COACHING AND FAMILY:
THE BENEFICIAL EFFECTS OF MULTIPLE ROLE MEMBERSHIP

A Dissertation
by
TIMOTHY DAVID RYAN

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

August 2007

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Approved by:
Chair of Committee, Michael Sagas
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ABSTRACT

Coaching and Family:

The Beneficial Effects of Multiple Role Membership. (August 2007)

Timothy David Ryan, B.S., Wheaton College;
M.S., University of Southern Mississippi
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An examination of the intersection between work and family for small college coaches was conducted via an online questionnaire to explore variables that affect coaches’ work-family fit. Specifically, the work variables of autonomy, supervisor support, and working hours were hypothesized to be related to all or some of the work-family variables of work-family conflict, family-work conflict, work-family enrichment, and family-work enrichment. Likewise, family variables such as spousal support, spousal working hours, spouse job-type, number of children, child sport involvement, and child sport attendance were hypothesized to be related to all or some of the same work-family variables.

Ecological theory was used to explain and predict the expected relationships between work and family factors with the work-family interface variables. Confirmatory factor analysis results suggested that the fit for coaches and their work-family interface is best explained by four work-family dimensions—two directional conflict dimensions and two directional enrichment dimensions. Structural equation modeling was used to explore the effects of three work factors on the four work-family variables: supervisory
support, autonomy, and hours worked. Multiple regression was used to examine the
effect of family variables on the work-family constructs. Additionally, gender
differences within spousal job hours and type were explored.

Results suggest that supervisory support correlates with lower conflict and
greater enrichment. Additionally, coaches reported that an autonomous workplace
correlated with lower conflict and greater work enrichment with family. No hypothesis
was supported with hours worked. In the family domain, spousal sport support, like
supervisory support, was correlated with lower conflict and greater enrichment. No
other family variables were significantly related to the work-family variables within the
multiple regression analysis. Two hypotheses involving spouses of coaches, however,
were supported as coaching mothers had spouses/partners who were more likely to work
longer hours than fathers. Additionally, coaching mothers were more likely to have
spouses/partners who were more likely to work in a career-type job.

Besides theoretical and practical applications, an exploration contrasting male
and female coaches was done. Additionally, in aligning with ecological theory, coaches’
work-family fit needs to be considered when hiring and retaining parents who coach.
DEDICATION

To my home team that always enriches my life: Brenda, Shayna, Jamey, and Jessica, and to the One who gives me strength.
ACKNOWLEDGEMENTS

Clearly if this dissertation is any accomplishment, it is because of the support, encouragement, and guidance of many, not one. Without these friends, family, and colleagues, the road would have been much more difficult.

First, my parents, Delmar and Mary Sue Ryan, who showed me firsthand about the commitments a coach must make to his sport, but, more importantly, what an influence a man and woman can have on so many lives. My parents’ dedication to each other and to my family as I grew gave me a strong foundation for life. Indeed, because of them, I understood how a family can enrich one’s life. I believe that because of my parents and wonderful sister, Sue, and brother, Steve, I have had a blessed family background. While I believe it would also be suitable to thank my parents for their financial assistance, I believe it would be appropriate to pass on gratitude to my grandparents Riley L. and Edna Case for their prayers, love, and financial assistance. I truly miss them.

Next, I want to acknowledge the tireless work of my advisor, Dr. Michael Sagas. Besides picking up the check at numerous occasions, you have provided many opportunities for my success. More than anyone, you have made Texas A&M University and the Sport Management division a great place for me to be.

I would also like to thank my remaining committee members who all played a significant role in my educational development. Thank you to Dr. Gregg Bennett, who encouraged me to attain my doctorate, including the suggestion to attend Texas A&M University and to Dr. George Cunningham, who has gone above and beyond in
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While I have had many wonderful and motivating fellow students and friends at Wheaton College and the University of Southern Mississippi, I have had many excellent fellow Sport Management students at Texas A&M University who have contributed in some meaningful way and who have been wonderful colleagues. Lance, Jinho, Jason, Scott, Yo, Windy, Finch, Butler, Todd, Jacqueline, and, of course, my office-mate Melanie, have made my time at A&M meaningful. I also want to take this time to thank my former students, athletes, and staff at Central High School in Dewitt, Iowa for the long lasting impact they have made on my life. I had a great time while I was there, and I miss those friendships still.

Obviously, my wife Brenda deserves praise and acknowledgement as she has also shown how a spouse can make life much more enriching. It is because of her and my three beautiful daughters that I truly enjoy returning home each day. Shayna, Jamey, and Jessica have truly been a great and deep Joy in my life. I thank them all for allowing me to do this doctorate pursuit. It has been a wonderful adventure that I look forward to continuing.

Finally, I thank the One who has given this life purpose and hope. I thank Jesus Christ for His Gift to me. I can do all things through Him who gives me strength.
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CHAPTER I
INTRODUCTION

Over the past three decades, the intersection of work and family has received considerable research. Part of the reason has been the increase of non-traditional families, dual-earner partners, and the transformation of gender ideals (Dixon & Bruening, 2005: Greenhaus & Powell, 2006). Because of this, organizational scholars have attempted to aid practitioners by exploring individual, structural, and social factors that affect a family man or woman’s work life, or a worker’s home life.

The incongruence of work and family role demands and the conflict that arises has been termed work-family conflict (Greenhaus & Beutell, 1985), and it has been a dominant theme of work-family research (Barnett, 1998; Greenhaus & Powell, 2006) as the consequences of work-family conflict can affect both a workplace and a home (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). Within sport organizations these negative effects of participation within a family role and a coaching role have been studied, generally with coaches or sport managers at both the high school and collegiate level (Covell, 1998; Dixon & Bruening, 2005; Sagas & Cunningham, 2005; Sage, 1987).

Emerging work-family research has started to examine the beneficial and enriching ways that one role may enhance another role. Whether called work-family enrichment, facilitation, or enhancement, this construct attempts to focus on the positive interdependence and spillover between work and family roles (Greenhaus & Powell, ____________

This dissertation follows the style of the Journal of Sport Management.
However, within sport management, there is a gap in this area of research as little to no research has examined these potentially positive aspects of multiple role membership. One of the aims of this study, therefore, is to expand work-family research into the sport context.

Sport provides a unique and fertile area for work-family research, especially in role enrichment. Findings suggest that coaches are especially prone to work-family conflict, as their work frequently entails practices in the afternoons, non-balanced work schedules, moderate to heavy travel, and weekend and holiday obligations (Nance, 2005; Sagas & Cunningham, 2005; Sage, 1987; Shamir, 1983). As these responsibilities often conflict with prime family time, it is not surprising to see coaches at all levels leave the coaching profession to spend more time with their family (Sagas & Cunningham, 2005; Sage, 1987). Although overloaded time schedules are one reason for conflict, stress and tension from coaching may spill over and affect the home role as well (Kelley, 1994; Sage, 1987). Since this tension is consistently negatively correlated with both life and job satisfaction (Eby et al., 2005; Kossek & Ozeki, 1998) many high school and college coaches exit the coaching profession due to work-family conflict (Anderson, 2001; Hart, Hasbrook, & Mathes, 1986; Sage, 1987).

In spite of the high stress and potential for work-family conflict, many coaches find their jobs satisfying (Drake & Hebert, 2002; Sage, 1987). Additionally, anecdotal observation suggests that many coaches and athletes have had a parent who was a coach and have been able to share family experiences via sport. Conversely, many coaches are able to share their coaching experiences with members of their family and
enrich their family life. Likewise, because support from a family may lead to more positive work attitudes and satisfaction and acceptance at work (Greenhaus & Powell, 2006), the family role may enhance the coaching role. Indeed, coaching, and sport in general, may allow an expansion on the understanding of the positive benefits from participation in both roles. Unfortunately, while this positive spillover between work and family may be beneficial to understand for sport managers, little is known about the factors that affect enrichment from one role to another, especially those unique to sport.

Much of the past research in work-family enrichment has been based on a Sieber’s (1974) theory of role accumulation, or expansionist theory. Most research on roles has been based on scarcity theory where time and energy are fixed; time or energy given to one role meant that it could not be given to another (Greenhaus & Powell, 2006). Sieber’s (1974) expansionist theory, however, maintains that the advantages of multiple role membership may far outweigh the negatives. While multiple roles may conflict with each, role membership provides privileges and benefits for participation in other roles, not only in developing beneficial skills and behaviors, but also as a buffer to disappointments and failures in different roles (Sieber, 1974).

Although the correlation between work-family conflict and work-family enrichment is generally small or non-significant (Greenhaus & Powell, 2006), certain theoretical perspectives within work-family conflict may aid in development of theory within work-family enrichment. Individual approach theories examine the effects an individual’s factors and choices (such as gender or coping methods) have on that person’s outcomes (such as job and life satisfaction) (Dixon & Bruening, 2005).
Structural approach theories examine job and organization factors and their effect on the individual and on workplace and family outcomes (Dixon & Bruening, 2005). Therefore, both individual and structural characteristics need to be examined, including some that may be unique to sport and beneficial to sport managers.

In constructing an integration of multiple theoretical approaches to work-family conflict, Dixon and Bruening (2005) suggested that the sport context is beneficial in evaluating theory on work-family conflict as it helps establish boundary conditions in the individual, structural, and social models within work-family conflict. The authors were echoing Chalip’s (2006) thoughts on the importance of the development of sport management as a discipline—the testing of general theories within the sport context. The unique aspects of coaching may provide additional context that may aid in theory building in work-family enrichment.

Work-family enrichment research has followed conflict literature by separating the construct into two directional constructs. In this, the story of work-family conflict can best be explained with work interfering with family (WIF) and family interfering with work (FIW) constructs (Eby et al., 2005). Likewise, research has suggested work enriching family (WEF) and family enriching work (FEW) dimensions in the work-family enrichment literature (Grzywacz & Marks, 2005). However, no research has examined these four work-family constructs together within the sport context.

As a reminder, in previous research involving work-family enrichment, the correlations with work-family conflict have been small or insignificant (Greenhaus &
Powell, 2006). In spite of this, many studies have found the work-family conflict and work-family enrichment constructs to both be significantly related to common outcomes such as job satisfaction, marital quality, and life satisfaction (Eby et al., 2005; Greenhaus & Powell, 2006). However, when looking at possible antecedents, one explanation of the work-family interface accords pressures from work and/or home to influence conflict, while resources in a domain should correlate more with enrichment (Greenhaus & Powell, 2006; Grzywacz & Butler, 2005; Grzywacz & Marks, 2000).

In studying the work-family interface Grzywacz and Marks (2000) used ecological theory (Bronfenbrenner, 1979; Bronfenbrenner, 1999; Ettner, & Grzywacz, 2001) to conceptualize the work-family interface and identify significant pressures, barriers, and resources that correlate with both positive and negative spillover within the interdependent roles of work and family. In ecological theory, various person, process, time, and context characteristics have an additive or interactive effect on the work-family interface (Grzywacz & Marks, 2000). Therefore, it is important to examine the resources and pressures, including those specific to sport, that may affect the work-family interface.

Past research on work-family conflict does suggest some support for the ecological model. By some definitions, work-family conflict is the perceived incompatibilities of multiple role pressures (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Greenhaus and Beutel’s (1985) classic work on work-family conflict shows two moderators that affect the amount of perceived work-family conflict: role salience and perceived sanctions for role non-compliance. To connect with ecological theory, the
perceived sanctions for failing to meet a role expectation would be considered a pressure which affects the nexus between work and family. Additionally, job, financial, and family pressures have been shown to correlate with work-family conflict (Eby et al., 2005). It is expected that both work and family resources will affect work-family conflict and facilitation.

Within the family domain, several meaningful factors are expected to have an influence on work-family interdependence. Spouse job characteristics, age of children at home, and spouse affectual support have been found to be related to some facet of the work-family interface (Eby et al., 2004, Greenhaus & Powell, 2006; Grzywacz & Marks, 2000; Voydanoff, 1988). While it was expected these variables will be correlated with some dimensions of work-family interdependence, none are unique to sport management, and part of the purpose for this study was to examine variables that may be unique to the sport discipline.

Unique, but not exclusive to coaching, is the potential for family and friends to be involved in a coach’s work. Contests allow a visual opportunity to see the coach’s work in progress. Seeing the product the coach is involved with allows spouses and mates an opportunity to discuss a real event with the coach. Instead of an abstract concept of moral support, the family of a coach can literally cheer the coach and support him/her. Therefore, the construct spousal sport support will be introduced. It was expected that this construct will help explain part of the variance in the work-family interface.
For those coaches with children, an additional construct will be added. Again, within sport, parents who coach have the opportunity to involve their children with their work. While coaches may work long hours that often conflict with family time, frequently that work time may be spent with a child. Whether the child is actually on the team, is the team manager, “plays” at practice, or merely shares the sport with the parent, coaching allows additional shared experiences that may alleviate some work-family conflict or increase work-family enrichment.

Within the work domain, an individual’s control over his/her work environment has been correlated with components of the work-family interface as well as hours worked, weekends/shifts worked, and supervisor support (Eby et al., 2005; Greenhaus & Powell, 2006; Grzywacz & Marks, 2000). Additionally, Ryan (in press) found that coaches at smaller schools experience more interrole conflict between the teaching and coaching role as they may have more tasks for which they are responsible. Therefore, it is expected that these job characteristics will have an influence on the nature of the interdependent role of work and family.

Finally, ecological theory has suggested that individual personal characteristics have an impact on the positive and negative spillover effects of work and family (Grzywacz & Marks, 2000). By far, the most commonly studied variable has been sex within work-family research. Within coaching, results have not been conclusive (Dixon & Bruening, 2005; Sagas & Cunningham, 2005), but little to no work has examined the sex effect for positive spillover from the coaching domain to the family domain or from the family role to the coaching role.
Based on the desire to examine the need to expand work-family literature within the sport management realm and explore the work-family effect on turnover, the aim of this study is to use ecological theory as a guide to develop and expand the literature on work-family interface within the coaching management literature. Deriving from the aim of the study, the following research questions were formulated:

1. How many dimensions best characterize the work-family interface, and what are the correlations, if any, among these dimensions?
2. What individual and structural role pressures and resources correlate with the work-family experience? Included in this is the question: What impact does family involvement, spousal support, hours worked, supervisor support, autonomy, and other work and family factors have on the coach’s fit within the work-family experience?

Current Study

The primary purpose of the study is to develop a better understanding of work-family enrichment, specifically the antecedents and consequences in a sample of small college coaches. This study uses web-survey methodology to build upon emerging work-family facilitation research by examining the conditions involved within the sport context. An additional implication is to benefit sport managers, specifically college athletic administrators charged with hiring and maintaining quality coaches.

Specifically, this study sampled lower division college coaches in an attempt to: (a) distinguish work-family enrichment and its dimensions from work-family conflict and its dimensions, (b) examine the resources and pressures that correlate with work-
family enrichment, (c) explore the theoretical consequences of work-family enrichment, and (d) create a theoretical model involving work-family enrichment with the examined constructs.

To accomplish this research agenda, this dissertation is organized into five chapters. Chapter II identifies relevant literature including topics such as work-family enrichment and conflict: individual, structural, and social factors affecting the work-family interface. Within this, ecological theory is reviewed and used to explain the related variables and predict their relationships. Chapter III details the research methodology being used, including a description of the measuring instrument and sampling methods. Chapter IV contains detailed results obtained in the study. Finally, chapter V will contain discussion, implications, limitations, and suggestions for future research.
CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this chapter is to provide a review of the literature and theories involving the constructs of this study. The first section justifies the importance of work-family research within the coaching profession. The second section examines research on work-family interface in organizational studies including sub-sections of work-family enrichment and work-family conflict. Within this second section hypotheses are provided to assist in the examination of the work-family interdependence of coaches.

Coaching as a Profession

Coaching is an excellent profession to examine the work-family role relationship, as coaches frequently work during the prime family times of evenings, weekends, and during breaks. Additionally, their year involves high-stress times of competitive seasons, less visible but potentially as time-consuming off-seasons, and greater flexibility within the summer months. Chelladurai and Ogasawara (2003) wrote that it is necessary to use a human resources management perspective when studying coaches as they are the primary employees of intercollegiate athletics. As coaches have given family pressures as a reason why they have left the coaching profession (Hart, Hasbrook, & Mathes, 1986) and work-family conflict continues to be prominent for coaches with families who remain within the coaching profession (Sagas & Cunningham, 2005), it seems prudent for sport managers to continue to examine the interdependence of work and family among coaches as work-family conflict is related to turnover (Hom & Kinicki, 2001).
Very little quantitative measurement of work-family conflict has been performed within sport management research (Sagas & Cunningham, 2005), and less has been performed on the beneficial effects of home and family participation. As argued by Sagas and Cunningham, work-family conflict may have significant impact on the percentages of women coaches within collegiate coaching. When combined with Challip’s (2006) call for distinctive theoretical frameworks within sport management research, the need to study coaches is important from a practical and theoretical rationale.

The Work-Family Interface

With the increase in dual-earner homes and non-traditional families, research on the intersection of work and family has grown considerably over the past 25 years (Dixon & Bruening, 2005; Eby et al., 2005; Greenhaus & Powell, 2006) with the prominent amount of research focused on the incompatibility of the work and family role (Greenhaus & Powell, 2006). Work-family conflict research emerged as researchers attempted to gain insights into the negative effects, but interdependence, of the two roles. Only recently has the quantitative study of the positive interdependence between the two roles been undertaken.

While the focus of this manuscript is the positive spillover, or the enriching benefits of participation in coaching and family life, it is logical and necessary to include a review of the work-family conflict literature. Although the correlation between work-family conflict and work-family enrichment has been small or insignificant in most past research (Greenhaus & Powell, 2006), to not explore the conflict part of the work-family
interface would only be telling half of the story. As conflict has been the primary area of study within the work-family literature, it has become more developed, and it may be beneficial to examine the conflict literature first.

*Work-Family Conflict*

Work-family conflict is a type of interrole conflict. The classic definition of role conflict is the “simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other” (Kahn, Wolfe, Quinn, Snoek, and Rosenthal, 1964, p. 19). Kahn and colleagues were primarily concerned with conflicts within the work role; however, Kahn et al. (1964), defined interrole conflict as specific to participation in different roles. Greenhaus and Beutell (1985) offered this definition for work-family conflict: “a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (p. 77).

The key point of interest to the present study from the latter definition is that pressures from one role affect performance in another role. As mentioned in Chapter I and will be further examined, a key theoretical difference between work-family conflict and work-family enrichment is the type of source. Conflict arises from pressures which affect the work-family fit, but enrichment occurs from resources or rewards. Significantly, Greenhaus and Beutell (1985) identified three sources of conflict: time-based, strain-based, and behavior-based.

Time-based conflict is essentially that the time devoted to one role (e.g.,
work) cannot be used in another role (e.g., parenting). When work and family time schedules overlap, a conflict will occur. If individuals work late and miss a family event they were expected to attend, a conflict has occurred. If a mother stays home to be with a sick child, she then is unable to attend work functions. Besides physical time-based conflicts, a second type of time-based conflict exists—when pressures from one domain cause a preoccupation for an individual, even though the person is physically present and trying to meet the needs in the other domain (Greenhaus & Beutell, 1985). Considering time as a resource, time devoted to one role is time that cannot be used in another. When that time is scarce, pressure from one role affects participation in the other role.

Strain-based conflict occurs when the strain of one role affects the performance in another role (Greenhaus & Beutell, 1985). For example, coaches who experience fatigue and irritability from work that affects their role in the family are experiencing strain-based conflict. Again, for a conflict to occur, the performance in one role must be affected. Greenhaus and Beutell (1985) also point out that if an individual needs to spend extensive amount of time in a specific role or is preoccupied with a specific role, this may produce strain.

Behavior-based conflict occurs when the behavior in one role makes it difficult to fulfill the requirements in the other role. The classical stereotype of the tough and demanding military officer who is unable to shift to nurturing parent is an example of behavior-based conflict. While this form of conflict has been the most difficult to operationalize, Carlson (1999) found evidence that all three forms of conflict are empirically distinct. However, all three types of conflict generally have been
positively correlated with each other (Eby et al., 2005).

Additionally, besides these three types of conflict, researchers have also generally divided work-family conflict into two directions: work interference with family (WIF) and family interference with work (FIW). Evidence exists that FIW and WIF have different antecedents and outcomes. Within the literature, the directional conflict constructs are used more than the global work-family construct (Eby et al., 2005).

Within sport literature, most studies involving the incompatibilities of work and non-work are case studies or anecdotal (Covell, 1998; Drake & Hebert, 2002; Sage, 1987) or theoretical (Dixon & Bruening, 2005). There are, however, few published empirical studies within sport and coaching literature that examine the work-family conflict construct using established, psychometrically sound measures (Sagas & Cunningham, 2005). The exception to this was a Sagas and Cunningham (2005) examination of work-family conflict among college assistant coaches. They examined the three types (time-based, strain-based, and behavior-based) of conflict for both directions (FIW, WIF). These six different dimensions of work were assessed for differences between sexes for assistant coaches and correlated with job satisfaction. Their findings suggested that males reported significantly more time-based WIF than female coaches, but sex differences were not significant among the five other dimensions. Interestingly, none of the six dimensions were reported to be significantly correlated with job satisfaction for male coaches, while females reported significant correlations between job satisfaction and the dimensions of strain-based FIW, behavior-
based WIF, and behavior-based FIW.

As mentioned above, little quantitative work has been performed within coaching involving work-family conflict. However, as stated in Chapter I, the work that has been done only tells half the story in regards to the work-family interface. Little, if any, quantitative or qualitative work has explored the beneficial effects of the coaching role on family or the family role on coaching. Therefore, before moving to the factors expected to affect the work-family interface in coaching, it is necessary to review applicable research in work-family enrichment.

*Work-Family Enrichment*

Research on the positive interdependence between the work and family roles is relatively new, and various names have been used to examine this beneficial multiple-role relationship including positive spillover (Grzywacz & Marks, 2000; Kirchmeyer, 1992), facilitation (Frone, 2003), enhancement (Ruderman, Ohlott, Panzer, & King, 2002), and the term that will be primarily used during this manuscript, enrichment (Greenhaus & Powell, 2006; Rothbard, 2001). Greenhaus & Powell (2006) define work-family enrichment as “the extent to which experiences in one role improve the quality of life in the other role” (p. 73). A distinguishing difference between the conflict and enrichment constructs is the difference in focus; one highlights the weakness or illness of the relationship between work and family, while the other focuses on the strengths or health of the relationship (Greenhaus & Powell, 2006; Marks & MacDermid, 1996).

As mentioned in Chapter I, Sieber’s (1974) theory on role expansion is an oft-cited piece of work that laid the foundation for much of the work-family enrichment
literature. He suggested several reasons why the participation in multiple roles can produce positive outcomes. Greenhaus and Powell (2006) identified three ways in which participation in roles, especially high quality roles (Perry-Jenkins, Repetti, & Crouter, 2000), can be beneficial for individuals. The first benefit was the additive effect from positive work experiences and family experiences. Barnett and Hyde (2001) cited several areas of research suggesting the beneficial effects—both physically and psychologically—of role accumulation. Individuals satisfied with both work and family experience greater well-being and life satisfaction than those who do not participate in one of the roles or are not satisfied with one of the roles (Greenhaus & Powell, 2006; Rice, Frone, & McFarlin, 1992).

Next, participation in multiple roles can act as a buffer against failure or distress in another role (Greenhaus & Powell, 2006). In the same way that a diverse portfolio can protect an investor from the failings of one segment of the economy, so too can multiple roles protect an individual from problems in one particular role (Sieber, 1974). Voydanoff and Donnelly (1999) found that a satisfying experience in a high quality work environment moderated the relationship between family stressors and an individual’s well-being. Additionally, Barnett, Marshall, and Pleck (1992) found a similar moderating relationship except that a high quality family life buffered the relationship between work stress and impaired well-being. Therefore, role accumulation may be beneficial when individuals have a quality role that can compensate for failure or stressors in another role.

Finally, experiences in one role can produce positive resources, outcomes, and
experiences in another role or roles (Greenhaus & Powell, 2006; Sieber, 1974). This third mechanism differs from the first and second because it acknowledges a transfer of energy, experiences, skills, and/or resources from one role to the other. In other words, the more roles in which one participates, the greater the number of opportunities, privileges, and resources that are available to the individual for aiding in performance in different roles (Grzywacz & Marks, 2000). For example, coaches’ experiences in disciplining their athletes may be helpful when disciplining their own children. Family life may enrich a coach as patience developed when dealing with young children may benefit the coach when dealing with athletes. Other resources include those produced as a by-product of social networks built within one role that can be beneficial in the other role and an expansion of personality from adjusting to a variety of different people within each role (Greenhaus & Powell, 2006; Sieber, 1974).

While the first two effects illustrate how work and family experiences enhance well-being or decrease problems in overall life satisfaction, the last effect specifically refers to how one role benefits or enriches the other role. As mentioned before, this work-family enrichment is defined by Greenhaus and Powell (2006) as “the extent to which experiences in one role improve the quality of life in the other role” (p. 73). While this suggests that participation in a community role could benefit performance in the work role (and vice versa) or participation within a teaching role could benefit performance in the coaching role (and vice versa), the primary area of investigation, just as in role conflict, has been the work-family interface.

As in role conflict, it is suggested that resources developed and attained at
work will enrich functioning in the family role (WEF). Related to this construct is the family role enriching the work role (FEW). As with conflict, it is expected that these two directional constructs will be related, yet distinct. Yet it should be noted that past work on the work-family interface has reported small or insignificant relationships between conflict and enrichment items (Greenhaus & Powell, 2006; Grzywacz & Marks, 2000).

Grzywacz and Marks (2000) examined these four work-family enrichment/conflict directional constructs (WIF, FIW, FEW, WEF) in a national survey. Using principal-axis factoring with a varimax rotation, their hypothesis was supported that the work-family interface would best be characterized by the four factors given above. Similarly, I argue here that a four factor model will best explain the work-family interface as compared to two-two factor models (a work-family conflict and work-family enrichment model and a work to family and family to work model) or one factor model. The following are offered to assist this relationship.

**Hypothesis 1**: The work-family model is best characterized by four factors: work interference with family, family interference with work, work enrichment to family, and family enrichment to work.

**Ecological Theory**

Because of the differing ways individuals link work and family, showing causality has been difficult in the development of theory for work-family interface, and for more general interrole interface (Edwards & Rothbard, 2000). Other reasons for the lack of strong theory include evolving family and work structures, gender role evolution, and a lack of resolution on “basic conceptual issues concerning the meaning and causal
structure” among researchers and theorists (Edwards & Rothbard, 2000, p. 179). Additionally, the number of unknown variables acting on individuals within and between roles is hard to account for and control. Finally, in each social role, other mini-roles may exist which may conflict or support each other that may be hard to measure. For example, a coach may enjoy the “strategic role” in coaching, but not enjoy the “administrator role.” In a review of over 20 years of organizational research and literature, Eby et al. (2005) echoed Edwards and Rothbard’s (2000) comments regarding lack of theory on work-family interface. Eby et al. (2005) wrote that while there had been plenty of description of the impact of conflict between work and family, it is rarely within the scope of theory or the exploration of how and why given variables interact. Although work-family research has been rich in descriptives, it lacks explanation of how, when, and why certain relationships occur (Edwards & Rothbard, 2000).

Within sport literature, Dixon and Bruening (2005) suggested a multi-level framework for understanding the processes, factors and products within work-family conflict which could be expanded to the general work-family interface. The authors combined three common theoretical approaches: individual factors, structural factors, and socio-cultural factors. An individual factor approach examined work-family conflict through individual work and family factors, such as one’s personality, family background or structure, sex, or individual values. The individual approach is generally based in scarcity theory (Dixon & Bruening, 2005; Greenhaus & Powell, 2003) where individuals take on a family role and a worker role and must choose to make rational decisions to maximize overall job, family, or life satisfaction and minimize conflict. A
structural approach examines organizational characteristics such as flexibility in work schedules, organizational policies, work hours, or organizational culture. The final level, sociocultural factors, examines those characteristics like gender ideology or cultural norms that impact the work-family interface.

Dixon and Bruening’s (2005) multilevel approach is very similar to a theory used by Grzywacz and Marks (2000) who used ecological systems theory to explain the interface of work and family for an individual. Ecological theory suggests that the fit between work and family roles for an individual is based on a “joint function of process, person, context, and time characteristics” (p. 112). In this way, a coach’s work-family fit is determined by the way a coach interacts with the work and family environments. The more positive interactions, experiences, and/or resources an individual will have with the work (or family) environment, the more beneficial the fit. Conversely, the more negative the interaction, such as family or work pressure, tends to be associated with conflict. Therefore, a structural factor that causes pressure between work and family can have an additive (or interactive) effect on a social factor (or person characteristic), such as sex, which can negatively affect an individual’s work-family fit.

To simplify, those characteristics that cause pressure on an individual in the workplace or at home may lead to conflict and other characteristics may either heighten that pressure or relieve it. Alternatively, resources that one can attain from one role may spillover to be beneficial to another role, leading to enrichment (Grzywacz & Marks, 2000). Characteristics that increase resources, such as pay and skill development, are expected to increase work-family enrichment. Because of this, ecological theory may
look to factors as either affecting a pressure or affecting a resource, or both, and these pressures and/or resources affect the individual’s work-family experience. As a simple analogy, an individual’s comfort or satisfaction with his/her pants reflects the adequacy of fit between the individual and the pants. When the fit is poor, an individual can attempt to make personal changes, alter the pants, or find a different pair. Likewise, if coaches have a poor connection between their work and family roles, they can make personal adjustments, either at work or home, or they (or others) can attempt to make alterations in the family or work structures, or they will look to remove themselves from either the work or family role. Part the purpose here is to examine those measures of fit, and explore what family and work factors affect those measures.

Within the theoretical frameworks mentioned above, it is important to examine the characteristics at various levels. The present examination looks at several individual and structural factors at home and at work, especially those unique to sport. These work factors include family-supervisory support, work autonomy, and hours worked. Family factors include family characteristics such as age and number of children, spousal sport support, spouse work characteristics, and child sport involvement. Other characteristics examined will be sex and age of the coach.

**Work Factors**

*Supervisory support.* Past research has indicated that a supportive work culture, including supervisory support, may relieve some pressures that lead to work-family conflict (Eby et al., 2005; Frye & Breaugh, 2004; Greenhaus, Bedeain, & Mossholder, 1987). Frye and Breaugh (2004) suggested that the supervisor’s support to
accommodate working parents may be more important than the organization’s family-friendly practices as employees need to feel supported and comfortable in using these policies. Results from their study indicated that supervisor support correlated with lower WIF and FIW. In this, supervisor support had a stronger correlation with WIF than total number of hours worked. This suggests that supervisor support may alleviate some workplace pressures that may lead to conflict. However, while some work has been conducted on the relationship between supervisory support and conflict, less has been performed on the positive spillover from work to family, especially within coaching research.

In a national survey, Grzywacz and Marks (2000) examined positive spillover between the work and family domains. They compared overall support at work with the four work-family constructs. Their results suggest that low levels of support at work correlated with less WEF and FEW, with the work-to-family a stronger correlation. This may be because the supervisor may have an impact on the fit between individuals and their environment, allowing for greater spillover from the work to the family environment (Grzywacz and Marks, 2000).

Within coaching, little work has been done on supervisory support and work-family conflict; however, Dixon and Sagas (2006) looked at the effect of a similar construct: organizational support on work-family conflict. Their results suggest that work-family conflict was negatively correlated with organizational support, and it partially mediated the relationship between organizational support and job satisfaction.

I expected that the family supportiveness of the supervisor would alleviate
some pressures that lead to both directions of conflict. Additionally, I expected that a supportive supervisor would allow for greater positive spillover from the work domain to the family domain. The following hypotheses were offered.

**Hypothesis 2a**: Supervisory support will be negatively related to work interferences with family.

**Hypothesis 2b**: Supervisory support will be negatively related to family interferences with work.

**Hypothesis 2c**: Supervisory support will be positively related to work-family enrichment.

*Autonomy*. Many aspects of coaching allow the head coach independence and authority to make decisions regarding his/her team. Besides selecting an offensive play to run, or a training drill to implement, a coach would likely have a choice in practice time and personnel decisions. However, while some coaches may feel considerable opportunity in how they do their work in regards to the team, they may have less freedom in dealing with administrative issues such as practice time or game schedules. Therefore, it may be beneficial to examine the effect of autonomy on the work-family interface.

Within conflict studies, greater autonomy has generally been associated with greater involvement and investment. This attachment to the job positively correlates with work-family conflict as it generally is associated with longer hours or more days spent working (Eby et al, 2005; Greenhaus et al., 1987). However, as coaches regularly work the evening and weekend hours, more autonomy may mean the freedom to adjust
and balance work schedules. This would, in effect, reduce conflict between the work and family domains because it may alleviate competing time pressures. This has been supported in some research, as Grzywacz and Butler (2005) found that more work autonomy did allow for less work-family conflict. Therefore, for the teacher/coach, greater autonomy will be associated with less WIF and FIW.

In examining the positive spillover from work to family, Grzywacz and Butler (2005) argued that workers with independence and authority to perform tasks enhanced worker intrinsic motivation. This personal resource, they claimed, allowed for greater positive spillover from the work to family. Therefore, for the teacher/coach, greater autonomy is likely to be associated with more WEF. To summarize, the following hypotheses were offered.

**Hypothesis 3a**: Autonomy will be negatively related to work interferences with family.

**Hypothesis 3b**: Autonomy will be negatively related to family interferences with work.

**Hypothesis 3c**: Autonomy will be positively related to work-family enrichment.

**Hours worked.** The final work structure examined was work hours. Work hours have been shown to positively relate to work-family conflict, especially for those employees who work evening and weekend hours (Shamir, 1983); the prime working time for coaches (Sagas & Cunningham, 2005; Sage, 1987). Unique to the coaching profession is the presence of coaching seasons (in-season, out-of-season, and summer) which could cause variance in the amount of hours that coaches work throughout the
year. Past work has suggested that due to work overload due to teaching and coaching, coaches often experience conflict during the season (Sage, 1987). Recent research on college assistant coaches revealed that time-based WIF was higher than FIW as college coaches may work very long hours (Sagas & Cunningham, 2005). Additionally, past work on college coaches suggest that the hours worked during the off-season may have a stronger correlation with work-family conflict than hours worked during the season (Sartore, Ryan, Sagas, & Cunningham, 2005). This may be due to the predictability of the season schedule, as games, practices, and travel times are well known beforehand; alternatively, training, recruiting hours, and travel may not be as predictable during the off-season. Another explanation may be due to the ability of spouses, mates, or children to be involved in the coaching season, whereas during the off-season, family members may expect coaches to be able to engage in more family activities. In this way, the working hours cause work to interfere with family obligations, especially during the off-season.

While working hours place additional time pressures that lead to a higher conflict, the involvement and time within the coaching job may provide for additional resources that allow for spillover from work to family. However, the hour overload involved in coaching might easily be a barrier to the sharing of resources that is necessary for positive spillover to occur. Therefore, no expected relationship is predicted between working hours and positive spillover. (See also Grzywacz & Marks, 2000). To summarize the effect of working hours on the work-family interface, the following hypothesis was offered.
**Hypothesis 4:** Working hours will be positively related to work interferences with family.

A summary of the organizational work factors is given in Figure 1 (All figures are found in Appendix B). While three factors have been given that are expected to impact the work-family interface, it is important to examine home characteristics as well. In the next section, these family factors and their impact on the work-family interface are examined.

*Family Factors*

In looking at the potential effect of family factors, consideration needs to be given to potential pressures and resources that may affect positive and negative spillover from one domain to the other. Therefore, family structure is a key variable in many work-family studies (Dixon & Bruening, 2005; Grzywacz and Bass, 2003). Children at home, for example, may require more time commitments at home; however, children may also be considered a resource of personal fulfillment. Thus, family structure factors are examined in their impact on the interdependence of work and family.

*Age and number of children.* An individual family factor that has been examined in work-family literature is the presence of children at home. Past research has found that children at home, particularly young children, lead to more conflict, especially FIW (Dixon & Bruening, 2005). This most likely is due to the additional time and energy that is required in dealing with children, especially young children. Based on these past findings, I expected that young children would positively correlate with FIW.

Within enrichment literature, less work has been done on the effects of
children at home. However, since the experiences and development of one role benefiting performance in the other role was part of the description of role enrichment, it is expected that the coach who is a parent will profit from skills developed as a mother or father. Likewise, as a coach constantly deals with behavior issues, motivation, and developing young kids or adults, I expected that this skill development would benefit the coach in his/her home life. In this, I expected that the presence of children would positively correlate with both FEW and WEF. The following hypotheses were offered.

**Hypothesis 5a**: Children at home will be positively related to family interferences with work.

**Hypothesis 5b**: Children at home will be positively related to work-family enrichment.

**Hypothesis 5c**: Children at home will be positively related to family-work enrichment.

*Spouse work characteristics.* Within the home domain, I expected that the spouse/partner would be the primary sender of role expectations and support in most homes. Coaches whose spouses work outside the home are also more likely to have to deal with family problems, as the coach and the spouse may need to negotiate and compromise schedules around the needs of the family. Clearly, coaches whose mates work outside the home should have time pressures competing for their attention, and as a spouse’s hours increase, time demands will increase, thereby increasing FIW. Because more time may be needed in assisting in tasks at home when a spouse works outside the home, and because a working spouse may lack time to be as supportive, a working
spouse may result in a reduction in a resource that aids a coach from one domain to another.

In addition, Gilbert and Rachlin (1987) distinguished three family structures involving spouses/partners: traditional, dual-earner, and dual-career. The traditional family is characterized by one spouse, in this case the coach—generally the husband—involved in a paying career, while the other spouse is in charge of family and home care. The dual-earner family has both spouses working in paid jobs, but at least one of the jobs is not considered a career job. The dual-career family has both spouses committed to an occupational career (Gilbert & Rachlin, 1987). The authors distinguished jobs from careers, as jobs are generally taken for economic reasons, are more likely to allow for interruption, and generally lack the training and commitment required of careers. Because careers involve greater involvement and commitment, I expected that those coaches who have spouses involved in careers would experience greater potential for FIW and less FEW than would those coaches in the other two categories. The following hypotheses were offered.

**Hypothesis 6a**: Spouse/partner working hours will be positively related to family interferences with work.

**Hypothesis 6b**: Spouse/partner working hours will be negatively related to work-family enrichment.

**Hypothesis 6c**: Spouse/partner working hours will be negatively related to family-work enrichment.

**Hypothesis 7**: Coaches in dual-career homes will experience more family
interference with work than coaches in dual-earner homes or traditional family structures.

Family sport support. As previously mentioned, Greenhaus and Beutel (1985) categorized one type of work-family conflict as time-based. This occurred when competing pressures from one domain were incompatible with pressures from another domain and affected the performance in that other domain. However, Ryan (2007) suggested that unique to sport is the ability for families to participate with a coach in the sport he/she coaches, which could possibly reduce the effects of the perceived conflict.

While workers in many occupations may have supportive spouses, few jobs, relative to coaching, let the mate eyewitness, cheer on, and understand the “tasks” in which a worker is involved. In some cases, spouses may coach together, or a parent may coach his/her own child, allowing for an amalgamation of the two roles. Even without the amalgamation, because sport can be understood more readily and viewed more commonly than other occupations in many other industries, a spouse and a child may be more capable of supporting a coach and/or being involved with the sport coached.

The support of a spouse can reduce the amount of perceived work-family conflict (Greenhaus & Beutel, 1985). Additionally, researchers have suggested that having a supportive spouse/partner which allows for the opportunity to talk through stressful and difficult work situations, which may reduce strain from work and allow for better performance (Barnett, 1998; Repetti, 1989; Weiss, 1990). Grzywacz and Marks (2000) found that family factors, such as spousal support, that facilitate and encourage development of skills correlate with less FIW and more FEW. Because of this, the more
likely a spouse/partner encourages and supports a coach, the greater the likelihood of reduced conflict and increased enrichment between the work and family domain.

Children, like a spouse, have the opportunity to actively support a coaching parent by attending a game and/or cheering on a parent’s performance. However, I suggest that children are also more likely to attend a practice and participate in the sport that the parent coaches; the child can actually associate with a parent’s work by participation. In this way, enjoyment from coaching may spill over into the family domain, as a coach shares an activity with a child and relieves guilt and/or pressure from working during family hours. This support and participation are expected to be distinct constructs with both reducing WIF, and sport participation increasing WEF. The following hypotheses were offered.

**Hypothesis 8a**: Spousal sport support will be negatively related to family interferences with work.

**Hypothesis 8b**: Spousal sport support will be negatively related to work interference with family.

**Hypothesis 8c**: Spousal sport support will be positively related to work-family enrichment.

**Hypothesis 8d**: Spousal sport support will be positively related to family-work enrichment.

**Hypothesis 9**: Child sport attendance will be negatively related with work interference with family.

**Hypothesis 10a**: Child sport participation will be negatively related with work interference with family.
Hypothesis 10b: Child sport participation will be positively related to work-family enrichment.

Personal and Social Factors

As previously mentioned, ecological theory would suggest that each of these organizational and family structures affects the work-family experience (Grzywacz & Marks, 2000). Dixon and Bruening (2005) argued for a multi-level approach to understanding the work-family experience; like ecological theory, this includes personal, structural, and social factors. Likely apparent at this point is the lack of examination of personal and social factors, specifically differences between male and female coaches. Part of the reason for this is due to the breadth of the research project, but primarily the omission is due to past research, which has failed to find consistent differences for sex. Eby et al. (2005) cite several research products in their overview on work-family conflict, “There is mixed evidence as to whether men and women report different levels of work-family conflict. Some research finds no gender differences, whereas other studies find that women report higher levels of some dimensions of work-family conflict or overall work-family conflict. One study found that men reported higher work-family conflict than women” (p. 162, see article for specific studies). While a stereotype may exist that women experience more work and family conflict, the one notable quantitative research done on college assistant coaches explored six dimensions of work-family conflict and found only one significant gender difference—men reported more time-based WIF (Sagas & Cunningham, 2005). Additionally, Sagas and Cunningham (2005) reported conflicting research on females being more likely to leave coaching due to
family and time conflicts (Hart et al, 1986; Pastore, 1991) and that males were more likely to give lack of family time as a reason for exiting the coaching profession (Pastore, 1992).

Part of the reason there may be inconsistencies in work and family research is the evolving nature of families and different work settings so that different samples might experience different amounts of conflict uniquely. Additionally, a simpler explanation may be that men and women do not experience different levels of conflict. However, there also may be a failure to distinguish between sex differences and gender differences, in that sex is a “biological categorization” and gender is the “social elaboration of biological sex” (Eckert & McConnell-Ginet, 2003), p. 10). Therefore, comparisons that are only based on sex may not detect any differences; however, the gendered role of mother may produce significant differences from fathers, males in general, and childless-females.

One socio-cultural factor that is expected to show a gender difference is in the variable involving spouses and supervisors, as gender difference may interact with other structures, especially in areas regarding support (Dixon & Bruening, 2005). Additionally, while the traditional family structure of a father working with a mother at home may still be common, and dual-income parents also may be ordinary, a mother working with a father at home with the kids is a rare occurrence. Therefore, I expected that there would be gender differences within spousal work. The following hypotheses are offered.

**Hypothesis 11**: Mothers who are coaches will have spouses who work more
hours than fathers who are coaches.

**Hypothesis 12:** Mothers who are coaches are more likely to have a spouse in a career type job than fathers who are coaches.

I expected that other sex and gender differences may be found. While they will affect a coaches fit within the work-family experience, they will be explored without hypotheses.

Besides gender differences, it is expected that individual factors such as organizational tenure and age would have an impact on the work-family experience. Clearly age will have some correlation with stage of life. Rare is the 63 year old coach who is the primary caregiver of a preschooler or the 34 year old assistant with two adult children. Likewise, with experience in a coaching profession, fewer “new” tasks have to be learned which may reduce role overload which can reduce conflict (Ryan, in press). As was the case with sex and gender differences, these differences will be explored without hypotheses.

**Summary**

In this chapter, four dimensions that characterize the interdependence between the work and family and the factors that affect them were identified. In the coaching domain, autonomy, working hours, and supervisor support are expected to correlate with these four work-family dimensions. Within the family domain, spouse working characteristics, spousal sport support, and child sport support were examined. Additionally, personal factors that may affect the work-family experience were given. The methodology used for this research is examined in the next chapter.
CHAPTER III

METHOD

The purpose of this study is to expand work-family research into the sport context. The aim of the third chapter is to explain the method used for testing of the hypotheses given in Chapter II.

Population

The study was conducted using a web-based questionnaire with a sampling frame of National Association of Intercollegiate Athletics (NAIA) coaches of the fall sports, including men’s soccer, women’s soccer, volleyball, and cross-country. The NAIA schools were chosen because they are less likely to be over-sampled than are National Collegiate Athletic Association (NCAA) coaches (Turner, Jordan, & Sagas, 2006). All schools were chosen from the NAIA website, and all coaches from the targeted sports with an email address available on the Internet were selected. Additionally, to increase the number of coaches to over 1400 in the sample, coaches in the sports of track, tennis, baseball and softball at 52 randomly selected schools were contacted. Also, to increase the number of females in the survey, 210 women’s basketball coaches were randomly sampled. Currently, according to the NAIA.org website, 282 schools are in the NAIA. Not all the schools have all the sports mentioned. For example, according to naia.org, 245 schools support a volleyball team, while 206 schools participate in men’s soccer.

A total of 1408 coaches were sent the link to the online survey with information gathered from 628 (45%) surveys. Four contacts were completed as
recommended by Dillman (2000), with 601 (43%) retained for analysis. While the response rate for this type of survey is better than most surveys, especially online (Crawford, Cooper, & Limias, 2001; Kerlinger & Lee, 2000), a test of generalizability was administered by comparing four groups of respondents: early, late, paper, and an abandonment group (Dooley & Linder, 2003; Ryan and Sagas, 2006). This last group represented those who did not complete the online survey or left a significant amount of the survey incomplete. A comparison between the four groups on items that appeared at the beginning of the instrument revealed no significant differences between the groups in a one-way ANOVA. While this test does not guarantee that non-respondents are similar to respondents, it does suggest that for the sample neither timing, nor method of response revealed differences between coaches.

An additional way to examine the external validity of the sample is to compare a characteristic of the respondents to comparable samples in other studies (Jiang and Klein, 1999-2000, as cited by Cunningham & Sagas, 2003). Unfortunately, the known characteristics of NAIA coaches are not available to compare to the current study’s sample. However, in a 2003-2004 report on all NCAA head coaches (DeHass, 2004), the percentage of White head coaches for all three divisions of the NCAA was 91.3%, which compares to 92.8% of the respondents in this sample. In a comparison of schools similar in size to NAIA schools, White coaches represented 92% of division III head coaches. Additionally, in a comparison to a Sagas and Cunningham (2005) study that examined work-family conflict in NCAA assistant coaches, the numbers for age and number of children are similar to the assistant coaches examined in this study. In the
Sagas and Cunningham (2005) sample, the average age was 32.4 years ($SD = 8.2$) while in the current study, the average age was 31.9 years ($SD = 10.4$). The mean number of children indicated by coaches was $0.53$ ($SD = .89$) for the Sagas and Cunningham (2005) manuscript, compared to $0.43$ ($SD = .93$) in the present study. These comparisons suggest that the findings for the NAIA coaches may generalize to all college coaches.

Respondents included 478 (76%) head coaches, 123 assistant coaches (which includes 3 volunteer assistant coaches), 14 who were both a head and assistant coach, and 8 graduate or student assistants. Additionally, 411 (65%) males and 217 females responded. The average age was 36.8 years old ($SD = 10.4$). The overwhelming majority of respondents were White ($n = 584, 93$%), while 18 coaches identified themselves as African-American, 11 coaches were Hispanic, 4 were Asian, while 11 selected “other.”

For marital status, 402 (64%) respondents identified themselves as married, while 44 (7%) were living with a significant other. Eighteen (3%) coaches reporting being divorced and not living with a significant other, while 161 (26%) coaches were single. For coaches and children, 303 (50%) (males = 242; females = 61) responded that they were a parent, while 301 indicated that they were not. The average tenure at the current school for the coaching sample respondents was 5.5 years ($SD = 6.3$).

Procedure

Dillman (2000) recommends at least four contacts with the potential participants. The first contact was in early March, 2007, and was a prenotice email informing the participants that they would be receiving a request to help with this study.
Included in this was three links, one to the Laboratory of Study of Intercollegiate Athletics, one to the Center for Sport Management Research and Education, and another to the Texas A&M University Health and Kinesiology web page that has my contact information and curriculum vitae. This contact was also used to explain the purposes of the study.

The second contact explained the purpose of the study again, and included a link to a web browser where the interactive survey was administered. A week later, a third email was a thank you /reminder that had the link to the survey. Finally, the fourth and final contact informed participants that the web survey will be closing within the next 48 hours. These final two contacts offered an alternative paper and pencil questionnaire if the participant desired. This last contact was sent 15 days after the third contact.

Confidentiality was guaranteed to all the participants. At the end of the survey, participants had the opportunity to leave feedback and their email address to receive results and not get additional email reminders. Institutional Review Board approval was received prior to contact with the coaches.

Instrumentation

The research instrument was a questionnaire using previously developed items from organizational research for most of the variables. Besides collecting background and demographic information, characteristics of the coach’s job and home life were collected. These work characteristics included hours worked during the season, the off-season, and summer. Additionally, other work characteristics include salary from
coaching, and hours worked from coaching and any full-time job, if applicable. Home characteristics include number and ages of children, spouse’s working hours, and type of job for spouse, if applicable. To measure type of job for spouse (i.e. career job versus non-career job), a 5-item Likert-type scale with two questions was used (e.g. “I would label my mate's employment as a ‘career’ job”). It should be noted that career was intentionally not defined on the instrument. Additionally, mates who did not work jobs for pay were given a score of 0. Cronbach’s alpha for the two items was .81.

Coaches were asked to give marital status, with only respondents who answered “married” or “living with significant other” receiving questions concerning their spouse/partner. Likewise, coaches were asked if they had children living with them or nearby, and only those coaches answering affirmatively received items involving their children, including ages. In gathering data on the number and ages of children, four age ranges of children were considered: adult (over 18), teenagers still at home (13-18), grade school age (6-12), and preschoolers (under 6).

Three items from Hackman and Oldman’s (1974) Job Diagnostic survey were used to measure autonomy on a 5-item Likert-type scale with response options ranging from strongly disagree to strongly agree. In a meta-analysis of autonomy at work, Spector (1986) cited this measure as the most popular scale used for autonomy, and Fields (2002) reports reliability ranging from .68 to .81. One of these items was revised by Idaszak and Drasgow (1987). Cronbach’s alpha for the current study was .86.

Supervisory support was measured with six-items on a Likert-type scale with response options ranging from strongly disagree to strongly agree. Three items (e.g.
“My supervisor is understanding when I talk about personal or family issues that affect my work”) were taken from Anderson Coffey, and Byerly (2002); one item (“My supervisor is supportive when family problems arise”) was taken from Frye and Breaugh (2004); one item (“My supervisor understands that I have to meet family responsibilities as well as those related to my job”) was adapted by Frye and Breaugh (2004) from Warren and Johnson (1995), and one item was created for the current study (“My supervisor encourages me to have a life outside of coaching.”) Cronbach’s alpha for the current study was .94.

Measurement of spousal sport support, child sport attendance, and child sport participation were based on questions developed during pilot work. Experts within sport management and coaching (n=5) were asked to identify ways that spouses or a child could be supportive to a coach. From these discussions several items were generated and field tested on several coaches who were asked to give feedback on the questions (n=6). Following Anderson and Gerbing (1991), additional procedures to assess validly evidence based on test content were taken in which three research/coaching experts were asked to match test items and the construct (along with related constructs), based on the items’ content and construct definitions. A six-item spousal sport support, five-item child sport involvement, and three-item child sport participation were retained. Finally, items were field tested via a web survey on college coaches. The data were collected from randomly selected cluster samples of NAIA spring sport coaches using a web-survey as part of an overall study on WF relationships. A total of 288 coaches received a survey link with 139 (48%) usable surveys. Data from coaches who were
married/living with significant others (n=104) or had children living near/with them (n=74) were used for the analysis.

Principal-axis factor analysis with an oblimin rotation was used to examine validity evidence based on internal structure of the spousal sport support, child sport attendance, and child sport participation items. Along with the items from the three new variables, items from the conceptually related constructs of WF conflict and WF enrichment were analyzed. Results suggested high loading and low cross-loadings for five items within spousal sport support, and for three items each for child sport involvement and child sport participation. Reliability estimates for the three variables suggested acceptable to good reliability for spousal sport support $\alpha = .88$, child sport involvement $\alpha = .86$, and child sport participation $\alpha = .81$. Therefore, for the current study, a five-item scale was used to measure spouse sport support (e.g. “My spouse/partner enjoys attending contests that I coach”); a three-item scale for child sport involvement (“My children attend the home contest when I am coaching”); and a three-item scale for child sport participation (“My children enjoy to participate in the sport I coach”). Cronbach’s alpha for the current study was .87 for spousal sport support, .71 for child sport attendance, and .75 for child sport participation.

Measurement for the dependent variables work-family factors came from the National Survey of Midlife Development in the United States (MIDUS) collected in 1995 by the John D. and Catherine T. MacArthur Foundation Research Network on Successful Midlife Development, and that data was used in Grzywacz and Marks’s (2000) study on the work-family interface. Each of the four work-family variables
originally had four items in the MIDUS survey. However, in a factor analysis, two enrichment items were eliminated due to high cross-loadings. Therefore, in their data, WIF was measured with a four-item scale with good internal consistency (Cronbach’s) $\alpha = .83$. FIW was measured with four items ($\alpha = .80$). WEF was measured with three items ($\alpha = .73$), while FEW was also measured with three items ($\alpha = .70$). In the current study, Cronbach’s alpha for WIF was .84, while for FIW $\alpha = .79$. As in the MIDUS study, an enrichment item was dropped for both FEW and WEF. Cronbach’s alpha was very similar to the MIDUS study with $\alpha = .72$ for WEF, while for FEW, $\alpha = .70$.

Appendix D reports the questions used for all latent variables used on the questionnaire.

**Analysis of Results**

Descriptive statistics, including means, standard deviations, correlations, and/or frequencies when acceptable were calculated, and are reported in Table 1 (All tables are found in Appendix A). Additionally, internal consistency estimates (Cronbach’s alpha) are reported for appropriate variables, with all latent variables attaining a Cronbach alpha greater than .70 (Nunnally & Bernstein, 1994).

The first hypothesis, which examined the four-construct work-family interface, was tested via confirmatory factor analysis. For the hypotheses involving organizational effects on the work-family interface, pathways linkages were tested with structural equation modeling (SEM) using AMOS 5.0 (Arbuckle, 2003).

As suggested by Bollen (1989) and Kelloway (1998) at least 2 indicators were used for each latent variable, and the endogenous variables were allowed to correlate
(Byrne, 2001) as well as the residuals for the two endogenous conflict variables and two enrichment variables. As a practical guideline, Bentler (1980) suggested that too many indicators cause problems in fitting a model to the data. As suggested by Kelloway (1998) and Little, Cunningham, Shahar, and Wildaman (2002), parcels, or “an aggregate-level indicator comprised of the sum (or average) of two or more items, responses or behaviors” (Little et al., 2002, p. 152) were formed for latent variables with more than three items. As suggested by Little et al., (2002) a test for unidimensionality was conducted on all parceled items, which suggested no multidimensionality from the constructs using the parcels.

Following a strategy suggestions model fitting from Kelloway (1998) and Anderson and Gerbing (1988), the fit of the measurement model was analyzed, followed by examination of the hypothesized structural model. A measurement model is a baseline model that allows all factors to correlate with each other; no other model can fit better than the measurement model (Kelloway, 1998). Additionally during the hypothesized model fitting, comparisons were made to plausible and more parsimonious models to analyze the fit. The hypotheses were tested using the model of best fit. Those pathways that are noted to be significant were used to confirm a hypothesis. Standardized parameter estimates ($\beta$) are reported for each pathway.

To assess the fit of a theoretical model tested in SEM, various “fit” statistics are examined. Besides the chi-square statistic, three other model fit indicators are used. Absolute model fit can be measured by a root mean square error approximation (RMSEA) statistic. Kelloway (1998) reports Steiger’s (1990) suggestion that values
under .1 indicate a good fit, while values below .05 indicate a very good fit. Hu and Bentler (1999) suggested that values under .06 indicate a good fit. The comparative fit index (CFI) is used to compare the model fit to a baseline or “null” model with values over .95 indicating close model fit (Hu & Bentler, 1999). Finally, the parsimony normed fit index is used to assess the parsimonious fit of the model. Hu and Bentler (1999) suggest values over .60. As a reminder, a representation of the organizational factors is in Figure 1.

Following Grzywacz and Marks (2000), for the testing of the family-based hypotheses, correlation and multiple regression analysis will be used. While the correlation results examined all coaches, the simple and multiple regression results only used coaches who claimed to be married/live with a significant other or those with children. It is important to note that listwise deletion of items was used, meaning that in the multiple regression analysis, only those individuals living with a spouse/ significant other and have children would have been analyzed. Because SEM needed a large sample, it is not able to be used for the testing of the family-based hypotheses.

The seventh hypothesis concerning spousal work choice (job or career) effect on WIF will be tested using ANOVA. Since the spouse work choice variable is based on two Likert-type questions, the variable with be trichotomized into high, medium, and low groups. Tukey’s HSD was used for any post hoc comparison of groups. Likewise, for Hypotheses 11 and 12, ANOVA is used to compare coaching parents and differences in their spouses’ careers. Lastly, exploratory examinations involving various personal
factors is given to further examine sex, age, and tenure differences. Results of the exploratory examinations are given in Appendix C.
CHAPTER IV

RESULTS

The purpose of this study is to expand work-family research into the sport context. The intent of this fourth chapter is to give the analysis of the hypotheses that were given in Chapter II. As mentioned in the previous chapter, Table 1 gives the descriptive statistics of the variables used during hypotheses testing.

Hypotheses Testing

Hypothesis 1

Hypothesis 1 predicted that for coaches, a four factor model would best describe the work-family interface. As previous research by Grzywacz and Marks (2000) completed an exploratory factor analysis with the four work-family indicators of WIF, FIW, FEW, WEF, the first hypothesis tested the dimensionality of the work-family interface for college coaches. Using CFA, a model was specified with the four unique work-family variables. Both conflict variables were composed of 6 scale items that were parceled to 3 indicators after a factor analysis indicated unidimensionality for both the WIF and FIW variables (Little et al., 2002). Both enrichment items were composed of 3 scale items. Five rival models were compared to the four-factor model: (a) a three-factor model of FEW, WEF, and combined the two conflict variables, (b) a three-factor model of FIW, WIF, and combined the two enrichment variables, (c) a two-factor model that had a conflict variable and an enrichment variable, (d) a two-factor model that had a work to family variable and a family to work variable, and, finally, (e) a one-factor model.
Results of the analyses are given in Table 2. As hypothesized, the chi-square difference tests and fit indices suggest a good fit of the data (Kelloway, 1998) and a superior fit with the 4 factor model over other models. Specifically, the four-factor model provides a better fit to the data than does a three-factor model hypothesizing two enrichment factors and one conflict factor ($\Delta \chi^2_3 = 296.52, p < .01$), a three-factor model hypothesizing two conflict factors and one enrichment factor ($\Delta \chi^2_3 = 272.56, p < .01$), a two-factor model combining both conflicts into one factor and both enrichments into another factor ($\Delta \chi^2_5 = 716.94, p < .01$), a two-factor model combining both work to family variables into one factor and both family to work variables into another factor ($\Delta \chi^2_5 = 863.11, p < .01$), and a one-factor model ($\Delta \chi^2_6 = 1145.17, p < .01$).

Additionally, the four-factor model provides an acceptable to good fit to the data ($\Delta \chi^2_6 = 150.75, p < .01, \text{CFI} = .96, \text{PNFI} = .58, \text{and RMSEA} = .058$).

These results suggest that a four-factor model is an acceptable model for the data, and is a better fit than models with fewer factors. Therefore, Hypothesis 1 is supported. Additionally, Table 1 lists the correlations between the four work-family experience variables. Aligning with past literature (Eby et al., 2005, Greenhaus & Powell, 2006), the correlation between the theoretically similar items of FIW and WIF is significant ($r = .53, p < .01$), as is the correlation between FEW and WEF ($r = .33, p < .01$). Additionally, WEF had smaller, but significant, negative correlation with both conflict items ($r = -.10, p < .05$ for both items), while FEW also had smaller, but significant, negative correlation with both conflict items ($r = -.22, p < .01$ for WIF, and $r = -.28, p < .01$ for FIW).
Hypotheses 2, 3, and 4

Hypotheses 2, 3, and 4 tested the effect of organizational factors on the four-factors of the work-family interface and were tested simultaneously with SEM. Before examining the structural equation model with the variables in question, it may be beneficial to examine the bivariate correlations, as found in Table 1 and review Hypotheses 2, 3, and 4 which are depicted in Figure 1.

Hypothesis 2 predicted that supervisory support would be negatively related to both interference constructs, but positively related to work-family enrichment. Preliminary examination suggests support for Hypothesis 2 as supervisory support was significantly correlated with each item, including the non-predicted family-work enrichment ($r = -.26, p < .01$ for WIF; $r = -.15, p < .01$ for FIW; $r = .20, p < .01$ for WEF; $r = .17, p < .01$ for FEW).

Hypothesis 3 predicted that autonomy would be negatively related to both interference constructs, but positively related to work-family enrichment. Preliminary examination of the bivariate correlations suggests some support for Hypothesis 3, as well, as autonomy was significantly correlated with each item, including the non-predicted family-work enrichment ($r = -.16, p < .01$ for WIF; $r = -.15, p < .01$ for FIW; $r = .17, p < .01$ for WEF; $r = .13, p < .01$ for FEW).

Hypothesis 4 only predicted that in-season working hours would be negatively related to WIF, with no prediction on the other work-family constructs. Preliminary examination of the bivariate correlations suggests some support for Hypothesis 4, as well, as working hours was significantly correlated with each interference item ($r = .14,$
Although the relationship was not hypothesized, it is worth noting that the hours worked negatively correlated with FIW.

While the bivariate correlations suggest some relationship between the variables under investigation, to examine the relationships within a system of variables, SEM is used. As a reminder, Kelloway (1998) and Anderson and Gerbing (1988) have suggested using a two-step strategy in an SEM examination. The first step examines the fit of the measurement model, followed by an examination of a structural model. Therefore, a measurement model that allowed all factors to correlate with each other was analyzed first. From this model, the hypothesized model, and plausible rival models were established. The measurement model included coaching hours in-season, autonomy, supervisory support, along with the previously examined four-factors from the work-family interface.

The measurement model provided an acceptable to good fit to the data ($\chi^2_{132} = 269.51, p < .01, \text{CFI} = .97, \text{PNFI} = .66, \text{and RMSEA} = .04$) and all factor loadings were significant. This allowed for assessment of the hypothesized structural model and two rival models; one that had all organizational factors—in-season hours, autonomy, supervisory support—leading to all of the work-family factors and a second model theoretically similar to the hypothesized model and shown in Figure 3. Table 3 displays the fit indices for the measurement model and the three structural models to be compared.
The hypothesized structural model and two rival models were created with exogenous variables in-season hours, supervisory support, and autonomy with endogenous variables WIF, FIW, WEF, and FEW. Because past research has shown that conflict items would be correlated (Eby et al., 2005), as well as the enrichment items (Grzywacz & Marks, 2000), and because the items had significant loadings in the measurement model and are theoretically similar, their residuals were allowed to correlate (Kline, 2005). Again, Figure 1 shows the relationships of the hypothesized model. As shown in Table 3, the hypothesized structural model provided an acceptable to good fit to the data ($\chi^2_{141} = 361.31$, $p < .01$, CFI = .96, PNFI = .66, and RMSEA = .05).

The first rival model compared all the organizational factors with all the work-family factors. The chi-square statistic was significant. The fit indices suggested an acceptable to good fit ($\chi^2_{136} = 317.68$, $p < .01$, CFI = .97, PNFI = .67, and RMSEA = .05). The second rival model, shown in Figure 3, replaces the coaching hours to WIF with coaching hours to FIW and adds a link from spousal support to FEW. The chi-square statistic was significant for this model, as well. The fit indices suggested an acceptable to good fit ($\chi^2_{140} = 322.40$, $p < .01$, CFI = .97, PNFI = .69, and RMSEA = .05).

As the selection of a model often has subjective elements in the decision process, there are three elements: absolute fit of the model with the data, the comparison of fit indices, and the degree of parsimony (Kelloway, 1998). It also should be noted that the all three models could be used based on the evaluation of the fit indicies as all...
three represented acceptable to good models. Also, it should be mentioned that the hypothesized model and rival model 2 are both nested models of model 1, but the two models themselves are not nested. In comparing the absolute fit, the first rival model had the lowest chi-square, and when comparing the two nested models with a chi-square difference test, the hypothesized model was significantly different ($\Delta \chi^2 = 43.62, p < .01$), while the second rival model was not significantly different ($\Delta \chi^2 = 4.72, \text{ns}$).

Therefore, since the second rival model is more parsimonious than the first rival model, the second rival model is preferred. In comparing the second rival model to the hypothesized model, the models’ fit indices are very similar. Because of the theoretical foundations upon which the hypothesized model was built, it shall be retained for evaluation. However, some discussion of the second rival model is contained in Appendix C. Table 4 gives the standardized regression coefficients for the models, which can also be found in Figures 2 and 3.

Hypothesis 2 predicted that supervisory support would be negatively related to both interference constructs, but positively related to work-family enrichment. Using the hypothesized model the standardized regression coefficients support Hypothesis 2 as supervisory support was significant for both WIF ($\beta = -.25, p < .01$) and FIW ($\beta = -.12, p < .05$), as well as the WEF ($\beta = .10, p < .05$). Overall, Hypothesis 2 was supported.

Hypothesis 3 predicted that autonomy would be negatively related to both interference constructs, but positively related to work-family enrichment. The regression coefficients support Hypothesis 3 in the hypothesized model as autonomy was
significant for both WIF ($\beta = -.10, p < .05$) and FIW ($\beta = -.12, p < .05$), as well as the WEF ($\beta = .14, p < .01$). Overall, Hypothesis 3 was supported.

Hypothesis 4 only predicted that in-season working hours would be positively related to WIF, with no prediction on the other work-family constructs. The regression coefficients were significant, ($\beta = -.09, p < .05$), but it did not support Hypothesis 4 as working hours were significantly related to WIF negatively. Therefore, Hypothesis 4 was rejected.

Finally the correlations between the residuals of the conflict items ($r = .64, p < .01$) and enrichment items ($r = .36, p < .01$) were significant. Squared multiple correlations for the hypothesized model included the following: WIF, $R^2 = .10$; FIW, $R^2 = .04$; WEF, $R^2 = .04$; FEW, $R^2 = .00$.

**Hypotheses 5, 6, 8, 9, and 10**

Hypotheses 5, 6, 8, 9, and 10 tested the impact of home factors on the four work-family interface variables. Evaluation of the hypotheses was done in two ways; first by analysis of the correlation matrix which examines two variables in isolation and included all coaches (found in Table 1). Secondly, evaluation of the hypotheses used information from multiple regression analysis and only used coaches who either lived with a significant other and/or had children. The individual work-family variables were regressed onto each of the five family factors of interest--children at home, spouse working hours, spousal sport support, child sport attendance, and child sport participation. Additionally, and more importantly, each individual work-family variable was regressed on the system of family factors. It should be noted in the tables that
because some coaches may have children, and not a mate, the sample varied for the multiple regression from the individual regressions. Correlation results are given in Table 1. Results of the multiple regression analyses are given in Tables 5 - 8.

Hypothesis 5 predicted that for coaches who were parents, the number of children would be positively related to FIW, FEW, and WEF. As mentioned in Chapter III, children at home was defined as the number of children under 18 living with or near the coach. Correlation results suggest some support for Hypothesis 5 as the number of children did positively correlate with FIW (WIF, r = -.03, ns; FIW, r = .14, p < .01; WEF, r = .03 ns; FEW, r = .02, ns). None of the four regression analyses supported Hypothesis 5; as total children was not significant in any of them.

Hypothesis 6 predicted that spouse/mate working hours would be positively related to FIW, but negatively related to FEW, and WEF. Correlational results suggest no support for Hypothesis 6 as none of the bivariate relationships were significant (WIF, r = .03, ns; FIW, r = -.07, ns; WEF, r = -.02 ns; FEW, r = .04, ns). None of the four regression analyses supported Hypothesis 6; as spouse working hours was not significant in any of them.

Hypothesis 8 predicted that spouse/mate sport support would be negatively related to FIW and WIF, but positively related to FEW, and WEF. All of the bivariate relationships were significant (WIF, r = -.17, p < .01; FIW, r = -.24, p < .01; WEF, r = .22, p < .01; FEW, r = .52, p < .01). Within the regression analysis, the factor spousal sport support stayed significant for each variable (WIF, β = -.15, p < .01; FIW, β = -.25, p < .01; WEF, β = .15 p < .01; FEW, β = .48, p < .01). Although, it should be noted, the
regression model for WIF and WFE were not significant with all five predictor variables, there is evidence to partially support Hypothesis 8.

Hypothesis 9 predicted that child sport attendance would be negatively related with work interference with family. As shown in Table 1, in the isolation of the correlational analysis and within the multiple regression analysis (Table 5), the relationship between child sport attendance was not significant. However, it should be noted that there was a significant bivariate relationship between child sport attendance and family-work enrichment ($r = .24, p < .01$). Overall, Hypothesis 9 was not supported.

Hypothesis 10 predicted that child sport participation would be negatively related with WIF and positively related to WEF. Indeed, all of the bivariate relationships were significant ($\text{WIF}, r = -.13, p < .05; \text{FIW}, r = -.18, p < .01; \text{WEF}, r = .14, p < .01; \text{FEW}, r = .20, p < .01$). However, when the work-family interface variables were individually regressed onto the family predictors, child sport participation became insignificant. Therefore, Hypothesis 10 was not supported.

*Hypotheses 7, 11, and 12*

Hypothesis 7 predicted that coaches in dual-career homes will experience more family interference with work than coaches in dual-earner homes or traditional family structures and was tested with a one-way ANOVA. The variable spouse work choice was trichotomized into three groups: high career, defined as scores of 4.5 and above ($n = 254$); medium, defined as scores of 3 to 4 ($n = 85$); and low, defined as scores below 3 ($n = 98$). Results of the WIF comparison were not significant, $F (2, 434) = .44$, ns. Therefore, Hypothesis 7 was rejected.
Hypotheses 11 and 12 predicted that mothers would have spouses who work a greater number of hours and more likely in a career type job. ANOVA results support both hypotheses as coaching mothers reported that their mates worked more hours, F (1, 283) = 19.21, \( p < .001 \), and more likely to work a career-type job, F (1, 283) = 10.58, \( p < .01 \) for scale score, F (1, 283) = 12.32, \( p < .01 \) for tertile grouping than coaching fathers. Cohen’s d was used to determine effect size, with d = .68, for Hypothesis 11 which compared working hours. This value is considered between medium and large (Cohen, 1988). For Hypothesis 12, d = .53, which is considered a medium effect.

It should also be noted that for coaches who were married or living with a significant other, similar significant results were found as women reported that their mates worked more hours, F (1, 138) = 4.83, \( p < .05 \), and more likely to work a career-type job, F (1, 138) = 5.65, \( p < .05 \) for scale score, F (1, 138) = 3.54, \( p < .05 \) for tertile grouping than men.
CHAPTER V
SUMMARY AND CONCLUSION

The purposes of this study were to examine the work-family interface for NAIA coaches and to use ecological theory to examine the work-family experience. As ecological theory would state that a coach’s work-family experiences depend on how the fit is between the individual coach and their environment (Grzywacz & Marks, 2000), it is important to be able to fully analyze the work-family experience. Past research on the work-family interface for coaches had neglected the positive affects of one role on the other. Therefore, it was important to simultaneously examine work-family enrichment and conflict within coaching.

Review and Discussion of Research Questions and Hypotheses

The first research question asked, “How many dimensions best characterize the work-family interface and what are the correlations, if any, among these dimensions?” This question was answered during the testing of Hypothesis 1, as a confirmatory factor analysis with the four work-family variables was found to be a better fit to the data relative to the other competing models. Additionally, there were significant correlations between all four variables, with the strongest correlations between the theoretically similar WIF and FIW, as well as FEW and WEF. Also, it should be noted that all the correlations between a conflict factor and an enrichment factor were significant and negative.

The significance of the four measures of the work-family interface is important, especially for coaches. Past research within coaching has only measured the
conflict between roles, which have in anecdotal writings, and both quantitative and qualitative research, been significant and correlated to negative outcomes such as intent to withdraw, lower job satisfaction, or lower likelihood to progress in the coaching profession (Anderson, 2001; Massengale, 1981; Nance, 2005; Ryan & Sagas, 2006; Sagas & Cunningham, 2005; Sage, 1987). However, conflict is only part of the work-family experience; the addition of enrichment may help explain why some coaches experience similar conflict between the social roles of work and family; they may be able to transfer beneficial and positive experiences from one domain to the other.

Ecological theory maintains that the work-family “experience reflects the adequacy of the fit between the individual and his or her environment” (Grzywacz & Marks, 2000, p.113). To return to the simple pants analogy from Chapter II, the addition of the enrichment factors within coaching allow for a more complete analysis of fit. Instead of just seeing how the pants fit on the waist, now the length is taken into consideration. For coaches, instead of just examining how the one role interferes with the other, it would appear prudent to examine how beneficial the roles are to each other.

The second research question attempted to examine what variables affect this work-family fit. The hypotheses were established based on the ecological theory perspective that pressures led to conflict, and resources would lead to enrichment; these would need to spillover in order to affect the work-family match (Grzywacz & Marks, 2000). Included in this were individual and structural work factors such as hours worked, autonomy, and supervisory support which were evaluated with SEM. For the family factors, spouse work hours and job type, spousal sport support, number of
children, child attendance, and child sport participation were evaluated with the work-family variables using correlational and regression analyses for exploration on the family factors. Additionally, an examination of sex and gender effects on the variables was done.

The first three hypotheses dealt with work factors and were analyzed using SEM. After accepting the measurement model with the four work-family factors and the work variables hours worked in-season, autonomy, and supervisory support; a structural model—representing the hypothesized relationships—and two rival models were created. While all models attained fit indices that were good or acceptable, the second rival model appeared to have better fit of the data over the hypothesized model, and both were consulted during the testing of the hypotheses.

Hypothesis 2 dealt with the relationship between supervisory support and the work-family variables. Specifically, I expected that there would be negative relationship between supervisory support and both conflict items, and a positive relationship with WEF. Hypothesis 2 was supported in the hypothesized model.

Hypothesis 3 predicted that autonomy would be negatively related to both interference constructs, but positively related to work-family enrichment. The hypothesized model and preferred model both had similar results with significant pathways from autonomy to the three work-family variables. Results from the bivariate correlations and SEM supported this hypothesis. In the same way that supervisor support stayed consistently significant for females, and not for males, the pathways involving autonomy and the conflict variables remained significant, for males, but not
necessarily for females as autonomy had no significant impact on the conflict variables in the second rival model.

Hypothesis 4 predicted that in-season working hours would be positively related to WIF. Although the hypothesis got some support from a significant bivariate correlation, the SEM model did not support the hypothesis. Additionally, it was this predictor that was probably the most difficult to understand within the test presented. In the hypothesized model, the pathway linking in-season hours worked to WIF was significant, yet negative, which might be interpreted as less hours worked leads to more WIF. A more expected outcome came from the second rival model where there was a significant, positive relationship between hours worked and perceived FIW.

Plausible explanations for outcomes from the second rival model (see Appendix C) may be easier to establish than from the hypothesized model. Marks and MacDermid (1996) suggested a theory of role balance which may affect how people organize their priorities which could cause negative outcomes when attention is needed to a less preferred role. This concept was also suggested by Ryan and Sagas (2006) and Ryan (in press) in their research on high school coaches and conflict between the coaching and teaching roles. A coach who prefers and/or feels obligated to spend a lot of hours within the coaching role may feel that time in the family role is interfering with time needed in the coaching role. Unfortunately, the interpretation is complicated by a significant bivariate relationship that is negative. This would encourage further exploration into the relationship between hours worked and FIW.
A possible explanation for the hours worked pathway being significantly related to WIF in the hypothesized model, but negatively instead of the expected positive relationship, could be a practical matter. Simply, coaches who do not feel their work is conflicting with their home life would than be more likely to spend time at work. Similarly, since coaching is such a time consuming profession with clearly understood time requirements (nightly practice, predetermined games, extremely high expectations to not miss a practice or game) and coaches that likely have high role salience (Sage, 1987), it could be that since the coach (and family, if applicable) have already made adjustments to fit that lifestyle. Unfortunately, this does not align with previous research that working longer hours and/or have higher involvement/investment at work correlates with more WIF (see Eby et al, 2005 for review). As mentioned above, this interesting relationship warrants further research.

The overall results also support the suggestion in Chapter II that supervisors play a key role in the work-family experience, as they not only appear to alleviate pressure or barriers which reduces conflict in general, but it is suggested, a “family-friendly” supervisor allows more positive spillover from work to family. Likewise, coaches who felt more autonomy in their jobs reported lower amounts of conflict between the work and family domain. Additionally, a positive relationship between autonomy and WEF suggests that the coaches who felt a greater freedom in the fulfillment of their work task have a more beneficial work-family fit between the coach and his/her environment.
The next set of hypotheses examined the effects of family factors on the work-family interface. Unexpectedly, the number of children had no significant impact on any of the work-family indicators except for a significant correlation relationship between the number of children and FIW. Several post hoc ANOVA tests were also completed and results suggest that coaches with children, regardless of the number or age of children, experience more WIF. Therefore, I suggested that there was little evidence that there is a spillover from family to work because of children, but a child, at any age, within a family does cause conflict with work.

The next two hypotheses examined the effects of a working mate; specifically, Hypothesis 6 examined spouse working hours, with expectations that more hours worked would lead to more conflict and reduce positive spillover, while Hypothesis 7 looked at spouse job type, with more career-type jobs with more involvement and investment would correlate with more conflict. Neither hypothesis was supported. However, there was evidence that a spouse with a career job aids the coach’s work-family experience as coaches with spouses with careers reported higher FEW. Along with Hypotheses 7 and 8, Hypotheses 11 and 12 predicted that there would be gender differences between coaching mothers and fathers as a coaching mother was more likely have a spouse who worked longer hours and in a more career type job. The same result was true for coaches with mates, but no children.

Hypothesis 8 examined the value of a supportive spouse, and the tests suggest that a supportive spouse does correlate to less perceived conflict and more positive enrichment between roles. In the same way the supervisor may be the primary provider
of support, expectations, and feedback for the coach at work, the spouse may fulfill that role at home. Therefore, it is not surprising that these roles play such a significant part in the work-family experience as coaches may seek fit within their work-family experience. However, what was unexpected, partially due to the image of the male coaching having a faithful wife supporting him, was mothers reported higher levels of spousal sport support than fathers did.

Hypotheses 9 and 10 examined the effects of children being involved in the coach’s life. There were no significant relationships involving either child sport attendance or participation within the multiple regressions. However, in isolation, there was evidence that child sport attendance and child sport participation both may affect the work-family fit. While child sport attendance increased the amount of FEW, child sport participation correlated with a decrease in both conflict variables, and an increase in both enrichment variables for coaches who were parents.

Implications

Ecological theory holds that a coach’s work-family experience is based on the fit between the coach and the coach’s personal, structural, and social pressures and resources that are acting on him/her. Several times throughout the manuscript an analogy has been made that this fit is similar to a fit of an individual wearing pants. An assumption for many coaches is that they will work long hours that may interfere with non-work role participation, especially family life. When combined with evening and weekend work and significant travel, it is inevitable that coaches will experience work and family conflicts. It is like being an NBA center that has to buy jeans at a Wal-Mart.
No matter what pair he picks out, they aren’t going to fit in some way—there will be conflict.

A suggestion from this work for future work-family research in all the organizational sciences is to consider a variable that examines overall work-family fit. While the four work-family variables are distinct, it is suggested here that the sum of the addition variables minus the sum of the conflict variables may provide a measure for work-family fit. Like other variables that use a summation of distinct factors to give a global measure, this overall fit may be worth further examination.

As a manager, it is beneficial to help the coach improve fit, even though conflict is inevitable. Previously mentioned, and found throughout the results, was the effectiveness of the spouse and supervisor at alleviating conflict and amplifying enrichment. As a coach and/or a spouse of a coach, it seems helpful to not segment the two roles, but instead make the boundaries permeable so that family is able to share in the coach’s work and the coach is allowed to spill over benefits from work to home. For the coach, this would include sharing with your spouse and kids what is occurring on the team, and when applicable, allowing kids to share in your sport.

For managers it is beneficial to see the correlation between supervisor support and a reduction of conflict, especially for coaches who are mothers (See Appendix C). It is important to note that supervisor support, like spousal support, does not necessarily have to be financial in any way. It does not call for a supervisor to provide additional funds for an assistant coach, but instead to be more understanding that a coach has family commitments. It is suggested here that because coaches have such pressure to
perform and be “on the job” that family policies may allow a mom or dad to stay home, but pressure to perform will return that coach to school. Therefore, those policies will not alleviate that coaches’ conflict, however, a supervisor who understands and expresses that concern to a coach may have a significant impact on reducing tension for that coach. Additionally, it is suggested that supervisor support, like spousal support, allows for greater beneficial spillover from one domain to the other.

While supervisor support was more beneficial for mothers, autonomy appeared to be an important way to assist coaches, especially fathers, in reducing conflict. Besides allowing coaches some freedom in adjusting their schedule for potential family conflicts, the latitude in the decision making process may assist some coaches in feeling in control of the work-family situation. This feeling of self-control may be reduce pressure which allows for a reduction in conflict. Therefore, when possible, it appears that allowing coaches autonomy is beneficial to the coach.

The family counterpart to work autonomy may be children at home. While coaches without kids generally face no caretaking responsibilities, the coach who is a parent does have parenting responsibilities. However, what may be often overlooked is that the presence of a child also loses some freedoms in the care of that child. This may be why parents of adult children expressed less conflict than other groups, even those with teenagers who need less care. The parents of adult children may find a certain freedom and autonomy at home that allows them to regain some control in their life.

I argue here that the coaches’ primary role senders have a significant impact on the coach’s work-family experience. Additionally, I suggest that this supervisory
support is expressed during the hiring process as supervisors relate concern to the well-being of the coaches’ families during the time of hiring and moving transition. They can encourage and support those coaches, and reduce the pressure on them. With this support, it is suggested for managers that coaches be given autonomy.

Strengths and Weaknesses

A limitation is in the research design with the use of a web-based questionnaire. The drawbacks of the questionnaire include response rate and the inability to verify the responses given which may hurt generalizability of the study (Kerlinger & Lee, 2000). However, in an attempt to address external validity issues, comparisons were made to known samples involving NCAA coaches. One benefit of the web-based survey over traditional paper versions is the ability to capture the answers of individuals who do not complete the survey for whatever reason. Generally, it would be expected that had the participant not completed the paper version of the survey, they would not return it. Because abandonment answers can be captured it allows for a comparison that would not be otherwise available. These abandonment answers are beneficial to comparing to other groups of responders, including those who completed a paper survey.

One possible reason for non-response, and an additional problem with web-based surveys, is compatibility issues between the software and older computers. This should not be confused with respondents not having access to computers, as all the NAIA schools contacted had email. In fact, many NAIA schools apparently use their web page for potential student-athletes to contact their coach if interested in participating
in a sport. The problem of older computers/software may have caused several to not complete the survey as 16 coaches contacted me to inform me they had tried the link and were not able to begin the survey. All coaches who had contacted me were given an additional link—which some were able to use—or a paper survey. Unfortunately, if 16 coaches made the attempt to complete the survey, failed, yet took the time to contact me, it is unknown how many other coaches made the attempt, and gave up upon having software difficulty.

An additional problem with the online survey is the possibility that spam filtering on some schools email system directed my email to the coach into a junk mail folder. One coach had contacted me after the third email saying she had not received any of the earlier emails. After an email request by me to check her junk folder, she was able to find the previous emails. As before, it is unknown how many coaches did not answer the survey because of spam filters on emails.

In terms of research design, the study ignores certain important contextual influences, such as school-level effects. Additionally, several problems exist with the cross-sectional design of questionnaires. Thus, coaches who participate in a profession with different seasons may not be adequately able to recall and/or decipher specific amounts of conflict or support with such variance during the sport season and school year. Additionally, common method variance is a problem as all variables were collected at one time which could inflate variable relationships. To guard against common method variance, several questions were reverse coded, and the items for the dependent variables were mixed throughout the questionnaire. Additionally social and
self-desirability may have been an issue as coaches may have been answering questions, especially those in regards to family, to portray themselves how they might prefer to act. Another potential weakness is the limited amount of variance explained in the structural models for the work-family factors. Finally, the participants were both assistant and head coaches. While this diversity is a strength, it should be noted that assistant and head coaches may have differing relationships and distance to their supervisor as head coaches are generally supervised by an athletic director, but supervise their assistant coaches.

A strength and contribution of the current study is the introduction of the enrichment variables to sport research. Future research will need to further expand the measures, and in the same way work-family conflict developed different dimensions, exploration may find multidimensionality within the enrichment variable. Additionally, this is one of the larger studies of conflict within the sport literature. With this, it is hoped that a more of the work and family story may assist researchers and practitioners in exploring retention of coaches and higher job, family, and life satisfaction.

Additionally, this research attempted to find unique ways that families can support the coach through the development and usage of three distinctly sport variables: spousal sport support, child sport participation, and child sport attendance. These variables, it is suggested, help coaches work life fit integrate into their family life, and vice versa. Clearly, further development of these variables is needed, but could be beneficial.
Future Research Recommendations

Perhaps the two most common suggestions in work-family studies are to expand past self-report in investigations on the work-family experience and to continue development on a theoretical model. While some researchers tackle the predictors and outcomes of work-family overlap by doing qualitative work, I argue here to continue developing stronger psychometric measures for work-family factors, especially for enrichment items based on the qualitative work of others. As a practical matter, self-report will continue to be the primary source to gather information on this topic, whether through questionnaire or interview. However, a next step would be to do longitudinal examinations or repeated measures of coaches, in two ways: First, throughout the course of several seasons, including off-seasons, summers, and after big wins and disappointing losses. But more beneficial may be the gathering of information during critical points in their life: promotion to head coach or bigger school, marriage, birth of a child, or children leaving home. It is at these points when pressures and resources may change the most, resulting in a change to the work-family fit that causes an adjustment to a coach’s home life, or a parent’s coaching life.

Future self-reports will need to continue examining personal and social factors, along with the structures at work and within a home. Ideally, examinations of the coaches would include personality factors, religious background and experiences, role saliency, school and self-inflicted pressure during the season and off-season, coach and spouse family backgrounds, and school effects. Unfortunately, the historic question of how much to include onto a questionnaire that will be realistically answered
thoughtfully by a coach who may already be feeling role overload will continue to be problematic (Ryan & Sagas, 2006). This leads to theoretical issues.

Many personal, structural, and social factors affect the work-family interface. Because of the uniqueness of sport, there may be several different boundary conditions, assumptions, and structures that should be examined for their effect on work-family interface. Three different variables were used within this analysis, and other research has suggested studying the ways and effects of coaches who attempt to remove as many barriers as possible between the two roles so that enrichment can be shared (Ryan, 2007). I suggest that researchers continue to explore ways that make sport unique, and within this, develop theory which aids in application for sport managers. Along with this, as ecological theory examines the coach’s fit within the work-family environment, it may be beneficial to continue pursuing development of theory based on what social, structural, and personal characteristics heighten/reduce pressures and resources that aid in the work-family development.

Closing Statements

While it is expected that coaches will feel the pressure of a bad fit between coaching and family, it is important to understand that some of this bad fit can be alleviated by understanding the factors and characteristics affecting the work-family fit. In examining the work factors that play a role in the work-family experience, supervisor support and autonomy helped diminish the pressures associated with conflict and augment the resources that allow for positive spillover. In the family domain, the spouse plays a large role in enhancing the nexus between family and work.
Further research is needed to explore ways the coaching and family roles are beneficial to each other. Along with this, supplemental development of current psychometric measures is needed, both for general measures, and those potentially unique to sport. This manuscript hopes to move sport research into further development of the work-family experience.
REFERENCES


APPENDIX A

TABLES
Table 1
Descriptive statistics, correlations, and reliability estimates of all variables used in analysis (N= 628)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
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<th>3</th>
<th>4</th>
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Notes. * p < .05. ** p < .01. Reliability estimates, when applicable, given in diagonal. For sex, males = 1, females = 2.
Table 1 (continued)

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<th>13</th>
<th>14</th>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td>12. Child sport participation</td>
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<td>(.75)</td>
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<td>.02</td>
<td>-.03</td>
<td>(.81)</td>
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<td></td>
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<td>14. Age</td>
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<td>-.07</td>
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</tr>
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<td>.05</td>
<td>.19**</td>
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Notes. * p < .05. ** p < .01. Reliability estimates, when applicable, given in diagonal. For sex, males = 1, females = 2
Table 2

*A comparison of fit indices of models used in confirmatory factor analysis*

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
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<th>PNFI</th>
<th>RMSEA</th>
<th>$\Delta \chi^2$</th>
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<td>296.52**</td>
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<td>.55</td>
<td>.11</td>
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<td>.14</td>
<td>516.19**</td>
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<td>Two-factor model E</td>
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<td>.46</td>
<td>.16</td>
<td>712.36**</td>
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<td>One-factor model F</td>
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<td>.57</td>
<td>.39</td>
<td>.18</td>
<td>994.42**</td>
</tr>
</tbody>
</table>

*Notes. * $p < .05$. ** $p < .01$. $\chi^2_{\text{diff}}$ represents difference between given model and the hypothesized four-factor model. Model A: WIF, FIW, WEF, FEW as 4 unique factors and is the hypothesized model. Model B: Three factor model combining WIF and FIW as one factor, while WEF and FEW are distinct. Model C: Three factor model combining WEF and FEW as one factor, while WIF and FIW are distinct. Model D: Two factor model combining WIF and FIW as one factor and FEW and WEF as one factor. Model E: Two factor model combining WIF and WEF as one factor and FEW and FIW as one factor. Model F: One factor model. WIF = Work-family conflict; FIW = Family-Work conflict; WEF = Work-family enrichment; FEW = Family-work enrichment.
Table 3

A comparison of fit indices of models used in hypotheses 2, 3, and 4

<table>
<thead>
<tr>
<th>Model</th>
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<th>df</th>
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<th>RMSEA</th>
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<td>140</td>
<td>.97</td>
<td>.69</td>
<td>.05</td>
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Table 4
A comparison of standardized regression weights from structural models

<table>
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<th>IV</th>
<th>DV</th>
<th>Hypothesized model</th>
<th>Rival model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>In season hours</td>
<td>WIF</td>
<td>-.09*</td>
<td></td>
</tr>
<tr>
<td>In season hours</td>
<td>FIW</td>
<td>.17**</td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>WIF</td>
<td>-.10*</td>
<td>-.10*</td>
</tr>
<tr>
<td>Autonomy</td>
<td>FIW</td>
<td>-.12*</td>
<td>-.11*</td>
</tr>
<tr>
<td>Autonomy</td>
<td>WEF</td>
<td>.14**</td>
<td>.13**</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>WIF</td>
<td>-.25**</td>
<td>-.25**</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>FIW</td>
<td>-.12*</td>
<td>-.12*</td>
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<tr>
<td>Supervisor support</td>
<td>WEF</td>
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<td>.16**</td>
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<tr>
<td>Supervisor support</td>
<td>FEW</td>
<td>.24**</td>
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Notes. * p < .05. ** p < .01.
Table 5
Standardized estimates from work-family interference regressed on individual family factors & all family factors.
DV = WIF

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>t</th>
<th>F(df)</th>
<th>R²</th>
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<tbody>
<tr>
<td>Children at home</td>
<td>.00</td>
<td>.05</td>
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<td>Spouse working hours</td>
<td>.00</td>
<td>.07</td>
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<td></td>
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<tr>
<td>Spousal sport support</td>
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<td>-2.11*</td>
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</tr>
<tr>
<td>Child sport attendance</td>
<td>-.02</td>
<td>-.21</td>
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<td></td>
</tr>
<tr>
<td>Child sport participation</td>
<td>-.07</td>
<td>-.94</td>
<td>1.86 (5, 226)</td>
<td>.04</td>
</tr>
</tbody>
</table>

Notes. * p < .05. ** p < .01.
Table 6

Standardized estimates from family-work interference regressed on individual family factors & all family factors.

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>t</th>
<th>F(df)</th>
<th>R²</th>
</tr>
</thead>
<tbody>
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<td></td>
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<tr>
<td>Spouse working hours</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Spousal sport support</td>
<td>-.25</td>
<td>-3.49**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child sport attendance</td>
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<td>.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child sport participation</td>
<td>-.09</td>
<td>-1.24</td>
<td>4.12** (5, 226)</td>
<td>.08</td>
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</table>

Notes. * p < .05. ** p < .01.
Table 7

*Standardized estimates from work-family enrichment regressed on individual family factors & all family factors.*

<table>
<thead>
<tr>
<th>Variable</th>
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<th>R²</th>
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<td></td>
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<tr>
<td>Spousal sport support</td>
<td>.15</td>
<td>2.01*</td>
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</tr>
<tr>
<td>Child sport attendance</td>
<td>-.04</td>
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<tr>
<td>Child sport participation</td>
<td>.09</td>
<td>1.27</td>
<td>1.68 (5, 226)</td>
<td>.04</td>
</tr>
</tbody>
</table>

*Notes.* *p < .05.* **p < .01.
Table 8

*Standardized estimates from family-work enrichment regressed on individual family factors & all family factors.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
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<th>F(df)</th>
<th>R²</th>
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</thead>
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<td>Children at home</td>
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<td>Spouse working hours</td>
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*Notes.* *p* < .05. **p* < .01.
Table 9

A report of standardized regression weights from structural models

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<th>Rival model 2</th>
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<td></td>
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</tr>
<tr>
<td>In season hours</td>
<td>FIW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>WIF</td>
<td>-.17**</td>
<td>-.04</td>
</tr>
<tr>
<td>Autonomy</td>
<td>FIW</td>
<td>-.19**</td>
<td>-.12*</td>
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<tr>
<td>Autonomy</td>
<td>WEF</td>
<td>.09</td>
<td>.23**</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>WIF</td>
<td>-.21**</td>
<td>-.32**</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>FIW</td>
<td>-.07</td>
<td>-.21*</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>WEF</td>
<td>.08</td>
<td>.16*</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>FEW</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: *p < .05. **p < .01. Fit indices for hypothesized model (males only) ($\chi^2_{141} = 304.79, p < .01, CFI = .95, PNFI = .68, and RMSEA = .05$). Fit indices for hypothesized model (females only) ($\chi^2_{141} = 193.26, p < .01, CFI = .98, PNFI = .68, and RMSEA = .04$). Fit indices for second rival model (males only) ($\chi^2_{140} = 270.99, p < .01, CFI = .96, PNFI = .68, and RMSEA = .05$). Fit indices for hypothesized model (females only) ($\chi^2_{140} = 185.74, p < .01, CFI = .98, PNFI = .68, and RMSEA = .04$). (n = 411 for males; n = 217 for females)
APPENDIX B

FIGURES
Figure 1
Descriptive model with organizational variables to be tested in work-family interface.
Figure 2
Hypothesized model with organizational variables with standardized regression weights.

Notes: *p < .05. **p < .01.
Figure 3
Representation of second rival model with standardized regression weights.

Notes: *p < .05. **p < .01.
APPENDIX C

SUPPLEMENTARY RESULTS
The purpose of this appendix is to supplement the findings found in the present dissertation. Primarily, the results given here either concern the second rival model given in the analysis of the work factors or additional gender effects found in the work-family variables. It should be noted that some of these items are discussed in Chapter V, however, because these items were generally not hypothesized, some of the discussion is included in this appendix along with the analysis.

**Supplemental Work-Factor Analysis**

In Chapter IV, there was a second rival model that did have a better absolute fit with one less degree of freedom than the hypothesized model. While both models had good to acceptable fit, because of theoretical reasons, they hypothesized model was retained for further analysis. However, the purpose of the present section is to further discuss findings suggested by the second rival model. As a reminder, Figure 3 and Tables 3 and 4 provide further information, including regression weights, relationships, and comparisons between the models.

Hypothesis 2 predicted that supervisory support would be negatively related to both interference constructs, but positively related to work-family enrichment. Using the second rival model the standardized regression coefficients support Hypothesis 2 as supervisory support was significant for both WIF \((\beta = -.25, p < .01)\) and FIW \((\beta = -.12, p < .05)\), as well as the WEF \((\beta = .16, p < .01)\). However, there was also a significant path from supervisory support to FEW \((\beta = .24, p < .01)\) which had not been found in the hypothesized model.
Hypothesis 3 predicted that autonomy would be negatively related to both interference constructs, but positively related to work-family enrichment. The regression coefficients support Hypothesis 3 in the second rival model as autonomy was significant for both WIF ($\beta = -.10, p = .05$) and FIW ($\beta = -.11, p < .05$), as well as the WEF ($\beta = .14, p < .01$).

Hypothesis 4 only predicted that in-season working hours would be positively related to WIF, with no prediction on the other work-family constructs. A noticeable difference in the second rival model from the hypothesized model was the modification of this path in the analysis from hours affecting WIF, to hours affecting the perceived amount of FIW, and the regression path was significant ($\beta = .17, p < .05$) and the relationship was positive.

Finally for both the hypothesized model and second rival model the correlations between the residuals of the conflict items ($r = .64, p < .01$ for hypothesized model; $r = .63, p < .01$ for rival model) and enrichment items ($r = .36, p < .01$ for both models) were significant. Squared multiple correlations for the hypothesized model included the following: WIF, $R^2 = .10$; FIW, $R^2 = .04$; WEF, $R^2 = .04$ FEW, $R^2 = .00$.

Squared multiple correlations for the second rival model included the following: WIF, $R^2 = .09$; FIW, $R^2 = .07$; WEF, $R^2 = .07$; FEW, $R^2 = .06$.

To further explore the effects of gender, both the hypothesized model and the second rival model were analyzed by gender and are presented in Table 9. It should be noted that the male models exceeded the number of participants necessary for a model with almost 70 parameters as it had 411 subjects, but some care needs to be taken when
reviewing the results of the female models as 217 is an acceptable number in some cases, but generally is small (Kelloway, 1998). However, it should also be noted that no test of invariants was completed to compare for gender differences for the variables used in the model (Byrne, 2001).

As before, fit indices for all 4 models were acceptable, and an evaluation of the regression weights reveals that there are several differences. First, in-season hours with the conflict variables were significant for males, but not for females. As before, the relationship for hours to FIW was expectedly positive in the second rival model, but unexpectedly negative for hours to WIF. An additional difference is that it appears that autonomy is more meaningful in reducing both dimensions of conflict for males, but autonomy had a greater effect on work enriching the family role for females. Finally, while supervisory support benefited male coaches by reducing negative spillover from work to family and increasing positive spillover from family to work, females saw those same benefits, but also significant benefits of supervisory support for reducing FIW and increasing WEF.

Hypothesis 2 dealt with the relationship between supervisory support and the work-family variables. Specifically, I expected that there would be negative relationship between supervisory support and both conflict items, and a positive relationship with WEF. Hypothesis 2 was supported in the hypothesized model and the preferred rival model. Additionally, while the hypothesized model did not predict a significant relationship to FEW, the rival model established a link between supervisory support and FEW. As mentioned in Chapter IV, this link, like the WEF, was positive and significant.
When the two models were analyzed with only females, all of the pathways within both models involving supervisor support remained significant. While supervisor support appears to lower WIF for men, and the results were mixed on how it affected enrichment, it is interesting that the pathway to FIW became non-significant.

When trying to find sex differences, there is some evidence to suggest that even though supervisor support and autonomy is beneficial to both men and women, women appear to garner more benefit from a supportive supervisor, while men are aided by autonomy in their decision making. Finally, fathers reported higher amounts of supervisor support than mothers or males who weren’t fathers.

*Supplemental Family-Factor Analysis*

After completion of the regression analyses for Hypothesis 5 which dealt with the number of children at home, a post hoc examination of the data looked for any significant relationships between number or presence of children and the work-family variables. The only significant correlation between any of the four age groups and the four work-family indicators was a negative correlation ($r = -.14, p < .05$) between FIW and total number of adult children. Obviously, care needs to be taken in interpreting this result as it is only a correlational relationship and could be the random result of multiple comparisons.

Further post hoc examinations of coaches were taken but with dichotomized variables to see if the presence of a child at any age increased conflict. This again included all coaches. A one-way ANOVA was conducted for all four work-family variables with presence of children the factor with two levels, yes or no. Again, a
significant result was found for FIW (F (1, 597) = 14.01, p < .01), and a near significant result for FEW (F (1, 597) = 3.70, p < .06). Further examination using age of oldest child was conducted on coaches who were parents. No significant difference was found for parents who had a school age for an oldest child, nor for those who had a pre-school age child for an oldest child. Overall, there was very little support that total number of children affected enrichment, but some support for children increasing FIW.

Further examination of Hypothesis 7 was completed comparing high, medium and low spouse career choices. A one-way ANOVA was used to examine the effect of spouses’ work choice on the other work-family variables; the results were not significant for FIW and WEF. However, results did suggest a difference for FEW, F (2, 434) = 4.55, p < .05). Using Tukey’s HSD post-hoc test revealed differences between the FEW means of the high career group (mean = 4.21, SD=.68) and both the middle group (mean = 3.99, SD = .71) and lowest career group (mean = 3.99, SD = .89).

To examine differences within the variables used in the study, MANOVA analyses were run. Results of the first analysis suggested some sex differences for some of the dependent variables (Pillai’s Trace = .032, F (4,596) = 4.91, p < .01). Further examination found that females reported more WIF (F (1, 599) = 9.83, p < .01) and FEW (F (1, 599) = 4.62, p < .05). The next MANOVA examined the work factors and results suggested no sex differences for the work variables in-season hours, autonomy, and supervisor support (Pillai’s Trace = .008, F (3, 596) = 1.55, ns). The final MANOVA examined the family variables—spousal support, total non-adult children, child sport participation, and child sport attendance. Results of the last analysis suggested no sex
differences for the family variables (Pillai’s Trace = .034, F (4, 227) = 2.02, ns).

However, because of the impact of spousal support on the work-family indicators, an
ANOVA was completed with just spousal support, but only for those coaches who were
parents. Interestingly, mothers reported higher levels of spousal support than fathers did
F (1, 282) = 7.35.

The multivariate tests were repeated except with only parents, and results
were significant for the work variables (Pillai’s Trace = .030, F (3, 298) = 3.04, p < .05).
Further examination found that fathers reported more supervisor support (F (1, 300) =
8.51, p < .01) with no significant results in autonomy or in season hours worked.

Results of the final MANOVA suggested some sex differences for some of the
dependent variables (Pillai’s Trace = .039, F (4,298) = 3.05, p < .05). Further
examination found that mothers reported more WIF (F (1, 301) = 4.75, p < .05) and
WEF (F (1, 301) = 4.87, p < .05). Note that before, sex differences were found for WIF
and FEW, while for parents who coach, WIF continued to be significant, while now
positive spillover from work to family became significant.

Finally an examination within each gender looked for perceived differences
for the work variables and outcomes. When a MANOVA analysis was used to compare
women without children to those with children results were not significant for the work
predictors (Pillai’s Trace = .0012, F (3, 205) = .85, ns). Although there did not appear to
be differences in the work factors, a MANOVA of the work-family outcomes did find
some difference (Pillai’s Trace = .703, F (4,204) = 3.04, p < .01) with mothers reporting,
not surprisingly, more FIW (F (1, 207) = 8.52, \( p < .01 \)) and also more WEF (F (1, 207) = 5.77, \( p < .05 \)).

For the fathers, the MANOVA analysis examining work factor differences did suggest further examination (Pillai’s Trace = .026, F (3, 385) = 3.49, \( p < .05 \)) with fathers reporting more supervisor support than non-fathers (F (1, 387) = 9.92, \( p < .01 \)). Significant differences were found within the work-family variables (Pillai’s Trace = .026, F (3, 385) = 8.08, \( p < .01 \)). Like the mothers, fathers reported more FIW (F (1, 388) = 7.76, \( p < .01 \)), but different from the mothers, fathers reported more FEW (F (1, 388) = 9.14, \( p < .01 \)).

Bivariate correlations comparing age to variables examined within the present study found no significant relationships with any of the work-family variables. However, age correlated positively with autonomy and negatively with in-season hours. Also, female coaches tended to be younger.

In comparing sex and parental differences on the work-family outcomes, women reported greater WIF and FEW. When children are added into the picture, moms report greater WIF and WEF than women without children while dads report greater WIF and FEW than men without children.
APPENDIX D

SCALES ON QUESTIONNAIRE
See Chapter III for source of the following scale items. All items were on a scale of 1 to 5, and unless noted otherwise, were anchored from strongly disagree to strongly agree.

Work Interference with Family
1. My coaching job makes me feel too tired to do the things that need attention at home.
2. My coaching interferes with my responsibilities at home, such as yard work, cooking, cleaning, repairs, shopping, paying the bills, or child care.
3. Coaching worries or problems distract you when you are at home.
4. Stress at coaching makes me irritable at home.
5. My coaching job reduces the effort I can give activities at home.
6. After coaching, I come home too tired to do some of the things I'd like to do.

Family Interference with Work
1. Personal or family worries and problems distract me when I am at work.
2. I'm often too tired at coaching because of the things I have to do at home.
3. My personal demands are so great that it takes away from my coaching.
4. Stress at home makes me irritable at coaching.
5. Activities and chores at home prevent me from getting the amount of sleep I need to do my coaching job well.
6. Responsibilities at home or with family reduce the effort I can devote to my coaching job.

Work Enriches Family
1. The skills I use on my coaching job are useful for things I have to do at home.
2. Having a good day on my coaching job makes me a better companion when I get home.
3. The things I do at coaching help me deal with personal or practical issues at home.
4. The things I do at coaching make me a more interesting person at home.

Family Enriches Work
1. Talking with someone at home helps me deal with problems at coaching.
2. Providing for what is needed at home makes me work harder at my coaching job.
3. The love and respect I get at home makes me feel confident about myself at coaching.
4. My home life helps me relax and feel ready for the next day's work.

Supervisory Support
1. My supervisor is understanding when I talk about personal or family issues that affect my work.
2. I feel comfortable bringing up personal or family issues with my supervisor.
3. My supervisor really cares about the effects that work demands have on my personal and family life.
4. My supervisor understands that I have to meet personal or family responsibilities as well as those related to my job.
5. My supervisor is supportive when personal or family problems arise.
6. My supervisor encourages me to have a life outside of coaching.

Autonomy
1. Coaching here permits me to decide on my own how to go about doing the work.
2. Coaching here gives me considerable opportunity for independence and freedom in how I do the work.
3. This coaching job gives me a chance to use my personal initiative or judgment in carrying out the work.

Spousal Sport Support
1. My spouse/partner enjoys attending contests that I coach.
2. My spouse/partner enjoys talking about the team I coach.
3. If asked, my spouse/partner would enjoy helping with some task involving the team I coach.
4. My spouse/partner learns the names of many of the players/participants from the team I coach.
5. The players/participants on my team know who my spouse/partner is.

Child Sport Participation (anchored from 1-Never/almost never to 5- Almost always/Always)
1. My children come with me to practice.
2. My children attend the home contests when I am coaching.
3. My children attend the away contests when I am coaching.

Child Sport Involvement
1. My children enjoy playing the sport I coach.
2. Generally, my children like that I coach.
3. My children enjoy to participate in the sport I coach.
4. My children would be sad if I was no longer coaching.

Spousal Career Type
1. I would label my mate's employment as a "career" job.
2. My mate's job required significant training or schooling.
VITA

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