# Risk Management Behaviors of NCAA Division III Head Football Coaches

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## **INTRODUCTION**

Coaches today face an ever-increasing responsibility for the safety of the participants in their programs. With the increase in litigation of sport-related injuries in recent years, it is of the utmost importance that coaches take the appropriate measures to reduce the likelihood of injuries occurring.

The allegation of negligence is the most common type of tort brought to legal action in school athletic situations (Carpenter and Acosta, 1982). In order for coaches to stay out of the court room and on the playing field, it is important for them to attempt to foresee possible dangers and take the necessary steps to prevent unreasonable injuries to their athletes. Developing risk management strategies can help coaches in this important area. Risk management is essentially a process of understanding and identifying those circumstances in which accidents are most likely to occur and taking appropriate steps to minimize their occurrence (Dougherty, 1983). Risk management is a proactive, preventive approach to injuries or accidents, rather than a reactive, after-the-fact approach.

It was, therefore, the purpose of this study to measure 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. It is important to note that most of the survey questions did not ask whether the head coach actually performed the specific risk management behaviors personally. Rather, the survey questions were directed more to the issue of whether the specific risk management behaviors were performed within the varsity football program by someone. For example, some of the risk management behaviors might have been performed by an athletic trainer, an equipment manager, a facilities manager, an assistant coach, or a student manager. However, since the head coach is the person responsible for the overall operation of the varsity football program,

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he should be aware of the degree to which specific risk management behaviors were being performed within the varsity football program.

### **METHODOLOGY**

The subjects selected for this study were all NCAA Division III head football coaches (N=225). Completed surveys were received from 182 subjects, for a return rate of 81%. A 36-item survey developed by the investigators was used to collect data related to the specific risk management behaviors within each NCAA Division III varsity football program as reported by the head football coaches. The survey questions addressed safety and risk management behaviors in six conceptual areas, including: 1) supervision, 2) instruction, 3) warnings, 4) facilities, 5) equipment, and 6) medical concerns. In addition, 16 questions collected relevant demographic data about each respondent and each football program represented.

A 5-point Likert scale was used by each respondent to indicate the degree to which the head football coach believed that the specific behavior identified in each survey statement was performed by someone connected with the varsity football program. Circling a "1" for an item indicated that the behavior was "never" performed. Circling a "2" signified that the behavior was "seldom" performed. A "3" was circled if a specific behavior was "sometimes" performed. A "4" was circled if the behavior was "often" performed. Finally, circling a "5" indicated that the behavior was "always" performed. This Likert scale of consistency was utilized based upon the reasoning that consistently performing specific risk management behaviors is important in attempting to reduce the likelihood of injury to program participants. Theoretically at least, the "safer" programs are the ones in which carefully planned risk management behaviors are consistently implemented.

#### RESULTS AND DISCUSSION

Table 1 shows relevant demographic data collected from the survey respondents (N=182).

**Table 1.** Demographic data of respondents and their programs (N=182)

Age	M = 43.913  years	(Rang	ge = 27  to  71)
Gender	Male = 100%		
Race	Caucasian	=	164 (90.1%)
	African American	=	4 (2.2%)
	Native American	==	2 (1.1%)
	Hispanic	=	1 (.5%)
	Asian American	=	1 (.5%)
Highest Degree	Bachelor's	=	30 (16.5%)
Earned	Master's	-	145 (79.7%)
	Doctoral	=	3 (1.6%)

Bachelor's Degree Major	Sport-related = 97 (53.3%) Nonsport-related = 80 (44%)
Graduate Degree Major	Sport-related = 91 (50%) Nonsport-related = 56 (30.8%) No graduate degree = 30 (16.5%)
Coaching Status	Full-time coach = 149 (81.9%) Part-time coach/ Part-time teacher = 19 (10.4%) Part-time coach/ Full-time other employment = 5 (2.7%)
	Do not coach other sport(s) = $122 (67.0\%)$ Do coach other sport(s) = $56 (30.8\%)$
Coaching Experience	Mean years as head FB coach = 12.878 Mean years as NCAA Division III head FB coach = 8.864 (Range = 1 to 44)
Highest Level of FB Playing Experience	College = 145 (79.7%) Professional = 14 (7.7%) High school = 9 (4.9%) Semi-pro = 8 (4.4%)
Coaching Staff	Mean number of paid assistants = 5.511 Mean number of volunteer assistants = 1.901
Student Enrollment	Mean = 2840.273 (Range = 200 to 29,000)
Institution Classification	Private = 154 (84.6%) Public = 23 (12.6%)
First Aid and CPR Training	First aid certification = 41 (22.5%) No first aid certification = 134 (73.6%)
	CPR certification = 53 (29.1%) No CPR certification = 122 (67.0%)
Athletic Trainers	Mean no. of full-time ATC = 1.602 (Range = 0 to 4)  Employ at least 1 full-time ATC = 174 (95.6%)  No full-time ATC = 3 (1.6%)  Mean no. of part-time ATC = 1.344 (Range = 0 to 8)  Mean no. of student trainers = 6.338

Table 2 shows the ranked means and corresponding standard deviations for each of the 36 survey items among all respondents (N=182).

Table 2. Ranked means and standard deviations for each survey item (N=182)

Item Descriptor	Rank	Mean	<u>S.D.</u>
Head coach present at games	1	5.000	0.000
Head coach present at practice sessions	2	4.989	0.105
Medical emergency plan developed	3	4.972	0.195
Medical assistance available at events	4	4.940	0.335
Athletes' medical history documented	5	4.901	0.435
Athletes required to have annual physical exams	6	4.890	0.555
Injury reports completed	6	4.890	0.419
Close supervision provided for practice drills	6	4.890	0.378
Travel to games in school provided transportation	9	4.852	0.400
Coaches develop written practice plans	10	4.802	0.509
Practice drills sequenced in order of complexity	11	4.764	0.685
Equipment meets industry safety standards	12	4.749	0.725
No defective equipment used by athletes	13	4.737	0.698
Equipment properly fitted for athletes	14	4.707	0.713
Progressive conditioning program developed	15	4.691	0.599
Instruct athletes on proper use of equipment	16	4.683	0.638
General supervision of drills/activities provided	17	4.665	0.549
Coaches teach athletes FB rules and regulations	17	4.665	0.559
Football equipment design not altered	19	4.593	0.710
Football equipment inspected	20	4.525	0.814
Facility hazards repaired	21	4.519	0.742
No unsafe facilities used until repaired	22	4.345	0.898
Coaches demonstrate appropriate skill techniques	23	4.341	0.685
Football facilities inspected before use	24	4.283	0.970
Coaches reinforce verbal safety warnings	25	4.258	0.895
Supervision provided in weight room	26	4.111	1.030
Football playing surface inspected before use	27	4.088	1.040
Practice plans kept on file	28	4.055	1.044
Coaches entertain questions about football risks	29	3.978	1.110
Athletes read equipment warning labels	30	3.857	1.355
Athletes warned of football risks in writing	31	3.845	1.498
Supervision provided in locker room	32	3.440	1.110
Coaches demonstrate improper skill techniques	33	3.298	0.989
Coaches use sport risk assessment system	34	3.185	1.515
Equipment inspections documented in writing	35	3.115	1.641
Athletes sign written football warnings	36	2.961	1.871

# MANALYSIS BY CURRENT COACHING STATUS

Table 3 shows the results of the statistical analyses conducted on the basis of current coaching status (i.e., full-time coaches v. part-time coaches). T-tests indicated that no significant differences existed in the subjects' mean scores across all 36 survey items combined (grand composite mean) or within any of the six conceptual areas. Four significant differences existed among the 36 individual survey items (p<.05).

Table 3. Analysis by current coaching status

# **GRAND COMPOSITE MEAN**

Full-time 4.3754 Part-time 4.4032

Instruct proper use of equipment

# CONCEPTUAL AREAS

CONCEPTUAL AREAS					
<b>Status</b>	<b>Supervision</b>	<b>Instruction</b>	<b>Warnings</b>		
Full-time	4.5746	4.3682	3.7456		
Part-time	4.4926	4.3522	4.0138		
	<u>Facilities</u>	<b>Equipment</b>	Medical		
Full-time	4.3255	4.4397	4.9070		
Part-time	4.2011	4.4694	4.9862		
INDIVIDUAL SURV	EY ITEMS				
Supervision in we	eight room	FT 4.176	59		
- -		PT 3.758	$36 \ (p = .046)$		
Teach football rul	es and regulations	FT 4.630	)9		
		PT 4.827	$76 \ (p = .026)$		
Entertain question	as about football risk	s FT 3.912	22		

Table 4 shows the results of the statistical analyses conducted on the basis of other sports coached (i.e., other sport(s) coached v. no other sport(s) coached). Ttests indicated that no significant differences existed in the subjects' mean scores across all 36 survey items combined (grand composite mean) or within any of the six conceptual areas. Similarly, there were no significant differences among the 36 individual survey items when analyzed by other sports coached.

PT 4.4138 (p = .007)

PT 4.9643 (p = .000)

FT 4.6216

Table 4. Analysis by Other Sports Coached

## GRAND COMPOSITE MEAN

Coach other sport(s) 4.3788 Do not coach other sport(s) 4.3804

# **CONCEPTUAL AREAS**

<u>Status</u>	<b>Supervision</b>	<b>Instruction</b>	<b>Warnings</b>
Coach other sport(s)	4.5476	4.4031	3.9295
Do not coach other Sport(s)	4.5675	4.3484	3.7250
	Facilities	<b>Equipment</b>	Medical
	<u> acmerco</u>	Equipment	IVACUICUI
Coach other sport(s)	4.3259	4.3699	4.8821
Coach other sport(s)  Do not coach other sport(s)			

Table 5 shows the results of the statistical analyses conducted on the basis of the subjects' educational backgrounds (i.e., bachelor's degree v. master's degree). T-tests indicated that no significant differences existed in the subjects' mean scores across all 36 survey items combined (grand composite mean) or within five of the six conceptual areas. Significant mean differences were found within one of the six conceptual areas as well as two of the individual survey items. In each of these instances, coaches with master's degrees scored higher than did coaches with bachelor's degrees.

Table 5. Analysis by Educational Background

#### GRAND COMPOSITE MEAN

Bachelor's degree 4.2773 Master's degree 4.4004

## **CONCEPUTAL AREAS**

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	Degree	Supervision	Instruction	<u>vv arnings</u>
	Bachelor's	4.6190	4.2810	3.2817
	Master's	4.5511	4.3887	3.8803 (p=.012)
		<u>Facilities</u>	<b>Equipment</b>	<u>Medical</u>
	Bachelor's	4.2500	4.4283	4.8533
	Master's	4.3316	4.4441	4.9321
INI	DIVIDUAL SURVEY	ITEMS		
	Athletes warned of ri	sk in writing	Bachelor's	3.1667
		_	Master's	3.9653 (p=.008)
	Athletes sign written	warnings	Bachelor's	2.2759
			Master's	3.0556 (p=.040)

Instruction

Warninge

Sunarvician

Table 6 shows the results of the statistical analyses conducted on the basis of the subjects' undergraduate majors (i.e., sport-related majors such as physical education, sport management, athletic training, etc. v. nonsport-related majors such as English, history, etc.). T-tests indicated that no significant differences existed in the subjects' mean scores across all 36 survey items combined (grand composite mean) or within any of the six conceptual areas. One significant mean difference was found among the 36 individual survey items.

Table 6. Analysis by Undergraduate Major

# GRAND COMPOSITE MEAN

Sport-related 4.3998 Nonsport-related 4.3571

#### CONCEPTUAL AREAS

Major	<b>Supervision</b>	Instruction	<b>Warnings</b>
Sport-related	4.5592	4.3763	3.8830
Nonsport-related	4.5637	4.3518	3.6881
	<b>Facilities</b>	<b>Equipment</b>	Medical
Sport-related	4.3170	4.4286	4.9485
Nonsport-related	4.2948	4.4564	4.8844
INDIVIDUAL SURVEY	ITEMS		
Injury report forms c	ompleted S	port-related	4.9691
		onsport-related	4.8250 (p=.014)

Table 7 shows the results of the statistical analyses conducted on the basis of the subjects' graduate majors (i.e., sport-related v. nonsport-related). T-tests indicated that no significant differences existed in the subjects' mean scores across all 36 survey items combined (grand composite mean) or within any of the six conceptual areas. One significant mean difference was found among the 36 individual survey items.

Table 7. Analysis by Graduate Major

#### GRAND COMPOSITE MEAN

Sport-related 4.3728 Nonsport-related 4.4483

#### **CONCEPTUAL AREAS**

<u>Major</u>	<b>Supervision</b>	<b>Instruction</b>	<u>Warnings</u>
Sport-related	4.5259	4.3666	3.8099
Nonsport-related	4.5876	4.4082	4.0455

Sport-related Nonsport-related	<b>Facilities</b> 4.2592 4.4152	<b>Equipment</b> 4.4243 4.4762	Medical 4.9467 4.9107
INDIVIDUAL SURVEY Facilities inspected be		sport-related nonsport-related	4.1348 4.5179 (p=.012)

Statistical analyses by first aid certification (i.e., certified v. noncertified) and CPR certification (i.e., certified v. noncertified) revealed no significant differences in the subjects' mean scores across all 36 survey items combined (grand composite mean) or within any of the six conceptual areas.

# **SUMMARY AND CONCLUSION**

The data collected in this study indicated that, according to the self-reported scores of the subjects, the risk management behaviors being performed within NCAA Division III varsity football programs are being performed in a rather consistent manner. These findings are similar to a previous study that measured the risk management behaviors within NCAA Division III athletic programs as assessed by the athletic directors of those programs (Anderson & Gray, 1994). In the present study, the ranked means of the 36 survey items (Table 2) indicated that the top 28 items had mean scores greater than 4.0 on the 5-point Likert scale. Only 1 of the 36 survey items (athletes sign written warnings) had a score below 3.0 (M=2.961) among all subjects combined (N=182). It was interesting to note that the three survey items with the lowest scores among all subjects (N=182) were each related to documentation (Table 2). It is important to realize that although the failure to provide written documentation in a specific situation might not necessarily be evidence of negligence, the ability to provide such documentation might be instrumental in assisting a coach successfully defend against an allegation of negligence, particularly when a major issue in the litigation is related to something that can be documented (i.e., equipment safety inspection, facility safety inspection, written warnings, etc.).

Perhaps a major factor related to the relatively high degree of consistency with which the coaches indicated that the identified risk management behaviors were being performed within their programs is the fact that most of the teams are being coached by mature (mean age = 43.913 years), experienced (mean years as head football coach = 12.878 years; 96.7% with football playing experience), and well-educated (81.3% with graduate degrees) individuals. In addition, the data collected in this study indicate that most of the NCAA Division III varsity football programs are supported with the appropriate types of support staff (i.e., mean number of paid assistant coaches = 5.511; mean number of volunteer assistant football coaches = 1.901; mean number of full-time certified athletic trainers = 1.602; programs with at least 1 full-time certified athletic trainer = 95.6%). Therefore, according to the

data collected in this study, it seems that the head football coaches at NCAA Division III institutions are making a sincere, professional effort to lead their athletes in an environment that is conducive to reasonably safe participation by performing prudent risk management behaviors in a relatively consistent manner.

# References

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