EXAMINING COACHING EFFICACY AMONG YOUTH RECREATIONAL BASEBALL COACHES

by

Mark Murray
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Examining Coaching Efficacy among Youth Recreational Baseball Coaches

A Project submitted in partial fulfillment of the requirements for the degree of Master of Science at George Mason University

by

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TABLE OF CONTENTS

List of Tables	V
List of Figures	vi
List of Abbreviations or Symbols	vii
Abstract	ix
Chapter One: Introduction	1
Purpose of Study	3
Research Questions	3
Definitions	3
Chapter Two: Review of Literature	5
The Coaching Efficacy Scale	5
Benefits of Youth Sports	<i>6</i>
Motivations for Participation in Youth Sports	8
Why Youth Players Cease Participation	g
Characteristics of a Successful Youth Coach	
Mental and Behavioral Characteristics	
How Coaches Learn to Coach	17
The Coach-Parent Relationship	19
Summary	20
Chapter Three: Methodology	22
Participants	22
Instrumentation	23
Data Collection	23
Confidentiality	24
Analyses	25

Chapter Four: Results	26
Descriptive Analyses	26
Study Subjects	26
Coaching Efficacy Scale	30
Analysis of Research of Questions	31
Research Question 1	31
Research Question 2	32
Research Question 3	37
Chapter Five: Conclusions and Implications	39
Major Findings and Conclusions	39
Suggestions for Future Research and Practice	43
Appendix A: Survey	47
Appendix B: Recruitment Email	
Appendix C: Follow-up Recruitment Email	53
References	54

LIST OF TABLES

TABLE	PAGE
Table 1. Descriptive Statistics for Recreational Baseball Coach Respondents	27
Table 2. Summary Statistics for the Coaching Efficacy Scale and Subscales	31
Table 3. Results of One-way Analyses of Variance for Coaching Efficacy Subscales by Youth Recreational Baseball Coach Age	34
Table 4. Results of One-way Analyses of Variance for Coaching Efficacy Subscales by Youth Recreational Baseball Coach Highest Level Played	35
Table 5. Results of One-way Analyses of Variance for Coaching Efficacy Subscales by Youth Recreational Baseball Coach Rating of Coaching Expertise	e36
Table 6. Correlations between Coaching Efficacy Subscales and Win Percentag	e37

LIST OF FIGURES

FIGURE	PAGE
Figure 1. Youth Recreational Baseball Coach Education Training Methods Used to Enhance Coaching Abilities	28
Figure 2. Youth Recreational Baseball Coach Level of Coaching Expertise	29

LIST OF ABBREVIATIONS OR SYMBOLS

Coaching Efficacy Scale

ABSTRACT

EXAMINING COACHING EFFICACY AMONG YOUTH RECREATIONAL

BASEBALL COACHES

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The purpose of the present study was to examine coaching efficacy among youth

recreational baseball coaches. Studies have been conducted focusing on coaching

efficacy with university or elite level coaches, but none specifically on youth recreational

baseball coaches. An instrument created on SurveyMonkey.com comprising the

Coaching Efficacy Scale, socio-demographic, and experiential questions was sent via

email to members of the Virginia Baseball Club to collect data on youth recreational

coaches in Northern Virginia. Sixty-one coaches fully responded (N=61) to the survey. It

was found that there was a significant difference among age groups and years of coaching

experience with regard to Game Strategy and Technique Efficacy. Further, youth

coaches were found to take pride in their position as evidenced by the amount of time

spent and resources used for coaching. Those responding defined their success as a

coach in terms of devloping the players, ensuring they have fun, and making sure they

countinue playing baseball. Win percentage was also found to be significantly correlated with Motivational Efficacy and Total Coaching Efficacy. Results of this study can be used by youth baseball leagues to modify and improve their coach training programs, and by coaches as a resource for viewing their strengths and weaknesses in their youth coaching endeavors.

Keywords: coaching efficacy, youth sport coaching, youth baseball

CHAPTER ONE: INTRODUCTION

My first organized youth sport experience occurred when I was about five years old. I played on the neighborhood soccer team. I added organized basketball to fill my winter schedule when I got to second grade. This continued each Winter, Spring, and Fall season until I was eight. I quickly fell in love with playing basketball and started to find soccer unappealing, and thus stopped playing soccer. It was not until I was about nine years old that I finally played organized baseball. This seems strange to me when I think back, as I always remember playing catch in the yard with my dad or best friend. When I finally began playing baseball, I thoroughly enjoyed it and excelled immediately.

Youth baseball participation has declined over the last decade, with a 24% decrease in participation for 7-17 year olds from 2000-2009 (Futterman, 2011). This is an alarming rate for a sport that is considered America's pastime. This is not the case for all youth sports, as Futterman notes, "participation in youth tackle football has soared 21% over the same time span [2000-2009], while ice hockey jumped 38". What explains this decline in baseball and what can be done to address it? It would be a shame for the youth participation rate of baseball to continue to dwindle in the United States. Baseball is not only a game to play, but a way for young people to learn important life skills such as teamwork or self-confidence, and also, a way to get exercise. I firmly believe that a key indicator in whether youth athletes enjoy a sport is the coaching they receive. In baseball, that might prove to be even more important.

Baseball is a sport that requires specific skills and practice to improve. It is also a slow moving game that requires patience as a player. A good youth baseball coach can

address these issues and create an opportunity for players to improve their skills and enjoy themselves while doing so.

Working with youth baseball, I am able to interact with many youth team coaches and observe them run practices or drills. I notice the varying differences in efficacy that these coaches have in coaching youth baseball. In other words, when a coach is interacting with their team, it is easy to tell a coach who is showing confidence in what he/she is doing through both physical and verbal actions. A coach with high efficacy will have great confidence in his/her abilities. A problem can arise for a youth coach when he/she has high efficacy in coaching the physical aspects of baseball, but not the mental aspects. Too many of these coaches think that because they played ball themselves in high school or college, they are equipped to coach. Too often, these coaches verbally instruct and do drills that are not age appropriate. The phrasing and drills are meant for 18 year old players, not 8 year olds. When the players cannot accomplish the drills correctly, coaches will yell or degrade them for a poor attempt. At a young age, especially in recreational leagues, youth will naturally improve their skills through playing and practicing basic fundamental skills. Coaches should spend more time and effort praising and encouraging the players than trying to teach advanced skills.

Much research has been conducted on youth sport coaching and on coaching efficacy (including research on youth coaching efficacy). This research has focused on college level players or on elite athletes and covers a wide range of sports, both team and individual. However, there is no specific research on coaching efficacy in a recreational youth baseball context.

Purpose of Study

The purpose of this study is to examine differences among various sociodemographic or experiential subgroups and coaching efficacy in youth recreational contexts. This study also looked at how youth coaches define success and if there are any correlations between coaching efficacy and win percentage. Results of this study can be used by youth baseball leagues to modify and improve their coach training programs and by coaches as a resource to learn about their personal coaching efficacy.

Research Questions

The study was guided by the following research questions:

- 1. How do youth coaches define success?
- 2. Are there significant differences among socio-demographic and experiential subgroups (specifically ethnicity, gender, age, highest level of baseball played, coaching experience, training methods, coaching level) with regard to coaching efficacy (specifically Game Strategy, Technique, Motivation, and Character Building Efficacy)?
- 3. Is coaching efficacy (Total Coaching, Game Strategy, Technique, Motivation, and Character Building Efficacy) correlated with win percentage?

Definitions

Several terms used throughout the study, are defined as follows:

Youth baseball coach – Someone who coaches a team where the players are aged 12 and under, specifically the 7-12 year age range.

Coaching efficacy – Defined by Feltz, Chase, Moritz, and Sullivan (1999), coaching efficacy is "the extent to which coaches believe they have the capacity to affect the learning and performance of their athletes (p. 765)."

CHAPTER TWO: REVIEW OF LITERATURE

This chapter includes a review of key literature on topics related to youth sports, youth coaching, and coaching efficacy. Specific areas of research that were considered included the benefits and motivations of youth sports, parents and coaches roles in youth sports, what it takes to be successful as a coach, and how coaching efficacy is measured.

The Coaching Efficacy Scale

The Coaching Efficacy Scale (CES) is an instrument developed by Feltz, Chase, Moritz, and Sullivan (1999) to measure coaching efficacy. There have been studies done on efficacy of classroom teachers and the results yield that teachers with high efficacy had greater effects on student learning. Since coaches are a form of teachers, Felt et al. believes that efficacy would play an important role in coaching success. The researchers defined coaching efficacy as,

The extent to which coaches believe they have the capacity to affect the learning and performance of their athletes. Performance in this sense is also meant to include the psychological, attitudinal, and teamwork skills of athletes (p.765).

The CES consists of four dimensions of efficacy: motivation, teaching technique, character building, and game strategy. This tool can be useful for coaches to self-evaluate their strengths and weaknesses in the certain areas of efficacy. It can also be used by

leagues to see if more information and support is needed to be given to the coaches and how the different areas compare.

The CES is the only published instrument to measure coaching efficacy (Myers, Wolfe, & Feltz, 2005). It is made up of 24 items that all begin with the phrase "How confident are you in your ability to…" and are followed by questions that relate to one of the four dimensions. Participants then answer on a 10-point Likert scale ranging from 0 (very poor) to 9 (excellent). The questions are divided by dimensions as follows: 7 on motivation, 7 on game strategy, 6 on teaching technique, and 4 on character building (Myers et al., 2005).

Feltz et al. (1999) examined sources and outcomes of coaching efficacy. They found that perceived social support, experience, past successes, or preparation may relate to higher efficacy. More effective coaching behaviors, more games won, and player satisfaction may, in turn, be an outcome.

Benefits of Youth Sports

Youth sport coaches must understand the principle benefits of youth sports in order to help achieve these benefits, thereby fulfilling players' needs, and improving the perception and satisfaction of the players' parents. According to Smoll, Cumming, and Smith (2011), three key objectives of youth sport are physical benefits, psychological skills, and social activities. The authors further note that youth sports provide"a developmental setting within which an educational process can occur" (p. 14). It is important for coaches to realize this, so their time and energy are spent coaching techniques, as well as real life skills. At the youth sport level, it is also important to make

a good impression on the parents, since the parents are the ones who have the greatest impact on how their child thinks and feels about other people or ideas.

Physical benefits developed from youth sport are crucial to a child's well being and have the potential to last throughout their lives or form a basis for healthy living and physical activities as an adult. Parents want to make sure their children are staying active to instill a healthy and fit lifestyle for the children at a young age, and try to avoid problems like childhood obesity or diabetes. There is a 70% chance that overweight adolescents will become overweight or obese adults (Hedley, Ogden, Johnson, Carroll, Curtin, & Flegal, 2004). The National Football League has recognized the need for America's youth to be active and created NFL Play 60, whose mission, is "To make the next generation of youth the most active and healthy" (About NFL Play 60, 2012). Through youth sports, participants develop sport skills such as throwing, catching, or kicking. While it is possible to develop these skills without playing organized youth sports, playing on a team provides a good environment for development. Equipment is provided by the leagues and a coach, who hopefully is skilled in teaching these techniques, can give plenty of repetitions to each player. Sports can be crucial to improving hand-eye and foot-eye coordination, both skills that are necessary throughout life, of the youth players.

Players will develop psychological skills from participating in a youth sport. Smoll et al. (2011) list leadership skills, self-discipline, respect for authority, competitiveness, cooperativeness, sportsmanship, and self-confidence as examples.

Some of these psychological skills develop from being part of a team and working towards common goals, as well as from being placed in a competitive environment.

Being part of a team also enhances social development by creating an opportunity for the players to meet new people, develop relationships, and ultimately become friends with their teammates, or even the coaches. Being part of these social activities also gives parents a chance to watch and support their children during games. This has potential to strengthen family bonds and give the children a chance to impress their parents in new ways.

Finally, the last and possibly most important objective of youth sports is also the primary motivation for why kids participate in youth sports:to have fun. Coakley (2004) argues that since children seek fun in their own games, then their sports experience should be tailored to increase fun. This concept is detailed in greater depth in the next section.

Motivations for Participation in Youth Sports

Understanding the reasons why youth play sports is important if the coach wishes to have success in developing players and keeping them engaged. Pugh, Wolff, DeFrancesco, Gilley, and Heitman (2000) studied 12 elite level eleven year old baseball players whose team had qualified for an international all-star tournament, to find out why elite youth athletes participate in baseball. After each player on the team was interviewed by the researchers, a list was created of the most frequently noted reasons for play, specifically to have fun, challenge their abilities, and engage in social interactions. Those same factors were supported in a study on 100,000 youth sport participants in Michigan

(Universities Study Committee, 1978). Study results show that youth participants played sports, "a) to have fun, b) to improve skills and learn new skills, c) for thrills and excitement, d) to be with friends or make new friends, and e) to succeed or win" (as cited in Smoll et al., 2012, p. 16).

Results of both Pugh et al. and the Universities Study Committee show that youth players participate in a sport to benefit from the enjoyment and social factors that the sport atmosphere will provide. In no studies is winning noted as a top reason for participation. This is validated by Cumming, Smoll, Smith, and Grossbard (2007), in a study of youth basketball players, who found that athletes' enjoyment of the sport experience is more related to the motivational climate created by the coach than the winloss record of the team.

Why Youth Players Cease Participation

With the youth baseball population declining over the past decade, it is crucial for baseball coaches to understand the reason for this pattern and to do what they can to keep the kids interested in baseball in order for baseball to continue to be seen as a popular sport to play. There are four main reasons for why youth players cease participation in baseball (i.e., a high emphasis on winning, too much pressure, negative experiences, lack of interest).

Youth players quit baseball due to too much emphasis on winning games. As noted by Pugh et al., the Universities Study Committee, and Cumming et al., youth players primarily look to enjoy themselves and place a lesser emphasis on wins and losses. Smoll et al.(2011) mention the dangers that can occur with the

"professionalization" of youth sports. Professional sports exist to make money and provide entertainment for the fans. The athletes who play in professional leagues get paid and are there to win games for their team. If the team does not win, the athletes may be cut or traded and replaced by other athletes who hope to have more success. Winning is everything in professional sports. Too many youth coaches believe that recreational youth leagues are centered on winning as well. This may cause the coach to become too obsessed with the scores of the games and not focus enough attention on whether the players are enjoying themselves and developing physical and social skills, thus leading to players quitting.

The overemphasis placed on winning can also create a climate of immense pressure (and a loss of perspective by the coach) on the youth. Although baseball is primarily a Spring and Fall sport, many coaches have their players practice year round to stay in shape for the upcoming season. This regimen may cause the players to feel burnt out with play. Coakley (2004) describes the term *burnout* by saying it occurs when the young people felt they had lost control over their lives and felt they could not explore and develop identities apart from sports (p. 105). This would cause stress for the players and cause them to have less enjoyment when participating in the sport.

Often youth players stop playing baseball due to a negative experience with their coach. This can be one specific experience or a season of actions that did not appeal to the player. The elite youth baseball players in the study by Pugh et al. (2011) were asked what they perceived as sources of stress on the baseball field. The most common response by these players was that they would be stressed when a coach would yell at

them in front of the rest of the team after they made a mistake. Most players know when they have made a mistake and feel like they have let the team down. It therefore seems unnecessary for a coach to add to these feelings by yelling. A coach should be a calm figure who makes the youth player feel better about themself and motivates them to forget about the mistake and move on. A coach can also use mistakes by players as a teaching tool; educating the players as to what could be done to prevent the mistake from occurring again.

While some coaches spend too much time focusing on drills and preparing the team to win, it is still important to youth players that they can perform at a level that will allow them to succeed and enjoy the game. Much like the sentiment of the *No Child Left Behind* program for education, it is important for youth baseball coaches to put focus on the players who are lagging behind in skill development as well as the best players on the team. It is too common for a coach to "give up" on a less developed player. A youth player who does not perform well will easily get discouraged and might look to participate in different sports or activities (Smoll et al., 2011).

The final reason why youth baseball players will stop participating in the sport is simply due to a lack of interest. It is important for the player to want to play baseball. Instead, a parent may register the player for the sport without consulting the child, as the parent thinks it will be a good activity or due to personal experience. According to Weiss and Weiss (2006) as cited in Smoll et al. (2011), "Athletes who feel 'entrapped' report less enjoyment, lower intrinsic motivation and benefits of being involved in sports, and are more likely to drop out of sports"(p. 16). Parents should wait for their child to express

a desire to participate in a sport, rather than choosing for the child. Some parents believe that they can only be considered a "good parent" if they enroll their children in organized sports, where they can participate in a safe, structured setting and not be causing trouble elsewhere (Coakley, 2004).

Even the players who are initially excited to play baseball can experience diminished interest in the game over time. Baseball, by nature, is a slow game. This may make it less interesting for youth who are fast paced with short attention spans. There are however numerous strategies for a youth baseball coach to help speed up the game and keep the kids moving around and focused. In a recreational youth baseball league, an equal or even larger amount of time is spent at practices as opposed to games. Thus, it is important for the coach to keep practices fast paced and fun, while also ensuring that the players are working on skill development.

The elite baseball team studied by Pugh et al. (2011) said their two main complaints about practices were that there was too much standing around and that there were too many repetitions of the drills that they would do. Ample resources exist that provide ideas for coaches on different drills for practice. Coaches should take advantage of these resources in order to keep the practices lively and the players interested. Such strategies include dividing the players into groups for stations instead of just having everyone wait in line for one drill, and turning some drills into games and point competitions; this will boost the focus and energy of players (Murray, 2010).

As far as the games are concerned, the main problem lies in the age range of 7-9 years old. This is when players start pitching for the first time. Prior to this age, the

coaches or a pitching machine are used to throw the ball to the batter. This allows for consistent strikes to be thrown and thus allow for more balls to be hit in play. When the players start pitching, they neither throw a high percentage of strikes, nor does the catcher catch a high percentage of pitches. Therefore, many batters are walked and the catcher spends a lot of time chasing the ball to the backstop. This further slows the game.

Many youth leagues have adopted new rules and created some variations from traditional baseball in order to try and keep the game fast paced for certain age levels. Murray (2010), in his work entitled *Youth Baseball Coach's Playbook*, lists many suggestions to provide "max touch" baseball to the players. The suggestions are centered on limiting down time and having the ball in play as often as possible. For example, a coach may stand at the backstop to fetch the ball for the catcher, the youth pitcher may be replaced by the coach after having thrown four balls (in order to eliminate walks and let everyone swing), and limiting the scoring in an inning to only five runs per team so one team is not batting for too long. Coakley (2004) states that the best recommendations to change organized sports are to increase the action, increase the personal involvement, create close scores, and maintain friendships.

Characteristics of a Successful Youth Coach

Researchers have been working to determine what makes some coaches more successful than others when it comes to win percentage, morale boosting, or player development. Of these, a number have focused on the correlation between coaching efficacy and certain characteristics of coaches like length of experience, gender, or behavioral techniques (Campbell & Sullivan, 2005, Feltz et al., 1999). Common sense

would lead one to believe that the number of years spent coaching would translate to significantly higher coaching efficacy. However, Kavussanu, Boardley, Jutkiewicz, Vincent, and Ring (2008) showed this was not the case, at least with regards to university teams in Britain. Results indicated years of coaching experience did not significantly predict motivational efficacy, character building efficacy, or total coaching efficacy. The one efficacy area that was significantly predicted by years of coaching experience was technique efficacy. This makes intuitive sense because a seasoned coach will have developed knowledge of the skills after years of experience.

Sullivan, Paquette, Holt, and Bloom (2012) agreed that coaching experience was uncorrelated to efficacy. The researchers also found that coaching experience was uncorrelated to any of the leadership behaviors from the Revised Leadership Scale for Sports (RLSS). This could mean that leadership is a trait that people naturally have and it is not something one can work to improve through practice.

Along with coaching experience, Kavussanu et al. (2008) looked at the relationship between gender and coaching efficacy. The researchers not only focused on whether there were differences in scores between males and females, but also looked at the scores when there was a mismatch of gender between the coach and players (e.g., a male coaching a women's soccer team). Gender did not predict motivation or character building efficacy; however, it was positively correlated with game strategy efficacy. Males had higher levels of game strategy efficacy than females. This is because males place a higher emphasis on producing winners, whereas females focus more on understanding the players' feelings and being a role model. Finally, the authors

discovered that if there is a gender mismatch between coach and players, then the players are less likely to see their coach as an effective motivator or character builder because the youth players cannot relate with adults of the opposite sex like they can with same sex adults.

Mental and Behavioral Characteristics

There are certain characteristics that all coaches should possess in order to have success in player development and creation of an exciting environment. First, a successful youth coach must be able to communicate with the players at a level that the players can comprehend. If a coach gets too technical when teaching some skills, it has the potential to go over the players' heads. If a coach can demonstrate each skill and drill correctly, but cannot convey what he/she is doing into words, the demonstration is only so effective. Strong training and instructional skills are crucial to help player development, but it is also key for the coach to be able to praise and encourage the players along the way (Sullivan et al., 2012).

It is important for young players to use youth sports as a learning tool for life skills. Therefore, coaches need to prioritize which goals are most important for the players. Sportsmanship and effort should be promoted and praised, and winning should be seen as a byproduct (Smoll et al., 2012). Coaches who cannot separate winning from sports will not be beneficial for all youth developmental players and might intimidate some of the weaker players.

Thelwell, Lane, Weston, and Greenlees (2008) studied the relationships between emotional intelligence and coaching efficacy. Participants took both the CES and the

Emotional Intelligence Scale (EIS) and the intercorrelations were analyzed. The authors found that social skills and regulation of emotions are significant predictors of motivation efficacy, optimism is significantly associated with character building, and technique efficacy is significantly associated with appraisal of own emotions. There were no significant predictors for game strategy efficacy. Finally, the researchers found that both coach appraisals of their own emotions and regulations of emotions were significantly correlated with overall coaching efficacy scores. The results of Thelwell et al. show that a high emotional intelligence will lead a coach to believe in his/her abilities. While the emotional characteristics have no bearing on game strategy efficacy, a skill that develops mostly from in game experience, they do help with the other aspects of coaching efficacy. Therefore, if a coach is having difficulties connecting with a player or team on the mental or emotional side of the game, the coach would benefit from work on strengthening or refocusing his/her own emotional skills. Business leaders lacking in emotional intelligence have significantly reduced leadership effectiveness (George, 2000).

Having high emotional intelligence can only do so much for a coach if he/she cannot act accordingly. It is crucial for a coach to behave in ways that create a comforting and positive environment to help the players feel at ease and believe that they can succeed. Youth sport participants are generally eager to please adults and constantly seek approval from them (Murray, 2010). As such, they are already disappointed when they make a mistake and feel they have let down others. When a coach singles out a player by yelling or saying negative things about their play, the player tends to become stressed, and thus will enjoy the game less (Pugh et al., 2011).

It is therefore important for the coach to provide positive feedback. This includes social support (looking out for the welfare of the athletes), situational favorableness (coaching to the level of the athletes), or verbal congratulation and consolation of players (Sullivan et al, 2012). Increased coaching efficacy is generally associated with more frequent displays of these effective coaching behaviors. Horn (2002) agrees with this sentiment saying that, in coaching, behavior is an outcome of efficacy. Higher efficacy will lead to more positive behavior.

How Coaches Learn to Coach

The value of educating coaches is underestimated in far too many youth leagues, dependent on volunteers. This not only causes the level of play in the league to suffer, but the potential for the players to have the best experience possible may decline.

Sullivan et al. (2012) believe there is a domino effect that starts with coaching education and results in a positive youth sport experience. A higher level of coaching education leads to higher coaching efficacy, more demonstrations of positive coaching behaviors, and finally a positive youth sport experience for the players. Leagues need to know which resources help coaches best build their knowledge and efficacy.

Many youth coaches, especially coaches who are the parent of a player, believe that just because they participated in the same sport when they were in high school or college, they are qualified and ready to do a great job. This is not necessarily the case. While prior playing experience does help with the technical aspects and the strategy of coaching, it does not help with the motivation, character building, or teaching abilities (Kavussanu et al., 2008). Coaches who rely heavily on memories from their playing

career will end up trying to recreate what occurred in their own training, which usually occurred at a higher level than a youth developmental league, and does not fit the specific needs of their team (Lemyre, Trudel, & Durand-Bush, 2007).

Contrary to prior playing experience, prior assistant or head coaching experience in the same or different sport at the same level does yield positive benefits to coaching efficacy (Lemyre et al., 2007). Being an assistant coach prior to being a head coach allows for one to learn with limited responsibility and pressure. That leads to opportunities for observation of the head coach and also a chance to socialize in the coaching community to learn how things should be done.

Not every youth coach has the opportunity to serve as an assistant coach for a season or two before taking over a head coaching role. This especially holds true for volunteer coaches and parent coaches. Many leagues, and even some national organizations, realize the difficulties that a beginner youth coach faces, and have instituted a coaching education program. Canada created the National Coaching Certification Program (NCCP) in 1974 in partnership with their national government ("Coaching Association of Canada," 2013). Campbell and Sullivan (2005) showed that all four areas of the CES improved from the pre-test to post-test with the NCCP Level One Theory Course administered as the treatment between tests. Trudel, Gilbert, and Werthner (2010) agree with those results and generalize them by saying that "[large scale] programs positively effected coaches' efficacy beliefs, knowledge, and behaviors" (as cited in Sullivan et al., 2012, p. 130).

If leagues do not have a coaching education program, it is important for new coaches to seek out educational resources on their own. A simple online search can lead to countless websites on coaching theories, coaching drills, or motivational strategies for players of all ages. Books and DVDs can be purchased on coaching and there are many organizations that hold coaching clinics throughout the nation.

The Coach-Parent Relationship

A positive coach-parent relationship is vital to youth sport and is often overlooked. While the coach's number one responsibility is to his/her players, the relationship with and impression made on the parents is essential. Positive relationships with the parents will insure youth participation and maintain interest. A negative relationship between coach and parent may damage the youth experience as parents have a great influence over their children at these ages (Smoll et al., 2012). There are many interactions among parents, players, and coaches and strong relationships are necessary in order to create the most positive experience for all.

One way to help make a good first impression is for the head coach to hold a parents' meeting prior to the season. This will immediately open two-way communication between the coach and parents and give everyone a chance to get familiar with each other. In this meeting, a coach can explain their background, discuss team expectations and goals, and provide a quick overview of the rules of the sport/league. Finally, a question and answer period at the end would give parents a chance to ask any questions and voice any concerns.

Despite a coach's best effort, not all parents are easy to deal with in a youth sports context. According to Smoll et al. (2012), coaches should be on the lookout for parents who fall victims to the reversed-dependency phenomenon. The researchers describe this phenomenon as, "All parents identify with their children to some extent and thus want them to do well. Unfortunately, in some cases, the degree of identification becomes excessive, and the child becomes an extension of the parents. When this happens, parents begin to define their own self-worth in terms of their son's or daughter's successes or failures" (p. 17). A coach can try to counter this phenomenon by stressing to the parents that youth sports are a learning experience and the number one goal of this team is to have fun. Winning is not all that matters in developmental youth sports; if the parent believes otherwise, the child may benefit from participation in a more competitive league next season.

Summary

The review of related literature shows the profound impacts that coaches and coaching styles can have on youth players. Coaches can contribute to player's success in the sport, but they can also contribute to the player ceasing participation. Youth sport coaches also have a unique opportunity to help develop skills such as sportsmanship or leadership in a young person's life. Thus, it is crucial for youth coaches to keep their priorities in order, so the youth can develop, have fun, and not place too much emphasis on winning.

The research shows that the characteristics needed to be a successful youth coach all lie within the coach's mentality. It makes no difference at the youth level if the coach

has played 15 years in the major leagues or has never played the game before. The most important characteristics are an ability to communicate with younger people, a high emotional intelligence, and a positive attitude. The coach will have more success if they stay positive and encouraging during the practices and games rather than focusing on the mistakes that the players will inevitably make. For a coach who has good psychological skills but is lacking in the technical baseball skills, there are many resources available. The technical skills and rules of baseball can be easily learned through books, websites, or coaching clinics.

CHAPTER THREE: METHODOLOGY

This chapter includes a discussion of the methodology including the study participants, the instrument that was used, how the data were collected, and what types of analyses were conducted. This chapter also details the confidentiality, validity, and reliability of the instrument.

Participants

The study was based on a census sample of 422 coaches in the Northern Virginia area listed by the Virginia Baseball Club (VBC). VBC is an organization that provides baseball instruction at its indoor facility in Fairfax or through outdoor camps around that area. It provides baseball classes, camps, and lessons to players and also holds two coaching clinics each year. Coaches in the past who attended the coaching clinics or registered their players or teams for a VBC service were enrolled on the VBC email list. These coaches are all volunteers who are leading teams in youth recreational leagues. The players on the teams are 12 years old or younger. The coaches were contacted if they had an email address registered with the VBC. Out of the 422 emails, 61 participants submitted the survey. This results in a 14.5% response rate. It is worth noting that approximately 30 additional coaches opened the survey, but did not choose to complete the questions asked. Taking these into account, the response rate is 15.6%.

Instrumentation

A questionnaire (see Appendix A) was developed comprising the Coaching Efficacy Scale (CES), a twenty-four item Likert-scale that divides responses into four different categories (i.e., motivation efficacy, game strategy efficacy, technique efficacy, and character building efficacy). The Likert scale asks the participant to answer "How confident are you in your ability to..." on a scale from 0-9 with 0 being not confident at all and 9 being extremely confident. The CES is a valid and reliable instrument (overall reliability of α =.95) designed to measure the concept of coaching efficacy and examine its hypothesized sources and outcomes (Feltz et al, 1999). Myers et al. (2005) extended validity evidence for the CES by providing an evaluation of the psychometric properties of the instrument.

In addition to the CES, a series of socio-demographic and experiential items was included (e.g., age, gender, years of coaching experience, baseball playing experience, and how they have been educated on coaching). The items in the socio-demographic portion were based on the questions asked by Kavussanu et al. (2008). Adding socio-demographic questions to the survey in order to segment the results does not affect the validity or reliability of the instrument.

Data Collection

The survey was created on SurveyMonkey.com and included Likert-scaled items to which respondents were asked to choose only one response, choose multiple responses, or write in answers. The link for the survey

(https://www.surveymonkey.com/s/CoachEfficacy) was included in the email that was

distributed (see Appendix B) on July 11, 2013. Participants were given one week to complete and submit the questionnaire. After the week was up, a reminder email (see Appendix C) was sent on July 18 to encourage coaches to fill out the questionnaire if they had not already done so, and to submit it as soon as possible.

At the time the survey was sent out, coaches had finished coaching the spring season and were preparing to coach again in the next fall or spring baseball season. The survey asked the participants about how prepared they felt for the upcoming season, not the past one.

The email contained a link to the survey and let the participant know that the survey was completely voluntary and participation in the study should have taken approximately ten minutes. The opening page of the survey was a consent form, on which the participant was asked to confirm that he/she is 18 years of age or older and understands that the survey is anonymous and no incentive was involved in completion. The survey and consent form were approved by George Mason University's Office of Research Integrity and Assurance (ORIA) in accordance with required human subjects protocols.

Confidentiality

The study included an anonymous questionnaire in which no names or personally identifiable information were collected or used. All data collected were examined only by the student researcher and the researcher's faculty advisor. No harm, problems of confidentiality, or problems of deception arose from this study as all participants reviewed and agreed to an informed consent form prior to participating in the study. Data

was collected via a short questionnaire and was based on participant opinions. No personally identifiable information was collected with the survey.

Analyses

Data were first descriptively analyzed. To test the research questions, a series of One-way Analyses of Variance was performed to address differences in Coaching Efficacy by socio-demographic and experiential subgroups. A Pearson Product-Moment Correlation was calculated to determine the relationship between Coaching Efficacy and Total Win Percentage. A p-value of .05 will be used for significance testing.

CHAPTER FOUR: RESULTS

The purpose of this study was to examine coaching efficacy among youth baseball coaches in a recreational context. This chapter includes a description of study results, a profile of the sample, and analysis of the results, including the significant differences among socio-demographic and experiential subgroups with regard to coaching efficacy and the correlation between coaching efficacy and win percentage.

Descriptive Analyses

Study Subjects. Sixty-one (N=61) youth recreational baseball coaches of the 422 names on the Virginia Baseball Club email list responded to the survey; taking into account those who opened the survey, but did not respond, the response rate is 15.6%. Of these, 96.4% were male and 3.6% were female. Eighty five percent described their race and ethnicity as White/Caucasian, 3.7% Asian/Pacific-Islander, 1.9% Hispanic/Latino, 1.9% Scottish-American, and 9.3% preferred not to say. The median age range was 35-44 years old with over half (55.6%) of the coaches in that age range. Thirty five percent were in the 45-54 age range, 7.4% in the 55-64 age range, and 1.9% were 25-34 years old (See Table 1).

When asked about the highest level of baseball they had played, 32.7% responded Little League (12 and under), 25% said 13-18 year old recreational baseball, and 26.9%

said high school baseball. Only a small percentage said either college or professional baseball. These coaches reported experience as head coaches of youth baseball that ranged from one to twenty seasons' worth of coaching (average 5.7 seasons of experience). They spend an average of 11.2 hours per week during the season coaching, with responses ranging from three to twenty-five hours per week.

Table 1. Descriptive Statistics for Recreational Baseball Coach Respondents

VARIABLE	FREQUENCY	PERCENTAGE (%)
Gender (n=55)		
Male	53	96.4
Female	2	3.6
Race/Ethnicity (n=55)		
White/Caucasian	46	85.2
Asian/Pacific-Islander	2	3.7
Hispanic/Latino	1	1.9
Scottish-American	1	1.9
Preferred not to say	5	9.3
Age (n=54)		
25-34	1	1.9
35-44	30	55.6
45-54	19	35.2
55-64	4	7.4
Highest Level Played (n=52)		
Little League (12 and under)	17	32.7
13-18 year old Recreational	13	25.0
High School Baseball	14	26.9
College Team	7	13.5
Professional (majors or minors)	1	1.9

A large majority of the coaches (80-90.1%) use various resources to enhance their coaching abilities (See Figure 1). Over 80% of the coaches use books, websites, videos (including YouTube), coaching clinics, and talking with more experienced coaches to

help them, and most of the coaches use multiple resources. When asked to rate their current level of coaching experience given the choices of beginner, advanced beginner, intermediate, advanced, and expert, the majority (51.9%) rated themselves as intermediate (See Figure 2). While 22.2% were advanced and 20.4% advanced beginner, only 3.7% and 1.9% of responses rated themselves as beginner and expert, respectively. For over two-thirds of these coaches, youth baseball is the only youth recreational sport that they coach. For the ones who do coach another sport, basketball is the most popular other sport (n=13 coaches) and then soccer (n=5).

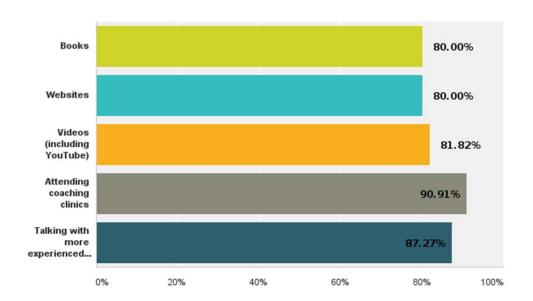


Figure 1. Youth Recreational Baseball Coaching Education Training Methods Used to Enhance Coaching Abilities (n = 55)

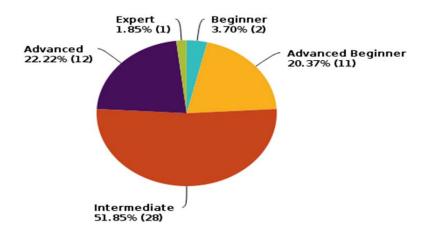


Figure 2. Youth Recreational Baseball Coach Level of Coaching Expertise (n = 54)

The coaches were asked "why are you currently coaching youth baseball?" Three main reasons were reported. Twenty-five of the respondents mentioned being able to spend time with their child or supporting them in the sport. This makes sense because all but one coach in the study has coached their own child. The second most prominent response was that these coaches enjoyed doing it. The word "enjoy" appeared in twenty different answers from the coaches. Finally, fourteen respondents discussed either skill development or teaching the players.

Coaching Efficacy Scale. The coaches completed the Coaching Efficacy Scale (CES) as part of their questionnaire. The CES has 24 items in a Likert scale format that asks the coaches how confident they are in their ability to do each of the 24 items. They assess themselves on a scale from 0-9 where "0" is not at all confident and "9" is extremely confident. The CES is made up of 7 questions about motivational efficacy, 7 about game strategy efficacy, 6 about technique efficacy, and 4 on character building efficacy. Each of these areas produces its own score and together they make up a total coaching efficacy score.

On individual items, the question that yielded the highest mean score was "How confident are you in your ability to promote good sportsmanship?" scoring 8.3 out of a possible 9. The lowest mean was 6.8, to the question "How confident are you in your ability to detect skill errors?" The lowest standard deviation was noted for the question about sportsmanship and the highest standard deviation for ability to detect skill errors.

The coaches, overall, had a Total CES mean of 7.48, indicating high confidence with means in the subscales as follows: Character Building Efficacy (8.26); Motivation Efficacy (7.55); Technique Efficacy (7.24); Game Strategy Efficacy (7.16) (See Table 2). These scores are high, only slightly lower than found by Feltz et al. (1999). In that study, the coaches had a Total CES of 7.9, a Character Building Efficacy of 8.2, a Motivation Efficacy of 7.6, a Technique Efficacy of 8.0, and a Game Strategy Efficacy of 7.9.

Table 2. Summary Statistics for the Coaching Efficacy Scale and Subscales (n=60)

Subscales	Mean	SD
Motivation Efficacy ($\alpha = .91$)	7.55	.90
Game Strategy Efficacy ($\alpha = .93$)	7.16	1.19
Technique Efficacy ($\alpha = .91$)	7.24	1.10
Character Building Efficacy ($\alpha = .90$)	8.26	.77
Total Coaching Efficacy ($\alpha = .95$)	7.48	.84

There was a general similarity between both studies, as the means all showed strong efficacy. It would be assumed that the high school coaches in Feltz et al.'s (1999) study would have higher coaching efficacy as it usually takes a more experienced and knowledgeable person to be a high school level coach. High school coaches must apply and interview, which is not at all the case for volunteer recreational youth baseball coaches. Character Building Efficacy and Motivation Efficacy were similar between the two studies suggesting that these two traits may not be learned through coaching knowledge or experience.

Analysis of Research of Questions

Research Question 1. This question examined how youth coaches define success. Coaches were asked this specific question in the survey. Nearly ninety percent

(88.5%) of the coaches wrote about improving or developing the skills of their players. Over half (57.7%) included having fun or enjoying the game of baseball, and 17.3% discussed success in terms of whether the player wants to return next year to play again.

Research Question 2. This question focused on the differences among various socio-demographic and experiential characteristics with regard to Coaching Efficacy (including the subscales). The results showed there was a significant difference among coach age groups with regard to Game Strategy Efficacy (F=2.86, p=.05) and Technique Efficacy (F=3.61, p=.02) based on a series of One-way Analyses of Variance using a significance value of $p \le .05$ (See Table 3). The older a coach is, the more opportunities he/she has to build confidence in his/her abilities to manage games and see and develop skills of the sport. This makes sense because, in all likelihood, older coaches have more experience and therefore can learn more about how the game is played. Age was not significantly related to Motivation Efficacy, Character Building Efficacy, or Total Coaching Efficacy.

There was also a significant difference among the highest level of baseball played by coaches with regard to Technique Efficacy (F=3.27, p=.02) and Total Coaching Efficacy (F=2.69, p=.04) based on a series of One-way Analyses of Variance using a significance value of p≤.05 (See Table 4). Higher playing experience makes perfect sense for an increased Technique Efficacy because of the more years of instruction these coaches received as players. Now, as coaches, they can, in turn, teach what they have learned to the players. Although Game Strategy Efficacy was correlated with age of the

coach, it was not significantly correlated to playing experience. This shows that playing baseball does not necessarily help improve confidence in coaching it.

The coaches were asked in the survey to rate their own coaching expertise. The results of a series of One-way Analyses of Variance shows that there was a significant difference among coaching expertise categories with regard to Game Strategy Efficacy (F=3.69, p=.01), Technique Efficacy (F=3.67, p=.01), and Total Coaching Efficacy (F=2.65, p=.04) (See Table 5). Coaches who rate their expertise highly have generally higher efficacy. No significant differences were found among expertise level with regard to Motivation Efficacy and Character Building Efficacy. It is more natural to think of Game Strategy and Technique when thinking about coaching expertise. The wording of the question may have led the respondents to think only in terms of their baseball knowledge and not the mental or emotional aspects of coaching.

There is a significant correlation between Game Strategy Efficacy and both the number of seasons of coaching experience (r=.34, p=.01) and the average number of hours per week spent on coaching (r=.28, p=.04) (with significance at p \leq .05). None of the other areas of efficacy, including Total Coaching Efficacy, were significantly correlated with either of these factors. Again, these findings are not unexpected.

Table 3. Results of One-way Analyses of Variance for Coaching Efficacy Subscales by Youth Recreational Baseball Coach Age (n=54)

Variables	n	Mean	SD	p
Motivation Efficacy				.96
25 to 34	1	8.00	_	., 0
35 to 44	30	7.50	.89	
45 to 54	19	7.54	.98	
55 to 64	4	7.55	.98	
Game Strategy Efficacy		,,,,,		.05*
25 to 34	1	8.43		
35 to 44	30	6.87	1.07	
45 to 54	19	7.68	.93	
55 to 64	4	6.46	2.30	
Technique Efficacy				.02*
25 to 34	1	8.17		
35 to 44	30	6.95	1.01	
45 to 54	19	7.74	1.03	
55 to 64	4	6.28	1.43	
Character Building Efficacy				.49
25 to 34	1	9.00		
35 to 44	30	8.20	.68	
45 to 54	19	8.37	.88	
55 to 64	4	7.88	.85	
Total Coaching Efficacy				.12
25 to 34	1	8.33		
35 to 44	30	7.30	.76	
45 to 54	19	7.77	.82	
55 to 64	4	6.98	1.33	II
		0.70	1.55	

^{*}Significant at p≤.05

Table 4. Results of One-way Analyses of Variance for Coaching Efficacy Subscales by Youth Recreational Baseball Coach Highest Level Played (n=52)

Variables	n	Mean	SD	P
Motivation Efficacy				.18
Little League (12 and under)	17	7.37	.91	
13-18 year old Recreational	13	7.94	.95	
High School Team	14	7.26	.71	
College Team	7	7.57	.97	
Pro-ball (Minor or Major League)	1	8.71	•	
Game Strategy Efficacy				.07
Little League (12 and under)	17	6.93	1.05	
13-18 year old Recreational	13	7.46	1.15	
High School Team	14	6.83	1.30	
College Team	7	8.10	.55	
Pro-ball (Minor or Major League)	1	8.57		
Technique Efficacy				.02*
Little League (12 and under)	17	6.85	1.12	
13-18 year old Recreational	13	7.52	1.00	
High School Team	14	7.03	1.00	
College Team	7	8.17	.61	
Pro-ball (Minor or Major League)	1	9.00		
Character Building Efficacy				.42
Little League (12 and under)	17	8.31	.85	
13-18 year old Recreational	13	8.48	.72	
High School Team	14	7.98	.65	
College Team	7	8.29	.78	
Pro-ball (Minor or Major League)	1	9.00		
Total Coaching Efficacy			-	.04*
Little League (12 and under)	17	7.27	.81	
13-18 year old Recreational	13	7.79	.87	
High School Team	14	7.20	.76	
College Team	7	8.00	.58	
Pro-ball (Minor or Major League)	1	8.79		

^{*}Significant at p≤.05

Table 5. Results of One-way Analyses of Variance for Coaching Efficacy Subscales by Youth Recreational Baseball Coach Rating of Coaching Expertise (n=54)

Variables	N	Mean	SD	p
Motivation Efficacy				.54
Beginner	2	7.50	1.72	
Advanced Beginner	11	7.43	.67	
Intermediate	28	7.41	.91	
Advanced	12	7.69	.96	
Expert	1	8.86		
Game Strategy Efficacy				.01*
Beginner	2	6.57	2.83	
Advanced Beginner	11	6.49	1.41	
Intermediate	28	7.04	.94	
Advanced	12	7.99	.79	
Expert	1	9.00		
Technique Efficacy				.01*
Beginner	2	7.42	2.24	
Advanced Beginner	11	6.64	1.11	
Intermediate	28	7.00	1.01	
Advanced	12	8.10	.77	
Expert	1	8.17		
Character Building Efficacy				.89
Beginner	2	8.13	1.24	
Advanced Beginner	11	8.27	.80	
Intermediate	28	8.21	.73	
Advanced	12	8.29	.82	
Expert	1	9.00		
Total Coaching Efficacy				.04*
Beginner	2	7.31	2.09	
Advanced Beginner	11	7.11	.84	
Intermediate	28	7.33	.74	
Advanced	12	7.98	.71	
Expert	1	8.75		

^{*}Significant at p<.05

Research Question 3. This question focused on the relationship of Coaching Efficacy and Total Win Percentage. There was a significant correlation between Total Win Percentage and Motivation Efficacy (r=.30, p=.04) and Total Coaching Efficacy (r=.33, p=.03) (Table 6). Neither Game Strategy Efficacy nor Technique Efficacy was significantly correlated with win percentage despite one or both having been related to other socio-demographic and experiential factors. This may indicate that talent and skills do not always make the difference at the youth recreational level when it comes to winning games. A youth coach should strive to put in effort motivating the players by building team confidence and self-esteem in the individuals.

Table 6. Correlations between Coaching Efficacy Subscales and Win Percentage (n=45)

Subscale	Mean	r	p
Motivational Efficacy	7.55	.30	.04*
Game Strategy Efficacy	7.16	.29	.05
Technique Efficacy	7.24	.23	.12
Character Building Efficacy	8.26	.29	.06
Total Coaching Efficacy	7.48	.33	.03*

^{*}Significant at p≤.05

Game Strategy Efficacy and Technique Efficacy appear to be closely related in the varied tests run for this study. Interestingly, these are both areas that can be improved through experience and learning. Similarly, Motivation Efficacy and Character Building Efficacy are related, and both are more complex in terms of the factors that impact and are impacted by these motivational variables. They are not linked to specific skill building activities (such as those for Game Strategy and Technique Efficacy), but rather by opportunities over time for personal and professional development.

CHAPTER FIVE: CONCLUSIONS AND IMPLICATIONS

This study focused on the examination of coaching efficacy among youth baseball coaches in a recreational context. This chapter summarizes the major findings and conclusions and provides suggestions for future research and practice.

Major Findings and Conclusions

RQ1. How do youth coaches define success? A large percentage of responding coaches defined a successful youth recreational coach as someone who improves and develops the skills of the players (88.5%) and/or someone who helps/allows the players to enjoy the game (57.7%). These are very positive response from the coaches, but there is no way to determine if these definitions of success are being demonstrated with players throughout the season. There is always a chance that once the games begin, the focus of the head coach shifts from development and fun into winning at all costs.

How does winning games fall into the mix of a successful youth coach? It can be argued that, at this level of baseball, wins and losses do not matter whatsoever. However, it can also be argued that baseball, or any sport, is more fun when you win. Thus, winning may become a determinant of fun. If a coach is successful by their own definitions, meaning the players develop their skills and have fun, then winning will

become a byproduct. If the players become more talented and are enjoying themselves, the likelihood of winning ballgames should increase.

RQ2. Are there significant differences among socio-demographic and experiential subgroups (specifically ethnicity, gender, age, highest level of baseball played, coaching experience, training methods, coaching level) with regard to coaching efficacy (specifically Game Strategy, Technique, Motivation, and Character Building Efficacy)? There were significant differences among the sociodemographic and experiential subgroups (i.e., age, level of baseball played, rating of expertise, coaching experience) with regard to coaching efficacy; specifically, Total Coaching Efficacy was higher for those with a higher level of playing experience, higher level of coaching expertise.

It makes sense that Total Coaching Efficacy increases with age, level played and expertise. The higher level of baseball that one plays, the more coaching—and likely better coaching—one will receive. There will be more exposure to better, effective drills and teaching approaches in higher levels of baseball. Coaches who rate their own expertise at a higher level will obviously tend to rate themselves higher on the likert-scale ability questions from the CES. Finally, a coach with a high win percentage will think he/she is doing a great job of coaching no matter if the coaching style has anything to do with the team winning games.

This study found that the participating coaches take pride in what they do as evidenced by the resources used to enhance their coaching abilities and the amount of time spent on coaching per week during the season. Leagues can take advantage of this by setting up coaching clinics to instill values and teaching points they wish their coaches

to possess. This can create a more uniform approach to coaching throughout the league and hopefully will create a more even opportunity for all of the players to develop and enjoy the game.

Obviously, all four of the coaching efficacy subscales, along with Total Coaching Efficacy, are strongly interrelated, in particular the Game Strategy Efficacy and the Technique Efficacy share similar factors. Discounting the Total Coaching Efficacy scores, only twice did the results show a significant correlation between one of the variables and two of the efficacy subcategories. Significant differences were found among age groups and expertise level with regard to Game Strategy Efficacy and Technique Efficacy. Game Strategy Efficacy and Technique Efficacy can both be improved through experience and education. A coach will gain confidence in his/her ability (e.g. teaching the skills of the sport, maximizing a team's strengths, or understanding competitive strategies) through coaching more games, reading coaching books, or talking to other coaches. This will allow the coach to gain confidence and thus his/her Game Strategy Efficacy and Technique Efficacy will improve.

There were few significant differences among socio-demographic and experiential subgroups with regard to Character Building Efficacy and Motivation Efficacy. Unlike with Game Strategy Efficacy and Technique Efficacy, Character Building Efficacy and Motivation Efficacy are not able to be learned through baseball resources like books or videos. Future research should be directed to identify factors contributing to the development of character and motivation efficacy.

RQ3. Is coaching efficacy (Total Coaching, Game Strategy, Technique, Motivation, and Character Building Efficacy) correlated with win percentage?

Motivation Efficacy was found to be significantly correlated with total win percentage.

The relationship between winning and motivating is interesting because motivation is intangible. Thoughts of motivation bring to mind pre-game speeches and trophies. Most of the questions in the Motivation Efficacy category of the CES deal with the concept of "building." Such as building team cohesion, building self-esteem, and building team confidence. All of these can be done without ever picking up a baseball at practice. While team confidence will increase with more wins or better players, it can also be increased through goals and beliefs set forth by the coach.

The results from this study show that—in youth recreational baseball—if a coach creates a positive environment where the players have greater self-confidence, self-esteem, team cohesion, and are mentally prepared to play, the team may win more games. The question is whether the coach becomes more motivated based on a winning season, or whether the coaches sense of efficacy and motivation impact the team to win.

Therefore, it would benefit youth recreational coaches to make sure they are working hard to create a healthy and positive environment for the players to play. If the coaches do a better job motivating and building confidence within the team and the players, the team will produce better results in the win-loss column. While the results did show that these coaches say they are more concerned with developing the players' skill and letting them enjoy the game, when given a choice between a win and loss, I do not believe many coaches would take the loss.

Suggestions for Future Research and Practice

This study focused on youth baseball coaches in the northern Virginia area who have a working email address for researcher access. Therefore, the study could not be generalized to a larger population, and may not be representative of all northern Virginia youth baseball coaches (as the participants were specifically members of the Virginia Baseball Club). It would be beneficial for future research to look at different or larger population areas. This would also help increase the diversity of the coaches studied. This study saw a very high percentage of males (96.4%), whites/Caucasians (85.2%), and people who coached their child (98.2%).

The research was conducted while the offseason was in progress, as opposed to during the conclusion of the Spring season. This time frame could have contributed to a low response rate since summer is a popular vacation time and it is also not a typical youth baseball season. The spring youth season had already been completed by the time these coaches responded to the survey. Thus, the respondents may not accurately have remembered player improvement throughout the season. Also, future research should be conducted prior to the spring season getting underway. Another approach would be to do the same survey both before and after the season to see how the coaching efficacy scores differ when compared.

Ideally, the researcher would conduct this research in multiple locations across the country. This would provide better variety in demographics and allow the data to be generalized to a far larger population. Unfortunately, due to time and resource

limitations, the study was delimited to youth recreational baseball coaches as listed by the VBC email list in the northern Virginia area.

This study attempted to fill a void in research on coaching efficacy by looking specifically at youth recreational baseball. While that includes youth, recreational, and baseball settings, it is a very specific area of coaching efficacy. Therefore, other complementary research is needed (e.g., youth recreational basketball, youth elite baseball, 13-18 year old recreational baseball). These studies may help determine generalizability. A study involving youth recreational softball could be used to examine the differences between males and females in this context.

It would also be beneficial for future research to try and use all of the coaches that are coaching in certain leagues (e.g., all of the coaches in the AAA Division of Vienna (Virginia) Little League). This way, the researchers would have situations where the talent is evenly distributed and the standings would be available for the league. Greater variability would be controlled with concentration on the coaches' demographics, their efficacy, and the win-loss results from the season. The sample of coaches from this current study had a cumulative win percentage of .598. This strongly suggests that slightly more winning coaches completed this questionnaire.

Another way this study can be improved is to get information from the players on the participating coaches' teams. This way the data from the players can be compared to the data from the coaches, which would triangulate what the coaches think of themselves and what the players think of their coach. It would also be interesting to ask a question to these coaches about how they think their players would rate the coaching abilities. The same study can also be done adding parents of the players into the mix.

Some additional socio-demographic questions should be added to future instruments that focus on non-baseball issues. For example, topics like highest level of education completed or current occupation can be viewed as other possible variables that relate to coaching efficacy. These can be used to show how much or how little coaching efficacy is related to baseball-specific variables compared to non-baseball-specific ones. In particular, this would be interesting to compare in terms of Character Building Efficacy and Motivational Efficacy – the two areas that have less to do with baseball skills and more to do with human skills.

Finally, it may have been beneficial for the questionnaire to be distributed in a different manner than through an email with a link to a SurveyMonkey account. People have a tendency to disregard emails from addresses they do not know and are not always willing to participate in online surveys. It may also have been helpful for VBC to send out an email in advance indicating the survey was coming. An in-person or on the phone survey might produce more in-depth responses to the open ended questions than online.

In conclusion, this study did highlight several significant differences among socio-demographic and experiential subgroups with regard to coaching efficacy among youth recreational baseball coaches. Looking at other sports, other geographical areas, or other ages will help gather data to broaden the generalizability of these results. The timing of the survey and the way in which it is administered can be changed to help increase participation rate and comprehensiveness of responses.

This study can be used by coaches or leagues to develop strategies for training and preparation, thereby improving the quality of coaching the youth recreational baseball players receive. There are many ways to improve Game Strategy Efficacy and Technique Efficacy if the coaches are willing to put in the time and effort. However, coaches need to be aware of the impact a high Motivational Efficacy can have on a youth team. It would be beneficial for individual coaches or leagues to consider psychological or sociological resources to help improve Motivation and Character Building Efficacy. Youth coaches need to keep in perspective the profound impact they can have on the lives of the players they coach and work hard to ensure that those impacts are all positive.

APPENDIX A: SURVEY

Survey of Youth Recreational Coach Efficacy July 11, 2013

Coaches play a major role in the development of our youth. This survey is being conducted to determine how youth recreational baseball coaches in Northern Virginia feel about coaching and their preparation to be a coach. The results will be used to enhance the preparation of youth coaches in order to ensure a quality experience for them and the youth they impact.

Please take about ten minutes to answer the following questions. When you are done, please hit the submit button on the final page.

This survey is being conducted as part of a Mason graduate student capstone master's project. Participation is completely voluntary and all responses will be anonymous. If you have any questions, please contact Mark Murray (mmurrayi@gmu.edu) or faculty advisor, Dr. Pierre Rodgers (prodgers@gmu.edu).

Informed Consent Form

We are conducting a survey on youth recreational coaching efficacy. We are requesting your voluntary participation in order to gain more information on the topic. Neither your name, nor any other identifying information will be collected or used. You may choose not to answer all of the questions or quit at any point during the survey. The survey should take approximately ten minutes. You must be 18 or older to participate. If you are willing to participate, please consent by clicking the "I Consent" button.

If you have any questions, please contact Mark Murray (mmurrayi@gmu.edu) or faculty advisor, Dr. Pierre Rodgers (prodgers@gmu.edu).

SECTION I – Confidence in Your Coaching Experience

The following questions are about your youth baseball coaching abilities. Please indicate for each item your level of confidence regarding the NEXT SEASON. A 0 indicates that you feel "not at all confident" in your ability and a 9 indicates that you feel "extremely

confident" in your ability. After Section I, please proceed to the second set of questions that are about you and your coaching experience.

Not at all confident --> ---> --> --> --> How confident are you in your ability to --> Extremely confident 1. Maintain confidence in your athletes? 0 1 2 3 4 5 6 7 8 9 Recognize opposing team's strengths 0 1 2 3 4 5 6 7 8 9 during competition? Mentally prepare athletes for game/meet 0 1 2 3 4 5 6 7 8 9 strategies? 4. Understand competitive strategies? 0 1 2 3 4 5 6 7 8 9 5. Instill an attitude of good moral character? 0 1 2 3 4 5 6 7 8 9 6. Build the self-esteem of your athletes? 0 1 2 3 4 5 6 7 8 9 Demonstrate the skills of your sport? 0 1 2 3 4 5 6 7 8 9 8. Adapt to different game/meet situations? 0 1 2 3 4 5 6 7 8 9 Recognize opposing team's weakness 0 1 2 3 4 5 6 7 8 9 during competition? 10. Motivate your athletes? 0 1 2 3 4 5 6 7 8 9 Make critical decisions during 0 1 2 3 4 5 6 7 8 9 competition? 12. Build team cohesion? 0 1 2 3 4 5 6 7 8 9 13. Instill an attitude of fair play among your 0 1 2 3 4 5 6 7 8 9 athletes?

SECTION II - EXPERIENCE

A.	How would you classify your ethnicity? (check all that apply) ☐ White/Caucasian
	□Black/African American
	☐ Hispanic/Latino
	☐ Asian-Pacific Islander ☐ Native American
	☐ I prefer not to say
	Other
В.	What is your gender? □Female □Male
C.	What is your age? years
D.	What is the HIGHEST level of baseball YOU played? □Little league (12 and under) □13-18 year old Recreational □High School team □College team □Pro ball (minor or major league)
	For how many seasons have you been a youth (12 year old and younger) baseball ach? seasons
wi	If you have coached youth baseball before, what was your team's approximate n/loss record for the past three seasons (if you have not coached three, only fill in the ount that you have)?
	winslosses (LAST SEASON)
	winslosses (TWO SEASONS AGO)
	winslosses (THREE SEASONS AGO)

	What training methods of youth baseball coaching education have you used to nance your own coaching abilities? (check all that apply) Books Websites Videos (including YouTube) Attending coaching clinics Talking with more experienced coaches Other Other
Н.	Rate your current level of coaching experience. Beginner Advanced Beginner Intermediate Advanced Expert
	Why are you currently coaching youth baseball? Have you ever coached your own child? Yes No
	What is the average number of hours per week you spend in-season on youth reational baseball coaching? hours per week
lev	Do you coach any other youth recreational sports? If so, please specify the sport and el (example: 10U Soccer) Yes No
M.	How do you define success for a youth baseball coach?
	THANKS FOR TAKING THE TIME TO FILL OUT THE SURVEY!

APPENDIX B: RECRUITMENT EMAIL

July 11, 2013

Hello,

My name is Mark Murray and I am a graduate student at George Mason University, in the Sport and Recreation Studies program. I have coached baseball in both the Arlington Babe Ruth and NVTBL Leagues as well as having worked for Ripken Baseball. I currently work with the Virginia Baseball Club.

Like you, I see great value in youth participation in baseball, and believe that it is an important part of their development. I also believe that coaches are crucial to this process. I am conducting a study of youth recreational baseball coaches in Northern Virginia focused on coaching experience and efficacy. Results of this study may have utility for youth baseball leagues to modify and improve their coach training programs, and by individuals as a resource for increasing coaching success.

This survey is voluntary and your responses will be completely anonymous, meaning all information will be used in the aggregate and your answers cannot be connected to you in any way.

The first page of the survey will ask for your consent before you proceed. You must agree to consent to the terms before you may do the survey. The survey should take approximately ten minutes. Please complete the survey by Friday, July 19.

Please click <u>HERE</u> to access the survey, or if that link does not work then please copy and paste the link below into your address bar:

https://www.surveymonkey.com/s/CoachEfficacy

If you have any questions please email mmurrayi@gmu.edu

Thank you for your time, Mark Murray

APPENDIX C: FOLLOW-UP RECRUITMENT EMAIL

July 18, 2013

Hello,

Last week you received a survey focused on youth recreational baseball coaches and their experience and feelings about coaching. If you have already responded to the first request, many thanks for your input. If you have not had the opportunity to complete the survey, please take the time now. I would appreciate hearing back from you within the next week. The results of this study will be of benefit to those of us in the coaching world, as well as for the many youth we impact daily.

Again, the survey will take no more than 10 minutes of your time. Please click <u>HERE</u> to access the survey. Remember, your responses will be completely anonymous, meaning that all information will be used in the aggregate and your answers cannot be connected to you in any way. The welcome page will ask for your consent before you proceed. This consent indicates that you understand all responses will be held anonymously and participation is completely voluntary.

If for some reason the above link does not work, please copy and paste the following into your address bar:

https://www.surveymonkey.com/s/CoachEfficacy

If you have any questions, please do not hesitate to contact me via email at mmurrayi@gmu.edu.

Thank you for your time, Mark Murray

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BIOGRAPHY

Mark Murray graduated from Yorktown High School, Arlington, Virginia, in 2007. He attended Virginia Tech for two years before transferring to George Mason University in 2009, where he received his Bachelor of Science degree in 2011. He has been coaching baseball for the past four seasons and is currently employed at Sports Plus, Inc. in Chantilly, Virginia. He received his Master of Science in Sport and Recreation Studies from George Mason University in 2013.