AN EVALUATION OF A LEADERSHIP DEVELOPMENT PROGRAM FOR
INTERCOLLEGIATE WRESTLING COACHES

By

Eric Adrian Bean

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

KINESIOLOGY

2011

ABSTRACT

AN EVALUATION OF A LEADERSHIP DEVELOPMENT PROGRAM FOR
INTERCOLLEGIATE WRESTLING COACHES

By

Eric Adrian Bean

The overarching purpose of this study was to investigate the efficacy of two online

modules, comprising part of a coaching leadership course, in achieving the course

objectives as defined by key stakeholders. In addition the study aimed to examine

coaches' opinions regarding the ease and effectiveness of an online learning environment.

This was accomplished in three phases. First, in Phase One the researcher conducted

qualitative interviews with key stakeholders to identify the outcomes and objectives of

the intervention broadly, and of two of the online modules, specifically. The second

phase aimed to examine the effectiveness of the two online modules in increasing

knowledge, intended use, and actual use of material covered in the modules. Due to

unforeseen circumstances in obtaining and retaining a large enough control or

comparison group, a single group longitudinal design had to be employed in Phase Two.

Phase three was designed to examine the intervention group coaches' perspectives

regarding the ease and utility of the online video format. The stakeholders in Phase One

reported that their program goals were of both a macro and micro nature. For example,

they hoped that the coaches would, on a macro level: develop a broader awareness of all

that their coaching role includes, approach the coaching role similar to that of a CEO, be

willing to reflect on their strengths and weaknesses, etcetera. On a micro level, for

example, the Phase One participants hoped that the coaches would: improve

communication skills, develop a vision for their program, and bring in assistant coaches

or interns to supplement their weaknesses. In Phase Two, causality determinations were limited, however, results indicated that the online modules effectively increased knowledge and intended use of the material covered. Finally, Phase Three demonstrated that the coaches perceived that the online modules met their needs, were easy to use, and were an effective way of delivering that style of leadership content.

ACKNOWLEDGMENTS

I would like to first acknowledge and thank my mother, Alice, for not only supporting and believing in me but also continuously challenging me to stretch beyond self-imposed limits and weaknesses. In addition, my mother instilled in me a passion for learning that will never cease. Thank you Mom.

I would like to extend a very special thank you to my committee members for guiding me on this journey. There were many times where I struggled to see the light at the end of the tunnel (or believed that the light belonged to a train) and yet you managed to help me maintain some semblance of confidence that I would see this through to the end. Not only were you patient with me but also you really helped me expand my viewing angles and see the golden nuggets within this study that I was sure didn't exist. Dr. Campbell, your knowledge and experience in evaluation research impacted the quality of this evaluation immeasurably. Not only did you impact, and perhaps save, this study but you have given me the confidence to continue to engage in evaluation research beyond MSU. Dr. Ewing, thank you for everything. It was clear to me from the beginning that you cared about me not only completing my dissertation but more importantly learning from the journey. Your feedback and guidance throughout allowed me to see how this experience was more than just another step in completing my doctorate. Dr. Lauer, thank you for challenging me to broaden my scope and perspective with regard to this dissertation. Your ability to apply information and knowledge from seemingly unrelated sources helped enrich this dissertation and will help me improve my future research and consulting.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1

INTRODUCTION

Nature of the problem

Wrestling is one of the oldest sports in the world with a history dating back to antiquity. Over the centuries it has provided millions of young people not only a vehicle to develop physically but also the enjoyment of participating in an exciting sport with opportunities to learn important life lessons through their involvement. For example, in addition to technical skills and tactics, wrestling coaches can use wrestling to teach their athletes about the value of hard work and how to handle failure.

In the United States wrestling has had a rich history as a collegiate sport helping colleges and universities meet their educational athletic objectives while allowing many young men and women to further develop their wrestling skills and capabilities. However, over the last 30 years collegiate wrestling has come under attack. Programs are being eliminated as the costs of sponsoring intercollegiate athletic programs have skyrocketed. With the NCAA only requiring universities at the Division I level to field a minimum of six men's sports wrestling competes with the other 15 Olympic sports for a limited number of varsity programs. Program elimination has occurred despite the fact that the NCAA Division I Wrestling Championships is one of the most successful championships of all NCAA sports—ranking between fourth and fifth in terms of revenue generated (NCAA, 2008).

Considering that there are a variety of reasons that programs are being cut it is important to examine specific programs that have been cut. For example, Portland State University and Delaware State University had their wrestling programs dropped due to poor academic performance (Brown, 2009; Prince, 2009). While both programs were said to have

deficiencies in a variety of areas it was stated that the lack of improvement with the Academic Progress Report (APR) was an area of major concern (Brown, 2009). Essentially, the academic issues not only affected the wrestling team, but the athletic department as well and therefore the administration at Delaware State University felt that the NCAA penalties, as well as the economic factors, would be too great to absorb, and decided to cut the wrestling program. In addition to academic concerns, some programs have been cut due to low roster numbers. For example, Lawrence University in Wisconsin, despite a long and successful history, suspended their program due to the fact that they did not have enough participants to sustain the program (Acker, 2008). Finally, despite the tremendous presence of high school wrestlers in the surrounding community and the fact that the Oregon wrestling program was in good academic standing, the Oregon wrestling program was cut in order to reinstate baseball at the university (Miller, 2007).

In addition to these publicized reasons for cutting programs, some believe that there are other factors that athletic departments evaluate when determining whether or not to eliminate a sport program. These factors include: (1) is the sport recognized as part of the multi-conference the program belongs to; (2) ability to be nationally competitive; (3) indigenous to the region from where the school recruits students; (4) is the sport funded at a level consistent with the other programs in the conference or region; (5) small, enrollment conscious schools, look for inexpensive sports that have large roster sizes; and (6) are there many off the field incidences (M. Moyer, personal communication, December 7, 2009). Finally, Mike Moyer, Executive Director of the National Wrestling Coaches Association stated, "many athletic directors have told [him] behind closed doors…that the tendency is to eliminate teams that are high maintenance, either the players and or the coach" (M. Moyer,

personal communication, December 7, 2009). In summation, the publicized factors for eliminating programs include economic hindrances, Title IX compliance, academic shortcomings, and low roster numbers, whereas a less publicized factor for eliminating a sport program is when either the coach, athletes, or both are high maintenance and disruptive to the overarching mission of the athletic department.

While much of the stress placed on collegiate wrestling programs results from the weakened economy and educational policies, there is a strong feeling that many programs that have been eliminated, or face the threat of elimination, are in that position because of the wrestling coaches. The coaches, while well-meaning and strong tacticians, lack strong leadership and student-athlete development skills and capabilities. In particular, having studied eliminated programs over the last 30 years the National Wrestling Coaches Association (NWCA) has come to believe that a lack of off-the-mat leadership is a significant issue. Coaches have not successfully garnered campus and community support for their programs likely because these coaches were lacking in communication skills and have not been successful at cultivating alumni involvement and donor support. Furthermore, they have had wrestlers who demonstrated poor citizenship by getting into trouble off the mat or failing to live up to their academic responsibilities. A need exists to address these issues by providing leadership training to America's collegiate wrestling coaches with the goal of maintaining and then growing the number of intercollegiate programs nationally.

Finally, it should be noted that while there are major threats to collegiate wrestling, opportunities for growth within the sport exist. Many small colleges and universities are enrollment driven and offer collegiate sports to help attract students to their campuses and because fewer males than females apply to college today having a collegiate wrestling

program can bring more male students to campus. To accomplish this, however, coaches must have the skills to ensure that their athletes develop academically and as people and know how to raise funds to support their programs while linking them and their athletes to academic and local communities.

National Wrestling Coaches Association Leadership Academy

In consideration of this threat the NWCA partnered with the Institute for the Study of Youth Sports (ISYS) to develop a state-of-the art leadership development program for America's collegiate wrestling coaches. Building from sport psychology, sport science and business leadership research and best practices, and what is known about effective coaching leadership, the program will address a number of important issues. These issues include: (1) an understanding of educational athletics and the role wrestling plays in the lager academic community; (2) program vision and mission; (3) the coach as a leader and principles of leadership; (4) public relations, marketing and fund raising skills; (5) effective campus and community relations; and (6) strategies for developing wrestlers as people and the promotion of life skills through wrestling involvement.

Over the last 10 years a transformation has taken place in education in that technology is changing the way we are educating individuals (Coyner & McCann, 2004; Larreamendy-Joerns & Leinhardt, 2006; Li & Irby, 2008). Perhaps the biggest technological change is in online instructional formats. Some examples of sport organizations that utilize online education are the National Federation of State High School Associations and the American Sport Education Program, as well as numerous higher education institutions. Educational programs and universities, including Michigan State University, are increasingly utilizing online education both in Kinesiology and general education programs (Singh & Pan, 2004). The logical reasons

for utilizing online courses are decreased costs, convenience and accessibility to the consumer (Coyner & McCann, 2004), and the ability to reach a larger market of potential learners due to the fact that learners can complete the course from nearly any location. Therefore, the NWCA Coaching Leadership Academy will have a strong online presence of lectures and interactive material for the coach to work through, but will also include readings, an in-person coaching leadership institute, then an individualized coaching plan for enhancing one's program, and a process of peer mentoring. Thus, the program design is a three-pronged approach. The first part of the leadership academy is 10 online video modules. Each module will take between 60 and 120 minutes to complete and include narrated PowerPoint's, interviews with successful coaches, interviews with experts in various arenas of leadership, and interactive exercises designed to aid the coach in developing his or her specific leadership needs. Module 1 is designed to achieve five objectives: (1) increase the coach's awareness of threats to the sport of wrestling; (2) create a sense of urgency for the coach to take responsibility for saving wrestling by making his or her own program all it is capable of being; (3) help the coach formulate a plan for taking his or her program to the next level; (4) motivate the coach to improve his or her leadership skills and act to improve his or her program; and (5) have a coach develop a vision for his or her program. Module 2 is designed to achieve four objectives: (1) help the coach understand the importance of effective leadership; (2) increase the coaches understanding of components of effective and ineffective leadership; (3) help the coach understand his or her leadership style; and (4) help the coach develop effective leader communication skills. Modules 3 to10 focus on developing all aspects of the wrestling program, public and community relations, marketing and fundraising, ensuring wrestlers develop academically, developing the wrestler as a person, helping wrestlers stay healthy,

coaching ethics, and career building for coaches, but will not be discussed in detail because they are not the focus of this investigation nor were they completed and available for evaluation at the start of the investigation.

Finally, each coach is being asked to complete a 360-degree evaluation of his or her coaching leadership ability. The general purpose of a 360-degree evaluation is to provide leaders an opportunity to compare their self-perceptions with the observations of the individuals that they are leading (or coaching), peers, and a supervisor (Kets de Vries, Vrignaud, Florent-Treacy, 2004). In conjunction with the ISYS, the NWCA created a 360-degree evaluation to examine a coach's ability to lead in a number of areas including: vision and goals, communication skills, motivation and feedback, working relationships with athletic administrators and supporting staff, marketing, recruiting and retention, fund raising, and the athletes' academic development.

Following completion of the 10 online modules the coaches will then partake in an in-person leadership workshop. The in-person portion of the academy will include a small group of coaches interacting with successful, veteran coaches for two-days engaging in in-depth leadership development. Following this portion of the academy the coaches will be matched to a successful coach mentor, and will engage in a traditional mentor-mentee relationship.

The NWCA leaders believe that behavioral change will occur over time through the combination of online educational materials, interaction and education at a leadership summit, and through successful coaches mentoring other coaches to develop their leadership abilities. The overarching goal of the Leadership Academy is to improve the leadership ability of the coaches and in so doing decrease the amount of collegiate wrestling programs

that are cut in the United States and hopefully regain some of those that were lost. Currently this program is the early stages of deployment and as such an opportunity exists to evaluate two of the online modules.

Evaluation Methodology

Evaluation is the "use of social research methods to systematically investigate the effectiveness of social intervention programs in ways that are adapted to their political and organizational environments and are designed to inform social action to improve social conditions" (Rossi, Lipsey, & Freeman, 2004, p. 16). Scriven (1991) offered an alternative definition that evaluation is aimed at determining the merit, worth, and value of programs or interventions. Given these definitions program evaluators utilize established research methods to measure the effectiveness or value of a program or intervention. There are many different methods of program evaluation that occur at different points along the developmental timeline of a particular program and the research methods are determined by the type of evaluation questions being asked. A brief overview of the different methods of program evaluation follows.

Many educational or social programs are designed to fill a specific void or alleviate a social problem (Rossi, Lipsey, & Freeman, 2004). Therefore, it is critical to evaluate the extent to which there is a need for a particular program. This form of evaluation is commonly referred to as a needs assessment, which is "a systematic set of procedures undertaken for the purpose of setting priorities and making decisions about program or organizational improvement and allocation of resources. The priorities are based on identified needs" (Witkin & Altshuld, 1995, p. 4). A need is often defined as a gap between what is and what should be (Witkin & Altshuld, 1995). There are many reasons for conducting a needs assessment particularly that people within a given population can perceive their needs as being quite different. Needs assessments "are

conducted to derive information and perceptions of values as a guide to making policy and program decisions that will benefit specific groups of people" (Witkin & Altshuld, 1995, p. 5). Needs assessments can be undertaken for a variety of reasons, but typically are intended to lead to action, change, and improvement.

Another series of evaluation questions focus on how a program is designed and conceptualized. Rarely do program stakeholders have a clear plan for the process of how their program is supposed to work and therefore an assessment of program theory is needed (Rossi, Lipsey, & Freeman, 2004). One method within this type of evaluation is evaluability assessments. An evaluability assessment is a process that helps one identify which evaluations would be useful and feasible, and begin the process of designing evaluations (Wholey, Hatry, & Newcomer, 2004). Essentially an evaluability assessment examines the program model by clearly defining goals and objectives of the program, and if a program is ready to be assessed or is evaluable. Typically, a program is not ready to be assessed when there is internal disagreement on program goals and performance criteria, goals do not fit the activity and or resources, performance indicators cannot be collected at a reasonable cost, or program managers are unwilling or unable to create change. However, a program is evaluable when goals are well defined, goals are plausible, an evaluator can obtain data at a reasonable cost, and program stakeholders are willing to act on the data obtained from the evaluation.

Evaluators conducting evaluability assessments are attempting to understand the program methods, objectives, delivery process, and the social reality through interviews, observations, and existing data. Evaluability assessments are aimed at getting program stakeholders to clearly define and articulate the programs design and goals. Additionally, some evaluators conducting an evaluability assessment will, from the data collected, create a logic model that describes logical

connections between activities and outcomes (Wholey, Hatry, & Newcomer, 2004). Logic models can identify the resources or inputs that lead to program outputs and outcomes.

Another common set of evaluation questions examines the impact or outcomes of a program. Outcome evaluation is an assessment of the degree of change in the outcomes over time (before, during, after, and following the conclusion of the program). An outcome evaluation does not necessarily involve a basis of comparison. Usually outcome evaluation is more small scale, time limited, and within the scope of a well-resourced community organization (Rossi, Lipsey, & Freeman, 2004). An impact evaluation is inherently comparative (randomized experiments or field experiments); looks at both program outcomes and also longer-term impacts or impacts at other levels of analysis. These are larger scale, resource intensive, done for programs for which it makes sense to invest this kind of effort. A program is ready for impact evaluation when there is an existence of program theory; a decent amount of process data has already been collected and or is readily accessible, timelines and expectations have been reviewed, and resources are available for the evaluation.

One major challenge in impact assessment is to identify measurable goals. The terminology of goals and objectives can be more burdensome than facilitative for program staff (Patton, 2008). Rather one should focus on what program stakeholders are trying to achieve and the differences that they will observe within the program participants. The key is to have them identify meaningful goals rather than precise goals that they are not truly interested in.

Evaluation studies are typically performed to evaluate social intervention programs that are aimed at improving a social condition, such as decreasing homelessness in a particular community through educational programs. However, these methods could be adapted to

evaluating online educational programs such as the NWCA Coaches Leadership Academy outlined above. Considering that the Leadership Academy is in its infancy and is still being developed a unique opportunity exists to evaluate both the implementation and the outcomes of the leadership academy.

Throughout the development of this Leadership Academy, the key stakeholders have examined a variety of educational methods (in-person, one-one, online, etcetera) that could be used to meet the leadership development needs of collegiate coaches. Rather than just choosing one approach, the stakeholders decided that the most effective approach would be to involve a combination of all three educational approaches. The program stakeholders are very much concerned with the outcomes of the intervention; however, it is also essential to know what occurred in the program that can be reasonably connected to those outcomes (Patton, 2008). Because the program is still being designed, an evaluation should not only examine outcomes, but also the process and implementation of the program.

Patton suggested that interventions or programs could fail for two likely reasons: (1) the intervention was not implemented as designed or (2) the theory was not effective. By simply evaluating outcomes one might miss what specific factors of the program led to, or hindered, those outcomes. Therefore, the current evaluation will examine preliminary outcomes by measuring knowledge gained, intended use, and actual use of the material covered in the first two online modules, but will also evaluate implementation by examining how the coaches interacted with the program (i.e. how much time they spent in the modules, whether or not they completed the recommended exercises, etcetera) and what aspects of the modules best fit their needs and were the most impactful.

Purpose of the Study

There are three main purposes of this study. The first is to clearly identify the outcome and implementation objectives of the first two online modules as defined by program stakeholders. The second is to examine the impact of the first two online modules on the participating coaches with regard to the objectives identified by the stakeholders. For the use of this study impact will be defined by examining changes in knowledge, use, and intended use of the principles in the first two Modules. Finally, an evaluation of user preferences and effectiveness regarding the delivery of the program will take place.

Hypotheses

Between-Group Hypotheses

1. The intervention group will experience significant increases in knowledge, use, and intended use of the principles of the first two Modules compared to the control group.

2. The control group will experience no significant increases in knowledge, use, and intended use of the principles of the first two Modules.

Within-Group Hypotheses

3. The intervention group will experience significant increases in knowledge, use, and intended use from Time 1 to Time 2

4. No specific prediction was made from Time 2 to Time 3 for the intervention group.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this chapter is to provide a review of the literature that is relevant to this study. The chapter begins by providing a rationale for developing an online leadership course for intercollegiate wrestling coaches. Next, research pertaining to methodology in evaluation research, including theories and challenges of evaluation, is presented. The evaluation literature is followed by a brief summary of relevant leadership literature that is aimed at providing the reader with an adequate amount of information relative to the leadership strategies presented in the online course. Finally, research pertaining to leadership development will be discussed.

Responsibilities of Today's College Coach

The college coach of today is required to do much more than just provide technical and tactical instruction to his or her athletes (Baber & Eckrich, 1998; MacLean & Zakrajsek, 1996; Mallett & Côté, 2006). The college coach of today has to effectively recruit and retain athletes, maintain effective alumni relations, organize camps and clinics, actively engage in fundraising opportunities, and establish a quality relationship with the surrounding community. Furthermore, the performance of intercollegiate coaches is measured in multiple dimensions including team outcomes, team academic performance, and recruiting quality (Cunningham & Dixon, 2003). Although the coach is required to do much more than just coach, few are formally educated in the areas that are required of a coach beyond the technical and tactical aspects.

The focus of current coaching education programs is aimed at high school and youth sport coaches. For example, the National Federation of State High School Associations (NFHS) provides online training to interscholastic coaches in teaching and modeling behavior, sport specific technique, and general fundamentals of coaching (National Federation of State High

School Associations, 2009). Similarly, the American Sport Education Program provides coaching education courses to over 25,000 coaches a year and offers courses on coaching principles, sport physiology, sport psychology, and first aid in addition to other topics (American Sport Education Program, 2009). Both programs offer courses within an online instructional format and are mostly utilized by high school coaches.

Considering that most coaching educational programs are geared towards high school and youth sport coaches and few aim to educate the coach beyond player safety and development, a need exists then to provide intercollegiate coaches with an educational program that is designed to develop the myriad of responsibilities required of a college coach. In addition, a need exists to offer intercollegiate coaches the opportunity to develop skills beyond player development and safety; particularly because they are being evaluated in other areas (MacLean & Zakrajsek, 1996).

National Wrestling Coaches Association Leadership Academy

Collegiate wrestling in the United States has a long and rich history helping universities meet their educational athletic objectives while allowing many young men and women opportunities to further develop their wrestling skills and capabilities. However, over the last 30 years programs have been eliminated as the costs of sponsoring intercollegiate athletic programs have skyrocketed and because the NCAA only requires universities at the Division I level to field a minimum of six men's sports. Therefore, wrestling has to compete with 15 other Olympic sports, as well as Title IX requirements, for a limited number of varsity programs. Despite the fact that the NCAA Division I Wrestling Championships is one of the most successful championships of all NCAA sports, ranking between fourth and fifth in terms of revenue generated (NCAA, 2008), programs are continuing to be eliminated.

The National Wrestling Coaches Association (NWCA) has studied eliminated programs over the last 30 years, and while much of the stress placed on collegiate wrestling programs is a result of the financial stress of universities, some believe program elimination is also a result of the coaches. The coaches, while well meaning, lack strong leadership and student-athlete development skills and capabilities. The NWCA has come to believe that collegiate wrestling coaches are lacking the necessary leadership skills required of them outside of the wrestling room. For example, coaches have not successfully garnered campus and community support for their programs likely because these coaches were lacking communication, fundraising, and public relations skills. Additionally, some programs have had wrestlers getting into trouble off the mat or failing to live up to their academic responsibilities. The NWCA wishes to halt this alarming trend of program elimination, and, ideally, reverse it, by providing leadership training to America's collegiate coaches to address these issues.

In consideration of this threat the NWCA partnered with the Institute for the Study of Youth Sports (ISYS) to develop a state-of-the art leadership development program for America's collegiate wrestling coaches. The team that was assembled to create the leadership development program included the director of the NWCA who was the engineer behind expressing the need for such a program and has roughly 10 years of working with every coach in the country which allowed him to create the vision for why this program was needed. The second member of this team included the director of the ISYS who was selected because he has over 30 years of developing and implementing coaches education programs. The third member of the team included a collegiate Associate Athletic Director who was selected because he could offer another perspective on the needs of college coaches. Building from business leadership research and best practices, and what is known about effective coaching leadership, the development team

14

created a program that addresses a number of important issues. These issues include: (1) an understanding of educational athletics and the role wrestling plays in the lager academic community; (2) program vision and mission; (3) the coach as a leader and principles of leadership; (4) public relations, marketing and fund raising skills; (5) effective campus and community relations; and (6) strategies for developing wrestlers as people and the promotion of life skills through wrestling involvement.

The program will have a strong online presence of lectures and interactive material for the coach to work through, but will also include an in-person coaching leadership workshop, then an individualized coaching plan for enhancing one's program, and a process of peer mentoring from coaches who have been successful both on and off the mat. The NWCA leaders believe that change will occur over time through the combination of online educational materials, interaction and education at a leadership summit, and through successful coaches working with other coaches to develop their leadership abilities. The overarching goal is to improve the leadership ability of the coaches and in so doing decrease the amount of collegiate wrestling programs that are cut in the United States and hopefully regain some of those programs that were lost. Currently this program is the early stages of deployment and as such an opportunity exists to evaluate some of the Modules.

Considering that the program is in the early stages of deployment it is useful to evaluate the process and preliminary outcomes of the first two modules amongst a sample of collegiate wrestling coaches. Therefore, it is critical to gain an understanding of evaluation literature and methodology in order to appropriately examine, and define, 'effectiveness.'

Evaluation Literature

Considering that the current economic climate is weak and there are budget cuts being made in nearly every industry, the era of accountability is likely to reach new heights as more organizations, foundations, government programs, and universities will need statistical evidence that their money is being spent appropriately and effectively. A need exists within the field of coaching education online courses to implement more evaluation research.

Some evaluations have been conducted in the past, for example, Gould, Petlichkoff, Hodge, and Simons (1990) evaluated the effectiveness of a psychological skills workshop in two studies, with a group of senior elite wrestlers (Study 1) and a group of junior wrestlers (Study 2). The participants completed a pre-camp test, post-camp test, and a 3-month follow-up test. An analysis of the results of their study indicated that the program was effective in facilitating change in the wrestlers' knowledge, perceived importance, and use of psychological skills covered in the workshop. However, the results should be interpreted with caution because neither study included a control group due to ethical and logistical issues. In one of the few studies to evaluate online education in Kinesiology, Mary Barron (2006) examined the impact of an injury prevention program on injury rates, coaches proficiency in areas of first aid and injury prevention, coaches opinions of the program, and if change occurred within coaches decision making ability following completion of the injury prevention program. Using quantitative measures to assess the effectiveness of the course, Barron found positive findings regarding the impact of the injury prevention program, however, a quarter of the coaches failed the follow-up examination three months after completing the program. One finding of particular interest indicated that coaches preferred the web-based presentation method to a traditional lecture style course. It was reported that the coaches preferred to take the course online as opposed to in a

lecture because they were able to take the program when it suited them best, rather than having to set aside a couple of hours on a weekend or a week night.

Gould, et al. (1990) recommended that evaluation research of interventions should continue to be conducted. Additionally, in a paper on program planning in positive youth development programs, Petitpas, Cornelius, van Raalte, and Jones (2005) called for the evaluation of sport programs to include process, implementation, and outcome evaluation studies. It should be noted that evaluation research is often conducted, for internal purposes or otherwise, but is not published in peer-reviewed journals.

Types of Evaluation

Evaluation research is commonly used to evaluate programs that are designed to impact a social issue, such as homelessness, disease prevention, or underage drinking (Rossi, Lipsey, & Freeman, 2004). Evaluation is the "use of social research methods to systematically investigate the effectiveness of social intervention programs in ways that are adapted to their political and organizational environments and are designed to inform social action to improve social conditions" (Rossi, Lipsey, & Freeman, p. 16). Scriven (1991) offered an alternative definition that evaluation is aimed at determining the merit, worth, and value of programs or interventions. Given the definition and aim of evaluation, it is critical to examine the various types of evaluations, major theories, and challenges in evaluation research.

Rossi, Lipsey, and Freeman (2004) indicated that every evaluation situation is unique and there is no one evaluation method that can be used for all evaluations. Each evaluation design must be tailored to fit the circumstances "while yielding credible and useful answers to the questions that motivate [the evaluation]" (Rossi, Lipsey, & Freeman, p. 32). Therefore, Rossi and colleagues recommended that a critical component of evaluation design begins with an

17

understanding of the purpose of the evaluation and what questions the evaluation aims to answer. After an appropriate set of questions has been determined, which itself can be an arduous process, evaluation design can begin. Furthermore, questions typically fall into recognizable categories or types of evaluations.

Considering that many social programs are designed to fill a specific void or alleviate a social problem (Rossi, Lipsey, & Freeman, 2004) it is important to determine the extent of the need for a particular program. This form of evaluation is commonly referred to as a needs assessment. A needs assessment is an evaluation designed to make decisions about program improvement or the allocation of resources. Thus, priorities are determined on identified needs (Witkin & Altshuld, 1995). A need is often defined as a gap between what is and what should be (Witkin & Altshuld, 1995). It is important to conduct a needs assessment because there may be variation in the perceived needs among people in a given population. Needs assessments "are conducted to derive information and perceptions of values as a guide to making policy and program decisions that will benefit specific groups of people" (Witkin & Altshuld, 1995, p. 5). Needs assessments can be undertaken for a variety of reasons, but typically are intended to lead to action, change, and improvement.

An example of a needs assessment was conducted by Gould, Carson, Fifer, Lauer, and Benham (2009) and was designed to identify issues and concerns that may influence educational and developmental objectives through the high school sport experience. The researchers conducted focus group interviews with key stakeholders that included parents, coaches, athletic directors, student athletes, and principals. Their analyses revealed issues that potentially could have a negative impact on life skills or positive youth development that could normally result from sport participation, which could justify needs for coaching or parental education.

18

Furthermore, their needs assessment, as recommended in the evaluation literature, examined the perceived needs of various groups within a given population. This needs assessment allowed the researchers to identify unique needs specific to each subgroup as well as to triangulate findings across groups. Based on the identified needs (e.g. sport parent problems) follow up studies and projects are being pursued (e.g. sport parent education programs are being developed) by the authors.

Another series of evaluation questions focus on how a program is designed and conceptualized. Rarely do program stakeholders have a clear plan for the process of how their program is supposed to work and therefore an assessment of program theory is needed (Rossi, Lipsey, & Freeman, 2004). One method within this type of evaluation is evaluability assessments. Evaluability assessment is a process that helps one identify which evaluations would be useful and feasible, and begin the process of designing evaluations (Wholey, Hatry, & Newcomer, 2004). Essentially, an evaluability assessment examines the program model by clearly defining goals and objectives of the program, and if a program is ready to be assessed or is evaluable. Programs that are not ready to be assessed commonly fit one of the four following criteria: there is internal disagreement on program goals and performance criteria; goals do not fit the activity and or resources; performance indicators cannot be collected at a reasonable cost; or program managers are unwilling or unable to create change as a result of the data collected. However, a program is evaluable when goals are well defined, goals are plausible, an evaluator can obtain data at a reasonable cost, and program stakeholders are willing to, and have clearly outlined how they will, act on the data obtained from the evaluation.

Evaluators conducting evaluability assessments are attempting to understand the program methods, objectives, delivery process, and the social reality through interviews, observations,

and existing data. Evaluability assessments are aimed at getting program stakeholders to clearly

define and articulate the program's design and goals. Additionally, some evaluators conducting

an evaluability assessment will, from the data collected, create a logic model that describes

logical connections between activities and outcomes (Wholey, Hatry, & Newcomer, 2004).

Logic models can identify the resources or inputs that lead to program outputs and outcomes.

One example of an evaluability assessment examined three programs of the Juvenile

Justice Commission (JCC) of the state of New Jersey (Finckenauer, Margaryan, & Sullivan,

2005). The JCC was created to centralize reform efforts, which include planning, policy efforts,

and service provision, in the juvenile justice system in New Jersey. The evaluability assessment

was performed to answer questions about each programs readiness for evaluation, whether it was

worthwhile to commit resources to an outcome evaluation, and whether the data collected from a

formal evaluation would be used. The researchers collected data through interviews, site visits,

meetings with staff, and through reviewing the record keeping systems. The researchers

concluded that the evaluability assessment provided useful answers that enabled them to tailor

evaluation designs for two of the programs (Finckenauer, Margaryan, & Sullivan, 2005).

Another common set of evaluation questions examines the impact or outcomes of a

program. Outcome evaluation is an assessment of the degree of change in the outcomes over

time (before, during, after, and following the conclusion of the program). An outcome evaluation

does not necessarily involve a basis of comparison. Usually outcome evaluation is more small

scale, time limited, and within the scope of a well-resourced community organization (Rossi,

Lipsey, & Freeman, 2004). An example of an outcome evaluation was undertaken to examine a

pilot program of the Play It Smart program, which was designed by the National Football

Foundation to develop life skills and meet the needs of football players in underserved

communities (Petitpas, van Raalte, Cornelius, & Presbrey, 2004). The evaluation was designed to examine the goals of the Play It Smart program, which included improving academic standards (e.g. GPA, SAT or ACT scores, and graduation rates), increased community service activities, and knowledge and use of health enhancing behaviors. Data were collected from each operating site and quarterly academic updates were used to track progress of the academic goals of the Play It Smart program. Results revealed that the participants' grade point averages increased and 83% of the participants went on to higher education. Although the results are promising they must be interpreted with caution due to the lack of a control group.

An impact evaluation, on the other hand, is inherently comparative (randomized experiments or field experiments); looks at both program outcomes, but also longer-term impacts or impacts at other levels of analysis. These are larger scale, resource intensive, done for programs for which it makes sense to invest this kind of effort. A program is ready for impact evaluation when there is existence of program theory; a decent amount of process data has already been collected and or is readily accessible, timelines and expectations have been reviewed, and resources are available for the evaluation.

Weiss, Price, Bhalla, and Bolter (2006) conducted an impact evaluation that was designed to evaluate a positive youth development program. The First Tee uses golf as a context to promote personal life skills such as self-regulation, social responsibility, and effective decision-making. Using quantitative measures, the researchers compared youth participants in the First Tee program with youth in other organized activities, such as sports and band, on life skills transfer, usage, and developmental outcomes. As is recommended in impact evaluation, the researchers had both an experimental group and a control group. The researchers found

significant differences among the First Tee participants and the control group in life skill transfer, developmental outcomes, and general life skill usage.

One major challenge in outcome or impact assessment is to identify measurable goals, in order to determine effectiveness of a program. The terminology of goals and objectives "have become daunting weights that a program staff feel around their necks, burdening them, slowing their efforts, and impeding rather than advancing their progress" (Patton, 2008, p. 239). Rather one should focus on what program stakeholders are trying to achieve and the differences that they will observe within the program participants. The key is to have them identify meaningful goals rather than precise goals that they are not truly interested in. Specifically, evaluating leadership development programs can be challenging if the program's objectives are not set out clearly beforehand (De Vries, Florent-Treacy, Ramo, & Korotov, 2008). Therefore, it is important to identify and define effectiveness which Schweigert (2006), in a review of evaluation reports, posited that there are three different meanings of effectiveness in regard to the outcomes or impact of a program: increased understanding of the material covered in a program, accountability with regard to whether the actions taken and results achieved correspond to the expectations of the intervention, and causality which examines the cause and effect relationship between the intervention and the acquired behaviors. Given this perspective of evaluation it is then important to examine theoretical perspectives on the process of determining effectiveness.

Evaluation Theory

To truly understand evaluation research it is critical to examine a few prevailing theories in the field. Space limitations prevent a detailed examination of all theories of evaluation; therefore only a few key theories will be reviewed. Alkin (2004) stated that evaluation theories typically inform the reader about methodology, value, and use. Value, in regard to evaluation

theory, is the manner in which the data will be judged, whereas use is how the data will be used. Alkin and Christie (2004) presented an evaluation theory tree that had three primary branches. Each branch represented an orientation of evaluation theory and the branches were methods, use, and valuing. The 'methods' branch deals with obtaining generalizabiltiy and getting the right method for the evaluation. Alkin and Christie recognized that while most evaluation theorists discuss methodology, only a few theorists have been dedicated to examining methodology, and those theorists represent the methods branch.

Theorists who believe that evaluation should be focused on making value judgments of an evaluand (what or who an evaluator is evaluating) represent the 'value' branch (Alkin & Christie, 2004). The most prominent evaluation theorist in this branch is Michael Scriven, who is often called the "father of value." Scriven (1991) believed that evaluation is the process of determining the merit, worth, or value of something, which involves determining the standards of merit, worth, or value and the performance of the evaluands on these standards. Scriven also believed that the evaluator should integrate the data to arrive at an overall evaluation, which may be both judgmental and a result of complex calculation. According to Scriven, merit is the intrinsic value of evaluands in regard to how well they performed. Worth, on the other hand, refers to the extent to which the evaluand met the needs of their target audience and whether or not it was cost-effective. Finally, the value of a program, according to Scriven, is measured by its importance in terms of the greater social good.

A limitation of Scriven's approach is that the evaluator remains external to the program that is being evaluated and does not work with the evaluand to determine methods and the general process of the evaluation. It is not the objective of this current study to evaluate the project from a distance, rather, to work with program stakeholders to evaluate certain aspects of

23

the program and use that data to inform the continued development of the remaining aspects of the program. Therefore, the current study will be grounded in utilization-focused theory.

The final branch of the evaluation theory tree, referred to as the 'use' branch, focuses on theorists who feel it is critical to conduct evaluations that are designed to help program stakeholders make decisions (Alkin & Christie, 2004). Utilization theorists design evaluations where the evaluator and the program stakeholders are solely focused on using the findings of an evaluation. Although, there are many prominent theorists that would fall within this branch, one of particular interest is Michael Patton.

Patton (2008) began his definition of utilization-focused evaluation as an "evaluation done for and with specific intended primary users for specific, intended uses" (p. 37). Because the focus of evaluation, in this definition, is use, it is clear that the design and process of evaluation should be permeated with an intentional focus on use from the beginning of the evaluation all the way through to the end. Patton (2008) continued that evaluations should be judged by their usefulness—for the intended users—and whether or not they are actually used. Patton (2008) concluded, "the focus of utilization-focused evaluation is on intended use by intended users" (p. 37). Throughout this theory, Patton (2000) emphasized that use is not some abstract construct; rather use "concerns how real people in the real world apply evaluation findings and experience the evaluation process" (p. 425). Finally, because utilization-focused evaluation is specifically used to create knowledge that will be used by the intended users, the theory is quite flexible and adaptable to the situation with regards to having the users work alongside the evaluator to select the methods, content, and focus of the evaluation. Considering this definition of utilization-focused

evaluation, with regards to the emphasis on utility and use, the role of the evaluator and the process of the evaluation are critical.

Patton (2008) offered an alternative method to Scriven with regard to determining value or rendering judgment. Scriven proposed that the evaluator is external to the program being evaluated and therefore independently renders judgment regarding the value of the program. Patton, alternatively, stated that the evaluator could offer interpretations, and judgments, if that is what the evaluation users want. However, Patton stated that even if the evaluators request him to render judgments he will only do so after providing the stakeholders "an opportunity to arrive at their own conclusions unencumbered by [his] perspective" (p. 500). Finally, as is typical in utilization-focused evaluations, Patton recommended that the evaluator should take on the role of evaluation facilitator and work with the decision makers and intended users during the process of rendering judgment and making recommendations based off of the data.

Because the program is still being designed, an evaluation should not only examine outcomes, but also the process and implementation of the program. Patton suggested that interventions or programs could fail for two likely reasons: (1) the intervention was not implemented as designed or (2) the theory was not effective. By simply evaluating outcomes one might miss what specific factors of the program led to, or hindered, those outcomes. Patton recommended that an implementation evaluation aimed at program improvement would examine a programs strengths and weaknesses. Furthermore, Patton discussed different types of an implementation evaluation, two of which are of particular interest to the current evaluation. The first is process evaluation that "focuses on the internal dynamics and actual operations of a program in an attempt to understand its strengths and weaknesses" (Patton, 2008, p. 324). A process evaluation will include questions about how the participants experience and perceive the

program and search for explanations of what resulted in successes, failures or changes. Therefore, a process evaluation aims to examine how an outcome was produced, rather than simply just examining the outcome.

Another type of an implementation evaluation is a component evaluation. This type of evaluation examines one or two pieces of a program rather than the entire program. For instance, the NWCA Leadership Academy has several components including the in-person workshop, mentoring, and 10-online modules. Rather than examining the impact or implementation of all of the components the current evaluation will focus only on two of the online modules. Patton (2008) argued a component evaluation can useful to determine potential improvements to a component, or if the component merits continuation. For the purposes of this study, by examining two of the online modules, the stakeholders can identify what aspects of the modules are most and least impactful and then use that information to improve those modules further and to inform the development and content of the modules that are yet to be developed. On the other hand, should the evaluation findings be interpreted to demonstrate that the online modules are not as useful as the stakeholders had hoped; the stakeholders could then refocus their efforts onto the other components (in-person workshop and mentorship) of the program.

Therefore, the current evaluation will examine outcomes by measuring knowledge gained, intended use, and actual use of the information covered in the first two online modules, but will also evaluate implementation by examining how the coaches interacted with the program (i.e. how much time they spent in the modules, whether or not they completed the recommended exercises, etcetera) and what aspects of the modules best fit their needs and were the most impactful.

Using utilization theory with a focus on outcome and implementation evaluation, this evaluation will examine the implementation and impact of the first two online Modules of the NWCA Leadership Academy. Considering that some of the objectives in the first two Modules are to develop leadership abilities within the coaches, a brief review of the literature on leadership is important.

Leadership Literature

This review of leadership literature is not a detailed review; rather it is intended to provide enough information for the reader to obtain a working knowledge of leadership as it is being applied to the online coaching Leadership Academy being evaluated in this study. Therefore, it is critical to first examine general leadership research, briefly discuss factors affecting today's leaders, and leadership development and evaluation. Sport psychology leadership research and theory will also be briefly examined.

Conceptualizing and Defining Leadership

Leadership has been extensively studied in a myriad of industries including business (e.g. Cohn, Khruana, & Reeves, 2005), management (e.g. Griffin, 2003) and sport (e.g. Case, 1987; Chelladurai & Arnott, 1985; Chelladurai & Saleh, 1980; Mondello & Janelle, 2001). Even though leadership has been extensively studied, there is not a single universally accepted definition of leadership (Bennis, 2007) or an accepted characterization of leadership (Mondello & Janelle, 2001). Despite these differences Northouse (2004) has indicated that four components seem to be involved in all conceptualizations of leadership. These include: viewing leadership as a process; recognizing that leadership involves influence; understanding that leadership occurs within groups; and realizing that leadership is about achieving goals. Based on these components

Northouse (2004, p. 3) operationally defined leadership as "a process whereby an individual influences a group of individuals to achieve a common goal."

In his widely used leadership text, Northouse (2004) goes on to present the major approaches to studying leadership. Included in these were the trait, skills, style, situational, contingency, path-goal, leader-member exchange, transformational, team and psychodynamic approaches. While each leadership approach has pros and cons, it is clear that to truly understand contemporary leadership, personal aspects, characteristics, and skills of the leader, the situation and their interaction are all critical to understand.

Coming to the same conclusion, Hackman and Wageman (2007) reframed common leadership questions that typically have hindered the growth of leadership research. Hackman and Wageman suggested that researchers examine the interaction of a leaders' personal attributes and the situational properties, rather than just focusing on the traits of a leader. Examining the interaction between a leaders' personal attributes and the situational properties, encompasses the beliefs that a successful, or unsuccessful for that matter, leader is not always a direct result of his or her specific behaviors. Therefore, one must also examine the conditions a leader is faced with as well as his or her personal characteristics and attributes. In regard to this study, intercollegiate coaches are being asked to lead in unfavorable economic conditions and are competing with sports, such as football and basketball that are virtually recession proof. Furthermore, because of the economic stress placed on many universities support staff cuts are being made, which result in the coach having to do much more than just coach. Therefore, college coaches of today must have skills in public relations, marketing, recruiting, fund raising, and alumni relations. They must also adopt a broader view of the goals of college wrestling leadership to include success on

28

the mat as well as off whether that be in the academic success of their athletes, community service, public relations and fund raising.

The NWCA Leadership Academy was designed by combining research in business and leadership to provide education to collegiate coaches in an effort to develop their leadership abilities beyond technical and tactical instruction. In a special issue of the *American Psychologist* devoted to leadership, Bennis (2007) professed that leaders do not exist in a vacuum and one must not overlook the situational impact on leadership. Vroom and Jago (2007, p. 23) define leadership as "a process of motivating others to work together collaboratively to accomplish great things." Vroom and Jago continued that organizational or leadership effectiveness is affected by situational factors that are not always within one's control, the environment affects how leaders behave, and situations influence the consequences of the leader's behavior. Therefore, views about leadership that are strictly trait-centered or purely situational do not encompass the phenomenon that is leadership. Furthermore, leadership development must adapt to this new age of leadership and begin to ask the right questions about leadership, which, ideally, will lead to more effective leadership development.

Leadership Development and Evaluation

Leaders are developed both informally and formally. Informally, individuals will engage in personal leadership development by reading the latest book on the topic in an effort to pick up some tips on how they can become a better leader. In a formal manner, leaders, or potential leaders, will engage in leadership development training programs or workshops, feedback programs, or will hire an executive coach. Riggio (2008) argued that the reason why there is a significant amount of published material on leadership and so much money is spent on leadership development is because people believe that leaders can have a big impact on an organization and

29

that the development of leadership is an abstract and complex phenomenon. Essentially, organizations and individuals "believe that leadership development is important and worth the investment of resources and their personal time" (Riggio, p. 384).

Before discussing program design, it is first important to examine perspectives on whether leaders are born or made. Avolio and Hannah (2008) cited behavioral geneticists and research with twins to make the argument that there is significant evidence that one's ability for leadership is more a result of their environment than a result of heredity. Rosenbach and Taylor (2001) stated that although there is general agreement that leadership could be developed; some individuals find it easier to grasp and successfully demonstrate the qualities of leadership.

Riggio (2008) recommended that models of employee training and development could be applied to leadership development. Riggio suggested that the model begins with a needs assessment that is driven by the organization's mission. In regard to the current study, the NWCA has extensively researched the current state of wrestling and the requirements of the coach in order to recognize the needs of the college coach of today. From this point, Riggio suggested that organizations take into account their leaders' readiness, desire to learn, and capacity to become a better leader. Following this step an organization can develop leadership training programs that are specified to the needs and capacities of the leaders in training. The next step, evaluation, is an often overlooked process that is either limited in scope or not undertaken at all (Riggio, 2008).

Although evaluation research was previously reviewed it is important to examine aspects of leadership development evaluation that are unique. Riggio (2008) stated that evaluations of leadership development are commonly focused on perceptions of success, measures of retention, behavioral criteria (are the lessons being put into action), and finally results criteria, which

examines whether or not there was a direct link between increased revenue or better performance and the leadership development course. De Vries, Florent-Treacy, Ramo, and Korotov (2008) recommended that leadership development programs should be constructed on a framework that lends itself to an integrated evaluation. The authors recommended that the framework include: clear outcome goals of the intervention, theoretical basis that matches the organizational context, specific leadership dimensions that the program is targeted toward, and appropriate teaching tools that fit the focus of the program. One benefit of this design is that an evaluator can evaluate the program within each aspect of the recommended framework.

More specifically to coaching education programs, Gilbert and Trudel (1999) recommended the strategy of measuring if the course was delivered as it was designed, if the coach acquired new knowledge, and if the coach actually applied the knowledge exhibited by his or her coaching behaviors. The authors collected data through participant observation, semi-structured interviews, stimulated recall interviews, and systematic observation. They concluded that although the evaluation strategy was time consuming, it was successful. However, one limitation was that the study was not designed to evaluate the program; rather it was designed to test the evaluation strategy. Therefore, the authors only studied one coach involved in the coach education program.

In summary, leadership is a complex phenomenon, so much so that a single, all encompassing definition of leadership has not yet been discovered (Bennis, 2007; Mondello & Janelle, 2001); leadership development is also a complex topic. The college coach of today is required to demonstrate leadership qualities of both an instructional nature directed toward their athletes, as well as leadership skills unrelated to coaching technique (Barber & Eckrich, 1998; MacLean & Zakrajsek, 1996; Mallett & Côté, 2006). Therefore, coaching education programs

31

must be designed to develop assets that are required of a coach. Furthermore, coaching education programs must be evaluated to assure that they are meeting the needs of coaches as well as having an impact on their leadership abilities. For example, the NWCA Coaching Leadership Academy was based on the assumption that today's wrestling coach is a leader that has the goal of influencing those he or she leads to achieve key team and organizational goals. Historically, the goal was simply to enhance wrestler and team performance on the mat. Today, however, leadership goals must be viewed more broadly to include the academic performance of the student athlete, fund raising, community relations and enhanced athlete health and safety. Thus, the goals of today's coach as a leader are multifaceted. For this reason the NWCA program is designed to enhance the coach's knowledge and awareness in each of these areas.

Regardless of the goals a leader pursues, modern leadership involves helping one's organization define their goals and then facilitate members' efforts for goal achievement. Given this fact, the NWCA focuses on leader influence skills like creating a compelling program vision, setting goals, building trust and credibility, effectively communicating and providing feedback.

Leadership in Sport

Thus far, the general leadership research has been summarized because the NWCA Leadership Academy is aimed at developing coaches as general leaders, much like a corporate Chief Executive Officer (M. Moyer, personal communication, December 1, 2008). However, this does not mean that sport psychology researchers have not studied leadership. Leadership has been extensively studied (see Weinberg & Gould, 2007 for a general overview) and parallels the general leadership research. The dominant model guiding sport psychology research is Chelladurai's (1990) multidimensional model of leadership. This model contends that effective leadership is influenced by the situation, leader characteristics and member characteristics.

32

Player performance and satisfaction are also a function of the leaders actual behavior, the

behavior required by the situation, and preferred behaviors. Maximum motivation, performance

and satisfaction are achieved when there is congruence between desired, actual and preferred

leader behaviors.

In an attempt to measure leadership behaviors, preference for specific behaviors, athletes'

perceptions of their coaches' behaviors, and coaches' perceptions of their own behaviors,

Chelladurai and Saleh (1980) developed the Leadership Scale for Sport (LSS). The LSS has five

dimensions that include training and instruction (coaching behavior that is aimed at improving an

athlete's performance), democratic behavior (coaching behavior that allows greater athlete

participation in decision making), autocratic behavior (coaching behavior that stresses individual

authority and decision making), social support (motivational behavior that demonstrates concern

for the well-being of an athlete), and positive feedback (motivational behavior that reinforces an

athlete by recognizing and rewarding good performance) (Chelladurai & Saleh, 1980). The LSS

has been used to examine and identify athlete preferences and perceptions of coaching behaviors

in a variety of contexts (e.g. Chelladurai & Arnott, 1985; Dwyer & Fischer, 1988; and Terry &

Howe, 1984).

In one study using the LSS, researchers examined wrestlers' perceptions of their coaches'

leadership as predictors of satisfaction with the leadership. Dwyer and Fischer (1990)

administered the LSS, as well as a satisfaction with leadership survey, to 152 wrestlers aged 15

and older. They found that wrestlers who perceived the behavior of their coaches to be high on

positive feedback, high on training and instruction, high on democratic behavior, and low in

autocratic behavior exhibited the highest satisfaction with coaches' leadership behavior.

However, one limitation of this study, as it pertains to the current study, is the sample included

both high school and college aged wrestlers and only examined the relationship between perceived leadership and satisfaction.

Based on this research it is emphasized that coaches must understand their own leadership style, recognize how the situation and followers influence the leadership context and adjust their style to the needs of the situation. In consideration of the college coach of today, it is critical to examine the coach as a leader beyond measures that only include his or her perceived behavior as a coach leader. Coaching athletes, and the behaviors that are exhibited during this interaction, is only one duty among many required of today's college coach.

Interestingly, the most recent work of Chelladurai (2007) has modified the multidimensional model of leadership to include the effects of transformational leadership examining its effects of situational and member characteristics. In pursing excellence he suggests that leaders must create a vision, engage in inspirational communication, engage in intellectual stimulation, provide individualized supportive behaviors, instill task and ego-oriented climates and provide various types of training behaviors. Hence, the leadership research in sport is expanding to a broader view of leadership effectiveness beyond optimizing coach and athlete relations. This approach is consistent with the training program adopted by the NWCA.

CHAPTER 3

METHOD

The present study was conducted in three separate phases to correspond with each of the purposes. The overarching purpose of Phase One was to clarify what specific criteria the NWCA Coaching Leadership Academy should be evaluated on. The participants in Phase One, key stakeholders in the NWCA Coaching Leadership Academy, were interviewed for their perspectives on the program's goals and objectives. Phase two of the study then focused on evaluating the effectiveness of two of the program's online modules. Finally, Phase Three assessed the intervention group coaches' opinions regarding the ease and utility of the online video components (i.e. coach interviews, PowerPoint with voiceover, etcetera).

Phase One: Qualitative Interviews of Key Stakeholders

Participants. To determine which specific criteria Modules 1 and 2 should be evaluated on, qualitative interviews were conducted with key stakeholders. The sample in Phase One included seven participants. Considering the objectives of Phase One (to identify objectives of the first two online Modules) it was important to collect data from varying levels of stakeholders. The sample in Phase One was comprised of two subgroups. The first subgroup included five participants. Three participants were influential in the development of the program and the other two participants were experienced coaches who were acting as mentors in the mentorship piece of the Leadership Academy. The participants in the first subgroup included: the executive director of the NWCA; the director of the ISYS who been the lead developer and director of the content and its delivery; and the associate athletic director at a university in the Midwest who is in charge of the mentorship portion of the leadership academy. Additionally, the first subgroup included two mentors who went through the program as experienced coaches and could

35

objectively judge the content. The second subgroup included two participating coaches who have already completed the first two modules. The two participating coaches were involved in the inaugural class of the Leadership Academy, have completed the first two online modules and offered a unique perspective that added to the richness of the data collected in Phase One. Each group offers a unique perspective to the Leadership Academy and, therefore, can effectively identify key components to evaluate in Modules 1 and 2.

Procedures. Permission to conduct this study was obtained from the Human Research Protection Program at MSU. Based on Patton's (2008) recommendation to work closely with key stakeholders to identify meaningful goals, Phase One consisted of qualitative interviews with key stakeholders involved in the NWCA Leadership Academy.

In Phase One the researcher first contacted the director of the NWCA to identify participants to include in this phase. The sample in Phase One was a purposeful sample that was selected for a number of factors including convenience, criterion (they were all involved in the NWCA Leadership Academy), and opportunistic (Patton, 1990). In addition to the lead program architects (NWCA executive director, ISYS director, NWCA mentor program coordinator) additional members of the sample were chosen based on which mentors and coaches would be willing and available to participate and had completed the first two modules. Additionally, the director of the NWCA was asked to recommend participants who would offer honest and open feedback. The director of the NWCA then sent out an email to a number of potential participants describing the purpose of the evaluation and requesting that interested participants respond to the director of the NWCA. The researcher then emailed interested participants, informed them about the evaluation study, attached the consent form, and requested formal consent. Additionally, a link to complete the demographic survey (See Appendix A) was included in the email. The

researcher then scheduled appointments with the participants to conduct the interview. Prior to the interview the investigator requested that the participants reviewed Modules 1 and 2.

Semi-structured interviews were conducted over the phone (six participants) or in-person (one participant) and lasted between 20 to 60 minutes. All interviews were digitally recorded and transcribed verbatim.

Measurements

Demographics. A demographic questionnaire was used to obtain background information from Phase One participants. The demographic survey had items that included age, NCAA division (if applicable), number of years as a coach (or coach educator), current position, and role in the Leadership Academy (See Appendix A).

Interview Guide. A semi-structured interview guide was used to conduct the interviews in Phase One (See Appendix B). The semi-structured nature of the interview guide ensured that the participants were asked a set of core questions to cover the most critical topics. Additionally, the interviewer asked probe questions to gather more detailed responses thus increasing the likelihood of rich data. The interview guide focused on obtaining information regarding the objectives and outcomes of the first two online Modules, as perceived by the stakeholders. Some of the questions included: In general what do you perceive are the main objectives of Module 1; what skills (knowledge) should the coach have following Module 2; if Module 1 is successful, how will the coaches be different than they were before completing Module 1; which aspects of the online Modules do you think will be the most successful in achieving the goals of Modules 1 and 2; which aspects of the online Modules do you think will be the least successful in achieving the goals of Modules 1 and 2?

Phase Two: Evaluation of Module's 1 and 2 Intervention

Modules 1 and 2. Module 1 of the NWCA Coaching Leadership Academy is titled: "A Call to Arms" and has five main purposes: (1) increase the coach's awareness of threats to the sport of collegiate wrestling; (2) create a sense of urgency for the coach to take responsibility for saving wrestling by making his or her own program all it is capable of being; (3) help the coach formulate a plan for taking his or her program to the next level; (4) motivate the coach to improve his or her leadership skills and act to improve his or her program; and (5) have a coach develop a vision for his or her program. Module 2, entitled "The Coach as a Leader," has four main purposes: (1) help the coach understand the importance of effective leadership; (2) increase the coach's understanding of components of effective and ineffective leadership; (3) help the coach understand his or her leadership style; and (4) help the coach develop effective leader communication skills.

Design. The original design of the study called for an evaluation of Modules 1 and 2 of the program using a 2 X 2 (Group x Pre/Post) design. Subscales included the knowledge and intended use items. However, as will be explained later in data analysis section, the inability to have control participants complete surveys on the post-test (Time 2) called for an alteration in the original design.

Participants. The 48 participants in Phase Two included male (n = 47) and female (n = 1) coaches who agreed to take part in the NWCA Coaching Leadership Academy. Of the 48 coaches 45 were head and three were assistant college wrestling coaches. Their age ranged from 26 to 61 years (*M* = 36.10, *SD* = 7.82). The participants reported coaching at the NCAA Division I level (n = 13), Division II (n = 11), Division III (n = 10), NAIA (n = 12), at the community college level (n = 1) and in a newly created women's division (n = 1). The coaches reported having from 1 to 26 years of coaching experience (*M* = 8.63, *SD* = 5.30) and the majority of the

participants have earned a masters degree (54.2%), while 21 of them have earned a bachelors degree (43.8%). Furthermore, of the 29 coaches (60.4%) who have had previous experience taking online courses, 24 of them found online courses to be either moderately (n = 14) or very effective (n = 10).

      Procedures. The participants were identified, rather then randomly selected, because an objective of the director of the NWCA is to launch this program with the coaches that he believes have an urgent need to develop their leadership skills, are in highly visible critical coaching positions that he believed are essential to the success of collegiate wrestling, or both. The director of the NWCA outlined a number of warning signs in identifying a coach in urgent need of the program; these warning signs include: (1) a part-time coach; (2) a program that is partially funded; (3) a wrestling team that is not part of the multi-sport conference that the institution participates in; (4) a wrestling team that has a consistent losing record; (5) a school that has a football program and is egregiously out of compliance with the proportionality requirement of Title IX; (6) a program with chronic off the field incidences; (7) a program that lacks alumni involvement; (8) a team without sufficient spectator support; and (9) a program that is part of a school that has recently released a press release announcing budget problems. Using these criterion, the director of the NWCA identified a group of 31 coaches as participants in the Leadership Academy. After identifying the coaches, the NWCA emailed the coaches inviting them to participate in the Leadership Academy. In an effort to increase compliance for participation in the NWCA Leadership Academy, the NWCA informed participants that they would provide a full stipend to the participants who complete the Modules that will allow them to attend the in-person workshop portion of the Leadership Academy in 2010 at no cost. In addition to requesting their participation in the Leadership Academy, their voluntary

39

participation in the current study was also requested. After this initial group of 31 coaches was contacted another four were later added to the intervention group. Additionally, the director of the NWCA also contacted another 31 coaches, to create a control group, that were matched by division and experience to the intervention group based on his knowledge of them and their programs. Thirty-five coaches agreed to participate in the intervention group, with 23 completing all of the necessary requirements. The control group began with 13 participants, with only four coaches finishing all of the necessary requirements, which necessitated a change in the original design.

Intervention group. After the NWCA director emailed the potential Leadership Academy coaches, the researcher, to formally request their participation in the current study and to obtain consent, then emailed the coaches. Included in the initial contact email, were instructions on how to gain access to the demographic survey (See Appendix C for Survey 1) and Survey 2 (See Appendix D for Survey 2). All surveys were completed online. Following completion of the demographic survey and Survey 2, the intervention group participants were then provided access to the online modules. In an effort to avoid an unequal dosage of the intervention (i.e. some participants completing all 5 modules then completing Survey 3, while others only completing 2 modules and then completing Survey 3), the intervention group participants did not complete Survey 3 (See Appendix E for Survey 3) until completing all five online modules. Additionally, the intervention group completed a follow-up survey (See Appendix F for Survey 4), to obtain more qualitative information used in Phase Three of the study. Finally, in an effort to test the use and retention of key program content, the coaches in the intervention group completed a retention survey one month after completing the modules (See Appendix G for Survey 5). Following completion of the final survey, participants in the intervention group were then

emailed a thank you letter as well as instructions on how to obtain the stipend for the in-person workshop.

      Control Group. The control or comparison group coaches were first emailed by the researcher and the director of the NWCA requesting their participation and formal consent as control group coaches (Appendix H). After obtaining consent, the control group coaches were then provided instructions on how to gain access to the demographic survey and Survey 2. Following completion of the demographic survey and Survey 2, the control group coaches were then provided an interim period of one month, to match the time the intervention coaches were given to complete the Modules, before completing Survey 3. Following completion of Survey 3 the remaining control group coaches were provided the opportunity to complete the modules, however, none of the coaches accepted the offer to do the modules on their own.

      Measurements

      Demographics. The demographic survey for participants in Phase Two has items that include age, NCAA Division, number of years coaching the team, level of coaching (head or assistant), total number of years coaching wrestling as a head coach, total number of years coaching wrestling as an assistant coach, number of years playing experience (See Appendix C).

      Surveys. In addition to the demographic survey (Survey 1), four surveys have been developed to reflect the theoretical standpoint of Patton (2000; 2008) and the recommendations put forth by Schweigert (2006), therefore the surveys are designed to determine the value and effectiveness of the first two Modules of the Leadership Academy. Effectiveness was further defined by the data collected in Phase One, thus the surveys were designed to examine effectiveness by determining the knowledge, use, and intended use of key principles covered in the first two Modules.

Survey's 2 and 3 (See Appendices D and E) contained items asking the coaches to rate their degree of knowledge and intended use of the topics presented in Modules 1 and 2 of the online portion of the Leadership Academy. The final survey, Survey 5 (See Appendix G) measured the retention and actual use of the material presented in Modules 1 and 2 of the Leadership Academy. (Note: The highlighted questions in the survey's represent new questions and '**' next to the questions represents eliminated questions from one survey to the next).

Phase Three: Coaches' Opinions Regarding Ease and Utility of the Online Video Format

Participants. The 28 participants in Phase Three included coaches who were involved in Phase Two of the current research study. Their ages ranged from 26 to 50 years old (M = 34.32, SD = 6.20). The participants reported coaching at the NCAA Division I level (n = 6), Division II (n = 6), Division III (n = 7), NAIA (n = 8), and at the community college level (n = 1). Of the 20 coaches in Phase Three who have had experience taking online educational courses, 17 (85%) found the method of online education to be moderately (n = 8) to very (n = 9) effective.

Procedures. The procedures for obtaining participants are identical to the procedures outlined in Phase Two. Following completion of the first two Modules, the participants involved in the intervention group were asked to complete a follow-up survey (See Appendix F).

Survey. The survey used in Phase Three (Appendix F) contained items asking the participants to rate the most and least useful aspects of Modules 1 and 2. Additionally, participants were asked to evaluate the usefulness of Modules 1 and 2. Figure 1 is a flow chart of the participant experience for Phases Two and Three.

Figure 1: Flow Chart of Participant Experience Phases Two and Three
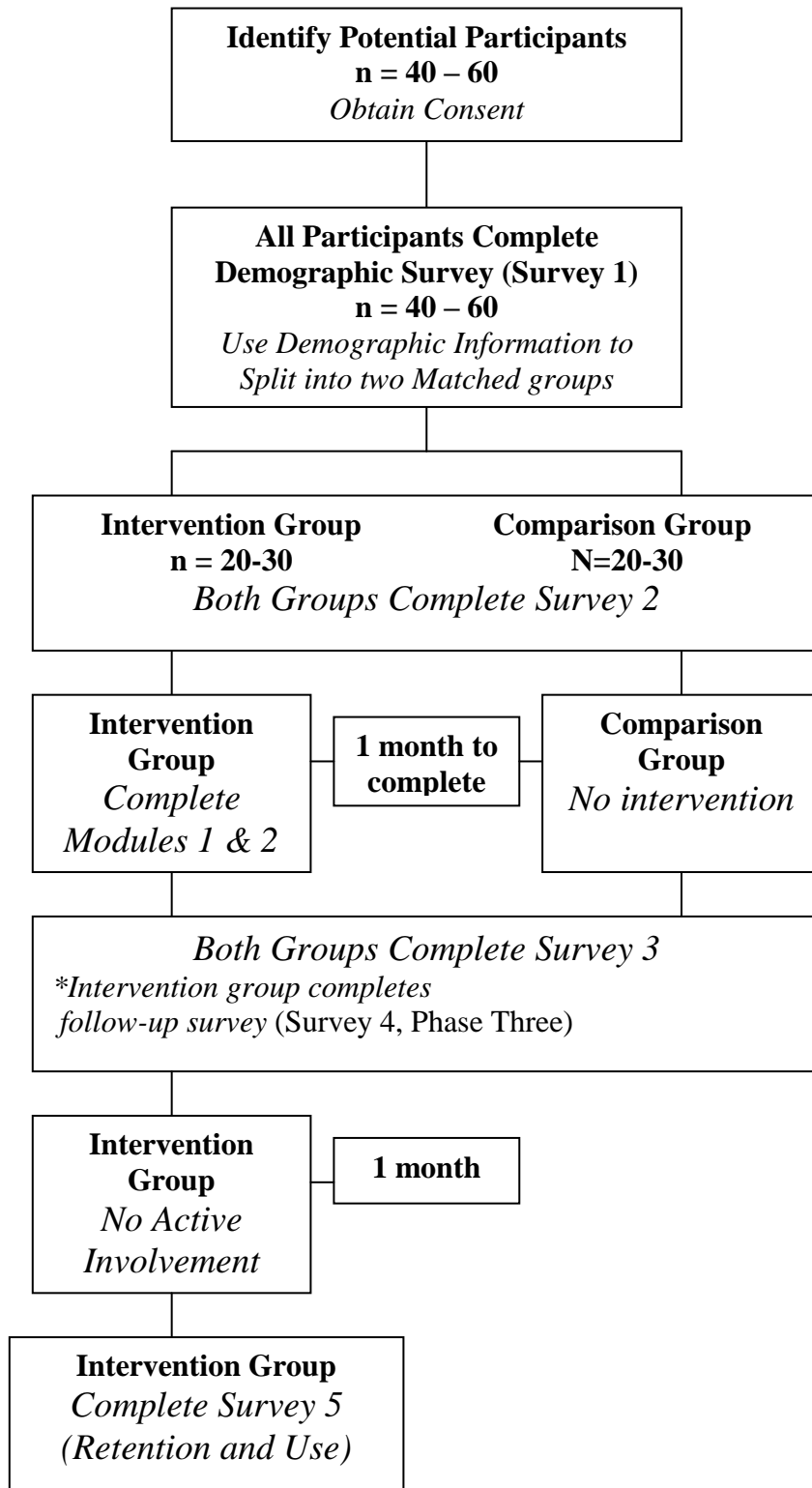
Data Analysis

Phase One

To analyze the interview data, audio recordings of the interviews were transcribed verbatim. The primary investigator then read and re-read each transcript in order to become familiar with the data. Using Miles and Huberman (1994) as a guide, the researcher identified individual meaning units (codes) that emerged directly from the participants' words. After coding all interviews the researcher then searched for similarities across the interviews, isolated commonalities and differences, then gradually elaborated a small set of generalizations that covered the consistencies from the data. Then the primary investigator identified goals and objectives that the participants believed should be obtained through the first two Modules to help formulate the quantitative measures that were developed based on the literature and will be used in Phases 2 and 3.

Identifying the number of participants who cited particular themes can provide additional meaning than just identifying themes. Therefore, the numbers in parentheses next to the themes denote the quantity of participants citing the theme (first number) and the quantity of respondents interviewed (second number).

Data was analyzed and organized by subgroups. These included: (1) program developers and mentors; and (2) coaches who participated in the first iteration of the Leadership Academy and who have previously completed the first two modules. Regarding the second subgroup (young coaches), it was clear to the researcher and the member checker that one of the coaches did not review the online modules prior to the interview, which was evidenced by the interviewee's inability to answer questions specifically referring to the online modules. Rather, the respondent provided general sweeping opinions about skills he believes all coaches should

have, most of which were not covered in the module that he was being asked about. When probed for specifics about a module he would often answer that he did not know or could not remember. Therefore, his interview has been removed from any further analysis. In an effort to give the other coach a voice in this research and to examine common themes, his responses that echo the themes from the first group (developers and mentors) will be discussed. Additionally, unique responses and responses from questions that are different from the first groups' interview guide will also be discussed.

Phase Two

Between-Group Analyses. The original study design, and the between-group hypotheses, was intended to evaluate the effectiveness of the first two online modules by employing a 2 X 2 (Group x Pre-post) design. However, the size of the control group at Time 2 ($n = 4$) made it impossible to warrant an analysis of this nature (see the number of participants in each group at each time in Appendix I). This certainly weakened the present study and was extremely disappointing to the investigator. However, it seemed unavoidable as many efforts were repeatedly made to obtain and retain control group coaches in the study. To start, the director of the NWCA made initial contact with potential control group coaches, informing them of the study, and urging them to participate. Then, the researcher sent a follow-up email one week after the first email was sent. Coaches who had not responded were then emailed up to five more times over the course of three weeks. This process yielded 13 participating control group coaches at Time 1, a fact that was very surprising to the director of the NWCA who during the design phase of the study felt that there would not be problems getting control coaches to participate. After completing the first survey, the control group coaches were then emailed thanking them for their participation and reminded that in one month they would be contacted

45

again to complete the post-test (Time 2). The 13 coaches were emailed exactly one month after they completed the pre-test. They were then emailed every week after that for 3 weeks. This process yielded four control group coaches at Time 2; a second major disappointment for the investigator.

While the original design of the study was impossible to implement without enough control or comparison participants, this did not mean that some meaningful comparisons could not be made. First, the intervention and control groups were compared at Time 1. An independent samples *t*-test for each survey item was conducted. Conducting multiple t-test analyses will greatly increase the chances of making a Type I error without an adjustment to the p-value. However, if one were to protect to highly against a Type 1 error they would then increase the chances of a Type II error. Therefore, the p-value was set to 0.01.

A MANOVA was conducted comparing the intervention and control groups with the dependent variables formed as subscales of Knowledge and Intention at Time 1. The purpose of a MANOVA is to examine if there are differences amongst the control and intervention group at Time 1, so the researcher can control for those differences in further analyses. In this study, the researcher wanted to examine differences beyond the item level and therefore conducted a MANOVA with the subscales of Knowledge and Intention by group. To create the subscales, the researcher first conducted a conceptual analysis of the items to identify which ones best represented knowledge and then intention. Then, the researcher conducted a reliability analysis of the 42 items (see Appendix J for the items that make up each subscale) that made up the Knowledge subscale and the Chronbach Alpha at Time 1 was 0.852. For the Intention subscale at Time 1, the Chrobach Alpha of the 14 items was 0.911. The Chronbach Alphas for Knowledge and Intention at Time 2 were 0.905 and 0.887, respectively. For any analyses with Time 3 data,

the Knowledge subscale was reduced to 15 items and the Intention subscale to 13 items (certain items that were asked at Time 2 were not asked again at Time 3). For ease, the smaller subscales will be hereto referred to as KnowledgeSmall and IntentionSmall. The KnowledgeSmall subscale had Chronbach Alphas at Time 1, 2, and 3, of 0.869, 0.902, and 0.905, respectively. The IntentionSmall subscale had Chronbach Alphas at Time 1, 2, and 3, of 0.911, 0.886, and 0.930, respectively.

Within-Group Analyses

Time 1 to Time 2. Despite the fact that there were not enough participants to compare intervention and control coaches at Times 1 and 2, it was still possible to examine the effectiveness of Modules 1 and 2 (Hypothesis 3). A paired samples *t*-test was conducted for each item to explore differences within the intervention group from Time 1 to Time 2.

Time 2 to Time 3. To further explore the impact of Modules 1 and 2, the intervention coaches were tested again one month after completing the Modules. A paired samples *t*-test was conducted at the item level to examine retention from Time 2 to Time 3. Further, a paired samples *t*-test was conducted with the subscales of KnowledgeSmall and IntentionSmall from Time 2 to Time 3.

Phase Three

Phase three data were analyzed by examining the intervention groups' mean scores on questions pertaining to their opinions of the online modules. Mean scores and open-ended responses were analyzed conceptually.

CHAPTER 4

RESULTS

The present study had three primary purposes. The first was to clearly identify the

outcome and implementation objectives of the first two online modules as defined by

program stakeholders. The second was to examine the impact of the first two online modules

on the participating coaches with regard to the objectives identified by the stakeholders. In

particular, impact was defined by examining changes in coaches' self-perceived knowledge,

use, and intended use of the principles in the first two Modules. Finally, the third purpose

focused on an evaluation of user preferences and effectiveness regarding the delivery of the

first two online modules, the components of the program that were the focus of this

investigation. Results that follow are organized and presented around each purpose or phase

of the study.

Phase One

The purpose of Phase One was to identify the outcome and implementation objectives

of the first two online modules as defined by program stakeholders. This was accomplished

through interviews with key stakeholders, which focused on which information the coaches

participating in the Leadership Academy should obtain and be evaluated on as a result of

completing the first two online modules.

Mentors and Developers

General Goals, Changes, and Influences. When asked to identify the general goals of

the entire Leadership Academy, changes they would like to see within the participating coaches,

and how they would like the academy to influence the coach's behavior, four main themes

emerged from the analysis (see Table 1). First, the mentors and developers stated that they hoped

that the coaches would develop a broader perspective and awareness of their role as a coach

(4/5). Essentially, the mentors and developers hoped that after completing the module the

coaches would not only be concerned about themselves and their program, but other programs

and the sport of college wrestling as a whole. One participant stated, "Coaches are taking a

broader perspective than just their program and how do they save college wrestling" (Developer

1).

Table 1

Objectives of Stakeholders in Phase One

General Dimension	Theme
Goals as a result of entire Leadership Academy	Develop a broader awareness of role of as a head coach
	Approaching coaching role similar to that of a CEO
	Reflect on strengths and weaknesses
	Increase personal responsibility at University and amongst the sport as a whole
Purpose of Online Portion of the Leadership Academy	Convenience and Accessibility
	Cost-effective
General Goals of Module 1	Increased awareness of threats to college wrestling and solutions
	Increased awareness of what it takes to run a quality program
Skills Resulting From Module 1	Ability to create a vision and engage in long-term planning
General Goals of Module 2	Improve communication skills
	Use the GROW model
Other	Hire (or bring in people) to supplement weaknesses

Two of these four themes emerged during this line of questioning as well as during

questions specific to Module 1. First, the mentors and developers indicated they would like the

coaches to be willing to do more than just coach and approach their job similar to a chief executive officer (CEO) (4/5). One participant noted, "I think the change is understanding that if you want to be a CEO if you're going to be a CEO you can't do that by just being an X's and O's type of guy" (Mentor 1). The other theme that emerged from this line of questioning as well as during questions specific to Module 1, was the goal that the coaches will reflect on their strengths and weaknesses (4/5). One mentor stated:

"…also that there is nothing wrong with identifying your strengths and your weaknesses and especially your weaknesses and then working on those weaknesses. It doesn't make you a weak person to have weaknesses, it makes you a strong person to identify your weaknesses and then work on those" (Mentor 2)

Finally, three participants from this subgroup indicated that they would like to see an increase in personal responsibility (3/5) among the coaches. One participant highlighted this point by stating "I hope that [the coaches] will consider a strategy that was discussed, and try to realize how they can take personal responsibility in effectuating change" (Developer, 3).

Purpose of Online Portion of the Leadership Academy. Three of the five participants in this group stated that the purpose of the online academy was for convenience and accessibility. While two of the five participants stated that the purpose of having the online portion of the academy was because it is cost-effective in delivering a large amount of information to a large group of individuals spread across the country.

General Goals of Module 1. The mentors and developers were asked to identify what they perceive are the general goals of Module 1. The two themes that emerged are the goal of having the coaches increase their awareness of threats to college wrestling and solutions to the threats (4/5) and recognize what it takes to run a quality program (2/5). Regarding threats and

50

solutions, one developer stated, "Yeah so sort of these pros and cons, threats, and then we do a little bit to try to get them to start thinking about solutions" (Developer 1).

Skills Resulting from Completing Module 1. One theme to emerge from this line of questioning focused on having the coaches develop the ability to create a vision and engage in long-term planning (2/5). A developer described this by stating:

"If you look at Module 1, you have all of these mentors and you have these other administrators talking about how it's important to have long-term strategies for growth and for success. So, I guess it's, you know it's identification of the need for the reinforcement of it, but that's kind of an intro to know these are all the elements of building that long-term strategy" (Developer 3).

General Goals of Module 2. When asked what are the general goals of Module 2, the developers and mentors identified two main themes. The first was for the coaches to improve their communication skills and use the GROW model (4/5). The GROW model is a communication tool to help leaders shift away from always telling others what to do to asking questions that engage subordinates to help derive and problem solve their own answers to challenges and tasks confronting them. In the GROW model each letter of the acronym represents a questioning style. The letter 'G' represents questions pertaining to goals (i.e. what are your goals for this season?). The letter 'R' represents questions pertaining to reality (i.e. what have you done so far to achieve those goals?). The letter 'O' represents questions pertaining to options (i.e. what are some ideas of how you could work on your footwork?). Finally, the letter 'W' represents questions pertaining to will (i.e. what are you going to do these next two weeks at practice to get closer to your goals?). One developer highlighted the importance of communication skills by stating:

"Well I think a lot of times, you know coaches are always in their stance, their always looking for the five point move, and when you're communicating with athletes, or you're communicating with your administration, or you're communicating with parents, you need to listen. And those communication skills are just so incredibly important" (Developer 2).

Skills and Behavioral Changes Resulting from Module 2. The mentors identified a broad objective that as a result of Module 2, they would like the coaches to add tools to their toolbox, but stopped short of identifying which tools specifically (2/5).

Other. One other important theme emerged regarding the goal that the coaches will hire (or bring in people) to supplement their weaknesses (4/5). One developer aptly highlighted this point with the following analogy:

"[Another objective would be] helping the coach to understand he's like the director of an orchestra, he doesn't have to know how to play every instrument, he only needs to know how many instruments he needs and he needs to find people to play them. And in this case, here the coach needs to be able to surround himself with paid and unpaid volunteers to help assist [him] with all the administrative duties that are far more than what any one person could ever keep his arms around." (Developer 2)

Additionally, 3 out of 5 believed the expert interview excerpts which appear in the modules would be the most successful in achieving the goals of Modules 1 and 2. Four of the mentors and developers (two each) believed that the exercises and the PowerPoint's would be the least successful components in achieving the goals of Modules 1 and 2. Two of the five commented that the greatest hindrance to the success of the online portion would be the length of the modules, while another two mentors and developers cited poor time management skills on the

part of the coaches as the greatest hindrance to the success of the online portion. One developer

mentioned that while a goal was to keep the modules relatively short (to encourage completion),

it was important that they were not too short or superficial that the modules would not really lead

to behavioral change. This point was emphasized with regard to the NWCA director's charge to

save college wrestling. One developer emphasized that the duration would be the greatest

hindrance stating. "Don't do hour long sessions. It's too classroom, and it's gonna turn the

coaches off" (Developer 3).

Parallel insights from the Coach

The coach from subgroup two shared many similar insights to the mentors and

developers regarding the goals and objectives of the first two modules. Specifically, the coach

believed that the goals from Modules 1 and 2 are for the coach to reflect on his or her strengths

and weaknesses; increase awareness of how his or her character impacts others as well as the

sport in general, thereby increasing their focusing beyond their own program; become a CEO

coach, and finally learning the GROW model and improving communication skills were

important.

One comment from the coach that highlights a common theme found across both groups

demonstrates the importance of a coach broadening his focus beyond his own program:

"I think the way they're going to act differently is to support wrestling, you know to uh,

to think about it as an entity rather than to just focus on their own program, I think that

everyone loves the sport, and um you know, kind of less selfish in a way, that you need to

support other programs, one of the biggest things that I got out of the, um, Module 1, is

that wrestlers really need to support wrestling, and to um get back and to help, and I

know there are a lot of programs out there that are real successful but it doesn't matter if

you don't have any opponents to go against…if some of the smaller schools aren't prospering and the sport itself isn't getting the attention that it needs" (Coach 1).

Finally, the coach also echoed the opinion that the most successful components of the online modules would be the expert interviews, and stated that the exercises would be the least successful, unless they were actually used. Essentially, the coach believes that the exercises would be really powerful because "[Doing the exercises] really forces you [the coach] to think about things" but he believes that most coaches would decide to skip the exercises. When asked whether or not he completed the exercises the coach responded, "Yup, I have it right here with me…I went through it last night, I was up pretty late doing it but I got it done."

Other. The coach was also asked a series of questions regarding his likes and dislikes of the online modules, as well as use and intended use of the information covered in the first two modules. The coach liked the video format in that it was easy to follow along, as well as learning from and seeing experienced, successful coaches. The coach did not like the length, but added "it was um late at night when I watched it, so um, I was tired but I don't know maybe if I would have watched it in the afternoon it wouldn't have seemed as long." The concern regarding length and time management was also expressed by four of the five other Phase One participants. Lastly, the coach was asked if he had used any of the information in the modules, however, he had only completed the modules the night before the interview, and therefore, had not had sufficient time to implement the information. When probed further, the coach expressed sincere intention to utilize the information, specifically the GROW model, and also stated:

"One way that I think I am going to use [the GROW model] is to pass it on to my assistant coaches so that we're all on the same page as far as the leadership is concerned and uh, it's gonna help me get organized, you know as far as putting things together,

54

getting a little bit of vision on our program as far as okay, we've got to have some direction here and uh, you know everybody wants to uh, success but we got to kinda focus our attention."

Summary

The developers, mentors, and the coach all felt that an important goal of the program is to widen coaches perspective of their coaching duties (i.e. view themselves as a CEO) and their perspective regarding their impact on the sport of wrestling beyond their college or university. Furthermore, all of the participants in Phase One recognized that an important goal of the Leadership Academy is to help a coach gain self-awareness regarding his or her strengths and weaknesses, and then intentionally take action (i.e. hire assistant coaches who can fill those gaps) to build up those weak areas.

The participants in Phase One hoped that a coach, after completing Module 1, would be have a greater sense of awareness regarding the threats to college wrestling and be able to strategize on how to overcome said threats. Further, the participants hoped that coaches would be able to recognize the importance of having a long-term vision, and be able to create and fulfill long-term missions.

The participants in Phase One felt that Module 2 focused on skill development and hoped that coaches would improve in their ability to communicate effectively by adding tools to their toolbox (i.e. the GROW model). Lastly, the participants hoped that the coaches would recognize how important it is to bring in people (i.e. assistant coaches, student coaches, etcetera) to supplement their shortcomings as a coach.

Lastly, many of the participants felt that the expert interviews would be the most useful teaching method to achieving the goals of Modules 1 and 2. Additionally, the majority felt that the modules are too long and that this length could hinder the effectiveness of the modules.

Phase Two

To recall, Phase Two was designed to examine Purpose 2 of the study; and as an evaluation of the impact of the first two online modules on the participating coaches with regard to the objectives identified by the stakeholders (especially changes in coaches' self-perceived knowledge, use, and intended use of the principles in the first two modules). This was accomplished by evaluating the effectiveness of Modules 1 and 2 in educating and affecting change within the intervention group coaches as compared to a control group of matched coaches.

Descriptives. Descriptive statistics pertaining to intervention and control group demographics are presented in Table 2. Independent sample t-test results on selected descriptive statistics are also presented in Table 2. Results revealed that the control group was statistically older and had significantly more coaching experience than the intervention group.

Table 2

Intervention and Control Group Demographics (N = 35)

Variable	Intervention (N = 35)			Control (N = 13)			P-Value
	Frequency	M	SD	Frequency	M	SD	
Gender							
Female	1			0			
Male	34			13			
Level							
Head	32			13			
Assistant	3			0			

Table 2 (continued)

Variable	Intervention (N = 35)			Control (N = 13)			P-Value
	Frequency	M	SD	Frequency	M	SD	
Years Coaching at Current		3.73	2.95		7.30	3.91	.013
Total Years Coaching		7.40	4.56		11.92	5.92	.004
Age		34.43	6.78		40.62	8.89	.007
NCAA Division							
Division I	9			4			
Division II	7			4			
Division III	8			2			
NAIA	9			3			
Other	2			0			
Experience with Online							
Yes	11			5			
No	24			8			
Own Program Elimination							
Yes	7			1			
No	28			12			
Time Available for Leadership Development (in hours)		2.77	1.46		2.38	.870	.375

Between-Group Analyses. Independent samples t-tests were conducted for each item to examine differences between the intervention and comparison group. Of the 64 items at Time 1, 13 yielded significant differences between the control and intervention groups at a $\alpha \leq 0.05$ level (see Table 3). All, but one, of the significant differences at Time 1 favor the control group, meaning that the control group had greater self-reported knowledge and intention to improve abilities.

Table 3

Independent Sample t-test on Survey 2

Variable (Question number, description)	*Intervention*		*Control*		*P-value**
	M	SD	M	SD	
Q1: Degree the sport of wrestling is at risk for elimination	3.17	.891	3.23	1.09	.848
Q2: Degree you feel the need to take action to help college wrestling	4.43	.650	4.38	.655	.837
Q3: To what degree do you have a plan to improve your program	4.09	.818	4.46	.519	.130
Q4: To what degree do you have a plan to improve your leadership abilities	3.71	.957	4.00	.707	.333
Q5: To what degree do you intend to formulate a plan to improve your program	4.51	.658	4.31	.751	.357
Q6: To what degree do you intend to improve your leadership abilities	4.40	.812	3.92	.954	.091
Q7: To what degree do you intend to formulate a vision for your program	4.69	.530	4.54	.519	.394
Q8: Knowledge of threats	*3.60*	*.775*	*4.46*	*.660*	*.001*
Q9: Knowledge of strategies to overcome threats	*2.94*	*.684*	*4.00*	*.707*	*.000*
Q10: Knowledge of strategies to build bridges to supporters	*2.57*	*.778*	*3.62*	*.961*	*.000*
Q11: Knowledge of AD's perspectives on the ideal college program	*2.86*	*.772*	*4.08*	*.862*	*.000*
Q12: Knowledge of the purpose of having a vision or plan for a program	3.94	.838	4.31	.751	.175
Q13: Knowledge of how to develop a plan or a vision	*3.14*	*.879*	*4.00*	*1.08*	*.007*
Q14: Knowledge of the methods of how to keep a vision alive	*4.08*	*.862*	*2.94*	*.802*	*.000*
Q15: Do you understand that the college coach of today is akin to a CEO	4.51	.919	4.54	.519	.929
Q16: Do you believe that marketing is an essential skill of a college coach	4.74	.611	4.69	.480	.790

Table 3 (continued)

Variable (Question number, description)	*Intervention*		*Control*		*P-value**
	M	SD	M	SD	
Q17: Do you believe that fundraising is an essential skill of a college coach	4.71	.572	4.46	.660	.199
Q18: Do you believe that budget management is an essential skill of a college coach	4.91	.284	4.69	.480	.054
Q19: Do you believe that public relations is an essential skill of a college coach	4.86	.355	4.85	.376	.926
Q20: Do you believe that academic support is an essential skill of a college coach	4.86	.355	4.69	.480	.201
Q21: Do you believe that communication is an essential skill of a college coach	4.97	.169	4.92	.277	.467
Q22: Do you believe that recruiting is an essential skill of a college coach	4.97	.169	4.85	.376	.116
Q23: Do you believe that community service is an essential skill of a college coach	4.51	.702	4.31	.855	.397
Q24: Do you believe that community relations is an essential skill of a college coach	*4.83*	*.382*	*4.46*	*.776*	*.033*
Q25: Do you intend to further develop your marketing skills	4.66	.725	4.46	.776	.419
Q26: Do you intend to further develop your fundraising skills	4.69	.718	4.54	.660	.523
Q27: Do you intend to further develop your budget management skills	4.23	.973	4.00	1.00	.476
Q28: Do you intend to further develop your public relations skills	4.54	.701	4.23	.927	.216
Q29: Do you intend to further develop your academic support skills	4.49	.702	4.00	1.08	.074
Q30: Do you intend to further develop your communication skills	4.57	.655	4.23	.927	.161
Q31: Do you intend to further develop your recruiting skills	4.83	.453	4.54	.660	.090
Q32: Intention to further community service skills	*4.34*	*.838*	*3.62*	*.961*	*.014*
Q33: Do you intend to further develop your community relations skills	4.54	.701	4.15	.899	.121

Table 3 (continued)

Variable (Question number, description)	*Intervention*		*Control*		*P-value**
	M	SD	M	SD	
Q34: Do you agree that leadership is about being the most charismatic hero out in front	2.69	1.30	2.62	1.12	.864
Q35: Do you agree that leadership is about wielding unilateral power	2.49	1.26	2.69	1.37	.626
Q36: Do you agree that leadership is about solving everyone's problems	2.14	1.24	2.15	1.06	.978
Q37: Do you agree that leadership is about providing all of the answers for others	2.03	1.27	2.15	1.14	.757
Q38: Do you agree that emphasizing collaboration as a leader means the follower or members have to stifle their competitive urges?	2.14	.944	2.62	1.26	.167
Q39: Do you agree that leadership is about defining an appropriate and compelling vision for your program?	4.54	.611	4.62	.506	.705
Q40: Do you agree that leadership is about getting things done via other people?	3.66	.873	3.38	1.04	.367
Q41: Do you agree that leadership is about letting others decide how to make a vision happen?	2.74	1.03	2.62	1.26	.723
Q42: Do you agree that leadership is about inspiring others to take responsibility?	4.49	.658	4.46	.660	.911
Q43: Do you agree that leadership is about creating an environment where people can develop the skills needed to be successful?	4.77	.490	4.69	.480	.620
Q44: Do you agree that leadership is about mobilizing people to face new challenges that require new values, priorities, and habits and ways of doing things?	4.34	.765	4.38	.768	.867
Q45: Do you agree that leadership is about helping others learn how to solve problems and develop solutions for themselves?	4.69	.530	4.31	.751	.057
Q46: Do you know what the GROW model represents?	1.51	1.09	1.53	1.19	.947
Q47: Do you *intend* to use the GROW model in the future?	2.31	1.23	1.61	1.26	.089
Q48: Have you engaged in a formal evaluation of your strengths and weaknesses?	2.77	1.33	1.92	1.25	.052
Q49: Intention to do a formal evaluation	*3.69*	*.990*	*2.62*	*1.39*	*.005*

Table 3 (continued)

Variable (Question number, description)	*Intervention*		*Control*		*P-value**
	M	SD	M	SD	
Q50: Do you believe it's important to hire assistant coaches (and or team aides) whose strengths are your weaknesses?	4.34	.802	4.15	1.21	.534
Q51: Have you hired assistant coaches (and or team aides) whose strengths are your weaknesses?	3.40	1.14	3.46	1.19	.871
Q52: Do you recognize the impact your behavior (and your programs behavior) has on other programs within the sport of college wrestling?	4.54	.852	4.54	.660	.987
Q53: Knowledge of why or how a college coach is akin to a CEO	*3.91*	*1.12*	*4.77*	*.439*	*.011*
Q54: Knowledge of common characteristics of effective leaders	3.66	.725	4.08	.759	.085
Q55: Knowledge of what external factors impact of influence leadership	*3.31*	*.870*	*4.07*	*.862*	*.003*
Q56: Knowledge of how modern leadership has changed from years past	3.06	.838	3.38	.869	.240
Q57: Knowledge of common myths of leadership	3.17	.785	2.92	.954	.363
Q58: Knowledge of the components set forth by Rainer Martens that effective coach leaders do	1.51	.919	1.54	.877	.935
Q59: Knowledge of the components of a team culture	*2.89*	*1.11*	*3.69*	*.947*	*.024*
Q60: Knowledge of Jack Welch's 4 E's for Effective Leadership	1.71	1.15	1.77	1.30	.888
Q61: Characteristics of great coach communicators	*3.03*	*.985*	*3.85*	*.555*	*.007*
Q62: Knowledge of methods on how to build trust	*2.86*	*.974*	*3.77*	*1.01*	*.006*
Q63: Knowledge of the components of the GROW model	1.51	.919	1.38	.767	.653
Q64: Knowledge of methods on how to use and implement the GROW model	1.40	.811	1.38	.767	.953

* - Italics indicate significance at the p ≤ 0.05 level.

A MANOVA was conducted to compare the intervention and control groups by the subscales of Knowledge and Intention. Significant multivariate effects were found, Wilks' Lambda = .66, $F(2, 45) = 11.48$, $p = .000$. Further, the Tests of Between Subjects indicated that

both the Knowledge ($p = .027$) and Intention ($p = .028$) subscales contributed nearly equally to the significant differences. The control scored significantly higher on the Knowledge subscale, while the intervention group scored significantly higher on the Intention subscale. The differences could indicate a sample bias on behalf of the control group. Thirty, hand selected by the NWCA director, coaches were invited to participate in the control group and only13 responded. This lack of response by the other 17 coaches may indicate that those who did not respond were ones that were the least interested in helping wrestling, and potentially the most in need of coaching leadership growth, within the group of 30 invited control group coaches. The lone item level difference at Time 1 that favored the intervention group (intention to further community service skills) could allude to the point that the intervention group is aware of their involvement in the NWCA Leadership Academy and are therefore more willing to intentionally enhance specific areas of their leadership than the control group.

Within-Group Analyses

Time 1 to Time 2. A paired samples t-test was conducted for each item to explore differences within the intervention group from Time 1 to Time 2. As shown in Table 4, 34, of the 64, items resulted in significant increases, at the $\alpha \leq 0.05$ level from Time 1 to Time 2.

Table 4

Paired Sample t-test Intervention Group Time 1 to Time 2 (n = 27)

Variable (Question description)	*Time 1*		*Time 2*		*P-value*
	M	*SD*	*M*	*SD*	
Degree that the sport of college wrestling is at risk for elimination	3.11	0.80	3.85	1.10	.001
Degree to which you plan to improve leadership abilities	3.74	0.94	4.41	0.64	.000

Table 4 (continued)

Variable (Question description)	*Time 1*		*Time 2*		*P-value*
	M	*SD*	*M*	*SD*	
Degree of intent to formulate a plan to improve program	4.48	0.70	4.85	0.36	.022
Degree of intent to formulate a plan to improve leadership abilities	4.37	0.84	4.81	0.40	.001
Knowledge of threats	3.56	0.80	4.07	0.83	.002
Knowledge of strategies to overcome threats	2.85	0.71	3.89	0.85	.000
Knowledge of strategies to build bridges to supporters	2.48	0.80	3.70	0.91	.000
Knowledge of AD's perspectives on the ideal program	2.74	0.71	3.70	1.10	.000
Knowledge of the purpose of having a vision or plan	4.00	0.88	4.56	0.64	.003
Knowledge of how to develop a plan or a vision	3.07	0.87	4.26	0.59	.000
Knowledge of the methods of how to keep a vision alive	2.85	0.81	4.00	0.55	.000
Agree that leadership is about being the most charismatic hero out front	2.81	1.38	2.07	1.20	.005
Agree that leadership is about wielding unilateral power	2.44	1.37	1.85	1.32	.018
Agree that leadership is about solving everyone's problems	2.26	1.26	1.59	1.08	.013
Agree that leadership is about getting things done via other people	3.78	0.93	4.19	0.83	.009
Agree that leadership is about letting others decide how to make a vision happen	2.74	1.10	3.59	1.37	.001
Agree that leadership is about inspiring others	4.56	0.64	4.81	0.40	.050
Agree that leadership is about mobilizing people to take on new challenges	4.44	0.75	4.81	0.48	.005
Knowledge of what the GROW model represents	1.52	1.16	4.22	1.01	.000
Intention to use the GROW model	2.44	1.01	4.22	0.97	.000
Intention to do a formal evaluation of strengths and weaknesses	3.89	0.80	4.37	1.01	.045

Table 4 (continued)

Variable (Question description)	Time 1		Time 2		P-value
	M	SD	M	SD	
Belief of importance to hire assistant coaches whose strengths are your weakness	4.37	0.79	4.67	0.48	.043
Knowledge of why or how a college coach is akin to a CEO	3.93	1.07	4.74	0.44	.001
Knowledge of common characteristics of effective leaders	3.67	0.73	4.59	0.50	.000
Knowledge of external factors that impact or influence leadership	3.41	0.75	4.40	0.64	.000
Knowledge of how modern leadership has changed from years past	3.04	0.81	4.30	0.78	.000
Knowledge of common myths of leadership	3.26	0.76	4.15	0.86	.000
Knowledge of Rainer Martens components of effective coach leaders	1.59	0.97	3.96	0.76	.000
Knowledge of components that lead to a team culture	3.04	1.09	4.30	0.72	.000
Knowledge of Jack Welch's 4 E's for effective leadership	1.67	1.07	4.29	0.72	.000
Knowledge of characteristics of great coach communicators	2.93	1.04	4.44	0.64	.000
Knowledge of methods on how to build trust	2.93	0.96	4.26	0.66	.000
Knowledge of the components of the GROW model	1.59	0.97	4.03	0.85	.000
Knowledge of methods on how to use and implement the GROW model	1.44	0.85	4.04	0.85	.000

Question numbers were omitted because the question number was different from Time 1 to Time 2.

Further, using the subscales of Knowledge and Intention as the dependent variables, a paired samples *t*-test yielded significant differences from Time 1 to Time 2 (Table 5). The increase in Intention is important considering only seven of the 35 intervention group participants believed that their program is at risk for elimination. Overall it appears that, from the

analysis of these results, Modules 1 and 2 (the intervention) positively impacted the intervention group coaches. One point to consider, however, is that the mean scores for both knowledge and intention started relatively high at Time 1 and while there was a statistically significant increase, the meaningfulness of that increase may not be as great. That said, the scores did increase demonstrating positive impact of the modules.

Table 5

Paired Sample t-test on the Subscales of Knowledge and Intention Time 1 to Time 2 (n = 31)

Subscale	*Time 1*		*Time 2*		*P-value*
	M	*SD*	*M*	*SD*	
Knowledge	3.45	0.31	3.98	0.53	.000
Intention	4.27	0.55	4.47	0.54	.019

Particularly Meaningful Significant Differences. While many of items in the paired samples *t*-test (Table 4) from Time 1 to Time 2 were significant, it is important to highlight a few that seem particularly important to the overall program. First, the intervention coaches' opinions regarding the degree to which college wrestling as a whole is at risk for elimination significantly increased from Time 1 to Time 2. Getting the coaches to truly recognize and understand the severity of this risk was an important objective for the director of the NWCA. One goal that was stated by the majority of the stakeholders interviewed in Phase One was that the coaches became aware of the threats to college wrestling, and knowledgeable about some strategies to overcome those threats. The difference from Time 1 to Time 2 was significant at the $\alpha \leq 0.01$ level for each of these items. Another explicitly expressed objective from Phase One, that resulted in a significant difference from Time 1 to Time 2, was that the coaches would be able to recognize that they have to do more than just coach on the mat, and that the job of a collegiate head coach

is akin to that of a chief executive officer (CEO). While the coaches' belief that a head coach is akin to a CEO began fairly highly at Time 1 (M = 4.44) and did not significantly change from Time 1 to Time 2, their understanding of how and why a coach is akin to CEO did significantly change from Time 1 to Time 2 as evidenced by the result on the following question: knowledge of why or how a college coach is akin to a CEO. The stakeholders in Phase One also mentioned the importance of creating a vision and hoped the coaches would be able to create a vision and engage in long-term planning. The items that addressed these goals (knowledge of the purpose of having a vision; knowledge of how to develop a plan or vision; and knowledge of the methods of how to keep a vision alive) all saw significant increases from Time 1 to Time 2.

Learning and implementing the GROW model was explicitly mentioned by nearly all participants in Phase One as an outcome goal for the coaches who complete Module 2. The questions pertaining to the GROW model saw the greatest growth of all of the questions from Time 1 to Time 2 as judged by the results on the following survey items: knowledge of what the GROW model represents; intention to use the GROW model; knowledge of the components of the GROW model; and knowledge of methods on how to use and implement the GROW model. These significant findings are strong indicators that the Modules achieved some of the objectives stated by the stakeholders in Phase One.

Finally, it is important to examine more closely the items that saw a significant decrease from Time 1 to Time 2. All three of the items pertained to commonly held beliefs or myths about leadership (degree to which you agree that leadership is about being the most charismatic hero out front; degree to which you agree that leadership is about wielding unilateral power; and degree to which you agree that leadership is about solving everyone's problems). While the mean scores were not very high to begin with (2.81, 2.44, 2.26, respectively) each did see a

statistically significant decrease from Time 1 to Time 2. In addition to seeing decreases on these items pertaining to leadership myths, the results also revealed significant increases on other items pertaining to current views about leadership (degree to which you agree that leadership is about getting things done via other people, degree to which you agree that leadership is about letting others decide how to make a vision happen, degree to which you agree that leadership is about inspiring others, degree to which you agree that leadership is about mobilizing people to take on new challenges). These findings may indicate that the coaches were honest about their beliefs about leadership and that the Modules, effectively, changed or reshaped those beliefs.

Findings Failing to Reach Significance. While over half of the items from Time 1 to Time 2 resulted in significant findings, some of the non-significant findings are worth mentioning. First, one item (degree to which you agree that leadership is about providing answers for others) approached a significant decrease ($p = 0.051$). One goal of the stakeholders in Phase One was that the coaches would be driven to take action to not only help their program, but also have the perspective that the success of their program impacts the sport of wrestling as a whole. One item on the surveys addressed the coach's degree to which he or she feels the need to take action to help college wrestling. This item saw a slight increase from Time 1 to Time 2, but it is important to note that the mean score was relatively high (m = 4.41) at Time 1, indicating that the coaches came in with a high deree of interest in helping college wrestling. Finally, the remaining differences that did not reach statistical significance from Time 1 to Time 2 consisted of questions pertaining to the essential (as perceived by the architects of the NWCA Leadership Academy) tasks of a collegiate head coach (i.e. marketing, recruiting, public relations, communication skills, fundraising, community service, etcetera). The recognition of the

importance of these tasks and the intention to further develop their ability to execute these tasks started and remained very high from Time 1 to Time 2.

Time 2 to Time 3. To further explore the impact of Modules 1 and 2, the intervention coaches were tested again one month after completing the Modules. A paired samples *t*-test was conducted to examine retention from Time 2 to Time 3 (n = 23). Nine of the 28-paired items resulted in significant decreases from Time 2 to Time 3 and are shown in Table 6.

Table 6

Paired Sample t-test Intervention Group Time 2 to Time 3 (n = 23, unless otherwise stated)

Variable (Question description)	Time 2		Time 3		P-value
	M	SD	M	SD	
Degree of intent to formulate a plan to improve program	4.83	0.39	4.65	0.49	.043
Knowledge of how to develop a plan or a vision	4.21	0.60	3.82	0.72	.004
Degree of intent to further fundraising skills	4.78	0.52	4.52	0.59	.011
Knowledge of Rainer Martens components of effective coach	3.87	0.69	3.04	0.77	.000
Knowledge of components that lead to a team culture	4.17	0.72	3.39	0.78	.000
Knowledge of Jack Welch's 4 E's for effective leadership	4.26	0.69	3.39	0.94	.000
Knowledge of characteristics of great coach communicators (*n* = 22)	4.36	0.66	3.73	0.63	.000
Knowledge of methods on how to build trust	4.21	0.67	3.57	0.84	.000
Knowledge of methods on how to use and implement the GROW	3.96	0.88	3.44	0.90	.025

Further, a paired samples *t*-test was conducted with the subscales of KnowledgeSmall and IntentionSmall from Time 2 to Time 3. To recall, both Knowledge and Intention increased

from Time 1 to Time 2, however, from Time 2 to Time 3, KnowledgeSmall significantly

decreased while IntentionSmall saw no statistically significant change (Table 7).

Table 7

Paired Sample t-test on the Subscales of Knowledge and Intention Time 2 to Time 3 (n = 23)

Subscale					*P-value*
	M	*SD*	*M*	*SD*	
Knowledge	4.03	0.29	3.66	0.53	.000
Intention	4.55	0.40	4.41	0.47	.062

While statistically significant mean decreases were seen from Time 2 to Time 3, many of

the means at Time 3 were still higher than at Time 1. Another paired samples *t*-test was

conducted to examine the differences in mean scores on items that saw a significant decrease

from Time 2 to Time 3. As seen in Table 8, many of the nine items that resulted in significant

decreases from Time 2 to Time 3 were found to still be statistically higher at Time 3 when

compared to Time 1. These results indicate that although there was a marked drop in mean

scores from Time 2 to Time 3, the impact of the modules still had lasting power as compared to

Time 1.

Table 8

Paired Sample t-test Intervention Group Time 1 to Time 3 (n = 23, unless otherwise stated)

Variable (Question description)	Time 1		Time 3		*P-value*
	M	*SD*	*M*	*SD*	
Knowledge of how to develop a plan or a vision	3.13	0.92	3.82	0.72	.002
Knowledge of Rainer Martens components of effective coach leaders	1.56	0.99	3.04	0.77	.000

Table 8 (continued)

Variable (Question description)	*Time 1*		*Time 3*		*P-value*
Knowledge of Jack Welch's 4 E's for effective leadership	1.65	1.11	3.39	0.94	.000
Knowledge of characteristics of great coach communicators (n = 22)	3.00	1.02	3.73	0.63	.006
Knowledge of methods on how to build trust	2.91	0.84	3.57	0.84	.001
Knowledge of methods on how to use and implement the GROW model	1.43	0.84	3.44	0.90	.000

Finally, means and standard deviations were calculated for items that were asked at Time 3 but were not on any of the previous surveys (Table 9). The results from these questions should be taken with trepidation due the simple fact that the coaches completed the surveys during the summer and, therefore, were not in season and may not have had as many opportunities to implement some of the teachings found in Modules 1 and 2.

Table 9

Means and Standard Deviations for select Survey 3 items (n = 23)

Survey Item	*M* [1 (not at all) to 5 (a lot) Likert scale]	*SD*
Have you developed a plan to improve your program	3.91	0.85
Have you developed a plan to improve your vision	3.61	0.84
Have you written out a formal vision for your program	3.39	1.27
Have you shared your vision for your program	3.22	1.31
Have you used the GROW model with your wrestlers	2.09	1.08
Have you used the GROW model with your coaching staff	2.22	1.00

Table 9 (continued)

Survey Item	M [1 (not at all) to 5 (a lot) Likert scale]	SD
Have you used the GROW model with other individuals besides your coaching staff or wrestlers	2.26	1.05
Have you implemented Jack Welchs' 4 E's for effective leadership	2.87	0.97
Have you implemented the components set forth by Rainer Martens	3.04	1.02
Have you implemented the components that lead to developing a team culture	3.13	0.97
Have you implemented methods on how to build trust	3.17	1.11

Phase Three

The third purpose of this study focused on an evaluation of user preferences and effectiveness regarding the delivery of the first two online modules, the components of the program that were the focus of this investigation. Hence, the coaches' opinions regarding the teaching components of the online modules (i.e. coach interviews, PowerPoint with voiceover, etc) and their general opinions regarding the efficacy of each module were surveyed. First, coaches were asked how impactful were each of the teaching components (Table 10).

Table 10

Impact of Each Teaching Component in Modules 1 and 2 (N = 27)

Variable	M (1 – 10; 1 = Not at all impactful, 10 = Very Impactful)	SD
PowerPoint's with voiceover	8.11	1.31
Video of other coaches discussing topics	9.11	1.12
Exercises in the workbook	8.26	1.53
Video of experts	9.00	1.07

Based on the mean scores, the coaches identified that the video of coaches and experts were the most impactful. This result reflects the predictions made by the participants in Phase One. Nine coaches identified other components that had an impact on the learning objectives. Some of these examples included: the production, tactical implementation with the workbook, and how the topics were well thought out. When asked if they would prefer an alternative format, 25 of the 27 participants indicated no, they would not prefer an alternative format. The two coaches who would have preferred an alternative format were asked to specify what type format, one indicated an in-person class, and the other indicated "a list of external resources that are applicable to each section of the Modules and accessible directly from the modules" (participant # 20065). All but one of the participants indicated that they did indeed like the format of having the workbook coincide with the video. The one who answered "no" to that question followed up by stating: "I would have liked a copy in PowerPoint that I could print" (participant 20031). All of the coaches indicated that they would recommend this course to other coaches.

Coaches were then asked if they had completed all of the exercises in the workbook. Six participants indicated that they did not complete all of the exercises with four of the six coaches reasoning that not all of the exercises were applicable to them at this stage in their coaching career. The other two coaches stated that they had either already done some of the exercises on their own or were in the process of obtaining more information to complete some of the exercises.

Coaches were then asked to indicate how long it took them to complete each module. The majority of the coaches needed between 30 and 60 minutes to complete each module. The fact that the coaches self-reported the completion times between 30 and 60 minutes is important

considering that Module One is just over 27 minutes long and Module Two is just over 52

minutes long. The issue is while it may take only 27 minutes to watch the video in Module One,

that time does not include the amount of time it takes the coaches to complete the workbook

exercises. Therefore, while the coaches are reporting that they are completing the Modules, we

do not know the level of effort and quality with which they are completing the workbook

exercises, which, as discussed in Phase One could be the most important aspects of the Modules.

Lastly, coaches were asked to indicate how capable they perceive themselves to be to implement

the teachings of each module given their individual resources, time available, and personnel. All

of the coaches responded either moderately or very capable.

CHAPTER 5

DISCUSSION

In spite of the fact that the NCAA Division I Wrestling Championships has historically

generated revenue in the top 5 of all NCAA Division I championships (NCAA, 2008), college

wrestling programs are continuing to be eliminated at an alarming rate. While there are a variety

of reasons programs are being cut (i.e. academic concerns, rising costs, Title IX compliance,

etcetera), the National Wrestling Coaches Association (NWCA) has set out to develop a state of

the art Leadership Academy to enhance the leadership ability of college coaches in order to

better equip them to manage and overcome many of the threats to college wrestling. The purpose

of this study was, in short, to evaluate the efficacy of a portion of the NWCA Leadership

Academy. This chapter discusses the findings of the current study, identifies implications of

these results with regard to both the NWCA and evaluation research, and discusses strengths and

limitations of the study. Wider implications for coaching education are considered.

Phase One: Qualitative Interviews of Key Stakeholders

Patton (2008) noted that program staff or stakeholders could become quite burdened by

the terminology of goals or objectives. Patton believed that "in the minds of many program

people, from board members to frontline staff and participants, goals are abstract statements of

ideals written to secure funding—meant to inspire but never achieved" (p. 240, 2008). Therefore,

Patton suggested that the evaluator guides stakeholders through a process of identifying

participant outcomes and what they will observe within program participants as a result of

completing the program. This process was accomplished in Phase One.

The stakeholders identified that the program outcomes, in general, were for the coach to

(1) broaden his or her perspective about facilitating the health and growth of collegiate wrestling

beyond just his or her program, (2) recognize that being a college coach is akin to being a CEO, (3) take the time to reflect on his or her coaching leadership weaknesses, and (4) take greater personal responsibility for the success of his or her program and the success of the sport of wrestling as a whole. It is interesting to note that when probed for information about how the stakeholders would like the coaches to behave differently as a result of completing the Leadership Academy, participants often took a more broad approach to the outcomes they were seeking. Rather than simply stating that they would like the coaches to develop and use specific skills, such as marketing through the use of social networking tools, they really wanted the coaches to essentially become more aware of what being a college coach truly involves and that coaching on the mat is only a fraction of what the job entails. This outcome goal reflects the sentiment put forth by previous researchers that the college coach of today must possess leadership qualities of both an instructional nature directed toward their athletes but also leadership qualities unrelated to coaching technique and strategy (Baber & Eckrich, 1998; MacLean & Zakrajsek, 1996; Mallett & Côté, 2006). Further, once the coach becomes more aware that his or her role is more broad than just enhancing wrestler performance on the mat, then he or she can begin to view him or herself as a CEO who has goals that also include academic performance of the athlete, fund raising, community relations and enhanced athlete health and safety. The stated objectives of the stakeholders clearly then fit together. First, they want the coaches to broaden their awareness of their role as leaders beyond traditional views of coaching, then they want the coaches to become aware of all of the duties this broadened role requires, and finally they want the coaches to reflect on their strengths and weaknesses of their increased scope of duties.

75

Considering that the majority of stakeholders hoped that, as a result of completing the Leadership Academy, the coaches would take time to reflect on their coaching leadership strengths and weaknesses may indicate that the stakeholders are concerned about the bravado and ego component that is common in college wrestling. As one mentor stated, "It doesn't make you a weak person to have weaknesses, it makes you a strong person to identify your weaknesses and then work on those" (Mentor 2). This plea may be an unobtrusive indicator that many college wrestling coaches are unwilling, for fear of being perceived as weak, to examine and admit to their weaknesses or hold to traditional views that their job is to simply train and develop their athletes technically and tactically. Moreover, some leadership experts perceive this ability to recognize one's strengths and weaknesses and changing roles to be critical in leadership development. Hackman and Wageman (2007) stated that "error and failure provide far more opportunities for learning than do successes and achievement, precisely because failures generate data that can be mined for insight into how one's assumptions and [leadership] models of action might be improved" (p. 46). Moreover, Hackman and Wageman further cautioned that reflecting on ones weaknesses might not occur, or might occur with a defensive posture thus limiting the effectiveness of the value of learning from one's mistakes and weaknesses. To extend this point, researchers in the field of leadership development have indicated that self-reflection alone is not enough, and that an outside entity should examine whether the self-reflection process is adaptive or maladaptive (Avolio & Hannah, 2008). Simply, adaptive self-reflection is a constructive process that is reflected by openness and eventually contributes to more effective choices and actions over time (Trapnell & Campbell, 1999; Carver & Scheier, 1982). Maladaptive self-reflection is more destructive and often results in negative emotions, which can ultimately diminish one's engagement in leadership development activities (Mor & Winquist, 2002). Based

76

on these points, one suggestion for the developers of the Leadership Academy is to teach the

mentors the components and indicators of adaptive and maladaptive responses to leadership

feedback, and then how to guide the coaches to engage in adaptive self-reflection more

frequently. For example, program organizers might accomplish this by requiring participating

coaches to complete all module exercises and activities and then in the in-person portion of the

Leadership Academy, work through key elements of the completed workbooks with their

mentors. This would not only hold them accountable for completing the workbooks but help

them reflect with an experienced mentor who could provide advice to ensure the reflective

process is adaptive versus maladaptive.

As a result of completing Module 1, the stakeholders indicated that they would like the

coaches to be more aware of the threats to college wrestling and the solutions to the threats, as

well as recognize what it takes to run a quality program. The stated objective of being more

aware of the threats to college wrestling could be a second order effect of broadening a coach's

awareness of his role. Meaning, a shortcoming of a coach could be that he or she solely exists

within his or her bubble of coaching his or her athletes, at his or her university, in his or her

conference. This narrow view of focus may limit the coach's ability to see the bigger picture and

be less aware of what are the larger scale threats to college wrestling as a whole because he or

she is only focusing on the threats he or she perceives are putting his or her, and only his or her,

program at risk. It seems that the stakeholders are keen on getting the coaches to see the bigger

picture in all aspects of coaching. The stakeholders want the coaches to see how they need to do

more than just coach, how they need to be more aware of the impact their program has on other

programs, and how they need to be aware of all of the threats out there, not only the ones directly

influencing their specific program. Interestingly, the coach interviewed in the first phase of this

study explicitly stated that as a result of Module 1 he became more aware of the importance of broadening his focus beyond just his own program.

Specific to Module 2, the stakeholders indicated that they would like coaches to increase their ability to communicate effectively by implementing communication tools such as the GROW model. This objective may be especially important for coaches who have a traditional view of coaching that their job is to simply train and develop their athletes technically and tactically. With this traditional mindset, it is likely that the coach will have highly developed communication methods for this narrow role. However, those specific communication tools may not be the most effective when engaging in the leadership requirements unrelated to coaching technique and strategy (i.e. communicating with alumni, fund raising, and community relations). In addition, if the coach has not yet expanded his or her view of what the coaching role truly entails (both traditional coaching duties and leadership duties unrelated to coaching technique and strategy), then he or she will likely see very few, if any, weaknesses in the area of communication skills. Furthermore, it becomes clear then that stakeholders' outcome objectives involve both macro and micro points about coaching leadership, and that the outcome objectives build off of one another. Thus, many of the foundational and macro goals (i.e. broader perspective, self-reflection, view role as a CEO, etcetera) build up to and create the motivation and internal desire for the coach to obtain some of the micro goals (i.e. awareness of threats and solutions, ability to create and engage in a vision, and communication skills). Phase two examined whether or not both the stated macro and micro goals were obtained as a result of the two online modules.

Phase Two: Evaluation of Module's 1 and 2 Intervention

Overall, the results of this phase and purpose of the study suggest that the two online modules of the Leadership Academy were effective in facilitating change in the coaches' knowledge and intended use of the coaching leadership skills covered in the first two modules. It should be noted that while the general outcome goals (i.e. greater awareness of all that a coaching role entails, increase in personal responsibility for the success of college wrestling as a whole, etcetera) identified by the stakeholders in Phase One were the outcomes they would hope for as a result of completing the entire program (including all of the online modules, the in-person portion, and the mentorship piece). The results from this phase indicated that some of those objectives have been achieved, in part, as a result of completing only Modules 1 and 2.

Unfortunately, because the control group did not complete all requirements and therefore the original design to be implemented as originally planned, it cannot be concluded that there is a causal relationship between completing the online modules and changes in the coaches' knowledge and intended use of the material. However, the fact that differences were seen from Time 1 to Time 2 in the intervention group does provide some evidence that the intervention had an impact.

The greatest changes in the study were seen from Time 1 to Time 2. Furthermore, in most cases the 1-month retention evaluation (Time 3) remained statistically equivalent to the Time 2 levels. Moreover, most of the items that significantly decreased from Time 2 to Time 3 remained significantly above Time 1 levels. This result is encouraging as they support the notion that the intervention had a lasting effect. However, the fact that dissipation did occur and in a short period (only one month) does give cause to consider that many of the skills taught in the modules could be perishable skills. Even though there was perceived knowledge depreciation, the transfer of knowledge may still be greater than in a traditional course. However, this knowledge

79

depreciation is likely comparable to that of a traditional course considering that a meta-analysis comparing distance education to classroom found that there is strong evidence that distance education is comparable to classroom education on achievement, retention, and attitude (Bernard, et al., 2004). However, the material being covered could impact how a program designer might decide between a traditional classroom approach versus a distance learning or online model. Hansen (2008) demonstrated that the online educational environment might be better suited for applying theoretical knowledge than a traditional face-to-face classroom. However, the result that knowledge did depreciate over time is still of considerable importance because it suggests efforts must be made to enhance material retention and potentially transfer. The onset of the mentorship component of the Leadership Academy may serve this function but there may be a time sensitive component, in that the mentorship piece should be implemented in the months following the completion of the online modules. The role of the mentors, then, may be significant in reinforcing the skills covered in the modules. It should also be noted that the in-person workshop is designed to come after all the modules are completed and will reinforce much of the content and, in so doing, hopefully facilitate knowledge retention, especially when the mentors are involved throughout both of the online and in-person portions of the academy.

Considering that one of the overarching goals of the academy is to create the need for change within the coaches and then, actually, change behavior within the coaches (to engage in more leadership behaviors unrelated to coaching technique and strategy), examining a theory of change becomes important. One such theoretical perspective on change, is the transtheoretical model (Prochaska & Norcross, 2001). Briefly, the model entails six stages of change that focus on the decision making process of the individual. Each stage represents a process step in which the individual grapples with a different set of issues and task that relate to changing behavior.

The stages are precontemplation (not yet acknowledging the problem and come to coaching at others urging); contemplation (acknowledge the problem but are not ready or willing to make a change); preparation (getting ready to change in the near future or start making small changes); action (make observable changes in behavior and are enacting their plan); maintenance (maintaining the behavioral change, but relapse risk is high); termination (former problem no longer exists or presents any threat). Relevant to the current study, it is important to recognize where the coach is when they are brought into the Leadership Academy. For example, a coach who is unaware of the threats to college wrestling and his or her program may be in the precomtemplation stage and therefore the first part of Module One where it is discussed that college wrestling is under attack may be critical for the coach (and mentor) to help move the coach to the next stage. Additionally, the mentor and the Leadership Academy will play a critical role during the maintenance stage considering that relapse risk to old habitually behaviors is high. Therefore, it is recommended that the mentors be made aware of these stages and briefed on their role and strategies to aid in behavioral change during each of the stages.

As the results showed, many of the program and module objectives that were identified by the stakeholders in Phase One appear to have been achieved as a result of completing the two online modules. Most notably, the majority of the stakeholders wanted the coaches to become aware of how encompassing their role as head coach truly is and how and why their role is akin to that of a CEO. In many ways, achieving these objectives can result in a mindset shift from that of a coach who focuses almost entirely on coaching and teaching skills directly related to performance on the wrestling mat, as opposed to one who engages in those standard duties in addition to coaching duties unrelated to technique and strategy. Once this mindset shift is broached, the outcome objective of having a coach identify his or her strengths and weaknesses

becomes a much broader experience. Rather than just examining strengths and weaknesses within the scope of only leadership duties directly related to technique and strategy (perhaps the area where the most strengths exist), the coach now has to examine his or her strengths and weaknesses amongst his or her ability to market the program, to interact with alumni, to fund raise, to engage in community service, etcetera. This expanded scope of self-analysis can then indirectly impact one's motivation to engage in leadership development and training. Motivation becomes particularly important because the only other potential indicator of motivation was an item asked at Time 1 about the coach's belief regarding whether or not his or her program is at risk for elimination, in which 28 out of 35 coaches did not believe their program was at risk. Therefore, it is unclear how motivated the coaches are to engage in leadership development, but perhaps their motivation increases alongside the expansion of their view of their role as a head coach.

Phase Three: Coaches' Opinions Regarding Ease and Utility of the Online Format

Michael Scriven (1991) believed that one of the ways evaluators engage in the process of evaluation is to determine the worth of a program by examining the extent to which the program met the needs of their target audience and whether or not meeting those needs was accomplished in a cost-effective manner. Some of the results from Phase Three of this current study indirectly indicate that the Leadership Academy met the needs of college coaches in a cost-effective manner. First, coaches were asked if they would prefer an alternative format other than the online format; 92% of the coaches indicated that they would not prefer an alternate format. Although, there were no probing questions following up on these responses, it can be culled that for the material that was covered and the method in which it was delivered the online format met the needs of the coaches. Secondly, coaches were asked whether they would recommend the

Leadership Academy to other coaches and every coach indicated that they would recommend the Leadership Academy to their peers. It could be assumed that a coach would not recommend a course to his peers if he did not himself believe that it met his needs. It should be noted that at the time of completing this phase the participating coaches had not yet been involved in the in-person portion of the Leadership Academy and were, therefore, recommending the course to other coaches solely based on their experience with the online modules. Moreover, the young coach from Phase One, when asked if he would recommend this course to other coaches, indicated that he would recommend the course adding, "I think it helps [a coach] focus on things [a coach] might not have thought about, you know there are just so many things here that it covers…and I just think it's invaluable and I don't think there is a lot of training out there available (on these topics) " (Coach 1). This comment highlights that the NWCA Leadership Academy satisfies a need that exists within collegiate coaching leadership development.

Lastly, determining whether or not the online portion of the Leadership Academy is cost-effective could be accomplished by examining two areas. First, the participants in Phase One indicated that they believed the purpose of the having the online portion of the Leadership Academy was either for convenience and accessibility or that it was a cost-effective way to deliver a significant amount of information to many coaches spread across the country. Secondly, measures of cost-effectiveness can also include the amount of time spent completing a task. Theoretically, the more time a task takes to complete effectively, the less cost-effective it would be. The majority of coaches in Phase Three indicated that completing a single module of the online portion of the Leadership Academy took between 30 and 60 minutes. This result is another indicator that the Leadership Academy is cost-effective in both a fiscal nature and a matter of time spent. However, the fact that the coaches indicated that it only took them between

83

30-60 minutes to complete the modules could indicate that they either did not complete the workbook exercises (only 6 out of 28 indicated that they did not complete all of the workbook exercises) or that they did them haphazardly. Furthermore, a tension appears to exist between getting the coaches to complete the modules given their time demands and having the appropriate amount of time to substantively deliver all of the information necessary to accomplish the monumental goals of the NWCA (i.e. trying to change the coaching leadership culture). Awareness of this tension could influence content development. For example, the participating coaches may prefer expert interviews over PowerPoint slides, but expert interviews are not always the most efficient way to deliver a significant amount of in-depth content.

Implications and Future Directions for the National Wrestling Coaches Association

The results of this study indicate that the online portion of the Leadership Academy appears to be an effective method to enhance the leadership abilities (unrelated to performance on the mat) of college coaches around the country. However, due to some of the limitations of this study, including the lack of control group, the extent of the impact of the online modules is unclear. To recall, Schweigert (2006) indicated that it is important to fully define the term "effectiveness" when examining the outcomes or impact of a program. Schweigert posited that effectiveness could be measured in different ways. First, a program could be considered effective if the participants had an increase in understanding or knowledge of the material covered in the program. While the measures of knowledge and understanding were self-reported, it appears that the online program is headed in the right direction to satisfying this definition of effective. Another method of measuring effectiveness according to Schweigert is causality. Causality, in this instance, is the ability to attribute program outcomes to program actions (i.e. knowledge changes associated with completing or not completing the online modules). Schweigert echoed

the idea that while experimental designs are the "gold standard" of evaluation they are not always possible or feasible, therefore, other research designs (i.e. quasi-experimental or natural) can approximate a causal demonstration. The current evaluation was originally intended to employ an experimental design (although it would have been even better if a placebo control group who took unrelated modules were involved), but, due to some unanticipated factors (outlined in the following section), this study resulted in a design that more closely reflects either a quasi-experimental design or a single group case study design. Therefore, the extent to which causality (and effectiveness) can be determined is limited. Thus, if the stakeholders within the NWCA are looking to strengthen the determination of causality and effectiveness of the online modules, it is advised that they implement an experimental design in their next evaluation.

Furthermore, the study only evaluated the first two of 10 online Modules. There are both strengths and limitations of this design as it pertains to the NWCA. First, Patton (2008) argued that component evaluation (examining only a part or parts of a program) could be a useful endeavor for an evaluation. Essentially, evaluating a single entity of a program's actions could help the program developers in determining potential improvements to that component, or it could determine if further development of that component (i.e. completing the unfinished online modules) merits continuation. Analyses of the results indicate that the online format is effective, meets the needs of the coaches, and therefore merits continuation. Regarding determining potential improvements of a particular component, this depth of this study allowed the researcher to determine some potential improvements. For example, some of the stakeholders in Phase One feared that the length of each Module would inhibit its effectiveness. Objectively, this did not appear to be the case as the majority of participants only needed 30-60 minutes to complete each module, but, as previously mentioned, the 30-60 minute completion time frame could indicate a

failure to effectively complete the workbook exercises which is a critical component of the modules. Additionally, the coach from Phase One indicated that while he did not like the length of the modules he completed them late at night and pontificated that had he completed them during the day they might not have seemed so long. Although, there were no questions pertaining to the ideal length of the modules, it would most likely be advantageous for the NWCA to keep the online modules within the 30-60 minute time frame. To add to this point, as indicated in Table 2, all of the coaches surveyed indicated that they have over 2.5 hours per week available to work on leadership development.

Another potential improvement could be for the NWCA to consider incentives for documented completion of the Modules. It was not the intention of the NWCA for the participating coaches to passively complete the modules by watching 10 online videos. Rather, the objective was for the participants to actively engage in the material by putting thought and energy into completing the workbook exercises. Therefore, the NWCA could withhold the promised stipend (for attending the in-person workshop) until the coaches have their completed workbook checked by and discussed with an NWCA mentor. The NWCA, currently, has no way of checking the quality of the effort put into completing the workbook exercises, and further the participating coaches in this study may have avoided exercises that explored their weaknesses or ones that they were uncomfortable with, which they could have benefited from the most.

Another finding of interest to the NWCA is that the coaches participating in the Leadership Academy found that learning from other coaches was the most impactful teaching component of the modules. While this result reflected the predictions made by the stakeholders in Phase One of the study, it is still useful in that it could influence how the remaining modules are formed. For instance, the developers of the NWCA Leadership Academy could consider

86

reducing the number of PowerPoint slides and increase the number of coach interviews, and determine ways to get the same information across but through the use of personal stories and accounts from experienced coaches. However, as mentioned previously, decreasing the PowerPoint slides could compromise the richness and the amount of material covered in the modules. To use a sport analogy, the wrestler may enjoy scrimmaging the most, but conditioning drills may be more effective to his or her development.

One limitation of component evaluation (only evaluating the first two of 10 online modules) is that it is unclear how all three components of the Leadership Academy interact to affect change within the leadership abilities of the coaches involved in the program. It was previously noted that the online modules started the process of achieving the overarching goals of the entire Leadership Academy as determined by the stakeholders. This finding is promising and could lead the NWCA developers to reconsider the direction and desired outcomes of the mentorship and in-person workshop portions of the Leadership Academy. If the online portion is accomplishing many of their larger scale objectives then gearing the other prongs of the Leadership Academy towards the same objectives does not make much sense. However, surveys from the in-person workshops demonstrate that the in-person workshops are very effective, and a little overlap (between the in-person workshop and online modules) may be useful to aid in the prevention of poor knowledge retention from the online modules. Therefore, it is strongly recommended that the NWCA, perhaps with the help of an evaluator, create a logic model detailing the connections between activities and outcomes. A logic model could help the NWCA stakeholders recognize all of their available resources and inputs, and how those lead to specific short-term and long-term program outputs and objectives. However, creating a logic model might be a challenge for the NWCA.

The director of the NWCA is extremely passionate about his mission to not only save college wrestling but also bring it back to its once thriving place amongst all college sports. This passion has produced an untiring work ethic within the director but also a lack of patience wanting to implement change right away and at times continually deriving new ideas for the program. Essentially, "[the director] is always a moving target, he always has new ideas every time I see him…and to commit to a logic model for him might be a two or three year process, but he might think he is committed to it in the first month, but he is reactive to what his is happening in his current environment" (D. Gould, personal communication, October 11, 2010). This approach to creating a world class leadership development program is certainly indicative of the director's intense motivation to have this program be successful and to save college wrestling. However, while the director is certainly well intentioned, he may not recognize that this lack of commitment to a specific direction can negatively impact the effectiveness of the Leadership Academy. Furthermore, the director of the NWCA is, much like a head coach, juggling a lot of different responsibilities simultaneously and may lack the ability to step back and see the big picture of how all of the components of the Leadership Academy fit together to lead to his outcome objectives. Thus, although it will take some patience and commitment, the creation of a logic model could be quite a useful exercise for the director to engage in.

Additionally, the long-term outcomes of the intervention were not examined in this evaluation. Retention was measured after 1 month, which may not have been an adequate amount of time to truly examine how well the coaches retained their increase in knowledge, and the extent to which they are implementing the tools taught to them in the modules. Therefore, it is recommended that the NWCA considers the timing of the interventions and examines long-term retention and use. Regarding the timing, it is recommended that the coaches complete the

88

online modules and the in-person workshop immediately prior to the start of college wrestling season. College coaches of all sports are stretched extremely thin during the season and the impact of the Leadership Academy could be greatly reduced due to the typical time demands of a coach during the competitive season. Furthermore, as was discussed previously, it appears that many of the skills taught could be perishable if not used shortly after learning them. This finding gives further cause to implement the Leadership Academy immediately prior to the start of a season so a coach can then begin using and refining the skills right away, during the season. It is therefore recommended that the NWCA capture retention and usage more than six months after the coaches complete the Leadership Academy. If the coaches complete the program prior to the start of the season, then implement the lessons learned during the season, a 6-month retention questionnaire would be completed nearly immediately after the end of the competitive season thus providing the NWCA with valuable information regarding the full scope of whether or not the coaches retained and utilized the information from the Leadership Academy. Considering that the coach will likely be in the maintenance stage of the transtheoretical model, the mentors role becomes critical at this point to aid in commitment to the new behaviors (Prochaska & Norcross, 2001).

Finally, it is recommended that, in conjunction with the aforementioned recommendations, the NWCA conduct an evaluation of the NWCA Leadership Academy that examines the program in its entirety to truly get a complete picture of the impact that the Leadership Academy is having on the coaches and college wrestling as a whole. This recommendation can be completed, in part, by observing and evaluating (through 360-degree surveys) the coaches who have already completed the NWCA Leadership Academy.

Implications and Future Directions for Evaluation

The current study demonstrated that while impact evaluations may be the most appealing to researchers and stakeholders, an impact evaluation might not be the most appropriate evaluation type. The director of the NWCA, the developers of the Leadership Academy, and the researcher may have been swayed by the lure of an impact evaluation study that could nearly definitively show that the hours and hours of manpower that were invested in creating the Leadership Academy were validated by demonstrating a near definitive causal linkage between the programs actions (online modules, in-person workshop, and mentoring) and the behavioral changes within the coaches, and, ultimately, by saving college wrestling. The researcher of the current study fully intended for this study to examine the impact of a component (two of the online modules) of the Leadership Academy. While there were elements of an impact evaluation, in many ways this study did not meet the criteria necessary for an impact evaluation. Instead this study more closely reflected a component outcome evaluation. Furthermore, this study shed light on the evaluability of the NWCA Leadership Academy.

To recall, an impact evaluation is typically larger scale and examines both program outcomes and long-term impacts of the program. Moreover, impact evaluations are resource intensive and are inherently comparative often utilizing a randomized experimental design. Whereas, an outcome evaluation is usually more small scale, time-limited, and does not necessarily involve a basis of comparison. Rossi, Lipsey, and Freeman (2004) outlined that a program is ready (or evaluable) for an impact evaluation when there is a program theory, a decent amount of process data has already been collected or is readily accessible, timelines and expectations have been reviewed, and resources are available for the evaluation. While some of these criteria have been met implicitly by the NWCA, they certainly were not met explicitly. At the onset of this current study, there was no existence of a logic model; the specific process of

90

how the Leadership Academy is delivered was still unclear; and expectations may have been

intuitively understood but were not explicitly determined to a great degree. Furthermore, the

director of the NWCA was unable to fully commit to an experimental design. This reality

seemed to occur at the crossroad of what was appealing (an impact evaluation) and what they

were willing to sacrifice (control of group designation). An examination of the psychological

difference between hiring an evaluator and someone requesting to do an evaluation of your

program may provide some insight into this lack of commitment.

The current evaluation study was externally, rather than internally, driven. The director of

the NWCA was deep into creating the Leadership Academy (amongst his bevy of other duties)

and garnering support for the academy when the researcher offered to do a component impact

evaluation. Perhaps the director felt that a positive result on the evaluation could help him

generate some more support (both political and financial) and or would provide some insight

from his target audience (college wrestling coaches) on the program and potential future

directions. Another possibility is that he was merely trying to help the author who he knew was

trying to complete his degree and spent many hours developing modules for the NWCA.

Therefore, while the director was committed to an evaluation he may not have been as

committed had he himself reached out to an evaluator to examine the impact that the program

was having. The researcher made every attempt to ensure that the director was committed to the

study design of identifying 60 coaches and then randomizing them into two matched groups

(control and intervention). The director on numerous occasions, both by email and telephone,

agreed to this design but when it came time to identify 60 coaches, the director instead chose to

identify only 30 coaches and deem them the intervention group. While the researcher explained

the negative impact that this decision would have on the strength of the evaluation, the director

was significantly more concerned about ensuring that those 30 coaches received the Leadership

Academy training, which is understandable given that his primary task is to help save college

wrestling by training the coaches who most needed the program training. Thus, he made it clear

that reaching these coaches at this specific time was more critical than the quality of the

evaluation design. The implication for future evaluation research is to strongly consider the

evaluand's motivation for engaging in an evaluation. If an evaluator approached an individual

then he or she is less likely to be committed to the evaluation methodology, than an individual

who reaches out to an evaluator and is truly interested in determining the extent to which his or

her program actually effects change within the program participants. Because of this change in

commitment, the current study became more of an outcome evaluation, with a bit of an

evaluability assessment, than a true impact evaluation.

Evaluability assessments are often aimed at getting the program stakeholders to clearly

define and articulate the program's design and goals. Often evaluability evaluators will, from the

data collected, create logic models detailing the connections between activities and outcomes.

While this current study did not result in a completed logic model it did provide some insight

into those connections and did get the stakeholders to explicitly express their goals for the

Leadership Academy beyond the long-term goal of "saving college wrestling." Further, the

current study demonstrated that the director of the NWCA was singularly committed to initiating

the Leadership Academy and, perhaps, not ready, from both a psychological standpoint and a

resource standpoint, for an impact evaluation.

Implications for Coaching Education

As previously mentioned, many coaching education programs are designed for High

School coaches, are aimed at player safety and development, and few go beyond the instructional

92

duties of a coach. Furthermore, while programs do have an online presence (American Sport Education Program, 2009; National Federation of State High School Associations, 2009) none, other than the NWCA Coaching Leadership Academy, have been found that educate coaches on coaching duties beyond player safety and development and combine online education with an in-person workshop and ongoing mentoring. The current study adds to research in coaching education because while many programs rely on online education, the results from this study indicate that a decrease in knowledge retention may be the result of just utilizing online education, thus making a strong case for future programs to include an in-person portion to supplement the online presence.

Another implication for coaching education is to consider not only the time it takes a coach to complete the education, be it in-person or online, but also when the education is delivered to the coach. While online education frequently provides coaches with the luxury to complete it when they have time available, providing online education during the competitive season can greatly impact the efficacy of the program if the coach is just trying to complete the course because his or her other time demands are so great. Furthermore, time considerations become even more critical if the educational model includes an in-person workshop that follows the completion of the online education, as is the case in the NWCA Leadership Academy. Therefore, it is recommended that future coaching education programs implement the education during the off-season but near the start of the competitive season in order to provide the coach opportunities to immediately implement the lessons.

Strengths and Limitations

Patton (2008) has strongly suggested that one role of an evaluator is to help stakeholders identify meaningful goals and objectives regarding behavioral changes and differences they

would like to observe within program participants as a result of completing the intervention. The current study aided the program director and developers in extending and further defining their goals beyond "saving college wrestling." Rather than just assuming that the goals of the modules are to develop the skills covered in the Modules the researcher successfully challenged the stakeholders (program developers, mentors, and a coach from a previous Leadership Academy) to identify more specific and meaningful goals.

Another strength of the study is that the participating coaches were not only tested on their perceptions of learning, but also on their perceptions of their experience interacting with the online Modules. Examining this component added to the richness of the study in that the study not only examined changes, but also examined whether or not the method of creating those changes met the needs of the participants.

Although there are strengths associated with this study, there are also some limitations worth mentioning. One limitation was that there was no member check in Phase One. Because the focus of the evaluation was on Phase Two the researcher did not send the transcribed interviews back to the participants to verify the transcribed data. This lack of a member check may have limited the accuracy of the data collected in Phase One, thus potentially impacting the objectives that were collected in Phase Two.

Another limitation of the study was that the control group was more than half the size of the intervention group to start and virtually non-existent (n = 4) for the comparison survey (Time 2, the post-intervention survey). The lack of a control group made it impossible to warrant a 2 X 2 (Group by Pre/Post) design and, therefore, limited the degree to which causality could be measured. Further, causality determinations could have been improved with the existence of a

placebo group (a group of coaches who completed an unrelated series of modules), in addition to standard control group.

Another limitation of the study was that the coaches completed the first post-intervention survey (Time 2) after they had completed all five available modules, even though the focus of the study was on the first two online modules. The researcher made this decision when he realized that it was virtually impossible to ensure that the coaches complete the survey immediately following completion of the first two modules. The coaches were provided access to all of the five online modules and were required to complete all of them within a time frame designated by the director of the NWCA (in order to provide them with their stipend with enough time to schedule the in-person academy). The researcher chose to have them complete the first post-intervention survey after completing all five modules in an effort to avoid unequal dosage (i.e. some coaches would complete the survey after finishing the first two modules, while others complete the survey after finishing four modules, etcetera). However, completing all five modules could have impacted the knowledge, retention, and overall opinions regarding the first two modules.

Another limitation is that purposeful sampling that occurred. Due to purposeful sampling in Phase One the sample may not have been entirely representative of the wrestling coach population due to subjectivity on behalf of the director of the NWCA. Meaning, the director may have selected coaches, mentors, or architects that are largely proponents of the NWCA Leadership Academy limited the possibility of disconfirming evidence for the program.

Lastly, the current study measured coach perceptions of learning and not actual learning or retention. As summarized by Dunning, Heath, and Suls (2004) people's self-views have a weak correlation to their actual behavior and performance. Essentially, people have a positive

illusion of themselves. Therefore, in this study the coaches may have rated their knowledge, intended usage, and retention higher than it actually was. Furthermore, citing research in education, Dunning, Heath, and Suls (2004) illustrate that students' assessment of their performance moderately aligned with assessments by their teachers and mentors. These findings further demonstrate the importance of future evaluation studies integrating 360-degree type assessments for the coaches. 360-degree assessment tools allow a coach to not only self-assess but also get feedback on the same items from peers, superiors, and subordinates (i.e. his or her wrestlers).

APPENDICES

Appendix A

Phase One Participants Demographic Questionnaire

1. Name (Last, First): _____

2. Today's Date: _____

3. Age: _____

4. NCAA Division:

    a. Division I

    b. Division II

    c. Division III

    d. NAIA

    e. Other

    f. Not applicable

5. Number of years coaching (if applicable): _____

6. Coaching level:

    a. Head Coach

    b. Assistant Coach

    c. Not applicable

7. If applicable, total number of years as a Head Coach: _____

8. If applicable, total number of years as an Assistant Coach: _____

9. What is your current position?

    a. Fill-in

10. What is your role in the NWCA Leadership Academy? (Select all that apply)

    a. Mentor

b. Content Developer

c. Coach participant in inaugural academy

d. Other _____

11. Circle your highest degree earned:

    a. High School Diploma

    b. Junior College Degree (i.e. A.A.)

    c. B.A. / B.S.

    d. M.A. / M.S.

    e. Ph.D/EDD

    f. Other _____

12. If applicable, what area of study did you earn in your undergraduate degree:

_____

13. Have you obtained any coaching certifications? Yes   No

    a. If yes, please specify: _____

14. Have you ever taken any formal leadership courses?   Yes   No

    a. If yes, please specify: _____

15. Do you have any experience taking online educational courses? Yes   No

16. If yes, how effective was/were the course(s) in delivering the content?

    a. Very effective

    b. Moderately effective

    c. Neither effective or ineffective

    d. Moderately ineffective

    e. Very ineffective

17. If yes to question 14, why was the course effective or ineffective?

    a. Fill-in answer

Appendix B

Interview Guide – Developers and Mentors

1. In general what do you perceive are the main objectives of Module 1?

2. What skills (knowledge) should the coach have following Module 1?

3. If Module 1 is successful, how will the coaches be different than they were before completing Module 1?

4. In general what do you perceive are the main objectives of Module 2?

5. What skills (knowledge) should the coach have following Module 2?

6. If Module 2 is successful, how will the coaches be different than they were before completing Module 2?

7. How will the coaches behave differently based on what they learned from Modules 1 and 2?

8. Which components of the online Modules do you think will be the most successful in achieving the goals of Modules 1 and 2?

   a. For example:

      i. PowerPoint's with voiceover

      ii. Video of other coaches discussing topics

      iii. Exercises in the coaches workbook

      iv. Video of Experts discussing topics

9. Which aspects of the online Modules do you think will be the *least* successful in achieving the goals of Modules 1 and 2?

   a. For example:

      i. PowerPoint's with voiceover

ii.   Video of other coaches discussing topics

iii.   Exercises in the coaches workbook

iv.   Video of Experts discussing topics

10. In your experience as a coach (or coach educator) what do you believe are the most

successful methods of teaching coaches?

Interview Guide – Coaches

(Questions in *italics* represent an additional question from the

Interview Guide for Stakeholders and Mentors)

1.   In general what do you perceive are the main objectives of Module 1?

2.   What skills (knowledge) should the coach have following Module 1?

3.   If Module 1 is successful, how will coaches be different than they were before

completing Module 1?

4.   *What did you like about Module 1?*

5.   *What did you dislike about Module 1?*

6.   *Have you used any of the material in module 1?*

a.   *If yes, how so?*

b.   *If no, why not?*

7.   In general what do you perceive are the main objectives of Module 2?

8.   What skills (knowledge) should the coach have following Module 2?

9.   If Module 2 is successful, how will the coaches be different than they were before

completing Module 2?

10. *What did you like about Module 2?*

11. *What did you dislike about Module 2?*

12. *Have you used any of the material in module 2?*

    a. *If yes, how so?*

    b. *If no, why not?*

13. How will the coaches behave differently based on what they learned from Modules 1 and 2?

14. Which components of the online Modules do you think will be the most successful in achieving the goals of Modules 1 and 2?

    b. For example:

        i. PowerPoint's with voiceover

        ii. Video of other coaches discussing topics

        iii. Exercises in the coaches workbook

        iv. Video of Experts discussing topics

15. Which aspects of the online Modules do you think will be the *least* successful in achieving the goals of Modules 1 and 2?

    a. For example:

        i. PowerPoint's with voiceover

        ii. Video of other coaches discussing topics

        iii. Exercises in the coaches workbook

        iv. Video of Experts discussing topics

16. *Would you recommend the course to your peers? If no, why? If yes, why?*

17. In your experience as a coach what do you believe are the most successful methods of teaching coaches?

Appendix C – Survey 1

Phase Two Participants Demographic Questionnaire

1. Name (Last, First): _____

2. Today's Date: _____

3. Age: _____

4. NCAA Division:

5. Number of years coaching: _____

6. Coaching level

    a. Head Coach

    b. Assistant Coach

7. If applicable, total number of years as a Head Coach: _____

8. If applicable, total number of years as an Assistant Coach: _____

9. Do you hold any administrative duties at your university in addition to your coaching

   responsibilities?

    a. Yes - If yes, what are they? _____

    b. No

10. Circle your highest degree earned:

    a. High School Diploma

    b. Junior College Degree (i.e. A.A.)

    c. B.A. / B.S.

    d. M.A. / M.S.

    e. Ph.D/EDD

    f. Other _____

11. If applicable, what area of study did you earn in your undergraduate degree:

    _____

12. Have you obtained any coaching certifications? Yes   No

    a.   If yes, please specify: _____

13. Have you ever taken any formal leadership courses?   Yes   No

    a.   If yes, please specify: _____

14. Do you have any experience taking online educational courses? Yes   No

15. If yes, how effective was/were the course(s) in delivering the content?

    a.   Very effective

    b.   Moderately effective

    c.   Neither effective or ineffective

    d.   Moderately ineffective

    e.   Very ineffective

16. If yes to question 14, why was the course effective or ineffective?

    a.   Fill-in answer

17. Do you feel that your wrestling program is at risk for being downsized or even eliminated

    by your athletic department?

    a.   Yes

    b.   No

18. Given all of the duties and responsibilities you have as a coach, how much time do you

    have available to work on your own leadership development?

    a.   Less than 1 hour per week

    b.   1-2 hours per week

c. 2-3 hours per week

d. 3-4 hours per week

e. More than 4 hours per week

Effectiveness of NWCA Leadership Academy Modules 1 and 2

<u>Directions</u>: Please answer the following questions based on your experience as a coach. Circle the appropriate number to the right of **each** statement.

Please note, that there are NO right or wrong answers and that your responses are confidential.

TO WHAT DEGREE…..

Module 1 Questions

		Not at all		Some		A Lot
1.	Is the sport of college wrestling at risk for elimination?	1	2	3	4	5
2.	Do you as a coach feel the need to take action to *help* college wrestling?	1	2	3	4	5
3.	Do you have a plan to improve your program in general?	1	2	3	4	5
4.	Do you have a plan to improve your leadership abilities?	1	2	3	4	5
5.	Do you *intend* to formulate a plan to improve your program in general?	1	2	3	4	5
6.	Do you *intend* to formulate a plan to improve your leadership abilities?	1	2	3	4	5
7.	Do you *intend* to formulate a vision for your program?	1	2	3	4	5

Please rate your degree of "knowledge" about each of the following

		Very Low				Very High
8.	Factors that are threats to college wrestling	1	2	3	4	5
9.	Strategies to overcome the threats to college wrestling	1	2	3	4	5
10.	Contemporary strategies for building bridges to supporters	1	2	3	4	5
11.	Athletic Directors perspectives of the ideal college wrestling program	1	2	3	4	5

12. The purpose of having a vision or plan for a program	1	2	3	4	5
13. The methods of how to plan and develop a vision	1	2	3	4	5
14. The methods of how to keep a vision alive	1	2	3	4	5

MODULE 2 QUESTIONS
TO WHAT DEGREE…..

	Not at all		Some		A Lot
15. Do you understand that the college coach of today is akin to a CEO?	1	2	3	4	5
16. Do you believe that *marketing* is an essential skill of a college coach?	1	2	3	4	5
17. Do you believe that *fundraising* is an essential skill of a college coach?	1	2	3	4	5
18. Do you believe that *budget management* is an essential skill of a college coach?	1	2	3	4	5
19. Do you believe that *public relations* is an essential skill of a college coach?	1	2	3	4	5
20. Do you believe that *academic support* is an essential skill of a college coach?	1	2	3	4	5
21. Do you believe that *communication* is an essential skill of a college coach?	1	2	3	4	5
22. Do you believe that *recruiting* is an essential skill of a college coach?	1	2	3	4	5
23. Do you believe that *community service* is an essential skill of a college coach?	1	2	3	4	5
24. Do you believe that *community relations* is an essential skill of a college coach?	1	2	3	4	5
25. Do you *intend* to further develop your *marketing* skills?	1	2	3	4	5
26. Do you *intend* to further develop your *fundraising* skills?	1	2	3	4	5

27. Do you *intend* to further develop your *budget management* skills?	1	2	3	4	5
28. Do you *intend* to further develop your *public relations* skills?	1	2	3	4	5
29. Do you *intend* to further develop your *academic support* skills?	1	2	3	4	5
30. Do you *intend* to further develop your *communication* skills?	1	2	3	4	5
31. Do you *intend* to further develop your *recruiting* skills?	1	2	3	4	5
32. Do you *intend* to further develop your *community service* skills?	1	2	3	4	5
33. Do you *intend* to further develop your *community relations* skills?	1	2	3	4	5
34. Do you agree that leadership is about being the most charismatic hero out in front?	1	2	3	4	5
35. Do you agree that leadership is about wielding unilateral power?	1	2	3	4	5
36. Do you agree that leadership is about solving everyone's problems?	1	2	3	4	5
37. Do you agree that leadership is about providing all of the answers for others?	1	2	3	4	5
38. Do you agree that emphasizing collaboration as a leader means the follower or members have to stifle their competitive urges?	1	2	3	4	5
39. Do you agree that leadership is about defining an appropriate and compelling vision for your program?	1	2	3	4	5
40. Do you agree that leadership is about getting things done via other people?	1	2	3	4	5
41. Do you agree that leadership is about letting others decide how to make a vision happen?	1	2	3	4	5
42. Do you agree that leadership is about inspiring others to take responsibility?	1	2	3	4	5

43. Do you agree that leadership is about creating an environment where people can develop the skills needed to be successful?	1	2	3	4	5
44. Do you agree that leadership is about mobilizing people to face new challenges that require new values, priorities, and habits and ways of doing things?	1	2	3	4	5
45. Do you agree that leadership is about helping others learn how to solve problems and develop solutions for themselves?	1	2	3	4	5
46. Do you know what the GROW model represents?	1	2	3	4	5
47. Do you *intend* to use the GROW model in the future?	1	2	3	4	5
48. Have you engaged in a formal (i.e. asking other individuals, using a 360-degree tool) evaluation of your strengths and weaknesses?	1	2	3	4	5
49. Do you *intend* to engage in a formal (i.e. asking others individuals, using a 360-degree tool) evaluation of your strengths and weaknesses?	1	2	3	4	5
50. Do you believe it's important to hire assistant coaches (and/or team aides) whose strengths are your weaknesses?	1	2	3	4	5
51. Have you hired assistant coaches (and/or team aides) whose strengths are your weaknesses?	1	2	3	4	5
52. Do you recognize the impact your behavior (and your programs behavior) has on other programs within the sport of college wrestling?	1	2	3	4	5

Please rate your degree of "knowledge" about each of the following

	Very Low				Very High
53. Why or how a College Coach is akin to a corporate CEO	1	2	3	4	5
54. Common characteristics of effective leaders	1	2	3	4	5
55. What external factors impact or influence leadership	1	2	3	4	5

56. How modern leadership has changed from years past	1	2	3	4	5
57. Common myths of leadership	1	2	3	4	5
58. The components set forth by Rainer Martens that effective coach leaders do	1	2	3	4	5
59. The components that lead to the development of a team culture	1	2	3	4	5
60. Jack Welch's 4 E's for Effective Leadership	1	2	3	4	5
61. Characteristics of coaches that are great communicators	1	2	3	4	5
62. Methods on how to build trust	1	2	3	4	5
63. The components of the GROW model	1	2	3	4	5
64. Methods on how to use and implement the GROW model	1	2	3	4	5

Appendix E – Survey 3

Effectiveness of NWCA Leadership Academy Modules 1 and 2

Directions: Please answer the following questions based on your experience as a coach. Circle the appropriate number to the right of **each** statement.

TO WHAT DEGREE…..   **Module 1 Questions**

		Not at all		Some		A Lot
1.	Is the sport of college wrestling at risk for elimination?	1	2	3	4	5
2.	Do you as a coach feel the need to take action to *help* college wrestling?	1	2	3	4	5
3.	Do you have a plan to improve your program in general?	1	2	3	4	5
4.	Do you have a plan to improve your leadership abilities?	1	2	3	4	5
5.	Do you *intend* to formulate a plan to improve your program in general?	1	2	3	4	5
6.	Do you *intend* to formulate a plan to improve your leadership abilities?	1	2	3	4	5
7.	Do you *intend* to formulate a vision for your program?	1	2	3	4	5

Please rate your degree of "knowledge" about each of the following

		Very Low				Very High
8.	Factors that are threats to college wrestling	1	2	3	4	5
9.	Strategies to overcome the threats to college wrestling	1	2	3	4	5
10.	Contemporary strategies for building bridges to supporters	1	2	3	4	5
11.	Athletic Directors perspectives of the ideal college wrestling program	1	2	3	4	5

12. The purpose of having a vision or plan for a program	1	2	3	4	5
13. The methods of how to plan and develop a vision	1	2	3	4	5
14. The methods of how to keep a vision alive	1	2	3	4	5

MODULE 2 QUESTIONS
TO WHAT DEGREE…..

	Not at all		Some		A Lot
15. Do you understand that the college coach of today is akin to a CEO?	1	2	3	4	5
16. Do you believe that *marketing* is an essential skill of a college coach?	1	2	3	4	5
17. Do you believe that *fundraising* is an essential skill of a college coach?	1	2	3	4	5
18. Do you believe that *budget management* is an essential skill of a college coach?	1	2	3	4	5
19. Do you believe that *public relations* is an essential skill of a college coach?	1	2	3	4	5
20. Do you believe that *academic support* is an essential skill of a college coach?	1	2	3	4	5
21. Do you believe that *communication* is an essential skill of a college coach?	1	2	3	4	5
22. Do you believe that *recruiting* is an essential skill of a college coach?	1	2	3	4	5
23. Do you believe that *community service* is an essential skill of a college coach?	1	2	3	4	5
24. Do you believe that *community relations* is an essential skill of a college coach?	1	2	3	4	5
25. Do you *intend* to further develop your *marketing* skills?	1	2	3	4	5
26. Do you *intend* to further develop your *fundraising* skills?	1	2	3	4	5

	1	2	3	4	5
27. Do you *intend* to further develop your *budget management* skills?	1	2	3	4	5
28. Do you *intend* to further develop your *public relations* skills?	1	2	3	4	5
29. Do you *intend* to further develop your *academic support* skills?	1	2	3	4	5
30. Do you *intend* to further develop your *communication* skills?	1	2	3	4	5
31. Do you *intend* to further develop your *recruiting* skills?	1	2	3	4	5
32. Do you *intend* to further develop your *community service* skills?	1	2	3	4	5
33. Do you *intend* to further develop your *community relations* skills?	1	2	3	4	5
34. Do you agree that leadership is about being the most charismatic hero out in front?	1	2	3	4	5
35. Do you agree that leadership is about wielding unilateral power?	1	2	3	4	5
36. Do you agree that leadership is about solving everyone's problems?	1	2	3	4	5
37. Do you agree that leadership is about providing all of the answers for others?	1	2	3	4	5
38. Do you agree that emphasizing collaboration as a leader means the follower or members have to stifle their competitive urges?	1	2	3	4	5
39. Do you agree that leadership is about defining an appropriate and compelling vision for your program?	1	2	3	4	5
40. Do you agree that leadership is about getting things done via other people?	1	2	3	4	5
41. Do you agree that leadership is about letting others decide how to make a vision happen?	1	2	3	4	5
42. Do you agree that leadership is about inspiring others to take responsibility?	1	2	3	4	5

43. Do you agree that leadership is about creating an environment where people can develop the skills needed to be successful?	1	2	3	4	5
44. Do you agree that leadership is about mobilizing people to face new challenges that require new values, priorities, and habits and ways of doing things?	1	2	3	4	5
45. Do you agree that leadership is about helping others learn how to solve problems and develop solutions for themselves?	1	2	3	4	5
46. Do you know what the GROW model represents?	1	2	3	4	5
47. Do you *intend* to use the GROW model in the future?	1	2	3	4	5
48. Do you intend to use the GROW model with your wrestlers	1	2	3	4	5
49. Do you intend to use the GROW model with your coaching staff	1	2	3	4	5
50. Do you intend to use the GROW model with individuals other than your coaching staff or wrestlers	1	2	3	4	5
51. Do you intend to implement Jack Welchs' 4 E's for effective leadership	1	2	3	4	5
52. Do you intend to implement the components set forth by Rainer Marten's on being an effective coach leader	1	2	3	4	5
53. Do you intend to implement the components that lead to developing a team culture	1	2	3	4	5
54. Do you intend to implement methods on how to build trust	1	2	3	4	5
55. Have you engaged in a formal (i.e. asking other individuals, using a 360-degree tool) evaluation of your strengths and weaknesses?	1	2	3	4	5
56. Do you *intend* to engage in a formal (i.e. asking others individuals, using a 360-degree tool) evaluation of your strengths and weaknesses?	1	2	3	4	5
57. Do you believe it's important to hire assistant coaches (and/or team aides) whose strengths are your weaknesses?	1	2	3	4	5

58. Have you hired assistant coaches (and/or team aides) whose strengths are your weaknesses?	1	2	3	4	5
59. Do you recognize the impact your behavior (and your programs behavior) has on other programs within the sport of college wrestling?	1	2	3	4	5

Please rate your degree of "knowledge" about each of the following

	Very Low				Very High
60. Why or how a College Coach is akin to a corporate CEO	1	2	3	4	5
61. Common characteristics of effective leaders	1	2	3	4	5
62. What external factors impact or influence leadership	1	2	3	4	5
63. How modern leadership has changed from years past	1	2	3	4	5
64. Common myths of leadership	1	2	3	4	5
65. The components set forth by Rainer Martens that effective coach leaders do	1	2	3	4	5
66. The components that lead to the development of a team culture	1	2	3	4	5
67. Jack Welch's 4 E's for Effective Leadership	1	2	3	4	5
68. Characteristics of coaches that are great communicators	1	2	3	4	5
69. Methods on how to build trust	1	2	3	4	5
70. The components of the GROW model	1	2	3	4	5
71. Methods on how to use and implement the GROW model	1	2	3	4	5

Appendix F – Survey 4

Follow-up Survey for Intervention Group

1. Which aspects of the online modules were *most* impactful? (Select all that apply)

    a. PowerPoint's with voiceover

    b. Video of other coaches discussing topics

    c. Exercises in the coaches workbook

    d. Video of Experts discussing topics

    e. Other – Insert answer

    f. All are equally impactful

2. Which aspects of the online modules were *least* impactful? (Select all that apply)

    a. PowerPoint's with voiceover

    b. Video of other coaches discussing topics

    c. Exercises in the coaches workbook

    d. Video of Experts discussing topcis

    e. Other – Insert answer

    f. All are equally impactful

3. Would you prefer an alternative format?

    a. Yes

    b. No

4. If yes, what type of format would you prefer

    a. Fill-In answer

5. Did you like the format of having a coach's workbook to coincide with the video?

    a. Yes

    b. No

6. If no, why not?

    a. Fill-In

7. Would you recommend this course to other coaches?

    a. Yes

    b. No

8. If no, why not?

    a. Fill-in

9. A number of recommendations for personal and program improvement were included in these two modules. To what degree do you believe that you are capable (e.g. have the resources, personnel, and time) of implementing such recommendations within your program?

    a. Very capable

    b. Moderately capable

    c. Neither capable or incapable

    d. Moderately incapable

    e. Very incapable

Retention and Use of Information in NWCA Leadership Academy Modules 1 and 2

<u>Directions</u>: Please answer the following questions based on your experience as a coach. Circle the appropriate number to the right of **each** statement.

TO WHAT DEGREE…..	**Module 1 Questions**				
	Not at all		**Some**		**A Lot**
1. **Is the sport of college wrestling at risk for elimination?	1	2	3	4	5
2. **Do you as a coach feel the need to take action to *help* college wrestling?	1	2	3	4	5
3. **Do you have a plan to improve your program in general?	1	2	3	4	5
4. **Do you have a plan to improve your leadership abilities?	1	2	3	4	5
5. Do you *intend* to formulate a plan to improve your program in general?	1	2	3	4	5
6. Do you *intend* to formulate a plan to improve your leadership abilities?	1	2	3	4	5
7. Do you *intend* to formulate a vision for your program?	1	2	3	4	5
8. Have you developed a plan to improve your program	1	2	3	4	5
9. Have you developed a plan to improve your vision	1	2	3	4	5
10. Have you written out a formal vision for your program	1	2	3	4	5
11. Have you shared your vision for your program	1	2	3	4	5

Please rate your degree of "knowledge" about each of the following

	Very Low				**Very High**

12. Threats to college wrestling	1	2	3	4	5
13. Strategies to overcome the threats to college wrestling	1	2	3	4	5
14. Contemporary strategies for building bridges to supporters	1	2	3	4	5
15. Athletic Directors perspectives of the ideal college wrestling program	1	2	3	4	5
16. The purpose of having a vision or plan for a program	1	2	3	4	5
17. The methods of how to plan and develop a vision	1	2	3	4	5
18. The methods of how to keep a vision alive	1	2	3	4	5

MODULE 2 QUESTIONS
TO WHAT DEGREE…..

	Not at all		Some		A Lot
19. **Do you understand that the college coach of today is akin to a CEO?	1	2	3	4	5
20. **Do you believe that *marketing* is an essential skill of a college coach?	1	2	3	4	5
21. **Do you believe that *fundraising* is an essential skill of a college coach?	1	2	3	4	5
22. **Do you believe that *budget management* is an essential skill of a college coach?	1	2	3	4	5
23. **Do you believe that *public relations* is an essential skill of a college coach?	1	2	3	4	5
24. **Do you believe that *academic support* is an essential skill of a college coach?	1	2	3	4	5
25. **Do you believe that *communication* is an essential skill of a college coach?	1	2	3	4	5
26. **Do you believe that *recruiting* is an essential skill of a college coach?	1	2	3	4	5

27. **Do you believe that *community service* is an essential skill of a college coach?	1	2	3	4	5
28. **Do you believe that *community relations* is an essential skill of a college coach?	1	2	3	4	5
29. Do you *intend* to further develop your *marketing* skills?	1	2	3	4	5
30. Do you *intend* to further develop your *fundraising* skills?	1	2	3	4	5
31. Do you *intend* to further develop your *budget management* skills?	1	2	3	4	5
32. Do you *intend* to further develop your *public relations* skills?	1	2	3	4	5
33. Do you *intend* to further develop your *academic support* skills?	1	2	3	4	5
34. Do you *intend* to further develop your *communication* skills?	1	2	3	4	5
35. Do you *intend* to further develop your *recruiting* skills?	1	2	3	4	5
36. Do you *intend* to further develop your *community service* skills?	1	2	3	4	5
37. Do you *intend* to further develop your *community relations* skills?	1	2	3	4	5
38. **Do you agree that leadership is about being the most charismatic hero out in front?	1	2	3	4	5
39. **Do you agree that leadership is about wielding unilateral power?	1	2	3	4	5
40. **Do you agree that leadership is about solving everyone's problems?	1	2	3	4	5
41. **Do you agree that leadership is about providing all of the answers for others?	1	2	3	4	5
42. **Do you agree that emphasizing collaboration as a leader means the follower or members have to stifle their competitive urges?	1	2	3	4	5

43. **Do you agree that leadership is about defining an appropriate and compelling vision for your program?	1	2	3	4	5
44. **Do you agree that leadership is about getting things done via other people?	1	2	3	4	5
45. **Do you agree that leadership is about letting others decide how to make a vision happen?	1	2	3	4	5
46. **Do you agree that leadership is about inspiring others to take responsibility?	1	2	3	4	5
47. **Do you agree that leadership is about creating an environment where people can develop the skills needed to be successful?	1	2	3	4	5
48. **Do you agree that leadership is about mobilizing people to face new challenges that require new values, priorities, and habits and ways of doing things?	1	2	3	4	5
49. **Do you agree that leadership is about helping others learn how to solve problems and develop solutions for themselves?	1	2	3	4	5
50. Do you know what the GROW model represents?	1	2	3	4	5
51. Do you *intend* to use the GROW model in the future?	1	2	3	4	5
52. Have you used the GROW model with your wrestlers	1	2	3	4	5
53. Have you used the GROW model with your coaching staff	1	2	3	4	5
54. Have you used the GROW model with individuals other than your coaching staff or wrestlers	1	2	3	4	5
55. Have you implemented Jack Welchs' 4 E's for effective leadership	1	2	3	4	5
56. Have you implemented the components set forth by Rainer Marten's on being an effective coach leader	1	2	3	4	5
57. Have you implemented the components that lead to developing a team culture	1	2	3	4	5

58. Have you implemented methods on how to build trust	1	2	3	4	5
59. **Have you engaged in a formal (i.e. asking other individuals, using a 360-degree tool) evaluation of your strengths and weaknesses?	1	2	3	4	5
60. **Do you *intend* to engage in a formal (i.e. asking others individuals, using a 360-degree tool) evaluation of your strengths and weaknesses?	1	2	3	4	5
61. **Do you believe it's important to hire assistant coaches (and/or team aides) whose strengths are your weaknesses?	1	2	3	4	5
62. **Have you hired assistant coaches (and/or team aides) whose strengths are your weaknesses?	1	2	3	4	5
63. **Do you recognize the impact your behavior (and your programs behavior) has on other programs within the sport of college wrestling?	1	2	3	4	5

Please rate your degree of "knowledge" about each of the following

	Very Low				Very High
64. **Why or how a College Coach is akin to a corporate CEO	1	2	3	4	5
65. **Common characteristics of effective leaders	1	2	3	4	5
66. **What external factors impact or influence leadership	1	2	3	4	5
67. **How modern leadership has changed from years past	1	2	3	4	5
68. **Common myths of leadership	1	2	3	4	5
69. The components set forth by Rainer Martens that effective coach leaders do	1	2	3	4	5
70. The components that lead to the development of a team culture	1	2	3	4	5

71. Jack Welch's 4 E's for Effective Leadership	1	2	3	4	5
72. Characteristics of coaches that are great communicators	1	2	3	4	5
73. Methods on how to build trust	1	2	3	4	5
74. The components of the GROW model	1	2	3	4	5
75. Methods on how to use and implement the GROW model	1	2	3	4	5

Appendix H

Control Group Recruitment Email

Dear Coach,

Mike Moyer and the National Wrestling Coaches Association are requesting your help.

College wrestling is under attack. In these difficult economic times an increasing number of programs are being dropped. In response to this state of affairs one thing the NWCA is doing is developing a *state of the art leadership academy for collegiate wrestling coaches* to provide coaches with critical information and the support needed to thrive. The NWCA has leaned on a significant number of successful businesspersons, athletic directors, and coaches to aid in the development of this program and it is now being initiated. **<u>So please help!!</u>**

The development of any program requires in-depth evaluation regarding its effectiveness for its intended users. Therefore, the NWCA has embarked on evaluating a portion of the Leadership Academy and <u>are asking you to help</u> in this evaluation process as a control group. Our goal is to compare coaches like yourself who have not yet gone through the program with coaches going through the program to see what information conveyed in the program helps participants develop the greatest. This is critical because we know college wrestling coaches already possess a number of coaching leadership skills and competencies and **we want to make sure what is presented in the program builds off these strengths** and does not simply tell coaches what they already know.

Your involvement would simply require you to complete two surveys that would **only take 15-20 minutes** each to complete. The surveys will ask you about your views of coaching and opinions of leadership and be completed about a month apart. A link to each survey will be

emailed to you and can be completed from any computer with Internet access. The information

collected from these surveys is completely confidential. Furthermore, the information gathered

from these surveys will be used to help educate those involved in the leadership academy to

better suit the leadership needs of intercollegiate coaches. **Therefore, your participation is**

really needed and greatly appreciated. Following completion of the surveys you will also be

offered the opportunity to complete the online portion of the Leadership Academy at no charge.

Please see the attached consent form for more detailed information about participation. If

you are interested in participating please click the link below and fill out the first survey. By

clicking below you are consenting to participate.

We realize how busy coaches like yourself are and that we are asking you to do one more

thing in a list of things you must do. However, getting information from coaches not yet in the

program is absolutely essential if we are to build a program that meets the needs of today's

college wrestling coach. SO PLEASE HELP!

Here is a link to the survey. <u>CLICK HERE</u>. Your survey ID is 20043

Thank you,

Eric Bean and Mike Moyer

Appendix I

Participants by Time

Group	Time 1	Time 2	Time 3
Control	35	27	23
Intervention	13	4	n/a

Appendix J

Subscales items at each time point

Knowledge Time 1 and Time 2	Knowledge Time 3 (KnowledgeSmall)	Intention Time 1 and 2	Intention Time 3 (IntentionSmall)
Q8: Knowledge of threats	Q8: Knowledge of threats	Q5: To what degree do you intend to formulate a plan to improve your program	Q5: To what degree do you intend to formulate a plan to improve your program
Q9: Knowledge of strategies to overcome threats	Q9: Knowledge of strategies to overcome threats	Q6: To what degree do you intend to improve your leadership abilities	Q6: To what degree do you intend to improve your leadership abilities
Q10: Knowledge of strategies to build bridges to supporters	Q10: Knowledge of strategies to build bridges to supporters	Q7: To what degree do you intend to formulate a vision for your program	Q7: To what degree do you intend to formulate a vision for your program
Q11: Knowledge of AD’s perspectives on the ideal college program	Q11: Knowledge of AD’s perspectives on the ideal college program	Q25: Do you intend to further develop your marketing skills	Q25: Do you intend to further develop your marketing skills
Q12: Knowledge of the purpose of having a vision or plan for a program	Q12: Knowledge of the purpose of having a vision or plan for a program	Q26: Do you intend to further develop your fundraising skills	Q26: Do you intend to further develop your fundraising skills
Q13: Knowledge of how to develop a plan or a vision	Q13: Knowledge of how to develop a plan or a vision	Q27: Do you intend to further develop your budget management skills	Q27: Do you intend to further develop your budget management skills
Q14: Knowledge of the methods of how to keep a vision alive	Q14: Knowledge of the methods of how to keep a vision alive	Q28: Do you intend to further develop your public relations skills	Q28: Do you intend to further develop your public relations skills

Knowledge Time 1 and Time 2	Knowledge Time 3 (KnowledgeSmall)	Intention Time 1 and 2	Intention Time 3 (IntentionSmall)
Q15: Do you understand that the college coach of today is akin to a CEO	Q46: Do you know what the GROW model represents	Q29: Do you intend to further develop your academic support skills	Q29: Do you intend to further develop your academic support skills
Q16: Do you believe that marketing is an essential skill of a college coach	Q58: Knowledge of the components set forth by Rainer Martens that effective coach leaders do	Q30: Do you intend to further develop your communication skills	Q30: Do you intend to further develop your communication skills
Q17: Do you believe that fundraising is an essential skill of a college coach	Q59: Knowledge of the components of a team culture	Q31: Do you intend to further develop your recruiting skills	Q31: Do you intend to further develop your recruiting skills
Q18: Do you believe that budget management is an essential skill of a college coach	Q60: Knowledge of Jack Welch's 4 E's for Effective Leadership	Q32: Intention to further community service skills	Q32: Intention to further community service skills
Q19: Do you believe that public relations is an essential skill of a college coach	Q61: Characteristics of great coach communicators	Q33: Do you intend to further develop your community relations skills	Q33: Do you intend to further develop your community relations skills
Q20: Do you believe that academic support is an essential skill of a college coach	Q62: Knowledge of methods on how to build trust	Q47: Do you intend to use the GROW model in the future	Q47: Do you intend to use the GROW model in the future
Q21: Do you believe that communication is an essential skill of a college coach	Q63: Knowledge of the components of the GROW model	Q49: Intention to do a formal evaluation	
Q22: Do you believe that recruiting is an essential skill of a college coach	Q64: Knowledge of methods on how to use and implement the GROW model		

Knowledge Time 1 and Time 2	Knowledge Time 3 (KnowledgeSmall)	Intention Time 1 and 2	Intention Time 3 (IntentionSmall)
Q23: Do you believe that community service is an essential skill of a college coach			
Q24: Do you believe that community relations is an essential skill of a college coach			
Q34: Do you agree that leadership is about being the most charismatic hero out in front			
Q35: Do you agree that leadership is about wielding unilateral power			
Q36: Do you agree that leadership is about solving everyone's problems			
Q37: Do you agree that leadership is about providing all of the answers for others			
Q38: Do you agree that emphasizing collaboration as a leader means the follower or members have to stifle their competitive urges			

Knowledge Time 1 and Time 2	Knowledge Time 3 (KnowledgeSmall)	Intention Time 1 and 2	Intention Time 3 (IntentionSmall)
Q39: Do you agree that leadership is about defining an appropriate and compelling vision for your program			
Q40: Do you agree that leadership is about getting things done via other people			
Q41: Do you agree that leadership is about letting others decide how to make a vision happen			
Q42: Do you agree that leadership is about inspiring others to take responsibility			
Q43: Do you agree that leadership is about creating an environment where people can develop the skills needed to be successful			
Q44: Do you agree that leadership is about mobilizing people to face new challenges that require new values, priorities, and habits and ways of doing things			

Knowledge Time 1 and Time 2	Knowledge Time 3 (KnowledgeSmall)	Intention Time 1 and 2	Intention Time 3 (IntentionSmall)
Q45: Do you agree that leadership is about helping others learn how to solve problems and develop solutions for themselves			
Q46: Do you know what the GROW model represents			
Q53: Knowledge of why or how a college coach is akin to a CEO			
Q54: Knowledge of common characteristics of effective leaders			
Q55: Knowledge of what external factors impact of influence leadership			
Q56: Knowledge of how modern leadership has changed from years past			
Q57: Knowledge of common myths of leadership			
Q58: Knowledge of the components set forth by Rainer Martens that effective coach leaders do			
Q59: Knowledge of the components of a team culture			

Knowledge Time 1 and Time 2	Knowledge Time 3 (KnowledgeSmall)	Intention Time 1 and 2	Intention Time 3 (IntentionSmall)
Q60: Knowledge of Jack Welch's 4 E's for Effective Leadership			
Q61: Characteristics of great coach communicators			
Q62: Knowledge of methods on how to build trust			
Q63: Knowledge of the components of the GROW model			
Q64: Knowledge of methods on how to use and implement the GROW model			

REFERENCES

REFERENCES

Acker, J. V. (2008). Lawrence to suspend wrestling program. *Lawrence University Sports News*. Retrieved December 9, 2009, from http://www.lawrence.edu/dept/communications /media/sportsnews/0809/121208.html

American Sport Education Program. *About* (2009). Retrieved October 29, 2009, from http://www.asep.com/about.cfm

Alkin, M. (2004). Comparing evaluation points of view. In M. Alkin (Ed.) *Evaluation roots: Tracing theorists' views and influences* (pp. 3 – 65). Thousand Oaks, CA: Sage Publications

Alkin, M. & Christie, C. (2004). Evaluation theory tree revisited. In M. Alkin (Ed.) *Evaluation roots: Tracing theorists' views and influences* (pp. 381 – 392). Thousand Oaks, CA: Sage Publications

Avolio, B. J., & Hannah, S. T. (2008). Developmental readiness: Accelerating leader development. *Consulting Psychology Journal: Practice and Research*, *60*(4), 331-347.

Barber, H., & Eckrich, J. (1998). Methods and criteria employed in the evaluation of intercollegiate coaches. *Journal of Sport Management*, *12*, 301-322.

Barron, M. J. (2005). Evaluation of an injury prevention program (Doctoral dissertation, Michigan State University, East Lansing, 2001).

Bennis, W. (2007). The challenges of leadership in the modern world: Introduction to the special issue. *American Psychologist, 62*(1), 2-5.

Bernard, R. M., Abrami, P. C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., et al. (2004). How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research*, *74*(3), 379-439.

Brown, A. (2009). Delaware State dropping wrestling. Retrieved December 9, 2009 from http://wrestlingreport.com/current_news/viewtopic.php?f=16&t=14190

Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality-social, clinical, and health psychology. *Psychological Bulletin*, *92*, 111–135.

Case, B. (1987). Leadership behavior in sport: A field test of the situational leadership theory. *International Journal of Sport Psychology, 18*(4), 256-268.

Chelladurai, P. (1990). Leadership in sports: A review. *International Journal of Sport Psychology, 21,* 328-354.

Chelladurai, P. (2007). Leadership in sports. In G. Tenebaum, & R.C. Eklund (Eds.) *Handbook of sport psychology* (3rd edition). Hoboken, NJ: John Wiley and Sons.

Chelladurai, P. & Arnott, M. (1985). Decision styles in coaching: Preferences of basketball players. *Research Quarterly, 56*, 15-24.

Chelladurai, P. & Saleh, S. D. (1980). Preferred leadership in sports. *Canadian Journal of Applied Sport Sciences, 3,* 85-92.

Cohn, J. M., Khruana, R., & Reeves, L. (2005). Growing talent as if your business depended on it. (Cover story). *Harvard Business Review*, *83*(10), 62-70.

Coyner, S. C., & McCann, P. L. (2004). Advantages and challenges of teaching in an electronic environment: The accommodate model. *International Journal of Instructional Media*, *31*(3), 223-228.

Cunningham, G. B., & Dixon, M. A. (2003). New perspectives concerning performance appraisals of intercollegiate coaches. *Quest*, *55*, 177-192.

Dunning, D., Heath, C., & Suls, J. M. (2004). Flawed self-assessment: Implications for health education, and the workplace. *Psychological Science in the Public Interest,5,* 69-106.

Dwyer, J. M., & Fisher, D. G. (1990). Wrestlers' perceptions of coaches' leadership as predictors of satisfaction with leadership. *Perceptual & Motor Skills*, *71*(2), 511-517.

Dwyer, J. M., & Fischer, D. G. (1988). Leadership style of wrestling coaches. *Perceptual and Motor Skills, 67*, 706.

De Vries, M. K., Florent-Treacy, E., Ramo, L. G., & Korotov, K. (2008). A framework for the assessment of Leadership Academys. *INSEAD Working Papers Collection*, (38), 4-15.

Finckenauer, J. O., Margaryan, S., & Sullivan, M. L. (2005). Evaluability assessment in juvenile justice: A case example. *Youth Violence and Juvenile Justice*, *3*(3), 265-275.

Gilbert, W., & Trudel, P. (1999). An evaluation strategy for coach education programs. *Journal of Sport Behavior*, *22*(2), 234-250.

Gould, D., Carson, S., Fifer, A., Lauer, L., & Benham, R. (2009). Stakeholders' perceptions of social-emotional and life skill development issues characterizing contemporary high school sports. *Journal of Coaching Education,2*(1).

Gould, D., Petlichkoff, L., Hodge, K., & Simons, J. (1990). Evaluating the effectiveness of a psychological skills educational workshop. *The Sport Psychologist*, *4*(3).

Griffin, N. S. (2003). Personalize your management development. *Harvard Business Review, 81*(3), 113-119.

Hackman, J., & Wageman, R. (2007). Asking the right questions about leadership: Discussion

and conclusions. *American Psychologist*, *62*, 43-47.

Hansen, D. E. (2008). Knowledge transfer in online learning environments. *Journal of Marketing Education*, *30*(2), 93-105.

Kets de Vries, M. F. R., Vrignaud, P., & Florent-Treacy, E. (2004). The global leadership life inventory: Development and psychometric properties of a 360-degree feedback instrument. *International Journal of Human Resource Management*, *15*(3), 475-492.

Larreamendy-Joerns, J., & Leinhardt, G. (2006). Going the distance with online education. *Review of Educational Research*, *76*(4), 567 - 605.

Li, C. S., & Irby, B. (2008). An overview of online education: Attractiveness, benefits, challenges, concerns and recommendations. *College Student Journal*, *42*(2), 449-458

MacLean, J., & Zakrajsek, D. (1996). Factors considered important for evaluating canadian university athletic coaches. *Journal of Sport Management*, *10*, 446-462.

Mallett, C., & Côté, J. (2006). Beyond winning and losing: Guidelines for evaluating high performance coaches. *The Sport Psychologist*, *20*, 213-221.

Miles, M., & Huberman, A. M. (1984). *Qualitative data analysis.* Beverly Hills, CA: Sage Publications.

Miller, T. (2007). Oregon University adds men's baseball, drops wrestling. Retrieved December 9, 2009 from http://standyourground.com/forums/index.php?topic= 13703.0;wap2

Mondello, M. J., & Janelle, C. M. (2001). A comparison of leadership styles of head coaches and assistant coaches at a successful division I athletic program. *International Sports Journal, 5*(2), 40-49.

Mor, N., & Winquist, J. (2002). Self-focused attention and negative affect: A meta-analysis. *Psychological Bulletin, 128,* 638 – 662.

National Collegiate Athletic Association. *Analysis of 2005-06 division I championships* [Data file]. Retrieved from http://www.ncaa.org/wps/wcm/connect/resources/file/ebca b70ec47d4b8/Copy%20of%20Div1_2006_MotherSummarySS.pdf?MOD=AJPERES

National Federation of State High School Associations (2009). Retrieved October 29, 2009, from http://www.nfhslearn.com/index.aspx

Northouse, P. G. (2004). *Leadership: Theory and practice.* Thousand Oaks, CA: Sage

Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage Publications.

Patton, M. Q. (2000). Utilization-focused evaluation. In D. L. Stufflbeam, G. F. Madaus, & T. Kellaghan (Eds.) *Evaluation models* (pp.425-438). Boston: Kluwer Publishers.

Patton, M. Q. (2008). *Utilization-focused evaluation* (4th ed.). Thousand Oaks, California: Sage.

Petitpas, A. J., Cornelius, A. E., van Raalte, J. L., & Jones, T. (2005). A framework for planning youth sport programs that foster psychosocial development. *The Sport Psychologist*, *19*(1), 63-80.

Petitpas, A. J., van Raalte, J. L., Cornelius, A. E., & Jones, T. (2004). A life skills development program for high school student-athletes. *The Journal of Primary Prevention*, *24*(3), 325-334.

Prince, S. (2009). Portland State eliminates its wrestling program. Retrieved December 4, 2009 from http://www.oregonlive.com/vikings/index.ssf/2009/03/portland_state_kills_ wrestling.html

Prochaska, J. O., Norcross, J. C. (2001). Stages of change. *Psychotherapy: Theory, Research, Practice, Training, 38*(4), 443-448.

Riggio, R. E. (2008). Leadership development: The current state and future expectations. *Consulting Psychology Journal: Practice and Research*, *60*(4), 383-392.

Rosenbach, W. E., & Taylor, R. L. (2006). *Contemporary issues in leadership*. Boulder, CO: Westview Press.

Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). *Evaluation: A systematic approach* (7, illustrated ed.). Thousand Oaks, CA: Sage.

Schweigert, F. J. (2006). The meaning of effectiveness in assessing community initiatives. *American Journal of Evaluation*, *27*(4), 416.

Scriven, M. (1991). *Evaluation thesaurus* (4 ed.). Newbury Park, CA: Sage.

Singh, P., & Pan, W. (2004). Online education: Lessons for administrators and instructors. *College Student Journal*, *38*(2), 302-309.

Terry, P., & Howe, B. (1984). The coaching preferences of elite athletes competing at Universaide '83. *Canadian Journal of Applied Sport Science, 9*, 201-208.

Trapnell, P. D., & Campbell, J. D. (1999). Private self-consciousness and the five-factor model of personality: Distinguishing rumination from reflection. *Journal of Personality and Social Psychology, 76,* 284 –304.

Vroom, V. H., & Jago, A. G. (2007). The role of the situation in leadership. *American*

Psychologist, 62(1), 17-24.

Weinberg, R. S., & Gould, D. (2007). *Foundations of sport and exercise psychology.* Champaign, IL.: Human Kinetics.

Weiss, M., Price, M., Bhalla, J., & Bolter, N. (2006). *Summary report: "More than a game:" Longitudinal effects of the First Tee life skills programs on positive youth development.* Retrieved from http://www.cehd.umn.edu/tuckercenter/projects/TheFirstTee/summary_report_06_final.pdf

Wholey, J. S., Hatry, H. P., & Newcomer, K. E. (2004). *Handbook of practical program evaluation* (2, illustrated ed.). San Francisco : John Wiley and Sons.

Witkin, B. R., & Altschuld, J. W. (1995). *Planning and Conducting Needs Assessments: A Practical Guide.* Thousand Oaks, CA: Sage.