and Sandler (2005) model of the parent involvement process uniquely combines factors independently shown to influence parent involvement and child-centered outcomes into one single theoretical framework. Level 1 combines internal motivational factors (e.g. role construction and self-efficacy), external motivational factors (from program, coach, and child), and individual life context (time and energy, skills and knowledge), which independently and in combination influence parental involvement. Level 2 explores what behaviors exhibit when involved and what learning mechanism they engage in during their involvement behaviors. These individual factors have been shown to influence parental involvement in education and some have been studied in the context of leisure studies. While, this model has been employed frequently in the field of education research,

but has yet to be applied to out-of classroom learning environments such as recreational sports.

Model development.

Hoover-Dempsey and Sandler (1995) first proposed the parent involvement process model in response to commonly presumed theories of parental involvement in education. Focusing on parental and school factors that lead to child/student outcomes by proxy of parental involvement, Hoover-Dempsey and Sandler challenged that the presumed model failed to answer two critical questions: Why do parents become involved in their children's education? How does parental involvement have a positive effect on children's educational outcomes? (Hoover-Dempsey & Sandler, 1995).

In initially proposing the parental involvement process model, the researchers focused on process variables rather than status variables. Status variables such as family income (Hill & Duncan, 1987; Plug & Vijverberg, 2005); family size and structure (Astone & McLanahan, 1991; Downey, 1995; Sandefur, McLanahan, & Wojtkiewicz, 1992); and race, ethnicity, or country-of-origin (Fugilini, 2006; Kao & Thompson, 2003) have all been shown to relate to educational attainment and child-centered outcomes. However, Hoover-Dempsey and Sandler narrowed their research to process variables for three reasons: (1) the variables selected are presumed to be more salient to the parent involvement process from the *parents'* perspective (Hoover-Dempsey & Sandler, 1995); (2) process variables have been shown to be more powerful in predicting school-related outcomes (Hoover-Dempsey & Sandler, 1997); and (3) process variables included are potentially more responsive to intervention strategies employed by schools and school personnel (Hoover-Dempsey & Sandler, 1995;

Hoover-Dempsey & Sandler, 1997). Theoretically, these process variables are within the purview of school-initiated influence whereas status variables are not, a distinction with tremendous importance for practitioners.

As initially proposed, a parent's decision to become involved in his or her child's education is influenced by three factors: (1) parent's role construction, (2) parent's sense of efficacy for helping the child succeed in school, and (3) general opportunities and demands for parental involvement (Hoover-Dempsey & Sandler, 1995). As explained by the researchers, these factors address the question of why parents become involved in their child's schooling. After making the decision to become involved, parental involvement forms are then influenced by parental skills and knowledge, time and energy, and specific demands for involvement by child and school. These factors combine to dictate what mechanisms parental involvement takes – modeling, reinforcement, or instruction. Involvement forms and mechanisms combine to address the research question of how parental involvement has a positive effect on child-centered educational outcomes.

Components of the revised model.

With continued research, the model was further refined to its current construction in a report issued to the United States Department of Education in 2005 (Hoover-Dempsey & Sandler, 2005). The three-year research project focused on two main goals: (1) to develop reliable and valid measures of model constructs and (2) to test the model against hypotheses regarding causes and effects of parental involvement in children's education (Hoover-Dempsey & Sandler, 2005). Results validated the research instrument, which is in turn modified for the current research. Secondly, findings suggested revisions to the model as

proposed by the researchers in 1997. Levels one and two of the revised model are presented in Figure 2.

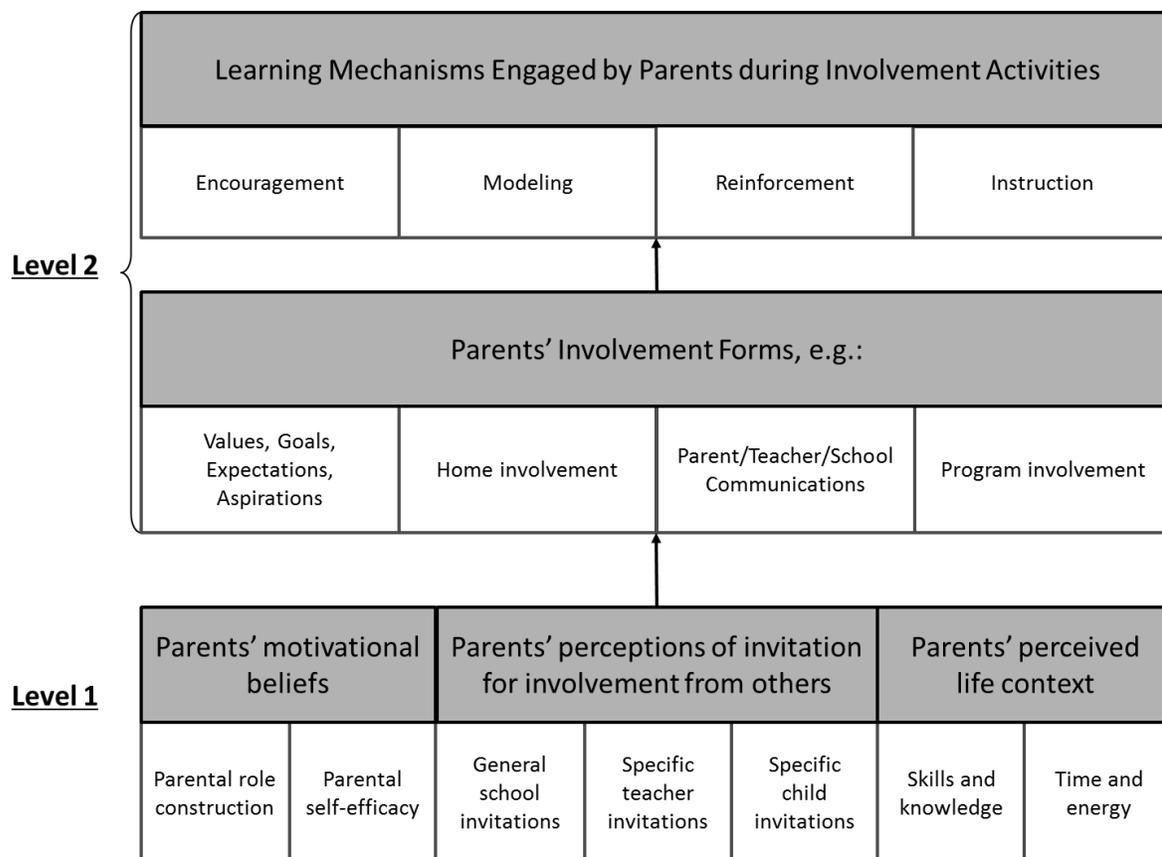


Figure 2. Levels 1 and 2 of the revised Hoover-Dempsey and Sandler model of the parent involvement process (Hoover-Dempsey & Sandler, 2005).

The revised Hoover-Dempsey and Sandler theoretical model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) provides a conceptual framework for the parent involvement process from parental motivations to child-centered academic

outcomes. Specifically, level 1 includes three key components regarding parental motivations for involvement: (1) parents' motivational beliefs, (2) parents' perception of invitations for involvement from others, and (3) parents' perceived life context. These motivations for involvement are then acted upon via parental involvement forms and learning mechanisms engaged in by the parent. This process is represented in level 2 of the model.

The constructs of the first level of the model include parents' motivational beliefs, parents' perception of invitations of involvement from others, and parents' perceived life context. Parents' motivational beliefs are formed by two related concepts, parents' role construction and parents' sense of self-efficacy. Role construction refers to the parents' sense of responsibility and behavior expected as a fundamental component of being a parent. As described by Deslandes and Bertrand (2005), "parents are more likely to become involved if they view their participation as a requirement of parenting" (p. 165). Parents' perceived role construction defines the activities and behaviors that are necessary, proper, and important for them to take on behalf of their children. In school settings, parental role construction has been shown to take one of three forms: parent-focused (parent believes that the parent is ultimately responsible for the child's educational success), school-focused (parent believes that the school is ultimately responsible for the child's educational success), and partnership-focused (parent believes that parent-school partnership is ultimately responsible for the child's educational success) (Hoover-Dempsey, Wilkins, Sandler, & O'Connor, 2004; Walker et al., 2005). Role construction alone is not sufficient but merely a motivating influence because parents must take this self-defined role and act upon those beliefs in order to influence their child's learning. These perceptions combine to define for the parent what

their role should be and therefore motivates action based on this self-perceived role. Validity for role construction scale items is based in prior empirical research (Hoover-Dempsey & Sandler, 1995, 1997; Hoover-Dempsey, Wilkins, Sandler, & O'Connor, 2004; Walker et al., 2005). Preliminary research into the model components found parental role construction to be the most important construct of the motivating influences (Hoover-Dempsey & Sandler, 1997).

Combining with role construction as a motivational belief is parental self-efficacy. This concept refers to the parents' belief that actions the parent takes can be effective in improving the child's academic outcomes. This construct is built upon the work of Bandura and colleagues (Bandura et al., 1996) who found that parents with a high sense of self-efficacy hold high academic aspirations for their children. In turn, these parents make effort to provide environments conducive to their child's academic development and advocate on their child's behalf with educational institutions and personnel. The sense that a parent can be an effective advocate and influence for their child enables them to act on the child's behalf even when faced with adversity (Hoover-Dempsey, Bassler, & Brissie, 1992; Hoover-Dempsey & Sandler, 1997). Validity for parental-self efficacy scale items is based in prior empirical research (Bandura, 1997; Hoover-Dempsey and Sander, 1995, 1997). Because this belief motivates parental action on behalf of their child, this construct of parental self-efficacy fits into the greater process model of parental involvement.

A second component of the model's lower level is parental perceptions of invitations. These invitations have three sources: (1) general invitations from the school, (2) specific invitations from the teacher, and (3) specific invitations from the child. General school

invitations refer to non-specific requests for involvement and a generally welcoming atmosphere. Examples include friendly signs at school entrances, polite greetings from school personnel, or generic parent newsletters (Hoover-Dempsey & Sandler, 1995). Such general invitations are not specific appeals for help wanted, but rather create an environment that fosters a collaborative atmosphere towards children's education and thus serve as a motivating influence for parents who may be considering involvement activities. Validity for scale items measuring general school invitations is based in prior empirical research from Griffith (1998) and Hoover-Dempsey and Sander (1995, 1997).

Conversely, specific teacher invitations are direct appeals for assistance to take place both inside and outside the classroom. Examples may include requests for chaperoning field trips, participation in career day, or homework assignments that require parent-child interactions. Such appeals directly request specific action from parents and establish expected behaviors. Direct appeals serve as merely motivating influences because despite their specific nature, parents may choose not to act upon the requests. The final component of perceived invitations are those initiated by the child. This includes the child requesting assistance with a homework assignment or appealing to the parent to attend a school-sponsored event. Specific child invitations may vary based on the personal characteristics of the child separate from level of academic achievement. As proposed by Hoover-Dempsey and Sandler (1997):

For example, some children may invite or demand help when they are struggling with work, while others may attempt to hide or ignore poor performance; similarly, some may see good performance as an incentive to invite parental involvement and enjoyment, while others may see it as an opportunity to allocate potential involvement time to other pursuits (p. 28).

Similarly, specific child demands may change over time as children approach adolescence

and seek more peer influences and involvement over parental participation. Regardless of child characteristics, study has shown that perceptions of specific child invitations may be the strongest predictor of parental involvement (Hoover-Dempsey & Sandler, 2005). Scale items in this construct were validated through empirical research focused on child invitations (Balli et al., 1998; Xu & Corno, 1998) and developmental literature focused on parental responses to children's needs (e.g., Baumrind, 1991)

The third block of level one constructs reflecting motivational influences on parental involvement relates to parents' perceived life context. It is composed of two separate variables, one reflecting parental skills and knowledge and the second reflecting parental time and energy. Skills and knowledge reflect a parent's perceived competence in the learning material. This component relates to whether a parent feels she has the adequate proficiency or subject matter expertise to assist the child in learning. Validity of skills and knowledge scale items is based in empirical research (Dauber & Epstein, 1993; Hoover-Dempsey et al., 2005; Kay, Fitzgerald, Parade, & Mellencamp, 1994) which suggests that parents are motivated to be involved if they believe they have sufficient skills and knowledge to be helpful to their child's participation in the activity. The component of time and energy is reflective of parental commitments and obligations as dictated by work, other children, or outside obligations. Time and energy as constrained by these obligations has been shown to influence the level and types of involvement parents can contribute to their child's schooling (Weiss et al., 2003). Life-context constructs were originally placed in level two but moved to level one in the model revision. The move reflects the results of empirical study which suggest that these life-context constructs shape but do not determine parental involvement

(Hoover-Dempsey & Sandler, 2005; Weiss, Kreider, Baughan, Dearing, Hencke, & Pinto, 2003). A parent with limited subject knowledge or time available but influenced by motivational beliefs or invitations to involvement will select involvement activities which fit within other responsibilities (Hoover-Dempsey & Sandler, 1995). Validity for time and energy scale items is based in previous research suggesting that such factors shape parents' involvement ideas and behaviors (Hoover-Dempsey et al, 2005;) Combined, motivational beliefs, invitations for involvement, and life-context factors influence and motivate parental involvement in children's education.

In response to the influencing components of level one constructs, the forms that parental involvement takes are reflected at the base of level two. The first component of involvement forms reflects values, goals, expectations, and aspirations. Research has suggested that over time, children will adopt values and beliefs similar to their parents (Eccles & Harold, 1991). As shown by Fan and Chen (2001), parental aspirations and expectations have the strongest relationship with academic achievement relative to other factors studied. In a study of academic achievement of students in immigrant families, Fuligni (2006) concluded that the student's own initiative and commitment to learning was driven by the perception of high expectations and aspirations held by the adolescent's family. Children strive to be successful in the eyes of their parents, and parents can motivate child behavior by establishing expectations for success and valuing education. Whether implicit or explicit, the establishment of family norms and expectations for academic commitment is one form of behavior parents can take to influence their child's scholastic achievement.

The natural dichotomy of home involvement and school involvement constitute the

second and third blocks of involvement forms. Home involvement generally consists of any parent-child academic-related interactions which occur outside the school. Examples include assisting a child study for a spelling test or checking a child's homework assignment. In an empirical test of the revised Hoover-Dempsey and Sandler model as a predictor of parental involvement in schools, parents' home-based involvement was predicted by perceptions of child invitation, self-efficacy beliefs, and self-perceived time and energy (Green et al., 2007). Conversely, school involvement refers specifically to parent behaviors that occur at the school. Examples may be child-centered (such as attending a parent-teacher meeting or a performance event) or school-centered (such as helping with a school clean-up day) (Hoover-Dempsey & Sandler, 2005). In the same empirical test cited above, Green et al. (2007) found that parents' school-based involvement was predicted most notably by the perception of invitations from both child and teacher.

The final involvement form at the base of model level two relates to parent/teacher/school communications. Unlike invitations for involvement as included at level one, this construct refers to ongoing communications regarding school activities and child performance. Parent/teacher/communications may focus on the student including dialogue on topics such as homework assignments, classroom conduct, performance, or attendance. Parent/teacher/communications may also include general school such items as notices regarding curriculum or policies. Distinct from requests for assistance at home or in the classroom, such general communication does not solicit parent behavior but rather develops trust between the family and the institution of school and emphasizes collaboration and cooperation. All scale items for level 2 involvement behaviors were validated in the

original Hoover-Dempsey and Sandler research in 1995 and 1997 and used successfully in subsequent research.

In incorporating the involvement forms specified at the base of model level two, parents may engage in a variety of learning mechanisms or mechanisms of influence. These are identified on the upper tier of model level two as: (1) encouragement, (2) modeling, (3) reinforcement, and (4) instruction. These four mechanisms are built in part on the work of Martinez-Pons (1996) with respect to parental inducement on children's self-regulation, defined as motivation to learn, realistic academic goal-setting, strategizing to achieve goals and self-monitoring for corrective action. Encouragement reflects explicit affective support for the child's academic pursuits. Modeling refers to the learning mechanism of observing and replicating the behavior of others. Martinez-Pons (1996) defines modeling as "parental behavior that displays motivation to learn, goal setting, strategy usage, self-monitoring, and strategy adjustment" (p. 214). Modeling demonstrates to the child that school and school-related activities are significant to the parent, and therefore should be of importance to the child as well. Reinforcement conceptualizes the rewards and risks of behavior; children will acquire and repeat behavior when such behavior is positively reinforced. Rewards include intangible inducements such as praise and attention and caution should be paid to implementing reinforcements that do not interfere with intrinsic motivation for learning (Hoover-Dempsey & Sandler, 1995). The final learning mechanism potentially employed by parents is instruction. Instruction can take the form of close-ended approaches such as memorization and rote learning or open-ended approaches such as conceptual understanding and problem-solving (e.g., Sigel, 1990, as cited in Hoover-Dempsey & Sandler, 1995;

Hoover-Dempsey & Sander, 2005). Motivated and induced to action by level one constructs, parents become involved in their children's academic pursuits through the forms at the base tier of model level two and employ learning mechanisms represented at the upper tier of model level two. Scale items measuring learning mechanisms were adapted from Martinez-Pons' (1996) questionnaires for children grounded in empirical research.

Of note, the model proposes the effects of motivational and behavioral variables as additive rather than multiplicative in nature. At the base level reflecting motivational influences, a general invitation for involvement as presented in a generic letter sent home from teacher to parent may not be sufficient alone to motivate action, but when combined with a parent's role construction and sense of self-efficacy in influencing a child's academic outcomes may result in a parent exhibiting involvement behavior. Similarly, a parent with little skills or knowledge but a strong belief that their role as parent is to foster a learning environment for their child may be spurred to become engaged by a specific request from their child's teacher. Further, the absence of one component of motivating influences does not negate a potential positive influence of other motivating constructs. The same rationale holds true for constructs further up the process model. The individual components combine to increase the likelihood that parents take an involved role and combine to affect student-centered academic outcomes.

It is also worth noting that although the model is linear in construction, in reality the process is likely more recursive and complex (Hoover-Dempsey & Sandler, 1997). For example, an invitation from a teacher for parent-child interaction at home may result in an enjoyable and productive experience for both parent and child. If the parent perceives the

child attained knowledge or improved school performance as a result of the home involvement, the parent may perceive a higher level of self-efficacy for assisting the child in future assignments. By design, the variables included are process oriented and responsive to intervention or modification. Therefore each experience of parent-child interaction may influence motivating factors and involvement behaviors for future interactions.

Among the objectives of the lead researchers' 2005 report to the U.S. Department of Education was to validate an instrument to be used for further research employing the revised Hoover-Dempsey and Sandler model as a framework for understanding the parent involvement process in education. Scale items were developed through an extensive combination of empirical research, conceptual, and theoretical discussion. Collectively, validity for construct items is based in empirical research and conceptual and theoretical discussion. Scales and reliability scores are presented in table 1. Results indicate that the instrument is reliable as applied to parental involvement in their children's school performance.

Table 1. Hoover-Dempsey and Sandler model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) scales and reliability scores.

Scale	Alpha
Level I Constructs	
Parental role construction	.80
Parental efficacy	.78
General school invitations	.83
Specific school invitations	.81
Specific child invitations	.81
Knowledge and skills	.83
Time and energy	.84
Level II Constructs – Involvement Forms	
Child-Specific Involvement	.85
School-General Involvement	.82
Level II Constructs – Mechanisms of Involvement	
Encouragement	.92
Modeling	.94
Reinforcement	.96
Instruction	.92

Model as used in further research.

Deslandes and Bertrand (2005) employed the original model (Hoover-Dempsey & Sandler, 1995, 1997) to study predictors of parental involvement in secondary school students in French Canada. Specifically, the researchers explored four constructs from level one of the model: (1) role construction; (2) self-efficacy; (3) specific teacher invitations; and (3) specific child invitations. Alpha reliability scores for the constructs in this research ranged from $\alpha = .63$ to $\alpha = .87$. Results indicated that implicit and explicit invitations from child to parent requesting involvement were the biggest predictor of parental home involvement in school activity. In focusing on adolescents, the researchers reported that parents who exhibit involvement behaviors do so proactively in response to child invitations

rather than reactively in response to poor grades or school performance. Parental involvement in school was largely the result of role construction; parents must believe that involvement at school is part of their responsibility as a parent prior to engagement. A key finding of this particular study was the unique differences in parental motivations with regards to involvement either at home or at school.

Upon model revision and instrument validation, the revised model has been employed as a framework for further research into parental involvement in youth education. In 2007, Green et al. conducted an empirical test of the model. The researchers examined the ability of the Hoover-Dempsey and Sandler (2005) model to predict types and levels of parental involvement in their children's education during the elementary and middle school years. Among their findings, parents' home-based involvement was predicted by perceptions of child invitation, self-efficacy beliefs, and self-perceived time and energy. Parents' school-based involvement was predicted similar factors. The most notable of these were perceptions of invitations from both child and teacher. Park and Holloway (2013) tested the model's applicability to older, high-school aged students from sociodemographically diverse backgrounds. Their findings results confirmed the power of the model and concluded that school outreach efforts are especially important in engaging disenfranchised parents and enhancing parental self-efficacy promotes parental engagement in the home environment. Most recently, Tang (2015) applied components of the Hoover-Dempsey and Sandler model to examine academic parental involvement in immigrant families, concluding that self-efficacy and opportunities for involvement predicted home-based involvement, but that the model may need to be expanded to include factors such as social capital. Overall, research

has consistently validated the applicability of the established model to predicting parental involvement in academic settings.

Applying Hoover-Dempsey & Sandler Model Constructs to Youth Sports Environments

The revised Hoover-Dempsey and Sandler theoretical model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) has yet to be applied to out-of-classroom learning environments as presented by recreation-type settings. Parental involvement in sport typically assumes the same trajectory as parental involvement in education, beginning with an instructive role which is assumed by peers and experts as the child advances beyond the competencies of the parent (Averill & Power, 1995). As with other theories from the field of education, the constructs and components of the model which suggest the motivations and behaviors of involved parents are apparent in the context of youth recreation. In light of the similarities between parental involvement in schools and youth sports and a precedent of applying research from the field of education to leisure studies, the revised Hoover-Dempsey and Sandler model of the parent involvement process may provide an appropriate framework with which to explore the relationship between motivations and behaviors of parental involvement in youth sports. Although the model has been applied to classroom learning environments, little to no research has been done into how these factors impact parental involvement in children's out-of-school leisure time activity.

The process variables included in the educational model are important because of their receptivity to intervention strategies potentially employed by teachers and schools. Similarly, the process variables as applied to out-of-classroom recreation environments may

be susceptible to intervention by coaches, league administrators, and other recreation providers. While socioeconomic status (Anderson, Funk, Elliott, & Smith, 2003), income (Kremarik, 2000), family structure, and other descriptive traits may impact the ways and degrees to which parents become involved in their child's sports participation, they are largely outside the influence of practitioners. Coaches and administrators however can implement strategies to assist parents in navigating any potential limitations and incorporate involvement forms that are conducive to the conditions of the family. Thus, process variables included in the revised Hoover-Dempsey and Sandler (2005) model are appropriate for studying parental involvement in youth sports participation.

The components of the revised Hoover-Dempsey and Sandler theoretical model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) as re-conceptualized for youth recreational sports are much the same as designed for educational settings. Level one focuses on motivations for involvement defined as: (1) parents' motivational beliefs; (2) parents' perception of invitations for involvements from others; and (3) parents' perceived life contexts. In the re-conceptualized model, "specific teacher invitations" is revised as "specific coach invitations" with the coach replacing teacher as primary instructor of skill and technique. "General school invitations" is rephrased as "general program invitations" and includes any invitations proffered by the child's recreation department, athletic advisory board, parent organization, or league administration. This construct would also include invitations from national bodies such as Little League International, Pop Warner Little Scholars, or the American Youth Soccer Organization. The base tier of level two again includes involvement forms specified as: (1) values, goals, expectations, and aspirations; (2)

home involvement; (3) parent/coach/program communications; and (4) program involvement. Again, “coach” replaces teacher and “program” replaces school in the phrasing of constructs. The upper tier of level two of the re-conceptualized model is identical to the revised model and includes the learning mechanisms of: (1) encouragement; (2) modeling; (3) reinforcement; and (4) instruction. The re-conceptualized model (Figure 3) is reprinted below.

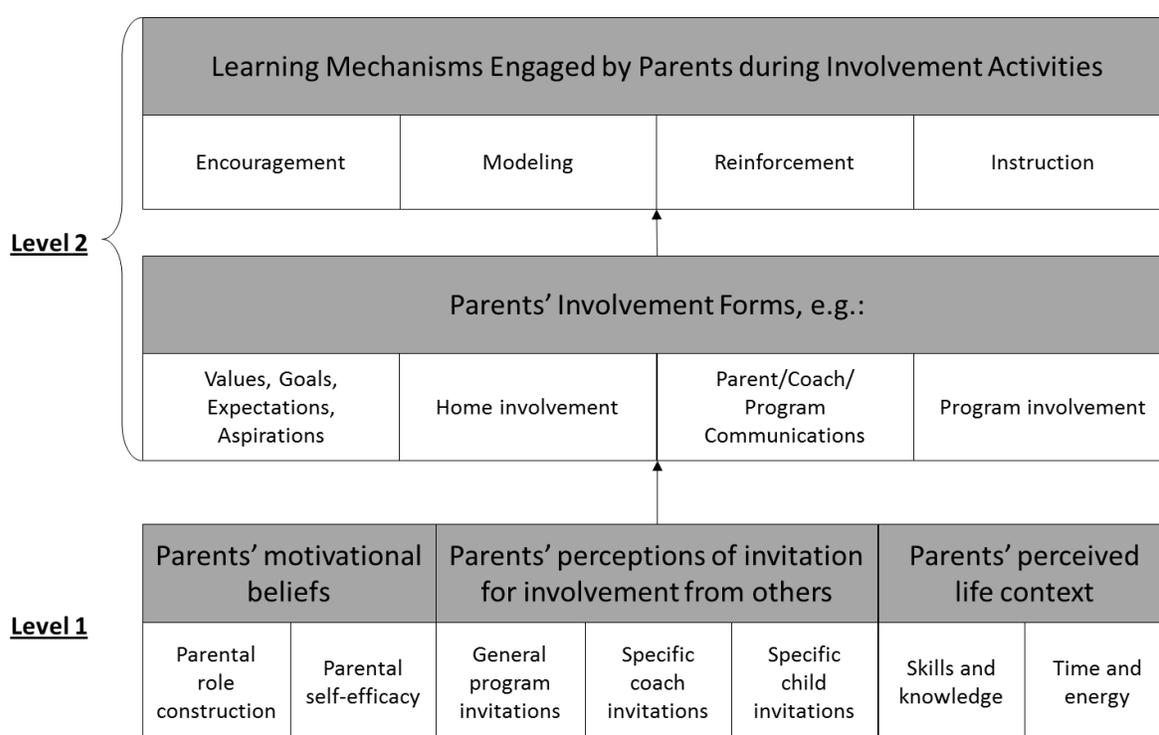


Figure 3. Levels 1 and 2 of the revised Hoover-Dempsey and Sandler model of the parent involvement process as re-conceptualized for youth recreational sports (Hoover-Dempsey & Sandler, 2005).

Level one of the re-conceptualized model reflects motivational influences for parental involvement defined as parents' motivation beliefs, parents' perceptions of invitation for involvement from others, and parents' perceived life context. Block one, parents' motivational beliefs, includes the related concepts of parental role construction and parental self-efficacy. Research has shown that role construction can have a particularly strong motivating influence on fathers who view sport as their parental territory (Coakley, 2006). However, for parents of either gender, their perceived role and responsibility in teaching and exposing their child to sport may influence their behavior.

A second component of parents' motivational beliefs is parents' sense of self-efficacy, which refers to the parents' belief that they can be effective in fostering sport participation and skill acquisition for their children. Study has shown that sports for fathers in particular can provide a setting in which they feel competent and comfortable in assuming a strong parental role (Coakley, 2006). Regardless of gender divide, this sense of competence can be a potentially strong motivator for parent involvement activities. Parents who believe that they can be effective in assisting their children in sport-centric activity are more likely to act upon that belief and engage in behavior that supports their child's sport participation.

The second construct of level one of the revised Hoover-Dempsey and Sandler model relates to parents' perceptions of invitation for involvement from others, namely the program in general, the instructor, and the child. In the context of school, general program invitation includes activities such as open houses or parent teacher conferences. In recreational sport settings this would include invitation to special events such as Opening Days and Parent Meetings or general program culture that emphasizes parental participation and involvement

in their child's sporting experience.

A second component of parents' perception for invitation is specific instructor invitations. For parents of schoolchildren, this includes letters home from the teacher and requests for participation in field trips or to help at home with school assignments.

Analogous to classroom settings, invitations from sport instructors would include requests from the coach to attend practices or games, assist in working with the child at home or away from scheduled activity, and providing progress reports to the parent throughout the season.

The third and final component of parents' perception of invitation relates to invitations from the child. Similar to coach invitations, this component relates to requests from the child for parental involvement and interaction. Child invitations can be either implicit or explicit and may vary as a function of age, independence, and performance level (Hoover-Dempsey et al., 2001). Some children may specifically request parental participation by asking for a parent to coach or assist with a sport-related activity. Conversely, other children may use sport as a means of expressing independence, choosing an activity that is "their own" and not parent- or family-directed.

The final construct of level one of the revised Hoover-Dempsey and Sandler (2005) theoretical model of the parent involvement process relates to parents' perceived life context and is formed by two components. The first of these components includes parents' skills and knowledge. A parent is more likely to become involved in their child's sports experience if they perceive themselves to have the requisite knowledge and aptitudes. Previous research into parental involvement in sport suggests that parents' competence is strongly and positively associated with child sport outcomes, particularly self-perception of ability and

sport value (Fredericks & Eccles, 2005).

The second component of parents' perceived life context focuses on parents' time and energy. Being a sports parent requires a considerable time commitment for both child and family and includes not just game and practice time, but travel to and from activity, planning, and preparation. This level of commitment can be further complicated when there are multiple children in the household or multiple activities occurring in one sport season. Many parents justify the commitment because the benefits associated with youth sport (Wirnsma & Fifer, 2008). While the perception of available time may allow for parents to be more involved, actual time spent with children in sport related activity may have both positive and negative effects. For example, Frederick and Eccles (2005) found that the time involvement of fathers was negatively related to children's value beliefs. Among the reasons proposed for these outcomes, the researchers speculated that participation with children could be perceived over time as controlling, resulting in less self-determination, which is a noted benefit of participation in leisure-time activity.

Level one of the model relates to constructs of parental motivations and rationale for involvement. These motivators are not actualized into behavior until level two which relates to how those beliefs are executed upon in parental involvement forms and learning mechanisms. Parental involvement can take various forms, all of which have the potential to impact child learning outcomes. The four forms included in the model are values formation, home involvement, communications, and program involvement. Through those forms, parents may engage multiple learning mechanisms to foster skill acquisition and activity outcomes. Learning mechanisms are conceptualized as encouragement, modeling,

reinforcement, and instruction.

Values promoted by the parent and family are often the basis for a child's own value system. Parents have the potential to influence not only activity choices, but also the values and attitudes of their children towards leisure-time activities (Shannon, 2006). Previous study into sport socialization has suggested that parents' value beliefs are strongly and positively associated with their child's self-perception of ability and sport value (Fredericks & Eccles, 2005). In promoting a value system within the household, parents also directly and indirectly establish goals and aspirations for their child. These concepts potentially influence a child's own value system, beliefs, and actions which enable a child to achieve outcomes.

Beyond establishing a system of values and beliefs related to sport, parents also become involved in their child's experience through home-based activities. Academically, parents may review homework or help a child study for a test. As a sport parent, mothers and fathers may shoot hoops in the driveway or kick a soccer ball around in the back yard. Neely and Holt (2014) suggested that parents provide the most important role in a child's sport experience by reinforcing the benefits of sport at home. However, home involvement may not be limited to the primary sport. Wheeler (2011) found that parents may be hesitant to coach or instruct a child in a sport with which they are not familiar. These parents may feel they lack the skills and knowledge component of the sport, but instead take an active role in teaching children more general sporting and motor skills such as playing catch or riding a bike.

Another manner in which parents may take an active role in their child's sporting experience is through communication with the coach and program. Involvement occurs when

a parent simply shows an interest in what their child is doing, asks questions of the coach, and communicates with the program.

Lastly, parental involvement can take the form of actual program involvement. While classroom involvement may include behavior such as assisting on a field trip or attending a PTA meeting, for sports settings, this behavior can include coaching a child, serving as a snack parent, or volunteer board member. Perhaps the most obvious form of program involvement is serving as a volunteer coach. However, coaching is not the only role parents can take in direct program involvement. Parents may also provide logistic support such as enrolling the child in the program, laundering uniforms and equipment, and providing transportation to and from program activity. Hurtel and Lacassagne (2011) found that parents sensed their program involvement as being stronger than emotional or informational support.

Through their involvement forms (values, home involvement, communication, and program involvement), parents can engage multiple learning mechanisms. Encouragement refers to verbal and non-verbal support which is internalized by the child as support for participation. Wheeler (2011) found that parents defined encouragement as “tak[ing] the form primarily of cheering and praising, and that parents did this before, during (if able), and after their children’s activities” (p. 244). Study has suggested that encouragement may be gendered, with parents providing more support to their sons’ involvement in sport than their daughters’ (Fredericks & Eccles, 2005). However, encouragement can be both positive and negative. Parents may cheer and support the children, but they may also provide feedback and criticism.

Modeling is defined as a parent showing the child through their own actions that the

parent supports the behavior or activity. Oftentimes this takes the form of role modeling where the parent exhibits an appreciation for sport or physical activity through their own lifelong participation. Cleland, Venn, Fryer, Dwyer, and Blizzard (2005) found that parents' physical activity levels were positively associated with children's extracurricular sports participation. Taking a gendered view of parents' and children's physical activity levels, Dollman (2010) found that sport participation of both sons and daughters was associated with both mothers' and fathers' physical activity levels. Evidence suggested that physical activity of both parents had an "additive" effect on the likelihood that children engaged in sport participation. Collectively, study results suggest that children are more likely to engage in physical activity if parents show their children that they value a physically active lifestyle.

Reinforcement is an action that shows a child that the parent values the work put forth by the child. Wheeler (2011) conceptualized reinforcement as a parenting "strategy", explaining it as the role of parents to "persuade their children to gain some commitment to their chosen sports" (p. 243). Components of reinforcement include fostering a work ethic, asking for help when struggling, and developing a positive attitude about both the experience and the struggles of sport participation.

The final learning mechanism exhibited by parents during involvement activities is instruction. Instruction can include teaching a child both sport-specific skills and life skills which may support positive sport outcomes. Because of the sometimes inherent conflict between the roles of parent/coach and child/athlete, this role has been characterized as a conundrum (Weiss & Fretwell, 2005).

Collectively, the revised Hoover-Dempsey and Sandler theoretical model of the

parent involvement process (Hoover-Dempsey & Sandler, 2005) as re-conceptualized for youth recreational sports may provide an appropriate framework through which to study parental involvement in out-of-classroom learning environments and ultimate child-centered outcomes. This proposed study will test levels one and two of the revised Hoover-Dempsey and Sandler theoretical model of the parent involvement process as re-conceptualized in a youth recreational sports setting.

Methods

Instrumentation

The revised Hoover-Dempsey and Sandler theoretical model of the parent involvement process (Hoover-Dempsey & Sandler, 2005), which provides a framework for this research, was created and has been tested using the Parent Involvement Project (PIP) Parent Questionnaire. For the purposes of this research, the PIP Parent Questionnaire was revised for youth sports environments, reviewed by experts in the field of youth development through recreation, pilot tested, and then fully implemented.

Initial revision.

The original questionnaire focuses on school and classroom settings. Therefore adaptations were necessary to reframe the instrument to recreational athletic environments. In many cases, this adaptation was accomplished with straightforward modifications in language. “Coach” substituted for “teacher” and “league/program” replaced “school” in the instrument’s original terminology. Some questions that were not relevant to the youth sport environment were dropped entirely, for example “goes to the school’s open house.” For questions regarding how often a behavior occurred in the most recent sports season, the

original scale that referred to an entire school year was broken into smaller increments that more accurately reflected the structure of a 10- to 15-week sport program. Finally, two questions were added. The parental valence questions in the original instrument (#1-6) assumed that the parent attended grade school. For the purposes of recreational athletics research, it cannot be assumed that parents participated as children, so a staged question was added asking specifically whether the parent participated in recreational sports as a child. Parents that answered no were directed to skip the section and proceed to question #8. A question was also added in the modeling section in an effort to obtain information on parent's active lifestyle, something not measured in the original instrument on school-related behavior but which is has been shown to be positively and significantly related a child's sport participation (Cleland et al. 2005; Dollman, 2010). Ultimately, the original questionnaire was 109 questions in length and after initial revision was reduced to 52 questions.

Demographic questions on the original instrument were also revised. Because parental involvement in youth sports may be dependent upon the gender (Fredericks & Eccles, 2005), age, or perceived skill (Averill & Power, 1995) of the child, questions were added to collect this information. One question, added to the family section, inquired about the parent's role as a coach in the league or program for the purpose of comparing parental beliefs and behaviors among and between coaches and non-coaches. Coaching is one clearly-identifiable form of parental involvement and including a question to identify coaches from non-coaches allows further exploration of whether the motivations and behaviors of parent-coaches are different than those of parents who do not serve as a coach. Questions dropped from the demographic section related to parental occupation. The original demographic

section was 10 questions in length. The revised demographic section was 12 questions split into two parts, one regarding the child and one referencing the parent and family.

Expert review.

Following an initial draft of the instrument revised for a youth sports environment, paper-based samples were sent to five experts in the field of youth development through sport and recreation. Input was solicited to confirm that revisions to the original instrument remained valid measurements of the intended constructs. Most feedback from the expert review focused on three concerns: instrument length, placement of demographic questions, and inconsistencies in formatting.

Length was a primary concern of the expert reviewers. Most suggested that the instrument, even at the reduced length of 52 construct questions plus 12 demographic questions (64 questions total), was too long to achieve complete and thorough responses. Conversely, other reviewers questioned the decision to eliminate some items from the questionnaire prior to pilot testing. A small pilot test and focus group (explained later) held prior to full study aimed to evaluate the merits of these concerns.

Initially, demographic questions were placed at the beginning of the research instrument to focus the parent's responses on a specific child during a particular sport season. However, placing the demographic questions at the beginning of the instrument raised concerns regarding early termination and incomplete responses. Following expert review, the demographic questions were split. In order to maintain the intention of focusing the parent's responses on one child during one particular sport, the child-centered questions remained at the beginning of the questionnaire but parent- and family-centered questions, including

income level and ethnicity, were moved to the end of the instrument.

In revising the instrument to a youth sports context, care was taken to remain faithful to the formatting of the original instrument. The PIP, as designed by Hoover-Dempsey and Sandler, was inconsistent in formatting directions, with varying use of underlining, capitalization, and/or italicization for emphasis. Two reviewers noted this in their comments on instrument design. In response, instructions were reformatted to use underlining consistently when emphasizing key components. Other changes made following outside review were corrections of minor grammatical or typographical errors. The instrument was then transcribed into an internet-based survey software for further review and ultimate distribution.

Pilot testing and focus group.

Prior to full research, a pilot test and focus group was conducted to achieve multiple goals, including analyzing delivery mechanisms, assessing instrument length, and reviewing the validity of revised scale items. Youth sport parents whose children participated in a local recreation department league with whom the primary researcher had a prior professional relationship were purposely selected. No incentive was provided for participation. Participants were informed of the purpose of the research generally and the focus group process specifically. They were notified that their responses as part of both the pilot test and focus group process were recorded, but no identifying information was tied to their answers. They then provided informed consent and agreed to participate.

The three pilot test participants were parents of youth recreational basketball players on a team for players aged seven and eight. All three were parents of girls. All completed the

research instrument at a municipal recreation center during their child's basketball team practice. Two participants completed the instrument on different models of laptop computer and one completed it using an iPad mini to test display and readability on various platforms. Participants were asked to complete the instrument fully and truthfully in reference to the child participating in the basketball practice. Participants were timed as they completed the instrument to determine how long it took to answer all questions. In response to the expert reviewers' concerns regarding instrument length, timing pilot test participants provided a true measure of the duration of time necessary to answer the instrument fully. The fastest participant completed the research instrument in 11 minutes; the slowest participant completed the instrument in 16 minutes.

Following completion of the research instrument, participants engaged in small-group discussion to review each instrument item. The conversation was mediated with an item-by-item review of the instrument. Group members were asked to discuss their initial reaction to the item, including their interpretation of what the item was intended to measure, their thought process in answering the item, and any questions or concerns they had in understanding and responding to the question.

The discussion was intended to confirm the validity of the constructs under review. Only three items within the instrument sparked discussion. One question related to parent's program involvement used as an example a term that parents had not heard before but found useful in context; because parents could reliably understand it's meaning it was kept in the final research instrument. A second discussion revolved around two questions related to child's invitations for involvement. One measured how often the child asked the parent to

attend practice and the second asked how often the child asked the parent to attend games. Parents in the focus group noted that their child rarely asked them to attend practices and games, because it was a common expectation that they would attend; therefore in these families, an invitation was neither necessary nor warranted. Following the pilot test, researchers conferred and determined that this expectation for attendance was measured in the instrument's questions regarding parental role construction and that the questions regarding child invitations were important to measure a separate construct. Ultimately, all questions discussed by the focus group remained as originally written.

Participants were also asked to share any feedback regarding the instrument's design, format, instructions, and delivery mechanism. One reviewer commented on the phrase "perceptions of invitation" in the instrument's instructions as being perhaps overly-technical for some parents; however, given the concepts under study, this term was kept in the final instrumentation. Finally, pilot testers identified a few remaining typographical errors that were corrected prior to full study.

The goals of the pilot test and focus group process were to confirm reliability and validity to the environment under study, to further reduce the instrument length if necessary, and to review implementation and data collection methods. First, the original instrument has been shown to be both reliable and valid (Green et al., 2007; Hoover-Dempsey & Sandler, 2005; Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). Pilot testing confirmed that modifications to the instrument to apply it to the environment under study did not undermine its integrity. A pilot test focusing on content item-by-item verified validity for the revised instrument. Secondly, the instrument as constructed remained quite long.

However, pilot testing allowed for quantifying the length of time necessary to complete the instrument and indicated that despite the high quantity of questions, it was possible to complete the instrument in fewer than twenty minutes. Responses and discussion during the focus group portion indicated no need to eliminate any items that were redundant or unrelated to the construct under review. Finally, pilot testing and field testing with youth sports parents in recreational team settings confirmed that the delivery mechanism was appropriate, feasible, and properly designed. Together, instrument revision, expert review, and focus group pilot testing finalized the instrument to be used in full research.

Final instrument.

The Hoover-Dempsey and Sandler theoretical model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) re-conceptualized to a youth sports context provided a theoretical foundation for this research and the PIP Parent Questionnaire provided a foundation for the research instrument. Level one of the model includes three main constructs each composed of a subset of other variables. Parents' motivational beliefs includes the lower level variables of parental role construction and parental self-efficacy. The final instrument contained five measures of parental role construction including "I believe that it is my responsibility to help my child practice at home" and "I believe that it is my responsibility to talk with my child about the day's sport activity". Parental self-efficacy was composed of three measures including "I know how to help my child do well in sports" and "I feel successful about my efforts to help my child learn sport skills." Responses to parents' motivation beliefs items were measured on a six-point Likert scale ranging from "strongly disagree" to "strongly agree".

Also at level 1, parents' perceptions of invitation for involvement from others included sub-measures of general program invitations, specific coach invitations, and specific child invitations. General program invitations were measured with three questions such as "Coaches in this program are interested and cooperative when they discuss my child" and "Parent activities are scheduled with this league/program so that I can attend." Responses on a six-point Likert scale ranged from "strongly disagree" to "strongly agree". Specific coach invitations included three items related to how often the coach asked the parent to talk with their child about the sport, attend a sport activity, or help out with the team. Responses on a six-point Likert scale ranged from "never" to "9 or more times this season". Specific child invitations were measured with four items including "My child asked me to help practice a sport outside of regularly scheduled practice" and "My child asked me to attend a game." As with coach invitations, child invitations were measured on a six-point Likert scale ranged from "never" to "9 or more times this season".

The final construct on level 1 relates to parents' perceived life context and includes measures of parents' skills and knowledge and parents' time and energy. Parents' skill and knowledge was measured by three items including "I know enough about the sport to help my child at home" and "I have the skills to help out with my child's sport participation." Parents' time and energy was measured by three items including "I have enough time and energy to help out with my child's sport participation" and "I have enough time and energy to attend special events at my child's league/program." Both parents' skill and knowledge and parents' time and energy were measured on a six-point Likert scale ranging from "strongly disagree" to "strongly agree".

The first tier of level 2 relates to parents' involvement forms. This was measured using three scale items: "Someone in this family talks with this child about the sport activity", "Someone in this family volunteers with the program", and "Someone in this family practices sport skills with this child." Responses on a six-point Likert scale ranged from "never" to "9 or more times this season."

The second tier of level 2 relates to learning mechanisms engaged by parents during involvement activities. Included in this construct were measures of encouragement, modeling, reinforcement, and instruction. Encouragement was measured by five items including, "We encourage this child when he or she doesn't feel like practicing," "We encourage this child to believe that he or she can do well," and "We encourage this child to follow the coach's directions." Modeling was measured by five items including "We show this child that we like to learn new sport skills" and "We show this child that we value an active lifestyle". Reinforcement was measured by five items including "We show this child that we like it when he or she keeps working on a tough skill even when he or she doesn't feel like it" and "We show this child that we like it when he or she asks the coach for help." Finally, instruction was measured by five items including "We teach this child to go at his or her own pace while practicing a sport skill" and "We teach this child to stick with his or her sport participation until he or she finishes it." All learning mechanism items related to encouragement, modeling, reinforcement, and instruction were measured on a six-point Likert scale ranging from "not at all true" to "completely true".

Participants

The purpose of the research is to focus on the motivations and involvement behaviors

of parents of youth recreational sports participants. Therefore, parents were identified through their children's participation in a recreational sports league. Those included in the study were parents of youth players on recreational teams designated for children ages 7- to 12-years-old. Children in the middle years generally participate in team sports that are led by volunteer coaches. Programs in this age group are commonly child-focused and not intended for parent and child to participate in together. Obvious parental involvement behaviors in youth team sports at this level vary, with some parents serving in the volunteer coach role and other parents apparently exhibiting little to no involvement in their child's playing experience. The more subtle forms in which parents exhibit involvement behaviors are among the topics under study in this investigation. Lastly, children in this age range most closely replicate the participants in the 2005 Hoover-Dempsey and Sandler research that focused on children in kindergarten through 6th grade.

Participants completed the survey using an internet-based software system with a link provided via e-mail. Upon clicking the link, study participants were directed to a notice of research purpose and asked to provide informed consent. A status bar included in the instrument allowed participants to track their progress. After completing the online instrument, participants were provided an opportunity to supply their e-mail address to be entered into a randomly selected drawing for a gift card as an appreciation for participation. To ensure confidentiality, this e-mail was not linked to survey responses.

Participants were sampled from two municipal recreation agencies in the central Piedmont region of North Carolina. Participants were sampled during two different sports seasons in spring and fall 2014 representing youth sports teams in girls' softball, boys'

baseball, and co-recreation soccer programs.

Recreation Department 1.

Research participants from recreation department 1 completed the survey instrument in June 2014 at the end of the spring sports season. Participants were selected using a random cluster sample. The department conducts internal evaluation surveys of one-third of league teams each season; all youth baseball and softball teams not part of the department's internal evaluation (the remaining two-thirds of league teams) comprised the sampling frame. A total of 57 teams were made available for sample by the recreation department. Twenty-eight teams, approximately one-half of the teams within the sampling frame, were randomly selected for participation, resulting in one-third of all league teams participating in the research.

The department regularly communicates with league parents via e-mail and provided this contact information for the parents of 394 players on the 28 teams selected for research purposes. Internet survey participation was facilitated through e-mail correspondence directly from the lead researcher employing four contacts as prescribed by Dillman (2007). First contact was a pre-notice, notifying parents of the team's selection for participation. Second contact followed two days later in the form of an e-mail to parents of children on teams selected for study participation with a welcome notice and link to complete the online research instrument. Third contact was a thank you and reminder e-mail, again containing the survey link, sent three days following the second contact. The fourth and final contact was sent two days later containing one last reminder with survey link. Total time between pre-notice and fourth contact was one week. The survey closed three days later, allowing for a

10-day data collection window.

Of the 394 e-mails distributed, three were returned as undeliverable by the recipient's e-mail provider; therefore, 391 surveys were validly received. One-hundred ninety-six individuals began the survey and after removing those who failed to complete at least four-fifths of the instrument's scale items, a total of 179 valid responses were collected from recreation department 1. The survey response rate for recreation department 1 was 45.8%.

Recreation Department 2.

Research participants from recreation department 2 completed the survey instrument in October 2014 at the end of the fall sports season. All participants in the department's youth baseball, youth softball, and co-rec soccer leagues for players ages 7- to 12-years-old were selected for participation; leagues for 5- to 6-year-olds and 13- to 15-year-olds were excluded from participation.

League administrators informed volunteer coaches in the department's program of the research at the beginning of the season and asked to inform their team's parents. In the final week of the league's regular season, the league manager forwarded an e-mail message from the lead researcher informing parents of the purpose of the research and providing a link to complete the survey instrument. Included in the forwarded e-mail was an endorsement from the league administrator and department of the purpose for in the research and encouraging participation. A total of 915 households received the league manager's e-mail. One week later, the administrator forwarded a second e-mail from the lead researcher reminding parents of the survey and asking a second time for participation. The survey closed three days later, allowing for a 10-day data collection window.

Of the 915 households that received the league manager's notice, 219 began the research instrument. After removing those who failed to complete at least four-fifths of the instrument's scale items, a total of 123 valid responses were collected from recreation department 2. The survey response rate for recreation department 2 was 13.4%.

Respondents.

Responses from recreation departments 1 and 2 combined to result in 302 valid responses for an overall response rate of 23.1%.

In responding to the survey, parents reflected on players ranging from 6-years-old to 13-years-old. Leagues for players ages 7- to 12-years-old were selected for participation, however some players as young as 6 played in 7-8-year-old leagues and some players age 12 at the beginning of the season had turned 13 by the time of data collection.

Data collection with recreation department 1 occurred in spring 2014 when the department ran boys' baseball and girls' softball programs and data collection for recreation department 2 occurred in fall 2014 when the department ran boys' baseball, girls' softball, and co-recreation soccer programs. Demographics of youth athletes are presented in table 2

Table 2. Demographics of youth athletes

Age of athlete in years				
	Dept. 1	Dept. 2	Total	Total %
6	2	0	2	0.7%
7	46	14	60	19.9%
8	42	20	62	20.5%
9	29	26	55	18.2%
10	21	24	45	14.9%
11	18	20	38	12.6%
12	13	12	25	8.3%
13	8	7	15	5.0%
TOTAL	179	123	302	100.0%

Participant Gender				
	Dept. 1	Dept. 2	Total	Total %
Male	137	75	212	70.2%
Female	42	48	90	29.8%
TOTAL	179	123	302	100.0%

Primary Sport				
	Dept. 1	Dept. 2	Total	Total %
Baseball	145	24	169	56.0%
Softball	33	28	62	20.5%
Soccer	0	66	66	21.9%
Other	0	5	5	1.7%
TOTAL	178	123	302	100.0%

The respondents to the survey were parents or guardians of youth sports players. One-hundred eighteen of respondents (39.9%) were male guardians and 178 respondents (60.1%) were female guardians. Respondents were primarily White/Caucasian (n=254, 86.7%), while 17 (5.8%) identified as Asian/Asian-American, 11 (3.8%) identified as Hispanic/Hispanic-American, seven (2.4%) identified as Black/African-American, and four (1.4%) identified as

Other. Of those responding, 63 (21.3%) served as coaches for their child's team. The demographics of respondents are presented in table 3.

Table 3. Demographics of respondents

Parent Gender				
	Dept. 1	Dept. 2	Total	Total %
Male	72	46	118	39.9%
Female	104	74	178	60.1%
TOTAL	176	120	296	100.0%

Parent as Coach				
	Dept. 1	Dept. 2	Total	Total %
Yes	38	25	63	21.3%
No	138	95	233	78.7%
TOTAL	176	120	296	100.0%

Parent race/ethnicity				
	Dept. 1	Dept. 2	Total	Total %
Asian/Asian-American	11	6	17	5.8%
Black/African-American	4	3	7	2.4%
Hispanic/Hispanic-American	4	7	11	3.8%
White/Caucasian	151	103	254	86.7%
Other	3	1	4	1.4%
TOTAL	173	120	293	100.0%

Household Income Level				
	Dept. 1	Dept. 2	Total	Total %
Under \$15,000	0	1	1	0.4%
\$15,000-\$24,999	1	3	4	1.4%
\$25,000-\$34,999	3	1	4	1.4%
\$35,000-\$49,999	3	2	5	1.8%
\$50,000-\$74,999	12	9	21	7.6%
\$75,000-\$99,999	20	26	46	16.5%
\$100,000 and over	126	71	197	70.9%
TOTAL	165	113	278	100.0%

Results

The purpose of this research was to explore the relationship between parents' (a) motivational beliefs, (b) perceptions of invitation for involvement, and (c) perceived life context and parent involvement in youth recreational sports programs. The Hoover-Dempsey and Sandler theoretical model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) re-conceptualized to a youth sports context provides a theoretical foundation for this research. Level 1 of the model includes three main constructs (parents' motivational beliefs, parents' perceptions of invitation for involvement from others, and parents' perceived life context) each composed a subset of other variables. As hypothesized, these lower level variables will each positively impact the involvement parents take in their child's youth sports experience. Further, those parents with higher levels of involvement in their child's youth sports experience will also engage in learning mechanisms included in level 2 of the model to a higher degree than parents with lower levels of involvement. To test these hypotheses, first an exploratory factor analysis was employed to confirm the relationships between measured variables. Second, bivariate correlations were used to determine the relationship between (a) level 1 variables and involvement and (b) involvement and learning mechanisms at level 2.

Exploratory Factor Analysis

Level 1 of the theoretical model includes three main constructs each composed of a subset of seven other variables. As proposed, parents' motivational beliefs included the lower-level measures of parental role construction and parental self-efficacy. Second, parents' perceptions of invitation for involvement from others included general program

invitations, specific coach invitations, and specific child invitations. Third, parents' perceived life context included parents' skills and knowledge and parents' time and energy.

Exploratory factor analysis was run including all level 1 measures to ensure that survey items grouped as expected. Rather than the seven measures as proposed by the model, exploratory factor analysis identified six factors on the first level. Items measuring parental self-efficacy and parental skills and knowledge loaded onto a single factor ($\alpha = .894$). These items were combined to a single variable using an arithmetic mean and relabeled parental competencies and skills abbreviated PCS. The four items measuring specific child invitations loaded onto a second factor ($\alpha = .685$) which was combined to a single variable abbreviated CHI. The three items measuring specific coach invitations loaded onto a third factor ($\alpha = .762$) which was combined to a single variable and abbreviated COI. Time and energy items co-loaded onto a fourth factor ($\alpha = .894$) which was combined to a single variable abbreviated TE. Three of the five items measuring parental role construction loaded to fifth factor. However, two items assumed to measure role construction which read "I believe that it is my responsibility to volunteer with the program" and "I believe that it is my responsibility to communicate with my child's coach regularly" did not co-load. With these two items removed, a fifth factor of parental role construction ($\alpha = .615$) was identified, combined to a single variable, and abbreviated PRC. Finally, three items measuring general program invitations loaded to a sixth factor ($\alpha = .720$) which was combined to a single variable abbreviated GPI.

Level 2 is composed of a base tier related to parental involvement forms and a higher tier related to the learning mechanisms engaged by involved parents. As with level 1, exploratory factor analysis was conducted to ensure that items grouped as expected. All three

items measuring involvement co-loaded to a single factor ($\alpha = .557$). These three items were combined to a single variable using an arithmetic mean and abbreviated INV. As proposed by the model, learning mechanisms engaged by involved parents could take one of four forms – encouragement, modeling, reinforcement, and instruction. Five items measuring reinforcement co-loaded to the first factor ($\alpha = .873$) which was combined to a single variable abbreviated REI. Five items measuring modeling co-loaded to the second factor ($\alpha = .838$) which was combined to a single variable abbreviated MOD. Five items measuring encouragement co-loaded to the third factor ($\alpha = .777$) which was combined to a single variable abbreviated ENC. Exploratory factor analysis indicated that the five items measuring instruction clustered around two separate variables. Upon further analysis, it was determined that items three and four, which read “We teach this child ways to make his or her sport participation fun” and “We teach this child to have a good attitude about his or her sport participation” respectively, exhibited no variability, with almost all respondents indicating that these statements were “completely true.” Therefore, these items were uninformative to the analysis and dropped from further study. The result was a final fourth involvement factor ($\alpha = .638$) composed of three items related to instruction which was combined to a single variable and abbreviated INST.

Levels 1 and 2 of the Hoover-Dempsey and Sandler theoretical model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) re-conceptualized to a youth sports context with the factors identified by exploratory factor analysis and associated alpha values is presented in figure 4.

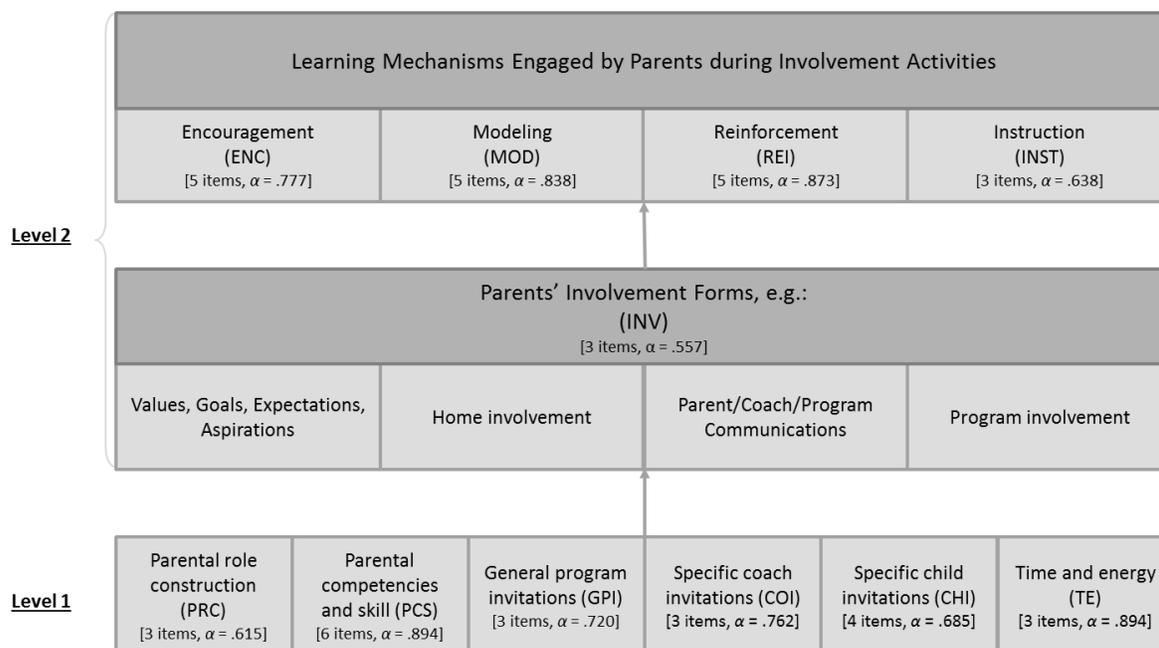


Figure 4. Levels 1 and 2 of the revised Hoover-Dempsey and Sandler model of the parent involvement process as re-conceptualized for youth recreational sports (Hoover-Dempsey & Sandler, 2005) based on exploratory factor analysis with associated alpha values.

Bivariate Correlations

The purpose of this research was to test the relationships between level 1 constructs measuring parental motivations for involvement and the level of involvement of parent in their child's youth sports experience. Secondly, the research was intended to test the relationship of parental involvement forms to the learning mechanisms engaged by parents during their involvement activities. With exploratory factor analysis confirming the reliability of the variables measured, bivariate correlations were computed to test the strength and relationships of variables.

Hypothesis one proposed that parents' motivational beliefs would be positively

related to the forms of involvement the parent takes in his child's youth sports experiences. Because parental self-efficacy and parental skills and knowledge were combined into one variable as a result of exploratory factor analysis, parents' motivational beliefs cannot be tested as a single factor; rather this hypothesis was tested with respect to two separate variables, parental role construction (PRC) and parental competencies and skills (PCS). First, parental role construction (PRC) was tested as it related to involvement forms (INV) exhibited by parents, resulting in Pearson correlation coefficient of $r = .32$ significant at the $p = .01$ level. Similarly, parental competencies and skills (PCS) was tested as it related to involvement forms exhibited by parents, resulting in an $r = .43$ significant at the $p = .01$ level. Therefore, both parental role construction and parental competencies and skills are significantly and positively related to the involvement forms parents take in their child's youth sports experience.

Hypothesis two proposed that parents' perception of invitation for involvement from the program, their child's coach, and the child him- or herself would be positively related to the forms of involvement the parent takes in his child's youth sports experiences. For this analysis, correlations were computed relating the independent variables of general program invitations (GPI), specific coach invitations (COI), and specific child invitations (CHI) to the dependent variable of involvement (INV). Results indicated that general program invitations are positively related to involvement with a Pearson correlation coefficient of $r = .20$ significant at the $p = .01$ level. Likewise, specific coach invitations are positively related to involvement with a Pearson correlation coefficient of $r = .36$ significant at the $p = .01$ level. Finally, specific child invitations are positively related to involvement with a Pearson

correlation coefficient of $r = .28$ significant at the $p = .01$ level. Results confirm hypothesis two and indicate that general program invitations, specific coach invitations and specific child invitations are all significantly positively related to the involvement forms of youth sports parents.

Hypothesis three proposed that parents' skills and knowledge of the sport and time and energy available to give to their child would also be positively related to the forms of involvement they take in their child's youth sports experiences. As explained earlier, skills and knowledge was combined with parental self-efficacy as a result of the exploratory factor analysis conducted earlier. Therefore, the remaining level 1 independent variable of time and energy (TE) was analyzed for its relationship on dependent variable involvement to test hypothesis three. Results indicated that parental time and energy are positively related to involvement with a Pearson correlation coefficient of $r = .39$ significant at the $p = .01$ level.

Ultimately, bivariate correlation analysis indicates that all level 1 independent variables identified by exploratory factor analysis are significantly and positively related to the involvement forms parents take in their child's youth sports experience. All level 1 correlations are presented in table 4. Hypotheses one, two, and three are all confirmed as true.

Table 4. Level 1 variables correlated to involvement at level 2

	PRC	PCS	GPI	COI	CHI	TE
Pearson Correlation	.32**	.43**	.20**	.36**	.28**	.39**
Sig. (2-tailed)	.000	.000	.001	.000	.000	.000
N	297	298	291	291	292	298

**Significant at the .01 level

The final hypothesis proposed that parents with higher levels of involvement in their child's youth sports experiences would also engage in learning mechanisms to a higher degree than parents with lower levels of involvement. To test this hypothesis, bivariate correlations were calculated relating involvement at the lower tier of level 2 as the independent variable to each of the learning mechanisms presented at the higher tier of level 2 as the dependent variable. Results indicated that involvement is positively related to encouragement (ENC) with a Pearson correlation coefficient of $r = .32$ significant at the $p = .01$ level. Involvement is also positively related to modeling (MOD) with a Pearson correlation coefficient of $r = .30$ significant at the $p = .01$ level. Next, involvement is positively related to reinforcement (REI) with a Pearson correlation coefficient of $r = .23$ significant at the $p = .01$ level. Lastly, involvement was positively related to instruction (INST) with a Pearson correlation coefficient of $r = .13$ significant at the $p = .05$ level. All level 2 correlations are presented in table 5.

Table 5. Involvement correlated to Learning Mechanisms

	Pearson Correlation	Sig. (2-tailed)	N
ENC	.32**	.000	296
MOD	.30**	.000	293
REI	.23**	.001	293
INST	.13*	.029	294

**Significant at the .01 level

*Significant at the .05 level

Based on the results of bivariate correlation analysis, hypothesis four was also confirmed as true. Levels 1 and 2 of the Hoover-Dempsey and Sandler theoretical model of

the parent involvement process (Hoover-Dempsey & Sandler, 2005) re-conceptualized to a youth sports context with the factors identified by exploratory factor analysis with correlations is presented in figure 5.

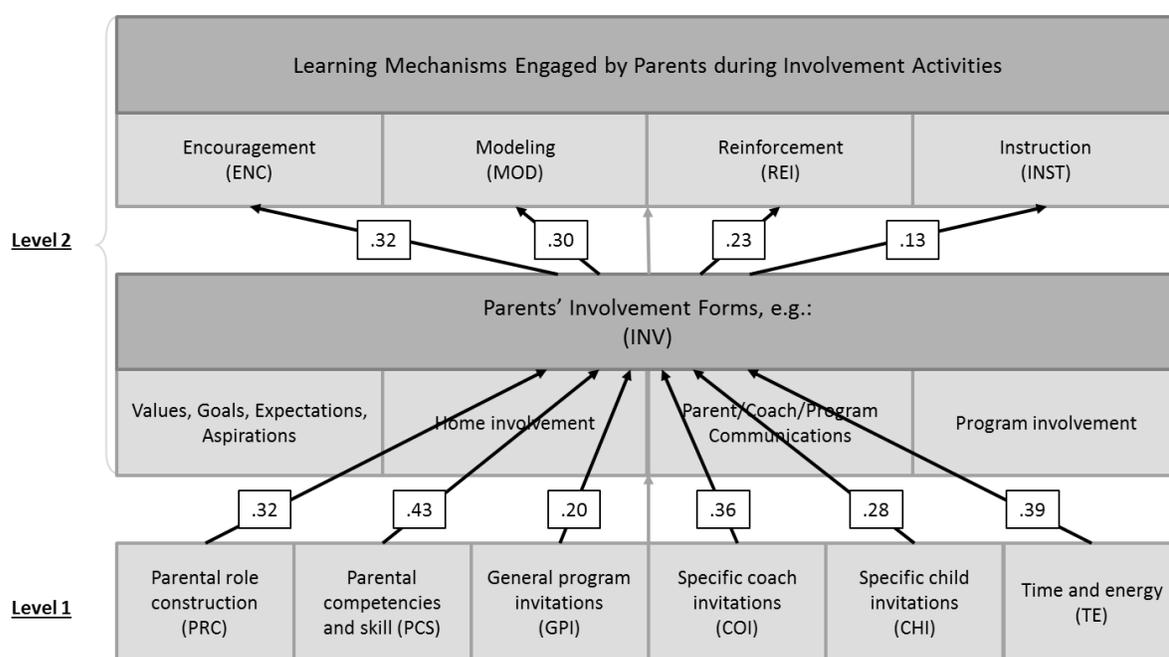


Figure 5. Levels 1 and 2 of the revised Hoover-Dempsey and Sandler model of the parent involvement process as re-conceptualized for youth recreational sports (Hoover-Dempsey & Sandler, 2005) based on exploratory factor analysis with correlations.

Discussion

Children are constantly learning and while classrooms provide traditional educational settings, out-of-classroom experiences also provide rich opportunities for intellectual, emotional, social, and physical development. . For example, extracurricular activities have

been positively linked to a variety of academic outcomes, including higher test scores, higher grades, greater school commitment, higher educational aspirations, and lower dropout rates (Cooper, Valentine, Nye, & Lindsay, 1999; Eccles & Barber, 1999; Mahoney & Cairns, 1997; Marsh & Kleitman, 2002). Involvement in out-of-classroom activities have also been shown as beneficial to children's psychological condition, resulting in outcomes such as increased self-esteem and lower rates of depression (Barber, Eccles, & Stone, 2001; Mahoney, Schweder & Stattin, 2002). Further, involvement in prosocial activities has been linked to reduced negative behavior such as alcohol and drug use (Eccles & Barber, 1999) and criminal activity (Mahoney, 2000) and increased positive behavior such as civic engagement (Youniss, McLellan, & Yates, 1997; Zaff, Moore, Papillo, & Williams, 2003). Lastly, participation in extracurricular activity is positively correlated with increased physical activity and reduced rates of obesity (Elkins, Cohen, Koralewicz, & Taylor, 2004).

With approximately 20.5 million U.S. children aged seven to eleven participating in youth sports programs (National Sporting Goods Association, 2011), recreational athletic environments provide a common, non-academic environment for youth development. Families generally, and parents specifically, influence how children engage in and interpret the world around them and as such, parents can either positively or negatively impact a child's development, knowledge, and skill acquisition. Therefore, the motivations for parental involvement and the behaviors they exhibit in guiding their children through life experiences can affect the outcomes of their children. Previous research has explored these motivational factors and involvement experiences of parents in classroom settings. This research extended this line of inquiry by examining these factors in out-of-classroom

recreational sports environments.

As hypothesized, all level 1 motivational factors significantly and positively influenced parents' involvement in their child's sporting experience. While the original model proposed two separate constructs of (1) self-efficacy and (2) skills and knowledge, results of the current study indicated a single variable measuring parental competencies and skills (PCS). Self-efficacy as proposed by Bandura (1997) refers to an individual's confidence in his or her own ability to organize behavior, execute action, and solve a problem or accomplish a task. In a youth sports context, parental self-efficacy refers to the parents' belief that the parent can be effective in improving a child's sport knowledge and experiences. This requires the parent to understand the sport skill or value, organize behavior in order to transfer this knowledge to the child, behave in such a manner that the child understands, and take corrective action if the behavior is initially unsuccessful. In order for this process to occur effectively, the parent must first believe in their own competency in the sport skill or value. Therefore, self-efficacy in the sport parent involvement process is directly related to the parent's own skills and knowledge in sport. The items in the parent involvement process questionnaire reconceptualized to a youth sports context employed in this research measured parental self-efficacy by asking to what degree parents felt as though they knew how to help their child do well in sports, felt successful about their efforts to help their child learn sport skills, and knew how to help their child succeed in sports on a scale from agree very strongly to disagree very strongly. A parent's response of strongly agree is reflective of both a perception of self-efficacy in guiding their child's experience and a perception of their own knowledge of the sport. The parent must first believe in his or her

own competencies both in the sport and as a parent assisting their child in the sport before believing that he can effectively share these competencies with his child. Therefore, what were previously two separate variables reflecting parental self-efficacy and skills and knowledge have been collapsed into one variable renamed parental competencies and skill (PCS).

Further analysis indicated that this newly created single variable of parental competencies and skill (PCS) is the strongest factor influencing parental involvement behaviors. Thus, a parent's skill and knowledge related to sport and sport values, combined with the belief that the parent can affect a child's sport experience, is the greatest factor influencing parental involvement behavior. In studying the role of parental self-efficacy in academic settings, Bandura et al. (1996) found that parents with high self-efficacy hold high academic aspirations for their child, foster constructive environments for child learning, and advocate on behalf of their child in social systems. Youth sport environments are one such social system in which parental self-efficacy can influence a child's experiences and outcomes. Research presented here suggests that this sense of self-efficacy works hand-in-hand with parental skills and knowledge to affect parental involvement behaviors. These behaviors may in turn affect child-centered sport outcomes. Fredericks and Eccles (2005) found that parents' competence was strongly and positively associated with child sport outcomes, particularly self-perception of ability and sport value. However, further research may be necessary to indicate whether the role of parental competencies and skill found here in influencing involvement forms in turn affects child-centered outcomes in sport participation such as physical fitness, skill acquisition, and social development.

Parental time and energy was shown to have the second strongest influence on parental involvement behaviors. The revised Hoover-Dempsey and Sandler model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) combined the variable of skills and knowledge with the variable of time and energy into a single construct related to parents' perceived life context as a result of empirical study which suggested that these constructs shape but do not determine parental involvement. Results of the study presented here suggest that the items measuring skills and knowledge are more related to the items measuring parental self-efficacy than they are to the items measuring time and energy.

Parental responses to the survey in this research suggest that those with greater time and energy available to participate in their child's sport were more likely to exhibit involvement behaviors. To some, time and energy may be perceived as a constraint that parents have to navigate in order to provide sporting experiences for their child. However, prior research has suggested that parents justify the commitment because of the perceived benefits of sport participation (Wirnsma & Fifer, 2008). Market hours worked over the last five decades has remained relatively stable while leisure time for men and women has increased dramatically due to a corresponding decrease in non-market hours worked (Aguiar & Hurst, 2006). This increase in leisure time is additional time that parents can apply to their children's leisure time activities. However, this same research suggests an increasing gap in leisure time between educated and less-educated adults resulting in a leisure time "inequality" similar to wage inequality seen throughout society. This gap may negatively impact children in low-income and less-educated households whose parents are unable to navigate the constraints of limited time available to be involved in their child's sport

experience, ultimately affecting child-centered outcomes in affected children.

Specific invitations from the coach to the parent requesting parental involvement in the child's sport was the third strongest factor influencing parental involvement forms. While many publications provide advice to coaches and parents for fostering positive relationships within a youth sports context, little research exists into the type and influence of coaches' communication with parents. Gould, Collins, Lauer and Chung (2007) showed that high school football coaches identified a need to work with parents to communicate information and prevent conflict, but this was a low-order theme related to effective coaching strategies and dealing with others that was not fully and independently explored. In a study of elite swimmers, Jowett and Timson-Katchis (2005) found that parents can considerably affect the coach-athlete relationship. In this role, parents may assist the coach by helping children to resolve conflicts with the coach, provide emotional support, or even give the coach information about their child's specific needs. Harwood and Knight (2013) suggest that sport parenting expertise requires among other things, interpersonal skills which allow the parent to manage relationships with others in the sport arena, including the coach. However, within this line of research, the nature of direct the parent-coach relationship has not been studied. Despite the lack of direct research, practical advice on navigating parent-coach relationships abounds (LaVoi, Omlil, & Wiese-Bjornstal, 2008; Smoll, Cumming & Smith, 2011). In their article aiming to assist coaches in working effectively with parents, Smoll, Cumming, and Smith (2011) suggest strategies for coaches to employ in communicating with and building allies from youth sports parents. Results presented here indicate that this topic should be further explored. Parents participating in this research indicated that when the child's coach

asked the parent to talk with the sport activity (practice or game), attend the sport activity (practice or game), or help out with the team, the parent was more likely to exhibit involvement behaviors. By inviting parental involvement, youth sport coaches may not only help themselves in the short-term, but may benefit the individual child's youth sport experience in the long-term.

In response to motivational behaviors, forms of involvement are positively and significantly related to the learning mechanisms engaged in by parents during youth sport participation. Involvement forms are most strongly related to encouragement, which is something a parent can exhibit regardless of his or her own skill level in the sport or time and energy available to contribute to the sporting experience. Martinez-Pons (1996) proposed that a child who is encouraged by his or her parents in the face of early failure is more likely to persist in his or her pursuit of mastery. Encouragement has been shown to be a significant factor in children's continuous participation in sport and those whose parents provide support are more likely to participate than those whose parents do not (Hohepa et al., 2007; Pugliese & Tinsley, 2007). Children who are encouraged are more likely to perceive themselves as competent, therefore feeling better about their sport participation and getting more enjoyment from the sport (Atkins, Johnson, Force, & Petrie, 2013). Positive encouragement by parents may result in greater and sustained participation from children, resulting in increased physical fitness, social development, and other positive outcomes associated with youth sports.

Modeling was second to encouragement in the strength of relationship between involvement forms and learning mechanisms. In modeling, the child observes and replicates

the behavior exhibited by the parent. Research results presented here suggest parents involved in their child's sport experience are likely to exhibit role modeling behaviors by showing their child that they value an active lifestyle and do not give up when things get difficult. Past research has suggested that parents' own levels of physical activity were positively related to children's extracurricular sports participation (Cleland et al., 2005; Dollman, 2010). Referring back to the importance of parents' time and energy in exhibiting involvement forms and the relative increase in leisure time available to adults (Aguar & Hurst, 2006), parents who use their leisure time to role model the importance of sports and positive physical activity may significantly affect the sport experience of their child.

Ultimately, the research presented here suggests that the revised Hoover-Dempsey and Sandler model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) may be appropriately revised and applied to a youth sports context. Parents indicated that their own self-efficacy, skills, and knowledge was most likely to motivate their involvement in their child's sporting experience, followed by time and energy and specific coaches' invitations. Once involved, parents were most likely to exhibit behaviors of encouragement followed by modeling behaviors. While the current study has both limitations and strengths, results suggest a further need for research into parental motivations, behaviors, and child-centered sport outcomes. Findings also provide actionable implications for practitioners who strive to provide recreational sports experiences that foster positive youth development.

Limitations

As with all studies, there are limitations to consider. Both recreation departments participating in this study serve upper-middle class suburban communities in the southeastern

United States. Respondents were predominantly affluent, highly-educated, and Caucasian. These factors may impact some of the constructs under study, most notably parental role construction (PRC); parental competencies and skill (PCS); and parental time and energy (TE). Ethnicity and cultural identity may impact role construction particularly as it relates to sport and extracurricular experiences. Both recreation departments participating in the study serve populations with high proportions of Asian-American residents but only 5.8% of survey respondents indicated Asian-American ethnicity. Bhalla and Weiss (2013) found that East Indian adolescent girls became involved in sport five years later and participated two and a half hours fewer than their Caucasian counterparts, indicating that East Indian families did not seek out early childhood exposure to sport or did not value such experiences. Thus, ethnicity may affect parental role construction as it relates to sport. Time and energy available to exhibit involvement may also be related to demographic factors.

The relatively high income level of the respondents to the survey in this research may also pose a limitation; over 70% of respondents reported an annual income of \$100,000 or higher. As exhibited by Aguiar and Hurst (2006), adults of higher income and education levels are likely to have more leisure time available to pursue their own and their child's interests. In academic settings, single-parent status has been shown to be negatively related to parental involvement at school, presumably because parents have less access to child-care, support systems, and time available to be involved (Kohl, Lengua, & McMahon, 2000). Research elsewhere has suggested that low-income and less-educated parents are less likely to be involved in their child's activities (Lareau, 2002).

Even when parents are involved, outcomes may be different for children from

different socioeconomic backgrounds, ethnicities, and family structures. Studying the effect of parental involvement in children's academic outcomes, Desimone (1999) found that the parent-involvement model was a less effective predictor of outcomes for Hispanic, black, and low-income students, leading the author to conclude that parental involvement factors may be less predictive of achievement for traditionally disadvantaged students than for advantaged students. Thus, given the impact of various demographic characteristics on parental involvement motivations, it is unclear whether responses here would be indicative of motivations and behaviors of different family types.

Further, data was collected during two sample periods; recreation department 1 in the spring included baseball and softball while recreation department 2 in the fall included baseball, softball, and soccer. Participants were engaged in one of three team sports. Not studied were the motivation and involvement behaviors of parents of participants in individual sports. Other research has suggested that the roles parents take in their child's sporting experience may be different depending on whether the child is engaged in a team sport such as those studied here or an individual sport such as tennis or swimming (Knight, Neely, & Holt, 2011).

Just as there may be differences in the behaviors of parents who participate in team versus individual sports, there may also be differences in the behaviors of parents of children of different ages. The sample in the study reported here was limited to parents of children ages 7-12 years old. This age is generally referred to as the sampling years during which parents are responsible for getting their child involved in sport and fostering sport participation (Côté, 1999). At this age, the emphasis is on play and enjoyment rather than

commitment and specialization. This age provides an appropriate context for studying the role of parents in sport as it relates to youth development. However, parental involvement may have different motivations and behaviors in the specializing years (ages 13 to 15-years-old) when children and families make a commitment to one or two sports or the investment years (ages 15 and above) when the focus generally becomes on elite performance in a single activity.

Lastly, the analysis of parental responses to the survey was limited to correlations between variables. Correlational relationships do not prove causality. While motivational beliefs as defined on level one of the Hoover-Dempsey and Sandler model (2005) were significantly correlated with involvement behaviors and involvement behaviors were significantly correlated with learning mechanisms, it is improper to assume that motivational factors cause parental involvement or parental involvement causes parents to engage in learning mechanisms. Further, higher correlational statistics do not necessarily indicate that an independent variable is more important in influencing a dependent variable than another. Thus, the relative strength of the influence of motivational beliefs on involvement and involvement on learning mechanisms cannot be assumed without further research.

Implications for future research

Despite these limitations, this research builds upon a body of knowledge in parental involvement in youth sports by applying established findings from an educational context to a youth sport environment. The findings have implications for both future research and practitioners who strive to provide positive youth development environments every day. Levels 1 and 2 of the revised Hoover-Dempsey and Sandler theoretical model of the parent

involvement process (Hoover-Dempsey & Sandler, 2005) provided a conceptual framework for this research. The complete model contains five levels. Level 1 which was studied here addresses parents' motivations for involvement. Level 2, also studied here, includes how parents become involved and what learning mechanisms parents employ in their involvement activities. Left unstudied in this research are levels 3 through 5 of the original model. Level 3 addresses how children perceive and interpret the learning mechanisms employed by their parents and includes child perceptions of encouragement, modeling, reinforcement and instruction. Level 4 represents children's attitudinal shifts as a result of their perceptions of their parents' involvement and includes measures of academic self-efficacy, intrinsic learning motivation, self-regulation, and social self-efficacy. Finally, at level 5, the model culminates in student achievement as measured by academic outcomes. Further research may attempt to adapt the complete Hoover-Dempsey and Sandler theoretical model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) to a youth recreational sports environment and test the applicability of levels 3 through 5 to child-centered sports outcomes. The research reported here studied only parental motivations and behaviors; from these results it is impossible to assume any effects on children and whether children's sport experiences, skill, and personal development benefit from parental involvement.

Additionally, parental involvement forms are only partially examined, with three items measuring concepts related to parental involvement at home, at the program, through communications with coach and program, and through establishing values, goals, expectations, and aspirations for the child. Broadly, results reported here indicate that parental motivations influence involvement forms and that involvement forms positively

influence the learning mechanisms engaged by parents. However, further research is warranted into how different specific involvement forms (at home, at program, communications, and establishing expectations) are influenced by parental motivations and in turn influence learning mechanisms. For example, parents who lack time and energy to be involved in their child's sport at the program, on the field, or on the court may more likely exhibit their involvement behaviors through establishing values, goals, expectations, and aspirations for their child. Conversely, a parent with high levels of parental competencies and skill may exhibit greater program involvement by taking on responsibilities such as volunteer coaching than a parent who lacks self-efficacy, skills, and knowledge. This potential relationship between motivations and involvement forms is unexplored here. Further, individual involvement forms may be related to different learning mechanisms employed by parents. Parents whose involvement mostly takes the form of program involvement may be more likely to engage instruction as a learning mechanism than parents whose primary involvement takes the form of establishing values, goals, expectations, and aspirations for their child. These relationships between level 1 constructs of motivational influences and level 2 constructs of involvement forms and between level 2 involvement forms and learning mechanisms remain unexplored in this research and may warrant further study.

Implications for practitioners

In addition to the research implications, insights into parental involvement motivations and behaviors can lead to suggestions for youth sports administrators wishing to foster positive parental involvement in their local programs. Results of the research presented here indicate that recreational sport programs and coaches can impact the involvement

behaviors of parents. Specific coach invitations are a significant factor motivating parents to become involved in their child's sport experience. Parents can help at practices by helping rotate kids through activities, collecting loose balls, or preparing water and snacks. Parents unable to help at practice, can be involved in their child's sports experience in other ways, by exhibiting values that support sport participation such as asking questions about what their child did in practice or reinforcing concepts taught by the coach. A simple invitation from the coach, asking the parent to step off the sideline and help or discuss the sport with their child at home, may go a long way in engaging the parent in their child's sport and overall development. Programs can assist and guide coaches to achieve this end by including in their coaches' training materials information on communicating with parents and how to involve parents in team development. An example educational materials and further discussion of appropriate strategies can be found in Smoll, Cumming, and Smith (2011).

General program invitations can also positively influence parental involvement behaviors. Programs that reach out to parents through parent training programs or intentional invitations to special events (i.e. opening days, awards banquets, etc.) may find parents more involved in the youth sports experience. The programs may also use these occasions to set their own tone regarding expectations for positive parental involvement and behavior at youth sports. Parent training programs may emphasize the role of the "good sport parent" including how to positively reinforce learning experiences for their children, redefining winning as learning a new skill or overcoming a challenge, and cheering for the playing experience rather than the outcome on the scoreboard. Special events such as post-season banquets may emphasize teamwork, sportsmanship, and other learning outcomes beyond

scores and standings. Through the activities included in these general program invitations (GPI), recreational programs may also influence the constructs of parental competencies and skill (PCS) and parental role construction (PRC). Together these components as shown by the research presented here positively influence parental involvement forms and learning mechanisms engaged in by parents, ultimately creating a more beneficial program to all participants.

Conclusion

The purpose of this research was to explore the relationship between parents' (a) motivational beliefs, (b) perceptions of invitation for involvement, and (c) perceived life context and parent involvement in youth recreational sports programs. Results indicate that motivational beliefs of parental competencies and skill (PCS), time and energy (TE), and specific coach invitations (COI) have the greatest impact on the forms of involvement parents exhibit in their child's sporting experience. When involved, parents are most likely to engage in encouragement and modeling to foster their child's youth sport participation. Results indicate that the revised Hoover-Dempsey and Sandler model of the parent involvement process (Hoover-Dempsey & Sandler, 2005) may be appropriately revised and applied to a youth sports context. Future research may explore the interactions between motivational behaviors, involvement forms, and learning mechanisms and the applicability of levels 3 through 5 of the parental involvement process to youth sports environments. Practitioners who implement youth sports programs may foster positive parental involvement by encouraging coach invitations for involvement and offering general program invitations that welcome parents to be involved and educate on parental involvement motivations, forms,

and activities.

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Appendices

Appendix A – Research Instrument

6 pages

* Indicates item removed following exploratory factor analysis

+ Indicates items combined into a single variable following exploratory factor analysis

In completing the following questionnaire, please consider one child currently participating in a youth recreational sport program.

We understand that the following information may be of a sensitive nature. We ask for this information because it helps us describe the range of families in our total group. Please select the best response for each item.

Please answer the following questions about your child.

1. How old is your child (in years)? _____

2. What is your child's gender?
 - _____ Female
 - _____ Male

3. For the current sport season, in what recreational sport is this child participating (for the purpose of this questionnaire, please focus on one sport)?

_____ Baseball	_____ Softball
_____ Basketball	_____ Tennis
_____ Football	_____ Track & Field/Cross Country
_____ Golf	_____ Volleyball
_____ Ice Hockey	_____ Wrestling
_____ Lacrosse	_____ Other – please specify _____
_____ Soccer	

4. What is your child's skill level in this sport when compared to other children in his/her league/program?
 - _____ Below Average
 - _____ Average
 - _____ Above Average

People have different feelings about youth sports. Please circle the number on each line below that best describes your feelings about your most important youth sport experience when you were a child.							
1.	Did you play any recreational sport as a child (if no, skip to question #6)	Yes 1	No 2				
2.	My coaches...	Did not care about me 1	2	3	4	5	Cared about me 6
3.	My youth sport experiences were...	Bad 1	2	3	4	5	Good 6
4.	I felt like...	An outsider 1	2	3	4	5	I belonged 6
5.	I considered my overall experience to be...	Negative 1	2	3	4	5	Positive 6
Please indicate how much you AGREE or DISAGREE with each of the following statements. Please think about the current sport season as you consider each statement.							
		Disagree very strongly	Disagree	Disagree just a little	Agree just a little	Agree	Agree very strongly
+	6. I know how to help my child do well in sports.	1	2	3	4	5	6
+	7. I feel successful about my efforts to help my child learn sport skills.	1	2	3	4	5	6
+	8. I don't know how to help my child succeed in sports.	1	2	3	4	5	6
Please indicate how much you AGREE or DISAGREE with each of the following statements. Please think about the current sport season as you consider each statement.							
		Disagree very strongly	Disagree	Disagree just a little	Agree just a little	Agree	Agree very strongly
9.	Coaches in this program are interested when they discuss my child.	1	2	3	4	5	6
10.	Parent activities are scheduled with this league/program so that I can attend.	1	2	3	4	5	6
11.	The coaches with this league/program keep me informed about my child's progress in sport.	1	2	3	4	5	6
Please indicate HOW OFTEN the following have happened during the current sport season.							
		Never	1 or 2 times this season	3 or 4 times this season	5 or 6 times this season	7 or 8 times this season	9 or more times this season
12.	My child's coach asked me to talk with my child about the sport activity (practice or game).	1	2	3	4	5	6
13.	My child's coach asked me to attend the sport activity (practice or game).	1	2	3	4	5	6
14.	My child's coach asked me to help out with the team (for example bring snacks, serve as a boo-boo parent, assist players in taking turns at practice, etc.).	1	2	3	4	5	6

Parents may have different beliefs about their level of responsibility in their child's sport experiences. Please respond to the following statements by indicating the degree to which <u>you believe</u> you are responsible for the following:						
I believe it's <i>my responsibility</i> to...	Disagree very strongly	Disagree	Disagree just a little	Agree just a little	Agree	Agree very strongly
* 15. ...volunteer with the program.	1	2	3	4	5	6
* 16. ...communicate with my child's coach regularly.	1	2	3	4	5	6
17. ...help my child practice at home.	1	2	3	4	5	6
18. ...support decisions made by the coach.	1	2	3	4	5	6
19. ...talk with my child about the day's sport activity (practice or game).	1	2	3	4	5	6
Dear parent, please indicate how much you AGREE or DISAGREE with the following statements. Please think about <u>the current sport season</u> as you consider each statement.						
	Disagree very strongly	Disagree	Disagree just a little	Agree just a little	Agree	Agree very strongly
+ 20. I have enough time to help out with my child's sport participation.	1	2	3	4	5	6
21. I know enough about the sport to help my child at home.	1	2	3	4	5	6
+ 22. I have enough time and energy to communicate effectively with my child's coach.	1	2	3	4	5	6
+ 23. I have enough time and energy to attend special events at my child's league/program.	1	2	3	4	5	6
24. I know how to explain things to my child about his/her sport.	1	2	3	4	5	6
25. I have the skills to help out with my child's sport participation.	1	2	3	4	5	6
Parents and families do many different things when they are involved in their children's sport experience. We would like to know how often you have done the following during <u>the current sport season</u> .						
Someone in this family...	Never	1 or 2 times this season	3 or 4 times this season	5 or 6 times this season	7 or 8 times this season	9 or more times this season
26. ...talks with this child about the sport activity (practice or game).	1	2	3	4	5	6
27. ...volunteers with the program (for example, signs up to bring snacks, serves as a boo-boo parent, assists players in taking turns at practice, etc.) .	1	2	3	4	5	6
28. ...practices sport skills with this child.	1	2	3	4	5	6
Parents and families do many different things when they help their children with sport participation. We would like to know how true the following things are <u>for you and your family</u> when you help your child with sport participation. Please think about <u>the current sport season</u> as you read and respond to each item.						
We encourage this child...	Not at all true	A little bit true	Somewhat true	Often true	Mostly true	Completely true
29. ...when he or she doesn't feel like practicing.	1	2	3	4	5	6
30. ...to develop an interest in sport participation.	1	2	3	4	5	6
31. ...to stick with a tough skill until he or she solves it.	1	2	3	4	5	6
32. ...to believe that he or she can do well.	1	2	3	4	5	6
33. ...to follow the coach's directions.	1	2	3	4	5	6

Parents and families do many different things when they help their children with sport participation. We would like to know how true the following things are <i>for you and your family</i> when you help your child with sport participation. Please think about <u>the current sport season</u> as you read and respond to each item.						
We <u>show</u> this child that we...	Not at all true	A little bit true	Somewhat true	Often true	Mostly true	Completely true
34. ...like to learn new sport skills.	1	2	3	4	5	6
35. ...know how to solve problems.	1	2	3	4	5	6
36. ...do not give up when things get hard.	1	2	3	4	5	6
37. ...value an active lifestyle.	1	2	3	4	5	6
38. ...want to learn as much as possible.	1	2	3	4	5	6
We show this child <u>we like it</u> when he or she...	Not at all true	A little bit true	Somewhat true	Often true	Mostly true	Completely true
39. ...wants to learn new skills related to sport.	1	2	3	4	5	6
40. ...has a good attitude about practicing at home.	1	2	3	4	5	6
41. ...keeps working on a tough skill even when he or she doesn't feel like it.	1	2	3	4	5	6
42. ...asks the coach for help.	1	2	3	4	5	6
43. ...works hard on a tough skill.	1	2	3	4	5	6
Dear Parent, please indicate HOW OFTEN the following have happened during <u>the current sport season</u> .						
	Never	1 or 2 times this season	3 or 4 times this season	5 or 6 times this season	7 or 8 times this season	9 or more times this season
44. My child has asked me to help practice a sport outside of regularly scheduled practice.	1	2	3	4	5	6
45. My child asked me to attend practice.	1	2	3	4	5	6
46. My child asked me to help out with the league/program.	1	2	3	4	5	6
Parents and families do many different things when they help their children with sport participation. We would like to know how true the following things are <i>for you and your family</i> when you help your child with sport participation. Please think about <u>the current sport season</u> as you read and respond to each item.						
We <u>teach</u> this child...	Not at all true	A little bit true	Somewhat true	Often true	Mostly true	Completely true
47. ...to go at his or her own pace while practicing a sport skill.	1	2	3	4	5	6
* 48. ...ways to make his or her sport participation fun.	1	2	3	4	5	6
* 49. ...to have a good attitude about his or her sport participation.	1	2	3	4	5	6
50. ...to stick with his or her sport participation until he or she finishes it.	1	2	3	4	5	6
51. ...to talk with the coach when he or she has questions.	1	2	3	4	5	6

We understand that the following information may be of a sensitive nature. We ask for this information because it helps us describe the range of families in our total group. Please select the best response for each item.
Please answer the following questions about you, your spouse, and your family.

1. Do you serve as a coach (head or assistant) for this child in this program?
 Yes
 No

2. What is your gender?
 Female
 Male

3. On average, how many hours per week do you work for pay?
 0-5
 6-20
 21-40
 41-60
 61-80

4. Your level of education (please check highest level completed):
 Less than high school
 High school or GED
 Some college, 2-year college, or vocational
 Bachelor's degree
 Some graduate work
 Master's degree
 Doctoral degree

5. On average, how many hours per week does your spouse or partner work for pay?
 0-5
 6-20
 21-40
 41-60
 61-80
 Not applicable

6. Your spouse or partner's level of education (please check highest level completed):

- Less than high school
- High school or GED
- Some college, 2-year college, or vocational
- Bachelor's degree
- Some graduate work
- Master's degree
- Doctoral degree
- Not applicable

7. Household income per year (check one):

- Under \$15,000
- \$15,000-\$24,999
- \$25,000-\$34,999
- \$35,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$99,999
- \$100,000 and over

8. Your race/ethnicity (select all that apply):

- Asian/Asian-American
- Black/African-American
- Hispanic/Hispanic-American
- White/Caucasian
- Other

Appendix B – Index of Scale Items

Child-centered demographics – page 1; items 1-4

Parental valence scale – page 2; items 1-5

Parental self-efficacy – page 2; items 6-8

+ Combined with time & energy to form a single construct following
exploratory factor analysis

General program invitations – page 2; items 9-11

Specific coach invitations – page 2; items 12-14

Parental role construction – page 3; items 15-19

* Items 15 & 16 removed following exploratory factor analysis

Knowledge and skills – page 3; items 21, 24, & 25

Time and energy – page 3; items 20, 22, & 23

+ Combined with parental self-efficacy to form a single construct following
exploratory factor analysis

Involvement – page 3; items 26-28

Encouragement – page 3; items 29-33

Modeling – page 4; items 34-38

Reinforcement – page 4; items 39-43

Specific child invitations – page 4; items 44-46

Instruction – page 4; items 47-51

* Items 48 & 49 removed following exploratory factor analysis

Parent/family demographics – pages 5 & 6; items 1-8