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FACTORS AFFECTING THE PERFORMANCE LEVELS OF RISK MANAGEMENT BEHAVIORS OF FLORIDA HIGH SCHOOL ATHLETIC DIRECTORS

By

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This is for my Dad.

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ABSTRACT

The purpose of this study was twofold: (1) to measure the degree to which Florida High School athletic directors utilize risk management within their athletic program and (2) to determine whether selected demographic factors (i. e. undergraduate major, years of experience as Athletic Director, level of education, etc.) have an effect on the performance levels of these risk management behaviors. A 42-item survey was used to collect data related to specific risk management behaviors and 12 demographic items. Descriptive statistics were calculated for each factor on the demographic section of the survey, the composite scores for each of the individual items on the survey, for all of the items combined (grand mean), and for the composite scores of each conceptual area (i.e. medical concerns, facilities, etc…). A one-way ANOVA was then used to test for significance among the independent variables (selected demographic factors) and dependent variables (risk management behavior scores of the (1) grand mean, (2) conceptual area means, and (3) individual item means). Results of the study suggest that (1) the risk management behaviors being performed within Florida High School athletic departments are being performed on a rather consistent basis and that (2) the two primary factors that influenced FHSAA athletic director's performance of risk management behaviors were current employment status and current coaching status.

CHAPTER I

INTRODUCTION

Sport is one of the largest industries in the United States. Even more impressive than its size is the extraordinary growth it has experienced over the past several years. Ozanian (1995) wrote that, "sports is not simply another big business. It is one of the fastest growing industries in the U. S., and it is intertwined with virtually every aspect of the economy." In 1987, the sport industry ranked 23rd ($50.2 billion) among the top 50 U. S. industries by gross national product (Sandomir, 1988). With its thousands of teams, over 10 million athletes, and 363 million spectators, the sport industry grew to $212.53 billion, ranking 6th behind only real estate ($935 billion), retail trade ($713 billion), health care ($460 billion), banking ($266 billion), and transportation ($256 billion) (Broughton, Lee & Nethery, 1999).

Numerous studies have been conducted in an attempt to discover factors that had contributed to this phenomenal growth. Pitts & Stotlar (1996) suggested a variety of factors including increases in the number of new and different sport, fitness, & recreation activities, increases in the number of same sports offered, and increases in the number and type of facilities, events, and participation. Simmons (2001) proposed four major determinants of increased participation in the sport industry: the aging population, Title IX, the commercialization of sport, and government involvement.

Although the exceptional magnitude and growth of almost every aspect of the sport industry today is undeniable, it has not come without its share of growing pains. One such dilemma that has accompanied the growth of the sport industry has been the dramatic increase in sport related litigation over the past 30 years (Hronek & Spengler, 1997). A 1997 study of awards by the University of Houston indicated that the average injury award is now over $1.5 million (Houston Law School Reporter, 1997).

There is considerable disagreement regarding litigation in sport and the effect it has on the sport industry. Critics of sport-related litigation condemn the continuous rise in the number of lawsuits filed and the enormous amounts of monetary damages that have become commonplace today. They claim that lawsuits are out of control, and if allowed to continue, will inevitably change the nature of sport as we know it and eventually destroy sport (Appenzeller, 1998). On the other hand, there are a number of proponents

of litigation in sport who believe that the court safeguards the welfare of the participant and attempts to end violence and discrimination. They claim that litigation or the threat of litigation makes sport better, as participants now enjoy the safest equipment, finest facilities, and best medical care and coaching ever (Appenzeller, 1998).

Although the debate over the effects of litigation on sport will undoubtedly continue, one fact remains clear, until something is done to curb this trend increases in the number of lawsuits filed and the amounts awarded will continue. Kaiser (1986) suggested that "litigation has become the nation's secular religion and it is practiced regularly against public and private park, recreation, sports, and leisure enterprises." Similarly, Ross (1985) stated, "like it or not, we live in an increasingly litigious society and today's athletic, physical education, and recreation administrators are much more likely to be sued than their predecessors."

As a result of this escalation of sport-related lawsuits, the sport industry responded on several levels. In an attempt to meet the needs of those associated with sport by reducing injuries and subsequent lawsuits, the number of sport publications increased dramatically. The Society for the Study of Legal Aspects of Sport listed only five sport and law texts published in the 1970's (Cotton, 1991). However, by 1995 the number of authors had grown to 117 who produced 89 textbooks.

Perhaps most notably, the drastic increase in sport litigation sparked an interest in risk management among sport, recreation, and leisure administrators. The formalized approach to safety that we call risk management is not new. Providing safe events and activities has generally been a goal of sport administrators. However, the legal liabilities associated with those activities have changed. Thus, risk management intended to assist sport administrators in dealing with these legal liabilities is new (Maloy & Higgins, 2000). van der Smissen (1990) noted the changing scope of liability that led to the increased interest in risk management:

> This interest in risk management came from the changing doctrine of sovereign / governmental immunity by enactment of the Tort Claims Act which opened the door to judgments against public entities, where there may have been immunity before. It, also, came in both private and public sectors due to the increase in litigation related to leisure activities and sport and the subsequent out-of-court

> settlements, as well as the multi-million dollar court judgments for the injured plaintiff. (p. 23.1)

After the enactment of the Tort Claims Act, persons engaging in activities involving personal risk had increasingly greater expectations concerning their safety and began litigating in increasing numbers (Pyles & Pyles, 1992). Consequently, sport administrators began to investigate new strategies for transferring, reducing, or eliminating risks.

As the specter of legal liability emerged, the sport administrator was forced to add new responsibilities to a growing list of duties. Among these new responsibilities was the legal expectation or duty to provide safe facilities and equipment that do not present an unreasonable risk of harm to the participants, staff, and visitors to the facility. This responsibility of facility managers to provide safe facilities is commonly referred to as premise liability. According to Page (1988), premise liability comprises "one of the largest subcategories within the broad spectrum of tort law." Thousands of people are injured each year as a result of participating in activities while using unsafe sports facilities and equipment, making the claim of unsafe facilities one of the most common claims in lawsuits alleging negligence in sport and physical activity programs (Appenzeller & Lewis, 2000). According to Maloy (1991) it was not uncommon for injury attorneys to trace the failure to provide minimum facility standards to the seemingly enduring incompetencies of the facility management.

Review of Literature

According to Bernstein (1996), the revolutionary idea that defines the boundary between modern times and the past is the mastery of risk: the notion that the future is more than a whim of the gods and that men and women are not passive before nature. The word "risk" derives from the early Italian word *risicare*, which means, "to dare" (Bernstein, 1996). There is no single definition of risk. Economists, behavioral scientists, risk theorists, statisticians, and actuaries each have their own concept of risk. Whatever the definition, risk has traditionally been defined in terms of uncertainty. In the context of risk management, risk refers to uncertainty or chance of loss, usually accidental loss, one that is sudden, unusual, or unforeseen (van der Smissen, 1990).

Programmatic Risk Management

Although the management of liability risks for public agencies is of recent origin, the practice has been used in the private sector for many years. The earliest organizations to practice risk management were insurance companies whose techniques have been modified and applied by hospitals, public schools, and universities (Kaiser, 1986). These groups dealt primarily with financial risk management. However, the management of financial risks alone would not be sufficient for the unique needs of the sport, physical education and leisure industries. van der Smissen (1990) explains:

> While the leisure industry did practice financial management, particularly in terms of property, risk management for public and private entities engaged in providing programs and services and the management of areas and facilities for recreation, outdoor pursuits, sport, et al. had to have another dimension if the challenge confronting the industry was to be met. That dimension was programmatic risk management. (p. 23.2)

Therefore, the sport industry must focus on not only financial risk management but also programmatic risk management. For example, a loss in the insurance industry is financial, but a loss in the sport industry must also encompass the possibility or risk that a participant would suffer harm. It is acknowledged that a participant or employee injury could result in a financial loss to the agency or organization, but the overriding reason for risk control should be moral responsibility as related to the injury of another, as well as the legal duty to provide a safe environment for participation (van der Smissen, 1990).

Theoretical Models of Risk Management

Scholars studying legal effects on recreation (Kaiser, 1986; van der Smissen, 1990), sport and physical education (Clement, 1998; Head & Horn II, 1991), event management (Berlonghi, 1990; Fried, 1999), and sport facilities (Mulrooney, 1995) have developed an organized body of legal knowledge used to develop guidelines for conducting programs in a more risk-free manner. The following are brief summaries of several theoretical models of programmatic risk management.

The Kaiser Model

The objective of risk management is to efficiently conserve the assets and financial resources of the organization and to achieve financial stability by reducing the

potential for financial loss (Kaiser, 1986). As shown in Figure 1, the Kaiser (1986) risk management model encompasses identification, evaluation, selection and implementation.

Risk identification. The identification phase of risk management is crucial since it is not possible to treat risks faced by an organization and its personnel prior to loss without this identification. Although sport administrators are faced with a host of financial and legal risks such as property loss, contractual liability, and fidelity losses, the Kaiser model concerns itself mainly with tort liability risks.

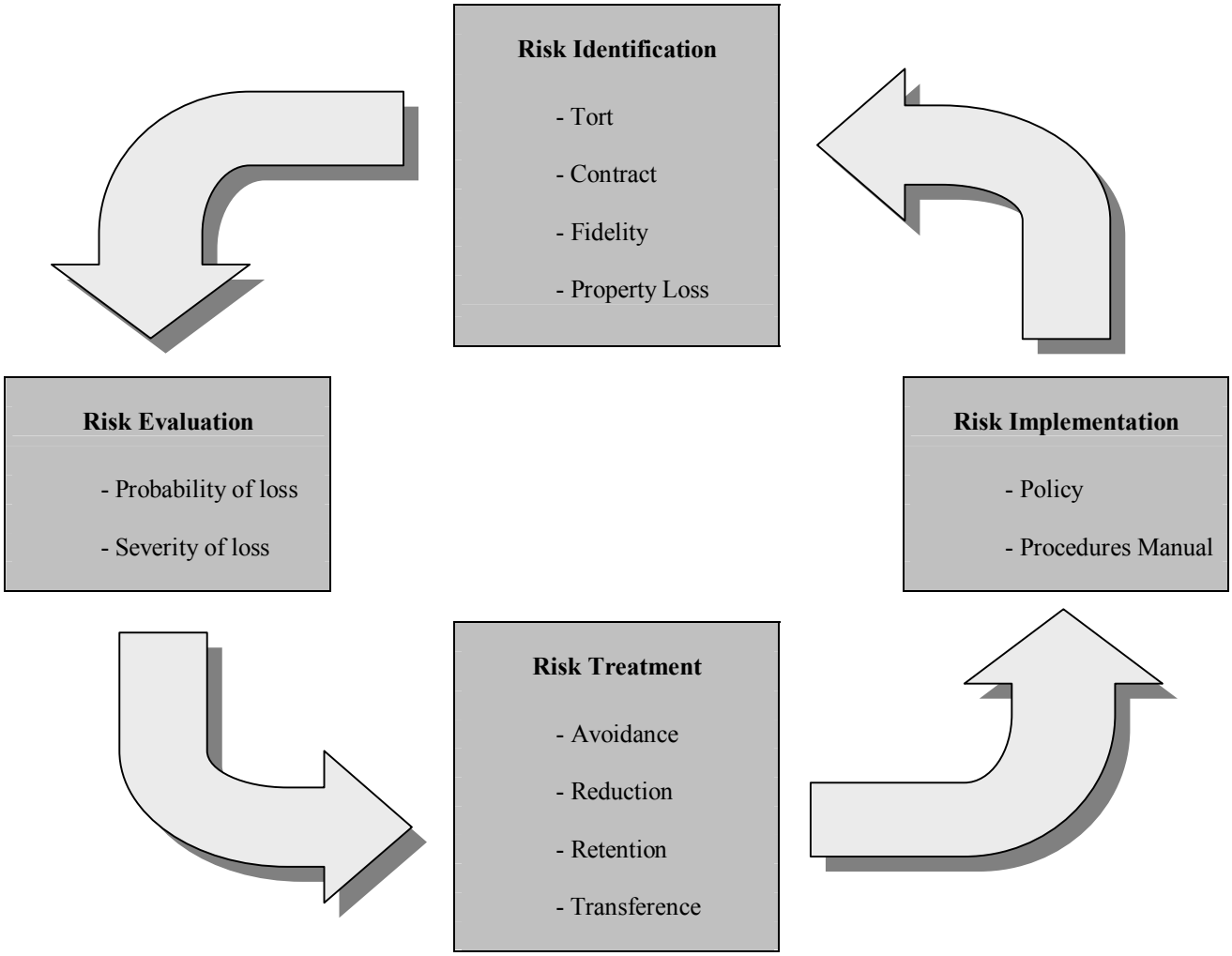

Figure 1: The Kaiser Risk Management Model

Note. From *Liability and law in recreation, parks, and sports* by R. A. Kaiser, 1986, Englewood Cliffs, NJ: Prentice-Hall.

According to Kaiser (1986), two options are available to identify tort liability risks confronting an agency and its personnel. The sport administrator may retain the services of an insurance consultant to identify risk or may undertake this process with existing staff. Although risk analysis questionnaires are available from individual insurance companies or insurance publishing houses to assist a manager with in-house analysis, the questionnaire should be structured to meet the individual needs of the agency.

Risk evaluation. Measurement techniques vary and can range from simple evaluations to complex statistical equations. Regardless of the formula or technique, all involve the determining of the probability of a loss occurring, maximum and minimum severity of such loss, predictability of a loss in a given time period, and financial resources available to meet such losses (Kaiser, 1986).

Risk treatment. After the risk exposure has been identified, an agency must decide on the options available to protect against losses. Some options available include: (1) risk avoidance, (2) risk reduction, (3) risk retention, and (4) risk transference. Selection of the single best method cannot be predicated on a precise mathematical model, therefore subjective evaluations must be made in the process. According to Kaiser (1986) however, it is possible to outline several rules of thumb for selecting proper treatments for risk. These rules are incorporated in a risk management matrix as shown in Figure 2.

Implementation. The implementation of a risk management plan involves a policy commitment from the agency's governing board, the establishment of the necessary administrative procedures, and a trained and motivated staff.

The Clement Model

According to Clement (1998), a risk management program requires a systematic examination of the environment, with identification of potential to loss and legal liability. This comprehensive system of identification, evaluation and control has the purpose of making the sport and exercise environment as safe as possible for participants and spectators, and the business efficient using accepted business practices.

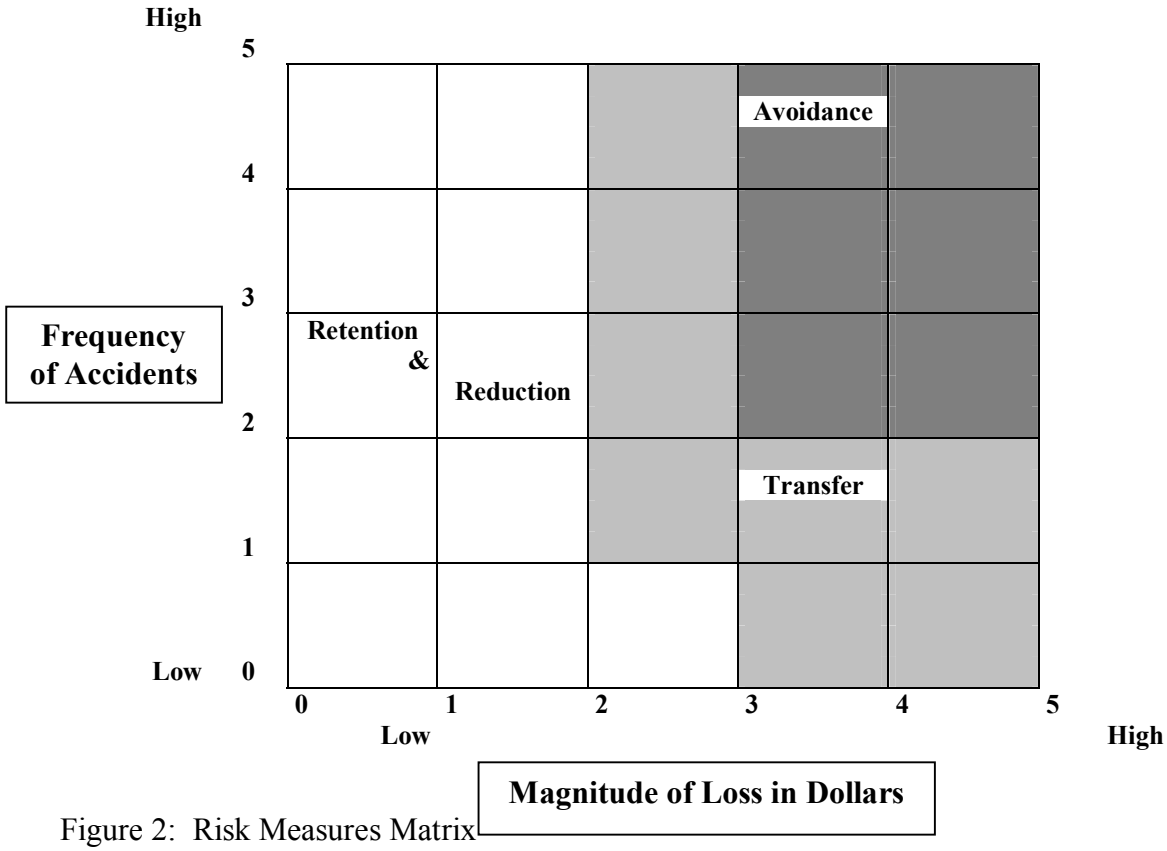

Figure 2: Risk Measures Matrix

Note. From *Liability and law in recreation, parks, and sports* by R. A. Kaiser, 1986, Englewood Cliffs, NJ: Prentice-Hall.

Identification. The first step is to identify all areas of potential or exposure to risk. Of particular importance are instances that could subject a business to public criticism or make them vulnerable to litigation. This step includes examination of local, state, and federal regulations; professional organizations and industry standards; policies and procedures; facilities; equipment; personnel; supervision; instruction; participant education; and contracts.

Evaluation. Once the risks have been identified, each risk is evaluated to determine the amount of risk that may exist. Risks are assessed in terms of probability, severity and magnitude.

A risk may have a high probability of occurring but when it occurs only a few people will suffer minor discomfort. On the other hand, a risk could have a very low probability of occurring and should it occur there is a good chance someone would die. Any activity scoring high on any one of the characteristics should be given serious

thought. Although a single death could be devastating to an organization, even minor discomforts for a large population could result in a public relations disaster (Clement, 1998).

PROBABILITY

A……B

A. Low probability of injury of harm.
B. High probability of injury or harm

SEVERITY

A……B

A. Minor discomfort
B. Serious injury or death

MAGNITUDE

A……B

A. Few people injured
B. Many people injured

Figure 3: Evaluation Component of Clement Model

Note. From *Law in sport and physical activity* by A. Clement, 1998, Tallahassee, FL: Sport and Law Press Inc.

Control. According to Clement (1998), control is the third essential step in a successful risk management program. Liability can be controlled by:

1. Accepting the risk and assuming the responsibility.
2. Retaining the activity and transferring the risk through contract or insurance.
3. Altering the activity to reduce the risk.
4. Eliminating the activity.

The Berlonghi Model

The Berlonghi Model was developed out of the need for event managers to realistically integrate risk management into the operations of their special events. Berlonghi (1990) states that risk management is the process of making and carrying out decisions that minimize the adverse effects of potential losses of an event. Effective risk management should identify as many liabilities and risk factors as possible, prevent alternative solutions, and make cost effective recommendations. There are five closely related steps in Berlonghi's risk management process: risk analysis, examining risk management techniques, planning effective and appropriate actions and techniques, implementing risk management recommendations, and evaluating and improving the risk management program.

Risk Analysis. The identification of risk factors should take place before an event and should result in the separation of risks that are unrealistic, potential, probable, and realistic. There are four parts to the identification process:

1. What is exposed to loss?
2. What specifically could cause a loss?
3. Who would suffer the loss?
4. *What are the financial consequences?*

Examining Risk Management Techniques. A risk manager should examine the effective, feasible and possible alternatives for preventing and paying for the potential losses identified. This can be done through risk control and/or risk financing. For some risks one can establish procedures and take actions that prevent something from happening or losses from occurring. Other risks will require evaluating various types of insurance coverage and other ways for paying for losses (Berlonghi, 1990).

Planning Effective and Appropriate Actions and Techniques. In this step, the risk manager will select those measures that best fit the operational goals and objectives of the event. This selection process requires a determination of the frequency and severity of expected losses, a forecast of the anticipated effects of measures taken, and an estimate of the cost.

Implementing Risk Management Recommendations. According to Berlonghi, all recommendations should be ones that can be successfully implemented either by the risk manager or by other directors.

Evaluating and Improving the Risk Management Program. Finally, an evaluation should be completed that covers both the effectiveness of the risk management program and the program's feasibility. The evaluation should also include a report on the cost of risk management: paid deductibles, insurance premiums, loss prevention measures, administrative costs, etc (Berlonghi, 1990).

The Head & Horn II Model

Head & Horn II (1991) define risk management as a process to identify loss exposures faced by an organization and to select the most appropriate techniques for treating such exposures. The objectives of this risk management can be classified as either pre-loss objectives or post-loss objectives. Important objectives before a loss occurs include economy, reduction of anxiety, and meeting legal obligations. Important objectives after a loss occurs include survival, continued operation, stability of earnings, continued growth and social responsibility (Head & Horn, 1991).

The Head & Horn II (1991) model of risk management, as shown in Figure 4, involves four steps: (1) identify potential losses, (2) evaluate potential losses, (3) select the appropriate techniques for treating loss exposures, and (4) implement and administer the program.

Identifying potential losses. The first step in Head & Horn II's model is to identify all major and minor loss exposures. There are several sources of information one can use to identify loss exposures such as risk analysis questionnaires, physical inspection, flowcharts, financial statements, and historical loss data. In addition, risk managers must keep abreast of industry trends and market changes that can create new loss exposures and cause concern (Head & Horn II, 1991).

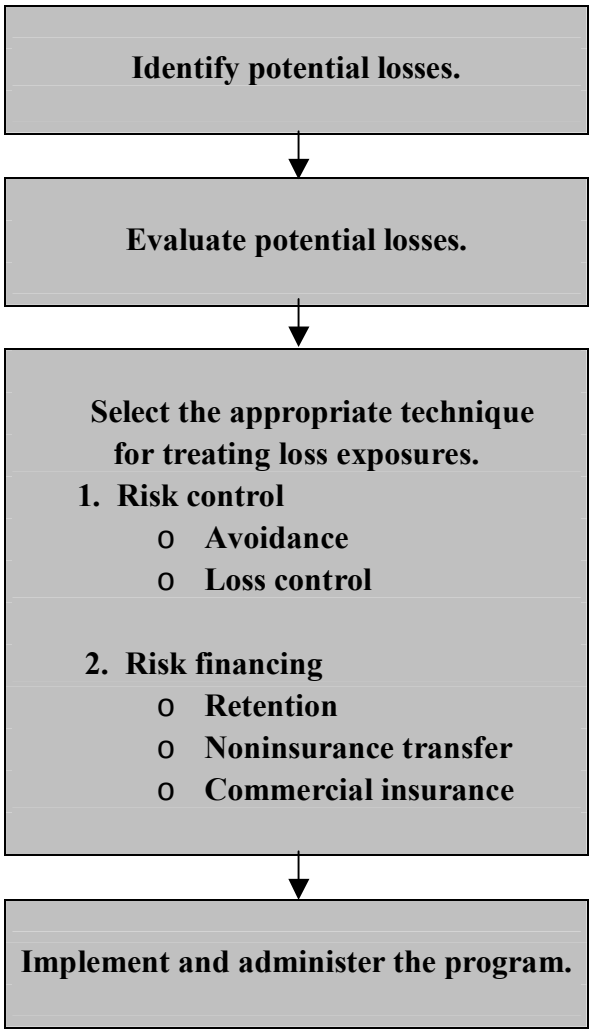

Figure 4: Steps in the Risk Management Process

Note. From *Essentials of Risk Management* by G. L. Head & S. Horn II, 1991, Malvern, PA: Insurance Institute of America.

Evaluating potential losses. The next step in Head & Horn II's risk management approach is the evaluation and measurement of the impact of losses on the firm. This step involves an estimation of the potential frequency and severity of loss. Loss frequency is defined as the probable number of losses that may occur during some given time period. Loss severity is defined as the probable size of the losses that may occur (Head & Horn II, 1991).

Once the frequency and severity of loss for each type of loss exposure is estimated, the various loss exposures should be ranked according to their relative importance. In addition, the relative frequency and severity must be estimated so that the risk manager can select the most appropriate technique, or combination of techniques, for handling each exposure (Head & Horn II, 1991).

Select the appropriate technique. The third step in this risk management approach is the selection of the most appropriate technique. These techniques can be classified as either risk control or risk financing. Risk control refers to techniques that reduce the frequency and severity of accidental losses. Risk financing refers to techniques that provide for the funding of accidental losses after they control (Head & Horn II, 1991).

Risk control involves techniques that either prevent losses from occurring or reduce the severity of a loss after it occurs. The major risk control techniques are avoidance and loss control. Avoidance means a certain loss exposure is never acquired, or an existing loss exposure is abandoned. The advantage of avoidance is that the chance of loss is reduced to zero if the loss exposure is never acquired. Also if an existing loss exposure is abandoned, the chance of loss is reduced or eliminated because the activity that could produce a loss has been abandoned. However, a disadvantage is that it may not always be feasible or practical to avoid an exposure (Head & Horn II, 1991). Loss control has two components: loss prevention and loss reduction. Loss prevention refers to measures that reduce the frequency of a particular loss. Loss reduction refers to measures that reduce the severity of a loss after it occurs.

Risk Financing. Risk financing consists of techniques that provide for the funding of losses after they occur and include the following: retention, noninsurance transfers, and commercial insurance.

Retention is when an agency retains part or all of the losses that can result from a given loss. Retention can be either active or passive. Active risk retention is when an agency is aware of the loss exposure and plans to retain all or part of it. On the other hand, passive risk retention is the failure to identify a loss exposure, failure to act or

forgetting to act. According to Head & Horn II (1991), retention can be effectively used in a risk management program when (1) no other method of treatment is available, (2) the worst possible loss is not serious, or when (3) losses are highly predictable. The major advantages of risk retention include saving money, encouragement of loss prevention, and increased cash flow. However, risk retention has several disadvantages such as the possibility of higher losses, higher expenses, and higher taxes.

Noninsurance transfers are methods other than insurance by which a pure risk and its potential financial consequences are transferred to another party. Examples include contracts, leases, and hold-harmless agreements. Head & Horn II (1991) list several advantages and disadvantages of noninsurance transfers.

Advantages:

- The risk manager can transfer some potential losses that are not commercially insurable.
- Noninsurance transfers often cost less than insurance
- The potential loss may be shifted to someone who is in a better position to exercise loss control.

Disadvantages:

- The transfer of potential loss may fail because of the contract language. Also, there may be no court precedents for the interpretation of a contract that is tailor-made to fit the situation.
- If the party to whom the potential loss is transferred is unable to pay the loss, the firm is still responsible for the claim.
- Noninsurance transfers may not always reduce insurance costs, because an insurer may not give credit for the transfers (Head & Horn II, 1991).

Commercial insurance is also used in a risk management program. Insurance is appropriate for loss exposures that have a low probability of loss but for which the

severity of loss is high. The use of commercial insurance has certain advantages and disadvantages (Head & Horn II, 1991):

Advantages:

- The firm will be indemnified after the loss occurs and continue to operate with little or no fluctuation in earnings.
- Worry and fear are reduced for managers and employees, which should improve their performance and productivity.
- Insurers can provide valuable risk management services, such as loss control services, exposure analysis to identify loss exposures, and claims adjusting.
- Insurance premiums are tax-deductible as a business expense.

Disadvantages:

- The payment of premiums is a major cost and must be paid in advance.
- Considerable time and effort should be devoted to negotiating the insurance coverage.
- A risk manager may have less incentive to follow a loss control program; because the insurer will pay the claim if a loss occurs. This slack attitude toward loss control could increase the number of noninsured losses as well (Head & Horn II, 1991).

Head & Horn II (1991) suggest that in determining the appropriate method or methods for handling losses, a matrix could be used that classifies the various loss exposures according to frequency and severity (See Table 1).

The first type of loss exposure is characterized by both low frequency and low severity of loss. This loss is best handled with retention because the loss occurs infrequently and when it does occur it doesn't cause much financial harm. The second

Table 1. Risk Management Matrix

Type of loss	*Loss Frequency*	*Loss severity*	*Appropriate risk management technique*
1	Low	Low	Retention
2	High	Low	Loss control and retention
3	Low	High	Insurance
4	High	High	Avoidance

Note. From *Essentials of Risk Management* by G. L. Head & S. Horn II, 1991, Malvern, PA: Insurance Institute of America.

type of exposure is more serious because although the severity of losses is relatively low, they occur frequently. Loss control should be used to reduce the frequency of losses. In addition, because losses occur regularly and are predictable, retention could also be used. The third type of exposure should be met by insurance, which is best suited for low frequency, high severity losses. Although a catastrophic potential is present, the low probability of loss indicates that the purchase of insurance is economically feasible. The most serious type of exposure is characterized by both high frequency and high severity. This type of exposure is best handled by avoidance (Head & Horn II, 1991).

Implementing and administering the program. The implementation stage begins with the development of a policy statement. A risk management policy statement is necessary to have an effective risk management program. It outlines the risk management objectives of the agency, as well as company policy with respect to treatment of loss exposures. In addition, Head & Horn II (1991) suggests developing a risk management manual to be used in the program. The manual describes in detail the risk management program of the agency and can be a very useful tool for training new employees.

The Mulrooney Model

According to Mulrooney (1995), the goal of risk management is to reduce the possible monetary losses while running a facility. In order to do this, a risk manager should recognize the possible risks, assess and treat the risks, and finally create standard operating procedures.

Identification stage. In the risk identification stage, facility manager must discover various risks that may cause losses during any given event. Mulrooney claims that a well-trained staff is the risk manager's best tool to identify risks but they can also be risks themselves. For example, although one employee may identify and treat a slip and fall hazard, another may use excessive force to detain an intoxicated patron.

	Very frequent	**Frequent**	**Moderate**	**Infrequent**	**Very infrequent**
Very high loss					
High loss					
Moderate loss					
Low loss					
Very low loss					

Figure 5: The Risk Matrix

Note. From *Liability in Public Assembly Facilities* by A. Mulrooney, 1995, Irving, TX: International Assembly of Auditorium Managers Resource Library

Risk Assessment. The assessment of risks should be systematic using amount and frequency of loss as the two criteria. As shown in Figure 5, Mulrooney (1995) used a matrix that gave the facility manager 25 categories in which to classify any identified risk. This allows a consistent approach to the assessment process.

Risk Treatment. Once each risk has been identified and assessed a facility manager must determine how to treat each risk. The risk treatment stage can also be

accomplished through the risk management matrix. As seen in Figure 6, Mulrooney (1995) suggests various treatments for risks based on the level of frequency and amount of loss. These treatments propose to either avoid the risk all together; shift the risk to a third party such as an insurance carrier; or manage the risk by keeping it in house and attempting to make sure the risk does not cause any damage or injuries (See Figure 6).

	Very frequent	**Frequent**	**Moderate**	**Infrequent**	**Very infrequent**
Very high loss	Avoid	Avoid	Shift	Shift	Shift
High loss	Avoid	Avoid	Shift	Shift	Shift
Moderate loss	Shift	Shift	Shift	Shift	Keep & Decrease
Low loss	Keep & Decrease	Keep & Decrease	Keep & Decrease	Keep & Decrease	Keep & Decrease
Very low loss	Keep & Decrease	Keep & Decrease	Keep & Decrease	Keep & Decrease	Keep & Decrease

Figure 6: The Risk Matrix with Treatments of Risk

Note. From *Liability in Public Assembly Facilities* by A. Mulrooney, 1995, Irving, TX: International Assembly of Auditorium Managers Resource Library

Standard operating procedures. In the Mulrooney model, the final step in the risk management is the development of standard operating procedures (SOP's). The SOP is a step-by-step set of detailed directions for the appropriate courses of action, given the situation and the risks that may arise. They are the most efficient and effective ways to decrease the occurrence of risk and should be developed for both risks that are shifted and risks that are kept and decreased (Mulrooney & Farmer, 1995). By strictly adhering to properly developed SOP's, Mulrooney (1995) claims the facility manager can ensure that everything reasonably possible is being done to protect the patron from injury.

The Fried Model.

Another more recent model of risk management proposed by Fried (1999) advocates a combination of ethics and risk management practices. His model is composed of the "front headlines test" and the "ECT" approach.

The Front Headlines Test. The "front headlines test" is a process by which an individual can identify potential legal concerns and develop effective procedures or tactics to minimize or eliminate risks that the media would love to report. This suggestion resembles an older ethical maxim called "The TV Test" which maintained that one should "act in such a way that the actions could be defended comfortably in front of a national television audience" (Parkhouse, 1996). In practice, Fried suggests that one ask all associates to examine their actions prior to undertaking any activity to determine how such activity would look if it was reported on the front page of a major newspaper. While saving someone's life would look great on the front page, sexually harassing a subordinate employee or not providing reasonable accommodations to a disabled patron would help destroy an organization's image (Fried, 1999).

The inclusion of this ethical component attempts to address the more contemporary business management concept of brand, or reputation management. A recent study by Lloyd's of London revealed that 62 percent of risk and insurance professionals say e-commerce crime and loss of reputation, or brand, are two of the most significant risks businesses face today (Kartalia, 2000). This finding was supported in the "Biennial Risk Management and Risk Financing Survey 2001". In this survey of 129 risk managers from among the 2000 largest U. K. private and public organizations, loss of reputation was ranked as the No. 1 risk by U. K. risk managers (Unsworth, 2001).

The ECT approach. According to Fried (1999), the ECT approach is a risk management tool that allows one to conceptualize the entire risk management process.

1. *deflECT liability to others*. Through waivers, releases, contract or indemnity clauses, liability should be moved from the risk manager's shoulders to someone else's shoulders.
2. *reflECT on your risk management objective*. After deflecting liability, one must reflect on the risk management objectives. This step could involve

preparing risk management manuals, educational materials or a pre-event safety conference.

3. *inspECT your program and facilities*. The inspection should be conducted in a way that one can detECT potential dangers.
4. *reflECT on what has been seen*. After detection of all potential hazards one must reflect on what has been seen and write down the observations. This may include the name of who did the inspection, when the inspection was conducted, what was found and who should be responsible for correcting the hazard.
5. *CorrECT the hazards*. Correction can be accomplished by repairing the problem, posting warning signs, or blocking access to the area.
6. *Re-inspECT the hazards*. It is not uncommon for someone to claim they have corrected a problem when in fact they may have worsened or created a new hazard. Therefore, one must follow up to ensure that all hazards have been addressed.
7. *Photograph the facility*. The last step is to take a photograph of the facility before and after an event. If a dispute ever arises concerning facility set-up or related issues, the photograph could provide useful information in showing that a potential hazard was not there prior to the event starting or that the equipment/facility was not set-up in the manner claimed by the plaintiff (Fried, 1999).

Research in Programmatic Risk Management

Risk management is more than an idea or perception. It is a process that must be actively engaged in by an individual or an agency. Therefore the bulk of research on programmatic risk management has focused on behavior rather than ideas, perceptions or attitudes. More specifically, it has focused on the behavior of the individual who is responsible for the risk management of the agency or program.

Considerable research has been conducted related to risk management behaviors of sport leaders in a variety of settings including collegiate athletics (Gray & Curtis, 1991; Gray & Crowell, 1993; Anderson & Gray, 1994; Gray & McKinstrey, 1994;

Wolohan & Gray, 1998; Brown & Sawyer, 1998; Bodey & Moiseichik, 1999), high school athletics (Gray & Curtis, 1991; Gray & Park, 1991; Gray, 1992b; Gray, 1995), and the private sector (Pyles & Pyles, 1992; Gray, 1992a; Mulrooney & Ammon, 1995; Young & Jamieson, 1999). The following is a brief summary of the body of research conducted on programmatic risk management in the sport industry over the past decade.

Sport Facilities

According to Berry & Wong (1993) facility owners have a duty to exercise reasonable care in maintaining the premises and in supervising the conduct of others at the facility. The general rule is that facility owners and possessors are liable for conditions on their premises that cause physical harm if they know, or should reasonably have known, about the existence of the dangerous condition, when such a condition poses an unreasonable risk to an invitee (Berry & Wong, 1993). More specifically, a facility manager must at least perform the following five duties in order to be considered reasonable (Apenzeller & Lewis, 2000):

1. Keep the premises in safe repair.
2. Inspect the premises to discover obvious and hidden hazards.
3. Remove the hazards or warn of their presence.
4. Anticipate foreseeable uses and activities by patrons and take reasonable precautions to protect them from foreseeable dangers.
5. Conduct operations on the premises with reasonable care for the safety of all.

Although relatively little research has been conducted on risk management behaviors in a variety of sport settings, even less is available on the risk management practices performed by facility managers of municipal stadiums and arenas. In one such effort, Mulrooney & Ammon (1995) surveyed 39 facility managers on the risk management practices at their stadiums. One significant outcome of the study was the lack of agreement of facility managers on a number of critical issues related to risk management. In light of the astronomical negligence awards and tremendous negative public relations which could result from litigation, it would seem prudent for a concerned stadium director to hire a risk manager or form a safety committee. However, data from

Mulrooney & Ammon (1995) indicated that 71% of the surveyed stadiums did not use a risk manager and more than 51% of the facilities never used a safety committee. Of the stadiums that did not employ a risk manager 47% were involved in some kind of litigation, while 59% of stadiums utilizing a risk manager were involved in some sort of litigation.

One area of consensus among the facility managers pertained to insurance coverage for spectator injuries. Although the insurance premiums were very high, over 77% of the respondents possessed this type of coverage.

However, one additional area of concern emerged from the results pertaining to risk management. While 80% of the stadium operators possessed an evacuation plan, more than 74% have "never" actually practiced it. The courts may find the existence of such a plan does not constitute reasonable behavior if the facility administration does not practice it (Mulrooney & Ammon, 1995).

Collegiate Athletics

Collegiate athletics has evolved into big business that impacts public relations, and ultimately, the financial stability of an institution. This has forced university officials to take an in-depth look at how various risk management practices influence the functioning of collegiate athletic programs (Bodey & Moiseichik, 1999).

Colleges and universities, more specifically athletic departments, have a duty of care to those who might be harmed by hazards that could have been foreseen. Article 2.2 of the NCAA Constitution (2001, p. 3) states "intercollegiate athletic programs shall be conducted in a manner designed to protect and enhance the physical and educational welfare of student athletes." In regards to the health and safety of the student athlete, Article 2.2.3 claims, "it is the responsibility of each member institution to protect the health of and provide a safe environment for each of its participating student-athletes". According to Grace (1989), if it is found that hazards were foreseeable but instead went undetected, the athletic department may be held liable for injuries that resulted from those hazards.

In the event of an allegation of negligence brought by a student-athlete against an institution, two people who are likely to be named in the lawsuit are the coach and the athletic director. An injured athlete may assert that a coach was negligent for failing to

perform as a reasonable coach including, among other things, the failure to properly instruct, the failure to properly supervise, the failure to provide adequate equipment, and the failure to provide adequate emergency medical care (Gray & Crowell, 1993). In addition to naming the coach in a lawsuit, the athlete may also name the athletic director since the athletic director is the administrator in charge of the entire athletic program. The athletic director can be sued for, among other things, his or her alleged role in causing the athletes injury for failing to adequately supervise the program and the coach (Gray & Crowell, 1993).

Coaches. As litigation for sport related injuries increased in recent years, so has the responsibility of coaches for the safety of participants in their program. In order for coaches to stay out of the courtroom and on the playing field, it is important for them to attempt to foresee potential dangers and take the necessary steps to prevent unreasonable injuries to their athletes.

Gray & McKinstrey (1994) measured the degree to which NCAA Division III head football coaches indicated the consistency with which specific risk management behaviors were performed within their varsity football programs. A survey questionnaire of 36 risk management behavior items within six conceptual areas of legal concern was used. The six conceptual areas were supervision, instruction, warnings, facilities, equipment, and medical concerns. The results of the study indicated that risk management behaviors were being performed in a rather consistent manner within NCAA Division III football programs. Of the 36 items on the survey, the top 28 had a mean score greater than 4.0 on a 5-point Likert scale. A score of 4.0 signified that a behavior was performed "often". Although it appeared that these coaches were performing prudent risk management behaviors in a relatively consistent manner one interesting note emerged. The three survey items that scored the lowest among all the subjects (N=182) were each related to documentation. These items included "coaches use a sport risk assessment system" (3.185), "equipment inspections documented in writing" (3.115), and "athletes sign written football warnings" (2.961). The scores indicate that these behaviors were performed only "sometimes". Another interesting fact was that while these three behaviors were the lowest scored among all the subjects, coaches with a masters degree scored significantly higher in the conceptual area of "warnings" and on

the individual items of “athletes are warned of risk in writing” and “athletes sign written warnings".

Wolohan & Gray (1998) measured the degree to which collegiate ice hockey coaches performed various risk management behaviors related to the operation of their collegiate ice hockey programs. According to the results of this study, the coaches generally performed most of the risk management behaviors addressed by the survey items. Out of 34 items on the survey, the top 15 had a score above 4.0 indicating that these behaviors were being performed “often”. However, the survey did indicate a couple areas where coaches should be more concerned. Three items scored below a 3.0, meaning that they were preformed only “sometimes”. These items were “inspecting the ice prior to games and/or practices” (2.943), and “players warned in writing of risks” (2.036). The survey item “equipment warnings read” received a score of only 1.908, signifying that the coaches “seldom” performed this behavior.

The findings of both Gray & McKinstrey (1994) and Wolohan & Gray (1998) are similar to a previous study by Gray & Curtis (1991) of risk management behaviors of soccer coaches at three levels of varsity competition. While many prudent coaching behaviors related to risk management appear to be practiced quite consistently, items pertaining to documentation were scored the lowest.

Athletic Directors. Gray & Crowell (1993) measured the consistency with which NCAA Division I athletic directors performed specific risk management behaviors within their athletic departments. According to Gray and Crowell (1993) whether or not an athletic program had a formal risk management plan, the athletic director was the person who was in the best position to oversee the implementation of risk management behaviors to minimize the risk of injury and, in the process, decrease the likelihood of a lawsuit. A 27-item survey of various risk management behaviors was divided into five conceptual areas of supervision, medical concerns, facilities, equipment, crowd control & spectator safety and used to collect the data. Results indicated that the three major variables that impacted NCAA Division I athletic director’s scores on the risk management survey were intercollegiate participation experience, intercollegiate coaching experience, and academic major. Results of the ranked means indicated that of the 27 items, risk management behaviors that required documentation continued to score

the lowest. Another interesting point was that five of the bottom ten scores were from the conceptual area of "facilities".

In a study of risk management behaviors in NCAA Division III athletic programs, Anderson & Gray (1994) found similar results in that risk management behaviors being performed in NCAA Division III athletic programs were performed in a consistent manner. Once again, however, facilities and documentation were among the lowest scores on the ranked means. Specifically, "facility evacuation procedures developed", "facility inspections are documented in writing", and "equipment inspections are documented in writing" scored among the bottom five items.

Finally, a later study of Division II athletic directors by Brown & Sawyer (1998) substantiates earlier studies by finding these risk management behaviors performed in the range of "seldom", or "sometimes": (1) emergency response plan is practiced, (2) practice or rehearsal of emergency response plan is documented in writing, (3) facility inspections are documented in writing, (4) facility evacuation procedures have been developed, and (5) facility inspections prior to events are thorough.

High School Athletics

Due to the recent increase in sport related litigation, high schools have also been forced to implement preventative measures to reduce the likelihood of athletic injuries and subsequent lawsuits (R. Youngblood, personal communication, March 18, 2003).

Athletic Directors. In a study of risk management behaviors of Iowa high school athletic directors Gray & Park (1991) used a 49-item questionnaire within 8 conceptual areas of legal concern. Results suggest that Iowa high school athletic directors generally perform the risk management behaviors addressed by the survey in a prudent and consistent manner. Results also indicated that athletic directors with a sport-related educational background scored significantly higher than those with a non-sport related educational background on the 49 items combined and in five of the eight conceptual areas (hiring & training of personnel, supervision, medical concerns, facilities, crowd control & spectator safety).

Principals. Gray (1995) studied the degree to which high school principals performed risk management behaviors related to the administrative supervision of their physical education and athletic programs. The results revealed very few statistically

significant data and it appeared that principals were aware of their legal responsibilities related to the administrative supervision of their high school physical education and athletic programs and were performing those supervisory responsibilities rather consistently (Gray, 1995).

High schools in the state of Florida have also been plagued by sport-related litigation. As recently as March, 2003, a lawsuit was filed against the Hillsborough County School District after a student was injured when she slammed into Plant City High School's gym wall. The complaint claims that the wall was too close to the basketball courts endline and was not sufficiently padded. The student sustained a concussion, a broken clavicle, and went into seizures before being rushed to the hospital. When the student was injured, the wall was five foot from the endline. The court's length has since been reduced from 92 to 84 feet and padding was added to the walls (Purks, 2003).

Statement of the Problem

Clear trends have emerged over the past three decades that created a dangerously litigious atmosphere in which the sport manager must conduct business. Increased participation (Pitts & Stotlar, 1996), a change in the scope of liability related to public entities (van der Smissen, 1990) and a public with increasingly greater expectations regarding their safety (Pyles & Pyles, 1992) are only a few of the numerous variables that have contributed to the dramatic increase in sport-related litigation over the past 30 years (Hronek & Spangler, 1997). As research suggests continued increases in the number of lawsuits filed and amounts awarded (Kaiser, 1986; Ross, 1995), sport managers need to investigate and implement new strategies for reducing, transferring and eliminating risks.

Purpose of the Study

The purpose of this study was twofold: (1) to measure the degree to which Florida High School athletic directors utilize risk management within their athletic program and (2) to determine whether selected demographic factors (i. e. undergraduate major, years of experience as Athletic Director, level of education, etc.) have an effect on the performance levels of these risk management behaviors.

Research Questions and Hypotheses

Based on the results of previous research regarding factors affecting risk management behaviors of athletic directors, the following research questions and hypotheses were developed for this study:

RQ1: Does an athletic director's level of education affect the degree to which risk management behaviors are performed within their athletic program?

$H_0$1: An athletic director's level of education will have no effect on the degree to which risk management behaviors are performed within their athletic program.

RQ2: Does an athletic director's current employment status affect the degree to which risk management behaviors are performed within their athletic program?

$H_0$2: An athletic director's current employment status will have no effect on the degree to which risk management behaviors are performed within their athletic program.

RQ3: Does an athletic director's undergraduate major affect the performance level of risk management behaviors performed within their athletic program?

$H_0$3: An athletic director's undergraduate major will have no effect on the degree to which risk management behaviors are performed within their athletic program.

RQ4: Does an athletic director's current coaching status affect the degree to which risk management behaviors are performed within their athletic program?

$H_0$4: An athletic director's current coaching status will have no effect on the degree to which risk management behaviors are performed within their athletic program.

RQ5: Does an athletic director's previous coaching experience affect the degree to which risk management behaviors are performed within their athletic program?

$H_0$5: An athletic director's previous coaching experience will have no effect on the degree to which risk management behaviors are performed within their athletic program.

RQ6: Does an athletic director's graduate major affect the performance level of risk management behaviors performed within their athletic program?

$H_0$6: An athletic director's graduate major will have no effect on the degree to which risk management behaviors are performed within their athletic program.

Operational Definitions

Risk Management Behaviors

A risk management behavior is an observable action that takes place within an athletic department and concerns the area of risk management. These actions do not have to be performed by the athletic director; but since the athletic director is ultimately responsible for what happens in an athletic department, they should be able to verify whether or not an action has been accomplished and documented (Brown & Sawyer, 1998).

Performance Levels

The performance levels in this study will be related to the survey responses given by the athletic directors. The responses will be based on a five point Likert scale ranging from one to five, where one indicated the behavior was never performed and five indicates the behavior is always performed.

Assumptions of the Study

The following assumptions served as the basis for the conduct of this study:

1. The athletic directors will understand the questions in the survey.

2. The surveys will be answered accurately and honestly.

Limitations of the Study

The following limitations existed in this study:

1. The results will only pertain to FHSAA athletic directors.
2. The listing of FHSAA athletic directors contained in the 2002-03 FHSAA Handbook is accurate.
3. The athletic directors perceive the survey items as intended by the researcher.

Significance of the Study

Due in part to the expansion of programs, an increase in the number of participants, and the proliferation of personal injury lawsuits, safety has become one of the most important concerns for today's sport manager (Appenzeller & Lewis, 2000). For that reason, research in this area is crucial to all physical education, recreation, and sport managers so they can establish and implement an effective, formal risk management plan. Risk management should help those who direct sports programs comply with their legal duties, provide safe programs, and enable personnel to defend themselves and their programs in the event of a lawsuit (Appenzeller, 1998).

CHAPTER II
METHODOLOGY

Research Design

The primary objectives of this study were to: (1) to measure the degree to which Florida High School athletic directors utilize risk management within their athletic program and (2) to determine whether selected demographic factors (i. e. undergraduate major, years of experience as Athletic Director, level of education, etc.) have an effect on the performance levels of these risk management behaviors. To achieve these objectives a risk management survey instrument developed by Gray (1991) was administered to all Florida High School Athletic Association member athletic directors via mail-out. The survey instrument was designed to yield data on the performance levels of individual risk management behaviors as well as in the eight conceptual areas of: (1) supervision, (2) medical concerns, (3) facilities, (4) equipment, (5) crowd control and spectator safety, (6) transportation, (7) equipment safety, and (8) hiring and training of personnel. The 42-item survey was mailed directly to the 681 Florida High School athletic directors, requesting them to indicate the performance levels of risk management behaviors within their program. Once the data had been collected, descriptive statistics were calculated for each factor on the demographic section of the survey, the composite scores for each of the individual items on the survey and for all of the items combined (grand mean), and for the composite scores of each conceptual area (i.e. medical concerns, facilities, etc…). A one-way ANOVA was then used to test for significance among the independent variables (selected demographic factors) and dependent variables (risk management behavior scores of the (1) grand mean, (2) conceptual area means, and (3) individual item means).

Subjects

The subjects selected for this study were all Florida High School Athletic Association member athletic directors (N=681). A list of full member schools was obtained from the FHSAA.

Instrument

Risk Management Questionnaire

The survey used in this study was employed in previous studies by Gray & Curtis, (1991); Gray & Crowell, (1993); Anderson & Gray, (1994); Gray & McKinstrey, (1994); Wolohan & Gray, (1998); Gray & Park, (1991); and Gray, (1995). The 42-item survey was used to collect data related to the performance levels of risk management behaviors within each athletic program as reported by the athletic directors. According to Gray (personal communication, April 16, 2003), each item was a desirable, prudent behavior recommended by either a sport law author or court case, or both. The various risk management behaviors were divided into the eight following conceptual areas: (1) supervision, (2) medical concerns, (3) facilities, (4) equipment, (5) crowd control and spectator safety, (6) transportation, (7) equipment safety, and (8) hiring and training of personnel. According to Gray (personal communication, April 16, 2003) the various conceptual areas were categorized by the researchers based on the literature after a thorough investigation of research studies, textbooks, and court cases.

A 5-point Likert scale was used to represent the degree to which the athletic director believed that someone in the athletic department performed the specific behavior identified in each survey statement (1 – "never" performed, 2 – "seldom" performed, 3 – "sometimes" performed, 4 – "often" performed, 5 – "always" performed).

Demographic Section

The researcher included a demographic section in the survey that was distributed to the athletic directors. This section of the questionnaire provided information on the athletic director's gender, age, educational background, undergraduate major, graduate major, current employment status, current coaching status, years of experience as an athletic director, enrollment of high school, and FHSAA football classification for football.

Validity

Validity refers to the extent to which the measurement procedures assign values that accurately reflect the conceptual variable being measured (McCall, 1994). Content validity relates to written tests in educational settings, questionnaires, or other written instruments where a comparison to a standard is not possible. The primary concern with

content validity is the extent to which the items or questions are capable of accurately measuring the desired information (Berg & Latin, 1994).

The content validity of the instrument was supported by a panel of experts including current Florida high school and regional athletic directors as well as risk management researchers. The experts were asked to examine the survey and provide comments and critique on how it may be improved. Although the panel agreed qualitatively that the content validity of the instrument was good, there is no statistical value related to content validity and therefore no manner in which to express it quantitatively.

Reliability

Reliability refers to the accuracy (consistency and stability) of a measurement by a test (Isaac, 1997). Although Gray's Model has been used in numerous studies such as Gray & Curtis, (1991); Gray & Crowell, (1993); Anderson & Gray, (1994); Gray & McKinstrey, (1994); Wolohan & Gray, (1998); Gray & Park, (1991); and Gray, (1995), its reliability has not adequately been established. Therefore, a reliability analysis was completed to statistically determine the reliability of the instrument. Results are shown in Table 2.

Data Collection

The 42-item survey was mailed directly to the 681 Florida High School athletic directors, requesting them to indicate the performance levels of risk management behaviors within their program. Each athletic director received a personalized envelope containing a (1) a cover letter explaining the purpose of the study, instructions on how to complete the survey, and directions on how to return it once finished, (2) the 42-item risk management survey with demographic section, and (3) a stamped, self-addressed return envelope. No space will be provided for identification of the athletic director, therefore the survey will be completely anonymous.

Analysis of Data

Descriptive Statistics

First, descriptive statistics were calculated for each factor on the demographic section of the survey. This information included the athletic director's gender, age,

educational background, undergraduate major field of study, graduate major field of study, current employment status, current coaching status, years of experience as an athletic director, enrollment of high school, and FHSAA football classification for football. Next, descriptive statistics of the composite scores were calculated for each of the individual items on the survey and for all of the items combined (grand mean). Finally, descriptive statistics will also be compiled for the composite scores of each conceptual area (i.e. medical concerns, facilities, etc…).

ANOVA

A one-way ANOVA was used to test for significance among the independent variables (selected demographic factors) and dependent variables (risk management behavior scores of the (1) grand mean, (2) conceptual area means, and (3) individual item means). A Tukey HSD Post Hoc was then used to test after significant F ratios. Significance was set at the .05 level. The Statistical Package for Social Science 11.0 (SPSS) was used to conduct statistical analysis.

CHAPTER III

RESULTS

This chapter contains the results from the data analysis procedures. The data was collected using a risk management survey that measured (1) the degree to which Florida High School athletic directors utilize risk management within their athletic program and (2) whether selected demographic factors (i. e. undergraduate major, years of experience as Athletic Director, level of education, etc.) have an effect on the performance levels of these risk management behaviors. To achieve these objectives a risk management survey instrument developed by Gray (1991) was administered to all Florida High School Athletic Association member athletic directors. The chapter is presented in the following four sections: (1) reliability analysis, (2) demographic data, (3) behavioral data, and (4) research questions & hypothesis testing.

Reliability Analysis

Reliability refers to whether the measurement procedures assign the same value to a characteristic each time it is measured under essentially the same circumstances (McCall, 1994). Overall consistency of the Risk Management Questionnaire was examined using the Cronbach Alpha reliability test with SPSS 11.0 software. As an entire instrument, the Risk Management Questionnaire obtained a reliability score of .90. Nunnally and Bernstein (1994) provide guidance in the interpretation of reliability coefficients by stating that a value of .70 is sufficient for early stages of research, but that basic research should require test scores to have a reliability coefficient of .80 or higher. When important decisions are to be made a reliability coefficient of .90 is the minimum with .95 or higher a desirable standard. However, Safrit (1986) states that in certain circumstances, lower reliability coefficients (r = .50 to r = .60) can be acceptable.

Internal consistency of the Risk Management Questionnaire was also examined using the Cronbach Alpha reliability test (See Table 2). Internal consistency of seven of the eight conceptual areas was acceptable according to Safrit (1986), with alpha values ranging from .54 to .73. However, the alpha value of the "Warnings & Transfer of Risk" construct was .33. Although, the reliability of this construct falls below the standard suggested by Nunnally and Bernstein (1994), and Safrit (1986), due to the strong content

validity of the particular questions that make up this factor, and to their contribution to the overall validity of the instrument, this conceptual area was retained.

Table 2. Reliability of standardized alpha coefficient for each conceptual area

Risk Management Conceptual Areas	Cronbach Alpha Coefficients	Number of Items
Equipment Safety	.73	5
Supervision	.69	7
Facilities	.66	6
Medical Concerns	.64	9
Hiring & Training of Personnel	.64	4
Crowd Control	.58	4
Transportation	.54	3
Warnings & Transfer of Risk	.33	4

Demographic Data

For the purpose of testing formulated hypotheses, each participant in the study was asked to provide some general demographic information, as well as information regarding their educational background, work status, and coaching experience. Table 3 shows the relevant demographic data for the subjects (See Table 3). Of the 681 subjects in the population, 201 chose to participate in the study by returning their surveys. This resulted in a final return rate of 30%. Among the 201 respondents, 176 (87.6%) were men and 22 (10.9%) were women. Their mean age was 46.3, with a range of 23 to 65 years of age. The average years of experience reported by the participants was 10.1 years, with a mean of 7.4 years at their current school. The average of school sizes reported was 1464.2 with a fairly even distribution among the football divisions 1A – 6A (range = 10.9% – 15.9%).

Educational Background

In regards to their educational background, the overwhelming majority of participants currently hold a terminal degree. Of those who had held their bachelors degree (94%) at the time of the study, over 57% had their degree in a sport-related field (sport management, P/E, etc…). On the other hand, of those who had completed a

Table 3: Demographic data

N	=	201 (681 surveys mailed). Return rate = 30%			
Age	=	46.3 years (Range = 23 to 65)			
Gender		Male	=	176	(87.6%)
		Female	=	22	(10.9%)
		No data	=	3	
Education		Doctoral Degree	=	2	(1.0%)
(highest degree earned)		Masters Degree	=	94	(46.8%)
		Bachelors Degree	=	93	(46.3%)
		Other	=	9	(4.5%)
		No data	=	3	
Area of Bachelors degree		Sport-related (sport mgt, PE, etc.)	=	109	(57.6%)
		Nonsport-related (math, etc.)	=	80	(42.3%)
		No data	=	3	
Area of Graduate degree		Sport-related (sport mgt, PE, etc.)	=	39	(39.3%)
		Nonsport-related (math, etc.)	=	60	(60.6%)
		No data	=	3	
Current status as A. D.		Full-time A. D.	=	116	(57.7%)
		Part-time A. D. / part-time teacher	=	71	(35.3%)
		Part-time A. D. / part-time admin.	=	11	(5.5%)
		No data	=	3	
Coaching status of A. D.		Currently coach	=	114	(56.7%)
		Do not currently coach	=	84	(41.8%)
		No data	=	3	
Coaching experience		Coaching experience	=	185	(92.0%)
		No coaching experience	=	13	(6.5%)
		No data	=	3	
Experience as A. D.		M = 10.1 years (Range = 1 to 43 years)			
Years in present school		M = 7.4 years (Range = 1 to 42 years)			
School size		M = 1464.2 students (Range = 15 to 5000)			

Football classification	**# of respondents**	**Percentage**
1A	30	(14.9%)
2A	22	(10.9%)
3A	26	(12.9%)
4A	20	(10.0%)
5A	32	(15.9%)
6A	30	(14.9%)
N/A	38	(18.9%)
No data	3	(1.5%)

masters or doctoral degree (49.3%) at the time of the study, only 39.3% held their graduate degree in a sport-related field (sport management, P/E, etc…).

Employment Status

Nearly 58% of the respondents performed their duties as athletic director full-time. The other 42% of athletic directors reported themselves as part-time athletic directors, splitting their duties between teaching (35.3%) or administration (5.5%).

Coaching Experience

The vast majority of respondents reported having previous coaching experience (92%), with 56.7% of those currently coaching a sport. A smaller percentage of the athletic directors, (41.8%) were not currently coaching.

Behavioral Data

This section contains the results of the descriptive statistics on the risk management survey instrument. The means and standard deviations will be reported for the following three areas: (1) the individual items on the survey, (2) the conceptual areas, and (3) the grand mean.

Individual Item Scores

Table 4 shows the ranked means and corresponding standard deviations for each of the 42 survey items among all respondents (See Table 4). A 5-point Likert scale was used to represent the degree to which the athletic director believed that someone in the athletic department performed the specific risk management behavior identified in each survey statement (1 – "never" performed, 2 – "seldom" performed, 3 – "sometimes" performed, 4 – "often" performed, 5 – "always" performed). Analysis showed these ranked means and standard deviations ranged from a high of 4.975 to a low of 2.841 on the 5-point Likert scale. According to the data, 30 of 42 survey items had a mean score exceeding 4.0 on a 5-point scale. These risk management behaviors were being performed within FHSAA member athletic director's departments "often". The next ten survey items fell into the range of 3.14 – 3.99 on the 5-point Likert scale, meaning they were performed within the athletic departments "sometimes." The risk management behaviors relating to the "written evaluation of coaches" (2.99) and the requirement of "written practice plans for coaches" (2.84) fell below 3.0 on the 5-point Likert scale.

Table 4: Ranked composite means and standard deviations for individual survey items

RANK	DESCRIPTOR	MEAN	S. D.
1	Students have physical exams	4.975	0.2106
2	Drivers (private) properly licensed	4.975	1.0461
3	Parents sign agreements to participate	4.905	0.4648
4	Contracted or school vehicles in safe condition	4.900	1.3638
5	Coaches at practice sessions	4.850	0.5173
6	Medical history kept on file	4.850	0.5810
7	Equipment meets standards	4.850	0.4771
8	A. D. attends games	4.821	0.3972
9	Permission to go to game on own	4.801	0.7350
10	Athletes have medical insurance before play	4.781	0.7758
11	Adequate game security provided	4.763	0.6636
12	Unsafe facilities not used	4.707	0.5903
13	Equipment properly fitted	4.702	0.6484
14	Medical approval before return to play	4.702	0.7145
15	Facilities maintained & kept clean	4.697	0.6344
16	Not playing injured athletes	4.697	0.6500
17	Facility hazards repaired	4.667	0.6028
18	Injury reports completed	4.662	0.7648
19	Safe storage of equipment	4.508	0.7219
20	Coaches use acceptable techniques	4.498	0.7689
21	Defective equipment not used	4.408	0.8323
22	Facility design flaws corrected	4.393	0.7809
23	Screening process to hire staff	4.378	0.9414
24	Spectator capacity not exceeded	4.328	1.1626
25	Spectators protected from injury	4.284	0.8742
26	Clinics required of coaches	4.249	0.9261
27	Close supervision of new coaches	4.204	0.7505
28	Emergency first-aid procedures	4.124	1.1311
29	Spectators warned of dangers	4.105	1.0132
30	Schedule similar opponents	4.060	1.1254
31	Equipment inspections performed	3.995	0.9669
32	Emergency evacuation procedures	3.990	1.2961
33	Athletes warned of risks in writing	3.990	1.1179
34	Coaches have first aid training	3.970	1.1786
35	Safety officer designated	3.896	1.4779
36	Pre-event facility inspections	3.886	1.1497
37	A. D. attends practices	3.726	0.8425
38	Safety clinics conducted	3.612	1.2404
39	Pre-practice facility inspections	3.418	1.3358
40	Injury surveillance system	3.144	1.4745
41	Written evaluation of coaches	2.995	1.4370
42	Written practice plans required	2.841	1.1681

Conceptual Area Scores

The various risk management behaviors were divided into the eight following conceptual areas: (1) supervision, (2) medical concerns, (3) facilities, (4) equipment, (5) crowd control and spectator safety, (6) transportation, (7) equipment safety, and (8) hiring and training of personnel. Risk management behaviors relating to seven of eight conceptual areas received scores exceeding 4.0 on a 5-point Likert scale, meaning they were being performed "often". The data indicated that the highest-ranking conceptual area was "transportation" (4.892), while the lowest ranking conceptual area was "supervision" (3.991). Table 5 shows the ranked means and standard deviations calculated for each of the eight conceptual areas for all subjects combined (See Table 5).

Table 5: Ranked means and standard deviations for the eight conceptual areas

CONCEPTUAL AREAS	MEAN	S. D.
Transportation	4.892	1.0483
Equipment Safety	4.493	0.7293
Warnings and Transfer of Risk	4.445	0.9233
Medical Concerns	4.345	0.9033
Crowd Control & Spectator Safety	4.337	0.9991
Facilities	4.294	0.8490
Hiring & Training of Personnel	4.052	1.0717
Supervision	3.991	0.8402

Grand Composite Mean Score

The grand composite mean is the mean of the combined scores of all survey items. It is an overall indicator of the degree to which risk management behaviors were performed within the athletic departments of FHSAA member schools. The grand composite mean score of the respondents was 4.316 on a 5-point Likert scale.

Table 6: Grand Mean: Composite mean for all 42 individual survey items combined

	MEAN	S. D.
Grand Composite Mean	4.316	0.4284

Research Questions and Hypothesis Testing

A one-way ANOVA was used to test for significance among the independent variables (selected demographic factors) and dependent variables (risk management behavior scores of the (1) grand composite mean, (2) conceptual area means, and (3) individual survey item means). Significance was set at the .05 level. The Statistical Package for Social Science 11.0 (SPSS) was used to conduct statistical analysis. The research questions and subsequent hypotheses are described in the following pages.

Analysis by Level of Education

The first research question was stated as:

RQ1: Does an athletic director's level of education affect the degree to which risk management behaviors are performed within their athletic program?

The following null hypothesis was formulated in response to the research question:

H1: An athletic director's level of education will have no effect on the degree to which risk management behaviors are performed within their athletic program.

Grand Composite Mean. Statistical analysis conducted on the basis of level of education indicated that no significant difference existed in the subjects' mean score across all 42 items (See Table 7).

Table 7: Analysis by Level of Education: Grand Composite Mean

GRAND COMPOSITE MEAN	
Degree	**Mean**
Graduate	4.34
Undergraduate	4.28
Other	4.37

Conceptual Areas. Similarly, Table 8 shows the results of the statistical analysis conducted on the basis level of education with statistical analysis indicating that no significant differences were present within any of the eight conceptual areas.

Table 8: Analysis by Level of Education: Conceptual Areas

CONCEPTUAL AREAS

Degree	Transportation	Equipment	Warnings	Medical
Graduate	4.91	4.52	4.46	4.33
Undergraduate	4.87	4.45	4.41	4.33
Other	5.00	4.69	4.47	4.43

Degree	Crowd Control	Facilities	Hiring & Training	Supervision
Graduate	4.27	4.32	4.13	4.02
Undergraduate	4.37	4.25	3.98	3.98
Other	4.53	4.44	3.94	3.79

Individual Survey Items. Statistical analysis conducted on the basis of level of education indicated that two significant differences existed among the 42 items (See Table 9). The two risk management behaviors pertained to the athletic director ensuring that coaches prepare written practice plans and that spectators are kept safe from injury from the area of play. The F ratio for "Coaches prepare written practice plans" was F (2,195) = 3.52, p = .025 and for "Spectators are safe from injury" was F (2,195) = 3.91, p = .022. In both cases, Tukey's HSD post hoc test resulted in athletic directors with graduate degrees scored significantly higher than those with other degrees (i.e. A.A., some college, H.S. diploma, etc…).

Table 9: Analysis by Level of Education: Individual Survey Items

INDIVIDUAL SURVEY ITEMS
Coaches prepare written practice plans* (p=.031)

Degree	Mean	
Graduate	2.95*	
Undergraduate	2.80	
Other	1.89	Tukey HSD (p = .025)

*Athletic directors with graduate degrees scored significantly higher than those with other or no academic degrees (i. e. high school diploma, A. A. etc…)

Table 9 Continued

INDIVIDUAL SURVEY ITEMS

Spectators are safe from injury* (p=.022)

Degree	Mean	
Graduate	4.45*	
Undergraduate	4.12	
Other	4.00	Tukey HSD (p = .025)

*Athletic directors with graduate degrees scored significantly higher than those with other or no academic degrees (i. e. high school diploma, A. A. etc…)

Analysis by Current Employment Status

The second research question was stated as:

RQ2: Does an athletic director's current employment status affect the degree to which risk management behaviors are performed within their athletic program?

The following null hypothesis was formulated in response to the research question:

H2: An athletic director's current employment status will have no effect on the degree to which risk management behaviors are performed within their athletic program.

Grand Composite Mean. Table 10 shows the results of the statistical analysis based on current employment status. Data indicated that a significant difference existed across all 42 items combined (grand mean). The F ratio for the Grand Composite Mean was F (2,195) = 11.08, p = .000. In this case, Tukey's HSD post hoc test resulted in those subjects who worked as "full-time" athletic directors scored significantly higher than those subjects who worked not only as athletic director, but also had teaching and/or administrator responsibilities.

Table 10: Analysis by Current Employment Status: Grand Composite Mean

GRAND COMPOSITE MEAN

Employment Status	Mean	
Full-time AD	4.42*	
Part-time AD / Teacher	4.19	Tukey HSD (p = .001)
Part-time AD / Admin.	3.97	Tukey HSD (p = .002)

* Full-time ADs scored significantly higher than both part-time AD/teachers & part-time AD/administrators.

Table 11: Analysis by Current Employment Status: Conceptual Areas

Hiring & Training* (p = .012)

Employment Status	Mean	
Full-time AD	4.18*	
Part-time AD / Teacher	3.89	
Part-time AD / Admin.	3.73	Tukey HSD (p = .027)

* Full-time ADs scored significantly higher than part-time AD/administrators.

Facilities* (p = .004)

Employment Status	Mean	
Full-time AD	4.39*	
Part-time AD / Teacher	4.19	Tukey HSD (p = .045)
Part-time AD / Admin.	3.92	Tukey HSD (p = .018)

* Full-time ADs scored significantly higher than both part-time AD/teachers & part-time AD/administrators.

Supervision* (p = .000)

Employment Status	Mean	
Full-time AD	4.12*	
Part-time AD / Teacher	3.84	Tukey HSD (p = .001)
Part-time AD / Admin.	3.69	Tukey HSD (p = .026)

* Full-time ADs scored significantly higher than both part-time AD/teachers & part-time AD/administrators.

Equipment Safety* (p = .010)

Employment Status	Mean	
Full-time AD	4.58*	
Part-time AD / Teacher	4.40	
Part-time AD / Admin.	4.18	Tukey HSD (p = .040)

* Full-time ADs scored significantly higher than part-time AD/administrators.

Medical Concerns* (p = .001)

Employment Status	Mean	
Full-time AD	4.45*	
Part-time AD / Teacher	4.21	Tukey HSD (p = .005)
Part-time AD / Admin.	4.01	Tukey HSD (p = .014)

* Full-time ADs scored significantly higher than both part-time AD/teachers & part-time AD/administrators.

Crowd Control* (p = .000)

Employment Status	Mean	
Full-time AD	4.48*	
Part-time AD / Teacher	4.17	Tukey HSD (p = .007)
Part-time AD / Admin.	3.82	Tukey HSD (p = .005)

* Full-time ADs scored significantly higher than both part-time AD/teachers & part-time AD/administrators.

Conceptual Areas. Table 11 shows the results of the statistical analysis based on current work status. Results indicate that significant mean differences existed in six of the eight conceptual areas. In the conceptual areas of "hiring & training of personnel" ($F(2,195) = 4.493$, $p = .012$), and "equipment safety" ($F(2,195) = 4.718$, $p = .010$), Tukey's HSD post hoc test resulted in subjects who worked as "full-time" athletic directors scoring significantly higher than those who worked as "part-time athletic director / administrators." In the cases of the conceptual areas of "facilities" ($F(2,195) = 5.636$, $p = .004$), "supervision" ($F(2,195) = 8.474$, $p = .000$), "medical concerns" ($F(2,195) = 7.713$, $p = .001$), and "crowd control & spectator safety" ($F(2,195) = 8.140$, $p = .000$), Tukey's HSD post hoc test resulted in subjects who worked as "full-time" athletic directors scored significantly higher than both "part-time athletic director/administrators" and "part-time athletic director/teachers."

Individual Survey Items. Statistical analysis conducted on the basis of current work status indicated that ten significant differences existed among the 42 items (See Table 9). In all cases, Tukey's HSD post hoc test resulted in subjects who worked as "full-time" athletic directors scoring significantly higher that their counterparts who worked as both athletic director and teachers or administrators.

Table 12: Analysis by Current Employment Status: Individual Survey Items

INDIVIDUAL SURVEY ITEMS

Development of an emergency evacuation plan to ensure safe & timely evacuation
***F (2,195) = 9.750, p = .000**

Employment Status	Mean	
Full-time AD	4.24*	
Part-time AD / Teacher	3.79	Tukey HSD (p = .045)
Part-time AD / Admin.	2.64	Tukey HSD (p = .000)

*Full-time ADs scored significantly higher than both part-time AD/teachers & part-time AD/administrators.

Coaches follow written procedures for emergency first-aid
***F (2,195) = 5.227, p = .006**

Employment Status	Mean	
Full-time AD	4.31*	
Part-time AD / Teacher	3.89	Tukey HSD (p = .033)
Part-time AD / Admin.	3.45	Tukey HSD (p = .041)

*Full-time ADs scored significantly higher than both part-time AD/teachers & part-time AD/administrators.

Table 12 Continued

INDIVIDUAL SURVEY ITEMS

Coaches follow a formal system of inspecting equipment at appropriate intervals
***F (2,195) = 4.066, p = .019**

Employment Status	Mean	
Full-time AD	4.10*	
Part-time AD / Teacher	3.93	
Part-time AD / Admin.	3.27	Tukey HSD (p = .017)

*Full-time ADs scored significantly higher than part-time AD/administrators.

Athletic director conducts formal written evaluations of staff
***F (2,195) = 10.652, p = .000**

Employment Status	Mean	
Full-time AD	3.38*	
Part-time AD / Teacher	2.55	Tukey HSD (p = .000)
Part-time AD / Admin.	2.09	Tukey HSD (p = .009)

*Full-time ADs scored significantly higher than both part-time AD/teachers & part-time AD/administrators.

Written permission before athletes transported by means other than official school carrier
***F (2,195) = 6.398, p = .002**

Employment Status	Mean	
Full-time AD	4.95*	
Part-time AD / Teacher	4.58	Tukey HSD (p = .001)
Part-time AD / Admin.	4.91	

*Full-time ADs scored significantly higher than part-time AD/teachers.

Equipment used meets standards established by the sport
***F (2,195) = 3.406, p = .035**

Employment Status	Mean	
Full-time AD	4.92*	
Part-time AD / Teacher	4.75	Tukey HSD (p = .039)
Part-time AD / Admin.	4.73	

*Full-time ADs scored significantly higher than part-time AD/teachers.

Specific protocol followed for physician/trainer approval before injured athlete return to play
***F (2,195) = 6.285, p = .002**

Employment Status	Mean	
Full-time AD	4.84*	
Part-time AD / Teacher	4.48	Tukey HSD (p = .002)
Part-time AD / Admin.	4.55	

*Full-time ADs scored significantly higher than part-time AD/teachers.

Table 12 Continued

INDIVIDUAL SURVEY ITEMS

Facilities deemed unsafe or in need of repair not used until corrections made
***F (2,195) = 8.474, p = .000**

Employment Status	Mean	
Full-time AD	4.78*	
Part-time AD / Teacher	4.65	Tukey HSD (p = .003)
Part-time AD / Admin.	4.18	

*Full-time ADs scored significantly higher than part-time AD/teachers.

Vehicles used to transport athletes are in safe working condition
***F (2,195) = 3.549, p = .031**

Employment Status	Mean	
Full-time AD	5.00*	
Part-time AD / Teacher	4.85	
Part-time AD / Admin.	3.91	Tukey HSD (p = .025)

*Full-time ADs scored significantly higher than part-time AD/administrators.

Coaches attend coaches clinics in their sport
***F (2,195) = 3.851, p = .023**

Employment Status	Mean	
Full-time AD	4.40*	
Part-time AD / Teacher	4.01	Tukey HSD (p = .017)
Part-time AD / Admin.	4.18	

*Full-time ADs scored significantly higher than part-time AD/teachers.

Analysis by Undergraduate Major

The third research question was stated as:

RQ3: Does an athletic director's undergraduate major affect the performance level of risk management behaviors performed within their athletic program?

The following null hypothesis was formulated in response to the research question:

H3: An athletic director's undergraduate major will have no effect on the degree to which risk management behaviors are performed within their athletic program.

Table 13 shows the results of the statistical analysis on the basis of the subject's undergraduate major. Results indicated that no significant differences existed in the

mean scores across all 42 items combined (grand mean), or within any of the eight conceptual areas. However, one significant mean difference was found among the 42 individual survey items. The F ratio for "Athletic director has an objective screening process to hire competent and qualified staff" was F (2,195) = 2.676, p = .049. In this case, the athletic directors with sport related undergraduate degrees scored significantly higher than those subjects with a non-sport related undergraduate degree.

Analysis by Current Coaching Status

The fourth research question was stated as:

RQ4: Does an athletic director's current coaching status affect the degree to which risk management behaviors are performed within their athletic program?

The following null hypothesis was formulated in response to the research question:

H4: An athletic director's current coaching status will have no effect on the degree to which risk management behaviors are performed within their athletic program.

Table 13: Analysis by Undergraduate Major

GRAND COMPOSITE MEAN

Undergraduate Degree	Mean
Sport related	4.33
Non-sport related	4.28

CONCEPTUAL AREAS

Undergraduate Degree	Transportation	Equipment	Warnings	Medical
Sport related	5.00	4.53	4.38	4.33
Non-sport related	4.74	4.42	4.52	4.32

Undergraduate Degree	Crowd Control	Facilities	Hiring & Training	Supervision
Sport related	4.35	4.29	4.15	3.98
Non-sport related	4.28	4.27	3.91	4.00

INDIVIDUAL SURVEY ITEMS

Athletic director has an objective screening process to hire qualified and competent staff
***F (2,195) = 2.676, p = .049**

Undergraduate Degree	Mean
Sport related	4.43*
Non-sport related	4.22

* Athletic directors with sport related undergraduate degrees scored significantly higher than those with non-sport related undergraduate degrees.

Grand Composite Mean. Table 14 shows the results of the statistical analysis based on current coaching status. Data indicated that a significant difference existed across all 42 items combined (grand mean). In this case, those subjects who were not currently coaching scored significantly higher than those athletic directors who presently had coaching duties.

Table 14: Analysis by Current Coaching Status: Grand Composite Mean

GRAND COMPOSITE MEAN
***F (2,195) = 12.026, p = .001**

Coaching Status	**Mean**
Not currently coaching	4.43*
Currently coaching	4.22

* Athletic directors that were not currently coaching scored significantly higher than those athletic directors who presently had coaching duties.

Conceptual Areas. Table 15 shows the results of the statistical analysis based on current coaching status. Results indicate that significant mean differences existed in six of the eight conceptual areas. In the conceptual areas of "hiring & training of personnel", and "warnings & transfer of risk", "facilities", "supervision", "medical concerns", and "crowd control & spectator safety", subjects who were not currently coaching scored significantly higher than those athletic directors who presently had coaching duties.

Individual Survey Items. Statistical analysis conducted on the basis of current coaching status indicated that 14 significant differences existed among the 42 items (See Table 16). In all cases, subjects who were not currently coaching scored significantly higher than those athletic directors who presently had coaching duties.

Table 15: Analysis by Current Coaching Status: Conceptual Areas

CONCEPTUAL AREAS

Hiring & Training* F (1,196) = 8.250, p = .005

Coaching Status	Mean
Not currently coaching	4.22*
Currently coaching	3.89

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Facilities* F (1,196) = 7.669, p = .006

Coaching Status	Mean
Not currently coaching	4.41*
Currently coaching	4.20

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Supervision* F (1,196) = 4.252, p = .041

Coaching Status	Mean
Not currently coaching	4.08*
Currently coaching	3.92

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Warnings* F (1,196) = 7.565, p = .007

Coaching Status	Mean
Not currently coaching	4.57*
Currently coaching	4.35

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Medical Concerns* F (1,196) = 14.327, p = .000

Coaching Status	Mean
Not currently coaching	4.49*
Currently coaching	4.23

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Crowd Control* F (1,196) = 14.344, p = .000

Coaching Status	Mean
Not currently coaching	4.54*
Currently coaching	4.18

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Table 16: Analysis by Current Coaching Status: Individual Survey Items

INDIVIDUAL SURVEY ITEMS

Objective screening process to hire competent and qualified staff*

***F (1,196) = 5.341, p = .022**

Coaching Status	Mean
Not currently coaching	4.55*
Currently coaching	3.79

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

The number of spectators does not exceed the facility capacity established by the fire marshal*

***F (1,196) = 4.073, p = .045**

Coaching Status	Mean
Not currently coaching	4.51*
Currently coaching	4.18

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Spectators are safe from injury from the area of play*

***F (1,196) = 11.445, p = .001**

Coaching Status	Mean
Not currently coaching	4.51*
Currently coaching	4.10

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Athletic director designates a person as the safety officer for the athletic program*

***F (1,196) = 10.195, p = .002**

Coaching Status	Mean
Not currently coaching	4.26*
Currently coaching	3.60

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Development of an emergency evacuation plan to ensure safe & timely evacuation

***F (1,196) = 6.546, p = .011**

Coaching Status	Mean
Not currently coaching	4.26*
Currently coaching	3.79

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Table 16 Continued

INDIVIDUAL SURVEY ITEMS

***F (1,196) = 6.383, p = .012**

Coaching Status	Mean
Not currently coaching	4.35*
Currently coaching	3.94

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Coaches & trainers use prudent judgment when determining whether injured athletes continues to play*

***F (1,196) = 7.798, p = .006**

Coaching Status	Mean
Not currently coaching	4.85*
Currently coaching	4.59

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Formal system of inspecting facilities for safety before each competition is followed*

***F (1,196) = 4.996, p = .027**

Coaching Status	Mean
Not currently coaching	4.10*
Currently coaching	3.73

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Specific protocol followed for physician/trainer approval before injured athlete return to play*

***F (1,196) = 14.563, p = .000**

Coaching Status	Mean
Not currently coaching	4.92*
Currently coaching	4.54

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Injury report forms are completed promptly following injuries*

***F (1,196) = 5.002, p = .026**

Coaching Status	Mean
Not currently coaching	4.80*
Currently coaching	4.55

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Table 16 Continued

INDIVIDUAL SURVEY ITEMS

Adequate security & supervision provided at athletic contests*

***F (1,196) = 5.361, p = .022**

Coaching Status	Mean
Not currently coaching	4.87*
Currently coaching	4.65

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Injury surveillance system is developed*

***F (1,196) = 5.095, p = .025**

Coaching Status	Mean
Not currently coaching	3.40*
Currently coaching	2.93

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Coaches attend coaches clinics in their sport*

***F (1,196) = 11.286, p = .001**

Coaching Status	Mean
Not currently coaching	4.50*
Currently coaching	4.06

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Identified facility hazards are properly repaired*

*** F (1,196) = 5.106, p = .025**

Coaching Status	Mean
Not currently coaching	4.77*
Currently coaching	4.58

* Athletic directors who were not currently coaching scored significantly higher than those athletic directors who were currently coaching.

Analysis by Previous Coaching Experience

The fifth research question was stated as:

RQ5: Does an athletic director's previous coaching experience affect the degree to which risk management behaviors are performed within their athletic program?

The following null hypothesis was formulated in response to the research question:

H5: An athletic director's previous coaching experience will have no effect on the degree to which risk management behaviors are performed within their athletic program.

Grand Composite Mean & Conceptual Areas. Table 17 shows the results of the statistical analysis on the basis of the subject's previous coaching experience. Results indicated that no significant differences existed in the mean scores across all 42 items combined (grand mean) however, one significant mean difference was found among the eight conceptual areas. In the conceptual areas of "equipment safety" ($F(1,196) = 7.220$, $p = .008$) subjects who had previous coaching experience scored significantly higher than those athletic directors who presently had no prior coaching experience.

Table 17: Analysis by Previous Coaching Experience

GRAND COMPOSITE MEAN

Coaching Experience	Mean
No coaching experience	4.14
Previous coaching experience	4.33

CONCEPTUAL AREAS

Coaching Experience	Transportation	Equipment*	Warnings	Medical
No coaching experience	4.77	4.12	4.48	4.16
Previous coaching experience	4.91	4.56	4.44	4.35

Coaching Experience	Crowd Control	Facilities	Hiring & Training	Supervision
No coaching experience	4.04	4.04	3.98	3.89
Previous coaching experience	4.35	4.31	4.05	3.99

*Athletic directors with previous coaching experience scored significantly higher than those with no prior coaching experience.

Individual Survey Items. Statistical analysis conducted on the basis of previous coaching experience indicated that five significant differences existed among the 42 items (See Table 18). In all cases, subjects who had previous coaching experience scored significantly higher than those athletic directors who presently had no prior coaching experience.

Table 18: Analysis by Previous Coaching Experience

INDIVIDUAL SURVEY ITEMS

Facility designs that pose a hazard are identified and corrected*
***F (1,196) = 6.868, p = .009**

Coaching Experience	**Mean**
No coaching experience	3.85
Previous coaching experience	4.43*

*Athletic directors with previous coaching experience scored significantly higher than those with no prior coaching experience.

Worn or defective equipment is taken out of use immediately*
***F (1,196) = 4.859, p = .029**

Coaching Experience	**Mean**
No coaching experience	3.92
Previous coaching experience	4.44*

*Athletic directors with previous coaching experience scored significantly higher than those with no prior coaching experience.

Formal system of inspecting equipment at appropriate intervals*
***F (1,196) = 4.286, p = .040**

Coaching Experience	**Mean**
No coaching experience	3.46
Previous coaching experience	4.03*

*Athletic directors with previous coaching experience scored significantly higher than those with no prior coaching experience.

Table 18 Continued

INDIVIDUAL SURVEY ITEMS

Facilities deemed unsafe or in need of repair not used until corrections are made*
***F (1,196) = 9.130, p = .003**

Coaching Experience	**Mean**
No coaching experience	4.23
Previous coaching experience	4.74*

*Athletic directors with previous coaching experience scored significantly higher than those with no prior coaching experience.

Injury report forms are completed promptly following injuries*
***F (1,196) = 4.332, p = .039**

Coaching Experience	**Mean**
No coaching experience	4.23
Previous coaching experience	4.69*

*Athletic directors with previous coaching experience scored significantly higher than those with no prior coaching experience.

Analysis by Graduate Major

The final research question was stated as:

RQ6: Does an athletic director's graduate major affect the performance level of risk management behaviors performed within their athletic program?

The following null hypothesis was formulated in response to the research question:

H6: An athletic director's graduate major will have no effect on the degree to which risk management behaviors are performed within their athletic program.

Table 19 shows the results of the statistical analysis on the basis of the subject's graduate major. Results indicated that no significant differences existed in the mean scores across all 42 items combined (grand mean), or within any of the eight conceptual areas. However, three significant mean differences were found among the 42 individual survey items. These risk management behaviors pertained to safe storage of equipment, decision making on injured athletes and regular maintenance of facilities. In this case, the athletic directors with non-sport related graduate degrees scored significantly higher than those subjects with a sport related graduate degree.

Table 19: Analysis by Graduate Major

GRAND COMPOSITE MEAN

Graduate Degree	Mean
Sport related	4.29
Non-sport related	4.36

CONCEPTUAL AREAS

Graduate Degree	Transportation	Equipment	Warnings	Medical
Sport related	4.92	4.44	4.37	4.25
Non-sport related	4.91	4.57	4.52	4.37

Graduate Degree	Crowd Control	Facilities	Hiring & Training	Supervision
Sport related	4.32	4.27	4.05	4.31
Non-sport related	4.33	4.34	4.15	3.99

INDIVIDUAL SURVEY ITEMS

Safe storage of equipment to prevent unauthorized and unsupervised use*

***F (1,97) = 5.602, p = .020**

Graduate Degree	Mean
Sport related	4.31
Non-sport related	4.65*

*Athletic directors with non-sport related graduate degrees scored significantly higher than those with sport related graduate degrees.

Coaches & trainers use prudent judgment when determining whether injured athletes continue to play*

***F (1,97) = 9.858, p = .002**

Graduate Degree	Mean
Sport related	4.51
Non-sport related	4.88*

*Athletic directors with non-sport related graduate degrees scored significantly higher than those with sport related graduate degrees.

Facilities are maintained on a regular basis*

***F (1,97) = 5.763, p = .018**

Graduate Degree	Mean	
Sport related	4.51	(p = .018)
Non-sport related	4.87*	

*Athletic directors with non-sport related graduate degrees scored significantly higher than those with sport related graduate degrees.

CHAPTER IV

DISCUSSION, SUMMARY & CONCLUSIONS

This chapter summarizes each chapter of the dissertation. A discussion of conclusions drawn from the results will be presented and recommendations for future research will be suggested.

Discussion of Findings

Behavioral Data

Discussion of Individual Item Scores. The first of two primary objectives of this study was to measure the degree to which Florida High School athletic directors utilize risk management within their athletic departments. To achieve this objective a risk management survey instrument developed by Gray (1991) was administered to all Florida High School Athletic Association member athletic directors via mail-out. The survey instrument was designed to yield data on the performance levels of individual risk management behaviors as well as in the eight conceptual areas of: (1) supervision, (2) medical concerns, (3) facilities, (4) equipment, (5) crowd control and spectator safety, (6) transportation, (7) equipment safety, and (8) hiring and training of personnel.

The data collected in this study suggest that the risk management behaviors being performed within Florida High School athletic departments are being performed on a rather consistent basis. According to the data, 30 of 42 survey items had a mean score exceeding 4.0 on a 5-point scale. These risk management behaviors were being performed within FHSAA member athletic director's departments "often". The next ten survey items fell into the range of 3.14 – 3.99 on the 5-point Likert scale, meaning they were performed within the athletic departments "sometimes." The risk management behaviors relating to the "written evaluation of coaches" (2.99) and the requirement of "written practice plans for coaches" (2.84) fell below 3.0 on the 5-point Likert scale (See Table 4). These findings are consistent with previous research measuring risk management behavior in High School (Gray & Park, 1991), NCAA Division I (Gray & Crowell, 1993), and NCAA Division III (Anderson & Gray, 1993) athletic departments and may be due to the sample of rather experienced, well-educated athletic directors who

were familiar with the sporting environment based on their experience as athletes, coaches and administrators (See Table 3).

Although the athletic directors generally indicated that they were performing most of the risk management behaviors addressed by the survey, it is important to note that the items receiving the lowest scores were risk management behaviors relating to documentation and inspection (See Table 20). It is imperative that athletic directors understand that although the failure to provide written documentation in a specific situation might not necessarily be considered negligent, the ability to provide such documentation might be instrumental in assisting a coach or athletic director successfully defend against an allegation of negligence, particularly when the issue in the litigation is related to something that could have been documented (i.e. equipment inspections, facility inspections, written warnings, etc.) (Gray & McKinstrey, 1994).

Research Questions

The second primary objective of this study was to determine whether selected demographic factors (i. e. undergraduate major, years of experience as Athletic Director, level of education, etc.) have an effect on the performance levels of these risk management behaviors.

Table 20: Individual means matrix - A comparison of lowest composite means for individual survey items among FHSAA athletic directors and previous research

	FL High School Ath. Director	IA High School Ath. Director Gray & Park ('91)	College (D1) Ath. Director Gray & Crowell ('93)	College (D3) Ath. Director Anderson & Gray ('94)
DESCRIPTOR	**MEAN**	**MEAN**	**MEAN**	**MEAN**
Equipment inspections performed	3.995	3.984	3.727	2.929
Emergency evacuation procedures	3.990	3.346	4.387	3.387
Athletes warned of risks in writing	3.990	3.819	3.199	3.919
Coaches have first aid training	3.970	3.549	n/a	n/a
Safety officer designated	3.896	2.241	n/a	n/a
Pre-event facility inspections	3.886	3.367	4.179	3.635
A. D. attends practices	3.726	3.214	n/a	n/a
Safety clinics conducted	3.612	2.808	n/a	n/a
Pre-practice facility inspections	3.418	2.674	n/a	n/a
Injury surveillance system	3.144	2.740	4.757	3.873
Written evaluation of coaches	2.995	3.336	4.497	4.408
Written practice plans required	2.841	2.445	n/a	n/a

Discussion of Analyses by Level of Education. The first research question was stated as:

RQ1: Does an athletic director's level of education affect the degree to which risk management behaviors are performed within their athletic program?

One might think that with the insight and experience obtained in graduate school athletic directors with graduate degrees might differ in their performance levels from their colleagues that have only an undergraduate education. Apparently this does not hold true. Statistical analysis conducted on the basis of level of education indicated that no significant difference existed in the subjects' mean score across all 42 items (See Table 7). This is consistent with previous research on a variety of subjects by Gray & Park (1991), Gray & Curtis (1991), Gray & Crowell (1993), Anderson & Gray (1994), and Gray & McKinstrey (1994) in which no significant differences were present when examining risk management behaviors in relation to level of education. This finding reinforces the notion that an athletic director's level of education does not affect the overall performance of risk management behaviors within an athletic department.

Discussion of Analyses by Current Employment Status. The second research question was stated as:

RQ2: Does an athletic director's current employment status affect the degree to which risk management behaviors are performed within their athletic program?

Table 10 shows the results of the statistical analysis based on current employment status. Data indicated that a significant difference existed across all 42 items combined (grand mean) strongly suggesting that current employment status does indeed have an affect on the performance levels of risk management behaviors within an athletic program. In this case, those Florida high school athletic directors who worked as "full-time" athletic directors scored significantly higher than their colleagues who worked not only as athletic director, but also had teaching and/or administrator responsibilities. This result may be attributed to the fact that full-time athletic directors are not sharing their time or focus with other responsibilities such as teaching or administration, therefore providing the subjects more time and energy to devote to their athletic director duties.

Discussion of Analyses by Undergraduate Major. The third research question was stated as:

RQ3: Does an athletic director's undergraduate major affect the performance level of risk management behaviors performed within their athletic program?

With the unique insight and knowledge gained through coursework in such majors as physical education, athletic training, and sport management, one may assume that athletic directors with this sort of academic preparation may perform risk management behaviors at a higher level than colleagues without this background. However, the data in this study do not support this notion. Table 11 shows the results of the statistical analysis on the basis of the subject's undergraduate major. Results indicated that no significant differences existed in the mean scores across all 42 items combined (grand mean), or within any of the eight conceptual areas suggesting that an athletic director's undergraduate major does not affect the overall performance of risk management behaviors within an athletic department. This finding is consistent with previous research on a variety of subjects by Gray & Curtis (1991), Gray & Crowell (1993), Anderson & Gray (1994), and Gray & McKinstrey (1994) in which no significant differences were present when examining risk management behaviors in relation to undergraduate major. However, in a study of Iowa high school athletic directors, Gray & Park (1991) found that those with sport-related educational backgrounds performed higher than those athletic directors whose educational backgrounds were non-sport related.

Discussion of Analysis by Current Coaching Status. The fourth research question was stated as:

RQ4: Does an athletic director's current coaching status affect the degree to which risk management behaviors are performed within their athletic program?

Table 14 shows the results of the statistical analysis based on current coaching status. Data indicated that a significant difference existed across all 42 items combined (grand mean) strongly suggesting that current coaching status does indeed have an affect on the performance levels of risk management behaviors within an athletic program. In this case, those Florida high school athletic directors who did not currently coach scored significantly higher than their colleagues who worked not only as athletic director, but

also had coaching responsibilities. This result may be attributed to the fact that full-time athletic directors are not sharing their time or focus with other responsibilities such as coaching, therefore providing the subjects more time and energy to devote to their athletic director duties.

Discussion of Analysis by Previous Coaching Experience. The fifth research question was stated as:

RQ5: Does an athletic director's previous coaching experience affect the degree to which risk management behaviors are performed within their athletic program?

It would seem that those athletic directors that have had close exposure to sport through participation or previous coaching experience would be more likely to perform risk management behaviors at a higher level than colleagues without this kind of experience due to their understanding of the risks involved in various sports environments. However, this notion was not supported by the data in this study. Table 17 shows the results of the statistical analysis on the basis of the subject's previous coaching experience. Results indicated that no significant differences existed in the mean scores across all 42 items combined (grand mean) suggesting that an athletic director's previous coaching experience does not affect the overall performance of risk management behaviors within an athletic department. This is consistent with previous research on a variety of subjects by Gray & Park (1991), Gray & Curtis (1991), Anderson & Gray (1994), and Gray & McKinstrey (1994) in which no significant differences were present when examining risk management behaviors in relation to previous coaching experience. However, in a study of NCAA Division I athletic directors, Gray & Crowell (1993) found that those with previous coaching experience performed risk management behaviors overall at a higher level than those athletic directors with no prior coaching experience.

Discussion of Analyses by Graduate Major. The final research question was stated as:

RQ6: Does an athletic director's graduate major affect the performance level of risk management behaviors performed within their athletic program?

With the combination of unique insight and knowledge gained through coursework in such majors as physical education, athletic training, and sport

management, and the academic rigor of a graduate level education, one may assume that athletic directors with this level of educational preparation may perform risk management behaviors at a higher level than their colleagues without this background. However, the data in this study does not reflect this idea. Table 19 shows the results of the statistical analysis on the basis of the subject's graduate major. Results indicated that no significant differences existed in the mean scores across all 42 items combined (grand mean), thus suggesting that an athletic director's graduate major does not affect the overall performance of risk management behaviors within an athletic department. This is consistent with previous research on a variety of subjects by Gray & Park (1991), Gray & Curtis (1991), Gray & Crowell (1993), Anderson & Gray (1994), and Gray & McKinstrey (1994) in which no significant differences were present when examining risk management behaviors in relation to graduate major.

Summary

The primary objectives of this study were to: (1) to measure the degree to which Florida High School athletic directors utilize risk management within their athletic program and (2) to determine whether selected demographic factors (i. e. undergraduate major, years of experience as Athletic Director, level of education, etc.) have an effect on the performance levels of these risk management behaviors. To achieve these objectives a risk management survey instrument was administered to all Florida High School Athletic Association member athletic directors via mail-out, requesting them to indicate the performance levels of risk management behaviors within their program. Results of the study indicated that (1) the risk management behaviors being performed within Florida High School athletic departments are being performed on a rather consistent basis and that (2) the two primary factors that influenced FHSAA athletic director's performance of risk management behaviors were current employment status and current coaching status. It is important to note that in both instances, "full-time" athletic directors scored higher than those athletic directors who also had responsibilities as teacher, administrator, or coach.

Some previous research would seem to suggest that performance levels of risk management behaviors are a function academic preparation (Gray & Park, 1991), or

previous coaching experience (Gray & Crowell, 1993). It is perhaps logical to expect those athletic directors who have had close exposure to sport, such as through coaching, might be more likely to implement risk management behaviors since they have been closely involved with these in other capacities. It would also seem logical that those athletic directors who have studied academic majors related to sport might be more likely to implement risk management behaviors since they should have studied coursework pertaining to these issues (Gray & Crowell, 1993). However, the data in this study did not reinforce these findings.

Previous research containing significant results in relation to academic preparation and previous coaching experience were conducted in the late 1980's early 1990's. The legal climate surrounding the sport industry was very different 15-20 years ago than it is today. It is perhaps logical to think that at that time, access to the specialized knowledge of legal duty and risk management through either academic preparation and/or coaching was the overriding influence on higher performance levels of risk management behaviors, thus leading to the significant differences in scores.

In contrast, the current study found no such differences in scores between those with sport related or non-sport related undergraduate majors or those with or without previous coaching experience. In addition, no differences were found in performance levels between those with sport related or non-sport related graduate degrees and none between those with differing levels of education.

Significant differences in performance levels were found however between those who worked exclusively, full-time as athletic directors and those who worked as teachers, administrators, or coaches in addition to athletic director. These individuals with the dual role of teacher, coach, or administrator and athletic director scored consistently lower than their colleagues with the singular responsibility of athletic director.

This finding could have resulted from a number of reasons. However, one pervading theme in this study among the lower performance levels was time; more specifically (1) the time it took to perform a particular risk management behavior and (2) the time available to perform a specific risk management behavior.

By examining Table 4 (Ranked composite means and standard deviations for individual survey items) and Table 20 (A comparison of lowest composite means for

individual survey items among FHSAA athletic directors and previous research) one can clearly see that although the athletic directors generally indicated that they were performing most of the risk management behaviors addressed by the survey, items receiving the lowest scores were risk management behaviors related to documentation and inspection, two areas of risk management that tend to be very time consuming.

The finding that athletic directors who have dual responsibilities scored lower than those with singular responsibility also lends itself toward the theory that more responsibilities and duties, and the subsequent lack of time, may be a contributing factor in lower performance levels of risk management behaviors. However, the current study in no way proves this, nor is meant to be a definitive answer to the question of what factors contribute to the performance levels of risk management behaviors of athletic directors. The current study merely lends a piece to the literature on the relationship between the performance levels of risk management behaviors and Florida High School athletic directors.

Conclusions

Research in programmatic risk management is crucial to all physical education, recreation, and sport managers so they can establish and implement an effective, formal risk management plans. The results of this study should assist those who direct high school sports programs comply with their legal duties, provide safe programs, and enable personnel to defend themselves and their programs in the event of a lawsuit (Appenzeller, 1998).

In conclusion, the following observations were noted and offered as a summary to the findings:

1. Overall, Florida High School athletic directors generally indicated that they were performing most of the risk management behaviors addressed by the survey on a rather consistent basis.
2. Items receiving the lowest scores were risk management behaviors related to documentation and inspection, two areas of risk management that tend to be very time consuming.

3. The results of this study do not support the notion that overall performance levels of risk management behaviors are a function academic preparation (Gray & Park, 1991), and/or previous coaching experience (Gray & Crowell, 1993).
4. Significant differences in performance levels were found between those who worked exclusively, full-time as athletic directors and those who worked as teachers, administrators, or coaches in addition to athletic director. These individuals with the dual role of teacher, coach, or administrator and athletic director scored consistently lower than their colleagues with the singular responsibility of athletic director.
5. The summary of significant results lends itself to question whether more responsibilities and duties, and the subsequent lack of time, may be a contributing factor in lower performance levels of risk management behaviors.

Suggestions for Future Research

Based on the results of this study and related review of research, the following recommendations were made for future research:

1. A replication of this study using high school athletic directors from different regions across the United States.
2. A similar study measuring the effect of various factors such as school enrollment, size of athletic department, and years of experience as an athletic director on the performance levels of risk management behaviors.
3. A series of longitudinal studies should be conducted to ascertain whether factors affecting the performance levels of risk management behaviors remain stable over time.
4. A similar study utilizing additional measures such as the Maslach Burnout Inventory (MBI), and/or the Job Characteristics Inventory to assess the affect job satisfaction and burnout may have on the performance levels of risk management behaviors.
5. A qualitative study of Florida high school athletic directors to help understand more thoroughly their experience, motivations, and/or barriers to performance of risk management behaviors within their athletic departments.

APPENDIX A

PANEL OF EXPERTS (CONTENT VALIDITY)

Panel of Experts Utilized to Establish Content Validity

Dr. Annie Clement, *Professor, Sport Management*
Barry University

Dr. Gary R. Gray, *Director of Intercollegiate Athletics*
Montana State University

Ronnie Youngblood, *Executive Director of Communications and Community Involvement*
Leon County Schools

Ricky Bell, *Director of Leon County School Activities*
Leon County Schools

Jim Sauls, *Athletic Director*
Leon High School

Art Witters, *Athletic Director*
Amos P. Godby High School

Paul Lambert, *Athletic Director*
Lawton Chiles High School

APPENDIX B

DEFENSE ANOUNCEMENT

Dissertation

Name: Thomas C Aaron **Phone:** 863-638-2977

Department: Sport Management, Recreation Management and Physical Education

Major Professor: Dr. Annie Clement

Defense Day: April 22, 2004 @ 10:30

Location: Tully 216

Title: Factors affecting the performance levels of risk management behaviors of Florida high school athletic directors

APPENDIX C

HUMAN SUBJECTS APPROVAL LETTER

Florida State
UNIVERSITY

Office of the Vice President
For Research
Tallahassee, Florida 32306-2763
(850) 644-8673 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Human Subjects Committee

Date: 5/10/2003

Thomas Aaron
P. O. Box 165
Babson Park , FL 33827

Dept.: **Sports Management**

From: **David Quadagno, Chair**

Re: **Use of Human Subjects in Research**
Factors Affecting the Performance Levels of Risk Management Behaviors of Florida High School Athletic Directors

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be exempt per 45 CFR § 46.101(b) 2 and has been approved by an accelerated review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If the project has not been completed by **5/15/2004** you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. Also, the principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00000446.

Cc: Dr Annie Clement
HSC No. 2003.247

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APPENDIX D

SURVEY COVER LETTER

August 1, 2003

Dear Athletic Director,

I am a graduate student under the direction of Dr. Annie Clement in the Department of Sport Management, Recreation Management, and Physical Education at Florida State University. As part of my work toward a doctorate degree, I am conducting a study of Florida high school athletic directors. The purpose of this study is to gain an understanding of the factors that contribute to the performance of risk management behaviors among Florida high school athletic directors.

Your participation will involve answering the items on the enclosed survey and should only take about 5 – 7 minutes. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time. This questionnaire is anonymous. The results of the study may be published, but your name will not be linked to responses in publications that are released from the project. All information you provide will remain strictly confidential.

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact me at (850) 228-3318, the Chair of the Human Subjects Committee, Institutional Review Board, through the Vice President for the Office of Research at (850) 644-8633, or my faculty advisor, Dr. Annie Clement, at (850) 644-9214.

By returning this questionnaire in the envelope provided, you will be agreeing to participate in the above described project.

Thanks for your consideration!

Sincerely,

Thomas C Aaron
Doctoral Candidate, The Florida State University

APPENDIX E

RISK MANAGEMENT SURVEY INSTRUMENT

Part I - Athletic Directors' Survey

Instructions:

The following is a list of 49 statements, all of which represent "ideal" behaviors of high school athletic directors in regard to risk management/injury prevention strategies. Please indicate TO WHAT DEGREE YOU PERFORM THESE BEHAVIORS. Your responses will be treated with complete confidentiality. Please circle the number which best describes your behavior regarding the point expressed in each statement. Please also complete the demographic data section which follows the survey for purposes of statistical analysis.

	Never	Seldom	Sometimes	Often	Always
1. The athletic director provides in-service training for coaches to ensure they are kept up to date on the latest coaching techniques.	1	2	3	4	5
2. The athletic director ensures that facility designs that pose a hazard are identified and corrected (e.g. Walls too close to the playing area, sharp edges or other protrusions too close to the playing area, etc.)	1	2	3	4	5
3. The athletic director supervises new coaches regularly to ensure that safety procedures are being followed.	1	2	3	4	5
4. The athletic director ensures that drivers of private vehicles used to transport athletes to contests are properly licensed and have sound driving records (If use of private vehicles is never allowed, please mark "6").	1	2	3 6	4	5
5. The athletic director ensures that coaches take worn or defective equipment out of use immediately.	1	2	3	4	5
6. The athletic director ensures that spectators are warned of any hidden dangers on the premises (e.g. appropriate signage, barricades, etc.).	1	2	3	4	5
7. The athletic director ensures that coaches have training in first aid procedures.	1	2	3	4	5
8. When scheduling athletic contests, the athletic director ensures that opponents are of reasonably similar ability to prevent injury due to superior athletic ability.	1	2	3	4	5
9. The athletic director has an objective screening process to hire competent and qualified staff.	1	2	3	4	5

	Never	Seldom	Sometimes	Often	Always
10. The athletic director ensures that the number of spectators does not exceed the facility capacity established by the fire marshal.	1	2	3	4	5
11. The athletic director ensures that participants are warned in writing of the inherent risks in their sport.	1	2	3	4	5
12. When using school cars or vans to transport students, the athletic director ensures that the driver(s) is properly licensed and has a sound driving record.	1	2	3	4	5
13. The athletic director attends practices on a regular basis.	1	2	3	4	5
14. The athletic director sees that a current medical history file is kept on each athlete in the sports program.	1	2	3	4	5
15. The athletic director ensures that coaches prepare written practice plans.	1	2	3	4	5
16. The athletic director ensures that spectators are safe from injury from the area of play (e.g. from stray balls, collisions with players who leave playing area, etc.).	1	2	3	4	5
17. The athletic director hires officials who are qualified by the state organization.	1	2	3	4	5
18. The athletic director designates a person as the safety officer for the athletic program (e.g. athletic trainer or other).	1	2	3	4	5
19. The athletic director ensures that coaches use standard, professionally acceptable coaching techniques.	1	2	3	4	5
20. The athletic director ensures that all participants have appropriate medical insurance prior to participation.	1	2	3	4	5
21. The athletic director ensures that all participants have medical examinations before each school year.	1	2	3	4	5
22. The athletic director has developed emergency evacuation procedures for athletic contests to ensure that safe and timely evacuation is maintained in the event of an emergency (e.g. fire, tornado, etc.).	1	2	3	4	5

	Never	Seldom	Sometimes	Often	Always
23. When attending practices, the athletic director stops unsafe activities that may be occurring.	1	2	3	4	5
24. The athletic director ensures safe storage of equipment to prevent unauthorized and unsupervised use.	1	2	3	4	5
25. The athletic director ensures that safety clinics are conducted to keep coaches up to date on safety issues.	1	2	3	4	5
26. The athletic director ensures that coaches follow written procedures for emergency first aid in the event of a medical emergency.	1	2	3	4	5
27. The athletic director ensures that coaches follow a formal system of inspecting equipment at appropriate intervals.	1	2	3	4	5
28. The athletic director ensures that coaches and/or trainers use prudent judgment in determining whether an athlete with pain or injury should continue to play.	1	2	3	4	5
29. When attending games, the athletic director stops any unsafe activities that may be occurring.	1	2	3	4	5
30. The athletic director ensures that a formal system of inspecting facilities for safety before each competition is followed.	1	2	3	4	5
31. The athletic director conducts formal written evaluations of staff.	1	2	3	4	5
32. During athletic contests, the athletic director ensures that proper aisles and walkways are kept clear for orderly exiting in the event of an emergency.	1	2	3	4	5
33. The athletic director ensures that written permission from parents or guardians is secured before students are allowed to be transported to or from an out of town athletic event by means other than the official school carrier.	1	2	3	4	5
34. The athletic director ensures that coaches follow an appropriate facility safety inspection prior to practices each day.	1	2	3	4	5
35. The athletic director ensures that coaches are present at all practice sessions so that athletes are not left unsupervised.	1	2	3	4	5
36. School-owned vehicles or privately contracted transport services are used to transport athletes to out of town contests.	1	2	3	4	5

	Never	Seldom	Sometimes	Often	Always
37. The athletic director ensures that sports equipment used meets the standards established by the sport. (e.g. Correct classifications of helmets as mandated by NOCSAE, etc.).	1	2	3	4	5
38. The athletic director ensures that a specific protocol for physician or athletic trainer approval is followed before an athlete returns to competition following an injury	1	2	3	4	5
39. The athletic director ensures that facilities deemed unsafe or in need of repair are not used until corrections are made	1	2	3	4	5
40. The athletic director ensures that coaches provide athletes properly fitted equipment.	1	2	3	4	5
41. The athletic director ensures that injury report forms are completed promptly following injuries.	1	2	3	4	5
42. The athletic director ensures that privately-owned vehicles used to transport athletes to out-of-town contests are in safe working condition. (If use of private vehicles is never allowed, please mark "6").	1	2	3 6	4	5
43. The athletic director provides adequate security and supervision at athletic contests to ensure the personal safety of spectators, athletes, and officials.	1	2	3	4	5
44. The athletic director ensures that facilities are maintained on a regular basis to provide a clean environment.	1	2	3	4	5
45. The athletic director ensures that an injury surveillance system is developed (i.e. monitor injury rates, their causes, and strategies to prevent similar injuries).	1	2	3	4	5
46. The athletic director ensures that informed consent forms (agreements to participate) are signed by the parents or guardians of minor participants prior to participation.	1	2	3	4	5
47. The athletic director attends the school's athletic contests on a regular basis.	1	2	3	4	5
48. The athletic director ensures that coaches attend coaching clinics in their sport.	1	2	3	4	5
49. The athletic director ensures that identified facility hazards are properly repaired.	1	2	3	4	5

Part II - Demographic Data

1. Gender: Male _____
Female _____

2. Age: _____

3. Educational background:

Bachelor's degree _____
Master's degree _____
Doctoral degree _____
Other (please specify) _____

4. Major field of study for bachelor's degree: _____

5. If you have a graduate degree(s), what was your major field(s) of study?

_____

_____

6. Current status:

_____ Full-time A. D.
_____ Part-time A. D.
(list % of each) % teacher: _____ % A. D.
_____ Part-time A. D.
(list % of each) % other: _____ % A. D.

*describe other (e.g. principal, counselor, etc.) _____

7. Do you presently coach any sports at your school?:

_____ No
_____ Yes
*If yes, please specify which sport(s): head or assistant coach?

_____ _____
_____ _____
_____ _____

8. How many years of experience have you had as an athletic director? _____

9. How many years have you been athletic director at your present school? _____

10. Did you coach prior to becoming an athletic director?

_____ No
_____ Yes
*If yes, please specify which sport(s): head or assistant coach?

_____ _____
_____ _____
_____ _____

11. How many students attend your high school? _____

12. What is your Florida High School Activities Association classification for football?

_____ 1A _____ 4A _____ N/A
_____ 2A _____ 5A
_____ 3A _____ 6A

APPENDIX F

FHSAA MEMBER SCHOOLS

Abundant Life Christian Academy
Academy at the Lake Day School
Academy for the Community Edauca
Academy of the Holy names
Academy Prep School
Admiral Farragut Academy
All Saint's Academy
Allison Academy
Alonso High School
Altamonte Christian School
Altha High School
American Heritage School, Delray Be
American Heritage School, Plantatior
American High School
Andrew Jackson High School
Apalachicola High School
Apopka High School
Archbishop Carroll High School
Archbiskop Curley High School
Archbiskop McCarthy High School
Armwood High School
Arnold High School
Astronaut High School
Atlantic Community High School
Atlantic High School
Auburndale High School
Aucilla Christian High Academy
Avon Park High School
Baker High School
Baker County Middle School
Baker High School
Baldwin High School
Barron High School
Bartow High School
Bartram High School
Bay High School
Bayonet Point High School
Bayshore Christian School
Bayshore High School
Bayside High School
Belen Jesuit Prep School
Bell High School
Benjamin School
Berean Christian School
Berkeley Preparatory School
Bethlehem High School
Bishop John J. Snyder
Bishop kenny High School
Bishop Moore High School
Bishop Verot High School
Blake High School
Bloomingdale High School
Blountstown High School
Blountstown Middle School
Boca Ciega High School
Boca Raton Christian School
Boca Raton High School
Boca Raton Prep
Bolles School
Bonifay Middle School
Booker High School
Boone High School
Boyd Anderson High School
Boynton Beach High School
Braddock High School
Bradenton Academy
Bradenton Christian School
Bradford High School
Bradford Middle School
Brandon High School
Branford High School
Brevard Christian School
Brito Miami Praivate School
Bronson High School
Broward Christian School
Buchholz High School
Callahan Middle School
Calusa Prep School
Calvary Baptist Church Academy
Calvary Christian Academy, Ft Laun
Calvary Christian Academy, Ormond Beach
Calvary Christian High School
Calvary Christian Academy
Canterbury School, Fort Myers
Canterbury School, St. Petersburg
Cape Coral High School
Cardinal Gibbons High School
Cardinal Mooney High School
Cardinal Newman High School
Carrabelle High School
Carrollton School
Carter-parramore Middle School
Cedar Creek Christian School
Cedar Key High School
Celebration School
Centennial High School
Centennial Middle School
Central Florida Christian Academy
Central High School, Milton
Central High School, Brooksville
Chamberlain High School
Chaminade-Madonna College Prep
Champagnat Catholic School
Charlotte High School
Chasco Middle School
Chattahoochee High School
Chiefland High School
Chiefland Middle School
Chiles High School
Chipley high School
Choctawatchee High School
Christopher Columbus High School
Circle Christian School
Citrus High School
Citrus Park Christian School
Citrus Springs Middle School
Clay High School
Clearwater Central Catholic
Clearwater High School
Clewiston High School

Clewiston Middle School
Cocoa beach High School
Cocoa High School
Coconut Creek high School
Colonial Christian School
Colonial High School
Columbia High School
Community Christian School, Tallaha
Community Christian School, Port Cl
Community Christian School, Stuart
Community School of Naples
Cooper City High School
Coral Gables High School
Coral Reef High School
Coral Shores High School
Coral Springs Charter School
Coral Springs Christian Academy
Coral Springs High School
Cottondale High School
Countryside Christian School
Covenant Christian School
Crescent City High School
Crestview High School
Crooms Academy of Information
Crystal River High School
Crystal Tiver Middle School
Cypresss Bay
Cypress Creek High School
Cypress Lake High School
Dade Christian School
David Posnack Hebrew Day School
Deerfield Beach High School
DeLand High School
Deltona High School
Design & Architecture High School
Dixie County High School
Dixie Hollins High School
Donna Klein Jewish Academy
Doral Academy High School
Douglas High School
Downey Christian School
Dr. Krop High School
Dr. Phillips High School
Dreyfoos School of the Arts
Dunbar High School
Dunedin High School
Dunellon Christian School
Durant High School
Dwyer High School
Eagle's View Academy
East Bay High School
East Hill Christian School
East Lake High School
East Ridge High School
Eastland Christian School, Orlando
Eastland Christian School, Gainsville
Eastside High School
Eau Gallie High School
Ed White High School
Edgewater High School
Ely High School
Englewood High School
Episcopal High School
Escambia High School
Estero High School
Eustis High School
Evangel Christian School
Evangelical Christian School
Evans High School
Everglades City High School
Faith Christian Academy
Faith Christian School
Father Lopez High School
Fellowship Christian Academy
Fernandina Beach High School
Fernandina Beach Middle School
First Academy
First Baptist School
First Coast Christian School
First Coast High School
Flagler Palm Coast High School
Flanagan High School
Fletcher High School
Florida Air Academy
Florida Bible Christian School
Florida Christian School
Florida School for the Blind
Florida School for the Deaf
Forest High School
Forest Hill High School
Forest Lake Academy
Forrest High School
Fort Launderdale Christian School
Fort Launderdale High School
Fort Launderdale Preparatory School
Fort Meade High School
Fort Myers High School
Fort Pierce Central High School
Fort Pierce Westwood High School
Fort Walton Beach High School
Fort White High School
Foundation Academy
Fox Chapel Middle School
Freeport High School
Freeport Middle School
Frostproof High School
FSU High School
Gainsville High School
Gaither HighS Chool
Gateway High School
Genesis Prep School
Geneva High School
Gerorge Jenkins High School
Gibbs High School
Gifford Middle School
Glades Central High School
Glades Day School
Godby High School
Gold Cost High School
Goleman High School
Grace Christian School
Graceville High School
Grade Ridge High School

Grandview Preparatory School
Greater Miami Academy
Green Cove Springs Jr. High School
Greensboro High School
Gulf Breeze High School
Gulf Coast High School, Pensacota
Gulf Coast High School, Naples
Gulf High School
Gulf Middle School
Gulliver Prep
Haines City HighS chool
Halifax Academy
Hallandale High School
Hamilton County High School
Hardee High School
Hardee Junior High School
Havana Middle School
Havana Northside High School
Haven Christian Academy
Hawthorne High School
Hebrew Academy
Hendricks Methodist Day School
Heritage Christian Academy
Heritage Christian School
Heritage Prep School
Hernando High School
Hialeah High School
Hialeah Miami lakes High School
Hidden Oaks Middle School
Highlands Christian Academy
Hillel High School
Hilliard high School
Hillsborough High School
Hollywood Christian School
Hollywood Hills High School
Holmes County High School
Holy Comforter Episcopal School
Holy Cross Academy
Holy Trinity Episcopal Academy
Hometead High School
Howard Middle School
Hudson High School
Hudson Middle School
Immokalee High School
Indian Rocks Christian School
Indiantown Middle School
Inlet Grove High School
Interlachen High School
Invernes Middle School
Island Christian School
Jacksonville Adventist Academy
Jay High School
Jefferson High School
Jesuit High School
John Carroll High School
John I. Leonard High School
John Paul II Catholic High School
Jones High School
Jupiter Christian School
Jupiter High School
Kathleen High School
Keswick Christian School
Key Largo School
Key West High School
Keystone Heights High School
King High School
King's Academy
LaBelle High School
LaBelle Middle School
Lafayette High School
Lake Brantley High School
Lake Butler Middle School
Lake City Middle School
Lake Gibson High School
Lake Highland Prep School
Lake Howell High School
Lake Mary High School
Lake Mary Preparatory School
Lake Placid High School
Lake Region High School
Lake Wales High School
Lake Weir High School
Lake Worth Christian School
Lake Worth High School
Lakeland Christian School
Lakeland High School
Lakeside Christian School
Lakeside Junior High School
Lakewood High School
Lakewood Ranch High School
Land O'Lakes High School
Landmark Christian High School
LaProgresiva Presbyterian School
Largo High School
LaSalle High School
Larurel Hill High School
Lawtey Community School
Lecanto High School
Lecanto Middle School
Leesburg High School
Legacy High School
Lehigh High School
Lely High School
Lemon Bay High School
Leon high School
Leto High School
Liberty County High School
Life Academy
Lighthouse Christian Academy
Lincoln High School
Lincoln Park Academy
Loften High School
Lyman High School
Maclay School
Madison County Central
Madison County High School
Mainland High School
Malone High School
Manatee HEAT
Manatee High School
Mandarin Christian School
Mandarin High School
Marantha Christian School

Marathon High School
Marianna High School
Marianna Middle School
Mariner High School
Martin County High School
MAST Academy
Master's Academy, Ft Launderdale
Master's Academy, Oviedo
McArthur High School
McKeel Academy
Melbourne Central Catholic
Melbourne High School
Menendez High School
Merritt Island Christian School
Merritt Island High School
Miami Beach High School
Miami Carol City High School
Miami Central High School
Miami Christian School
Miami Coral Park High School
Miami Country Day School
Miami Douglas MacArthur North
Miami Douglas MacArthur South
Miami Edison High School
Miami High School
Miami Jackson High School
Miami Killian High School
Miami Norland High School
Miami Northwestern High School
Miami palmetto High School
Miami Southridge High School
Miami Springs High School
Miami Sunset High School
Miami Union Academy
Middleburg High School
Milton High School
Miramar High School
Mitchell High School
Monsignor Pace High School
Montverde Academy
Moore Haven High School
Morningside Academy
Mosley High School
Mount Dora Bible School
Mount Dora High School
Mount Hermon Christian School
Mulberry High School
Munroe Day School
Murray Middle School
Naples High School
Navarre High School
Nease High School
New Dimensions High School
New Smyrna Beach High School
Newbwrry High School
Niceville High School
North Broward Prep School
North Florida Christian School
Nort Fort Myers High School
North Hamilton School
North Launderdale Academy
North Marion High School
North Miami Beach High School
North Miami High School
North Port High School
Northeast High School, Oakland
Northeast High School, St. Petersburg
Northside Christian School
Northview High School
Northwest Christian Academy
Nova High School
Oak Hall School
Oak Ridge High School
Ocala Christian Academy
Acala Word of Faith Academy
Okeechobee High School
Oldsmar Christian School
Olympia High School
Olympics Heights High School
Orange Park Christian Academy
Orange Park High School
Orange Park Junior High School
Orangewood Christian School
Orlando Christian prep School
Orlando Lutheran Academy
Osceola High School, Kissimmee
Osceola High School, Seminole
Osceola Middle School
Oslo Middle School
Our Lady of Lourdes Academy
Out-of-Door Academy
Ovideo High School
P.K. Yonge School
Pace High School
Pahokee High School
Palatka High School
Palm Bay Babtist Academy
Palm Bay High School
Palm Beach Day School
Palm Beach Gardens High School
Palm Beach Lakes High Scool
Palm Harbor University High
Palmer Trinity School
Palmetto High School
Panama City Christian
Parkway Academy
Parrott Middle School
Pasco High School
Pasco Middle School
Paxon School for Advanced Studies
Paxton High School
pembroke Pines Charter School
Pendleton School
Peniel Baptist Academy
Pensacola Catholic High School
Pensacola Christian Academy
Pensacola High School
Pine Castle Christian Academy
Pine Crest School
Pine Forest High School
Pine Ridge High School
Pine View Middle School
Pinellas Christian Homeschool

Pinellas Park High School
Piper High School
PLACE Academy
Plant City High School
Plant High School
Plantation High School
Poinciana High School
Pompano Beach High School
Ponce de Leon High School
Pope John Paulus II High School
Poplar Springs High School
Port Charlotte High School
Port St. Joe High School
Port St. Joe Middle School
Port St. Lucie High School
Posnack Hebrew Day School
Potter's House Christian Academy
Powell Middle School
Princeton Christian School
Providence Christian School
Providence School
R.J. Hendely Christian School
Raines High School
Rains Middle School
Ransom Everglades School
Redland Christian Academy
Ribualt High School
Richardson Middle School
Richards High School
Ridgeview High School
Ridgewood High School
River Ridge High School
Riverdale High School
Riversprings Middle School
Riverview High School, Riverview
Riverview High School, Sarasota
Robert E. Lee High School
Robinson High School
Rock School
Rockledge High School
Rocky Bayou Christian School
Roulhac Middle School
Royal Palm Beach High School
Rutherford High School
Saddlebrook Prep
Sagemont Upper School
Sandalwood High School
Santa Fe Catholic High School
Santa Fe High School
Santaluces High School
Sarasota Christian School
Sarasota High School
Satellite High School
Seabreeze High School
Sebastian River High School
Sebastian River Middle School
Sebring High School
Seffner Christian Academy
Seminole High School, Sanford
Seminole High School, Seminole
Seminole Trinity Christian School
Seven Rivers Christian School
Seven Springs Middle School
Shank High School
Sheridan Hills Christian School
Shorecrest Prep School
Sickles High School
Sneads High School
Sonrise Christian School
South Broward High School
South Dade High School
South Fork High School
South Hamilton School
South Lake High School
South Miami High School
South Plantation High School
South Sumter High School
South Sumter Middle School
Southeast High School
Southland Christian School
Southwest Florida Christian
Southwest Miami High School
Space Coast Jr. / Sr. HS
Soanish River High School
Springstead High School
Spruce Creek High School
St. Andrew's School
St. Augustine High School
St. Brendan High School
St. Cloud High School
St. Edward's School
St. John Lutheran School
St. John Neumann High School
St. Johns Country Day School
St. Joseph Academy
St. Petersburg Catholic High School
St. Stephen's Episcopal School
St. Thomas Aquinas High School
Stanton College Prep School
Stetson Baprist Christian School
Steward Middle School
Stranahan High School
Stuart Middle School
Summit Christian School
Suncoast High School
Suwannee High School
Suwannee Middle School
Tampa Baptist Academy
Tampa Bay Technical High School
Tampa Catholic High School
Tampa Prep School
Taravella High School
Tarpon Springs High School
Tate High School
Tavares High School
Taylor County High School
Taylor County Middle School
Taylor High School
Temple Christian School
Temple Heights Christian School
Terry Parker High School
The Cambridge School
Timber Creek High School

Titusville High School
Trenton High School
Trinity Catholic High School
Trinity Catholic Middle School
Trinity Christian Academy, Deltona
Trinity Christian Academy, Lake Wo
Trinity Christian Academy, Jacksonv
Trinity Prep School
Union County High School
Universal Academy of Florida
University Christian School
University High School
University School
Vanguard High School
Vanguard School
Varela High School
Venice High School
Vernon High School
Vernon Middle School
Vero Beach High School
Villages Charter Middle School
Wakulla High School
Wakulla Middle School
Walker Memorial Academy
Walton High School
Walton Middle School
Warner Christian Academy
Washington High School, Pensacola
Washington High School, Miami
Weightman Middle School
Wellington Christian Academy
Wellington High School
Wesley Chapel High School
West Florida High School of Adv Tec
West Hernando Middle School
West Nassau County High School
West Oaks Academy
West Orange High School
West Port High School
West Shore High School
Western High School
Westlake School
Westminister Academy
Westminister Christian School
Westwood Christian School
Wewahitchka High School
Wharton High School
Wildwood High School
Wildwood Middle School
Wilkinson Junior High School
Williston High School
Williston Middle School
Windermere Preparatory School
Winter Haven High School
Winter Park High School
Winter Springs High School
Wolfson High School
Woodham High School
Yearling Middle School
Yeshiva High School
Yulee High School
Zephyrhills High School
Zion Lutheran Christian School

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