COLLEGE SCHOLARS PROJECT APPROVAL

Joshua Pruitt
Scholar

Jenny Moshak
Mentor

ACL Injury Risk Prevention Video May 2, 2003
Project Title and Completion Date

COMMITTEE MEMBERS' SIGNATURES
(Minimum 3 Required)

Jennifer A. Moshak	X
Dr. Dixie Thompson	X
Dr. Wendell Liemohn	X

PLEASE ATTACH A COPY OF THE SENIOR PROJECT TO THIS SHEET AND RETURN BOTH TO THE PROGRAM DIRECTOR. THIS PAGE SHOULD BE DATED AND COMPLETED ON THE DATE THAT YOUR DEFENSE IS HELD.

DATE COMPLETED 5/2/03

ACL Injury Prevention Video

Senior Project of Joshua A. Pruitt
Jennifer A. Moshak, Faculty Mentor

Objective: The objectives of this project were two-fold. The first was to objectively provide proof for the need of some form of education for high-school coaches, and that these coaches would be willing to pay for an educational video for this purpose. The second was to produce such a video that will address ACL injuries and their prevention from an anatomical, biomechanical, and physiological perspective.

Methods: 200 high-school coaches were selected at random from TSSAA-participating institutions. Fifty of these coaches coached girls' basketball, fifty coached girls' soccer, fifty coached boys' basketball, and fifty coached boys' soccer. IRB approval was received to conduct a survey of these coaches, and they received, via US Postal Service, a survey (see attached) and an information sheet regarding the project (see attached). 81 surveys were returned, and the responses were analyzed using SPSS. Part of the analyzing process included recoding the scales on the responses to make them uniform and ease their interpretation (see attached). After determining the general outline of the video, a script was written. Contacts were made with experts in the field, and on-camera interviews were set up with them. These experts included Dr. Russ Betcher, orthopedic surgeon; Jackie Ansley, a specialist in conditioning, strength training, and speed and agility training; Dr. Margaret Lubert, podiatrist; Dr. Becky Morgan, family/sports medicine doctor; Dr. Chris Hosenfeld, chiropractor; and Jenny Moshak, Assistant Athletic Director for Sports Medicine, University of Tennessee Women's Athletic Department. The footage of these interviews was compiled with footage of demonstrations of exercises to produce the video.

Results: The compiled survey responses showed that high-school coaches in Tennessee would overwhelmingly be willing to pay for a video that would instruct them in ways to help lower the incidence of ACL injuries among their athletes. This led to the continuing production of the video.

Conclusions: The completed video will be available through the University of Tennessee Women's Athletic Department, and will be sold to cover the cost of production.

Information Sheet

You have been invited to participate in a research study being conducted by members of the Women's Athletics Sports Medicine Department at the University of Tennessee, Knoxville. This study is being conducted in order to better determine the specific need for an instructional video on the prevention of injuries to the anterior cruciate ligament of the knee. This study is being conducted by Senior Honors Student Joshua Pruitt under the supervision of Head Athletic Trainer and Assistant Women's Athletic Director for Sports Medicine Jennifer Moshak.

You are asked to answer the questions in the following survey as accurately as possible. This will allow a video to be produced that will best suit your needs as head coach of your respective sport. Please fill this out and return it in the enclosed self-addressed, stamped envelope as soon as possible. The information obtained by this survey will be maintained strictly confidential. The information will be stored securely, and only those conducting the study will have access unless you give written permission to release it.

If you have questions at any time about the study or the procedures, please contact:

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2117 Andy Holt Avenue
Apt. 1304
Knoxville, TN 37916
(865) 595-6571 (home)
(865) 974-6485 (work)

Jennifer Moshak, MS, ATC, CSCS
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117 Stokely Athletics Center
Knoxville, TN 37996
(865) 974-6485 (work)

Your participation in this study is voluntary, and you may choose not to participate without penalty. You may choose to terminate your participation at any time without penalty.

Thank you for your participation!

ACL Injury Questionnaire

Please answer each question to the best of your knowledge by circling your choice. Do not place any identifying information on this sheet (your name, name of school, etc.). Attach additional sheet(s) for comments as necessary.

1. Which sport do you coach?

   Girls' Basketball Boys' Basketball Girls' Soccer Boys' Soccer

2. In which region of Tennessee would you consider your school to be?

   West Tennessee Middle Tennessee East Tennessee

3. In which TSSAA classification is your sport?

   II A AA A/AA AAA

4. How concerned are you about ACL injuries with your team members?

1	2	3	4
not very	neutral	somewhat	very

5. How prevalent do you feel ACL injuries are in your sport?

1	2	3	4
not very	neutral	somewhat	very

6. Does your team have an athletic trainer at its practices?

1	2	3	4	5	6
always	usually	sometimes	rarely	never	on-call

7. Does your team have an athletic trainer at its games?

1	2	3	4	5	6
always	usually	sometimes	rarely	never	on-call

8. Are you currently incorporating any exercises designed to prevent ACL injuries into your daily routines?

   Yes No

   If so, please list:

9. Does your team have a weight-training program?

1	2	3	4	5
off-season	in-season	both in- & off-season	neither	athletes are on their own

10. If your team has a weight-training program, by whom is it run?

    Head coach Assistant coach Certified strength and conditioning coach

    Athletic trainer Other _____

11. How helpful do you feel that a video on the prevention of ACL injuries would be to you and your program?

1	2	3	4
not very	neutral	somewhat	very

12. Would you be willing to pay a nominal fee for such a video?

    Yes No

Recoded ACL Injury Questionnaire

Please answer each question to the best of your knowledge by circling your choice. Do not place any identifying information on this sheet (your name, name of school, etc.). Attach additional sheet(s) for comments as necessary.

1. Which sport do you coach?

   Girls' Basketball Boys' Basketball Girls' Soccer Boys' Soccer

2. In which region of Tennessee would you consider your school to be?

   West Tennessee Middle Tennessee East Tennessee

3. In which TSSAA classification is your sport?

   II A AA A/AA AAA

4. How concerned are you about ACL injuries with your team members?

1	2	3	4
not very	neutral	somewhat	very

5. How prevalent do you feel ACL injuries are in your sport?

1	2	3	4
not very	neutral	somewhat	very

6. Does your team have an athletic trainer at its practices?

1	2	3	4	5	6
never	rarely	on-call	sometimes	usually	always

7. Does your team have an athletic trainer at its games?

1	2	3	4	5	6
never	rarely	on-call	sometimes	usually	always

8. Are you currently incorporating any exercises designed to prevent ACL injuries into your daily routines?

   Yes No

   If so, please list:

9. Does your team have a weight-training program?

1	2	3	4	5
off-season	in-season	both in- & off-season	neither	athletes are on their own

10. If your team has a weight-training program, by whom is it run?

    Head coach Assistant coach Certified strength and conditioning coach

    Athletic trainer Other _____

11. How helpful do you feel that a video on the prevention of ACL injuries would be to you and your program?

1	2	3	4
not very	neutral	somewhat	very

12. Would you be willing to pay a nominal fee for such a video?

    Yes No

ACL Injury Prevention Video

Senior Project of Joshua A. Pruitt
Jennifer A. Moshak, Faculty Mentor

From the Beginning

- Perceived need for education
- Proof required

Use of Surveys

- IRB approval received for use of surveys
- 200 surveys sent out
- 50 high school girls' basketball coaches
- 50 high school boys' basketball coaches
- 50 high school girls' soccer coaches
- 50 high school boys' soccer coaches

Use of Surveys

- Random sample of TSSAA member institutions
- 81 surveys returned
- Responses based on coaches' perceptions
- Responses not based on recorded statistics

Questions Asked

- Which sport do you coach?
- In which region of Tennessee would you consider your school to be?
- In which TSSAA classification is your sport?
- How concerned are you about ACL injuries with your team members?

Questions Asked

- How prevalent do you feel ACL injuries are in your sport?
- Does your team have a certified athletic trainer at its practices?
- Does your team have a certified athletic trainer at its competitions?
- Are you currently incorporating any exercises designed to prevent ACL injuries in your daily routines?

Interesting Findings

- Games covered by an ATC (4.10) more frequently than practices (3.07)
- Basketball practices (3.50) covered significantly more frequently than soccer practices (2.64)
- Basketball games (4.36) and soccer games (3.86) covered statistically equally
- Large public schools (3.15) and small public schools (2.93) covered statistically equally at practices

Interesting Findings

- Large public schools (4.39) and small public schools (3.78) covered statistically equally at games
- Male sports (3.03) and female sports (3.17) covered statistically equally at practices
- Male sports (3.86) and female sports (4.17) covered statistically equally at games
- Region did not influence sport coverage by an ATC

Interesting Findings

- Of the 81 respondents:
- 32 (39.5%) had no weight-training program
- 26 (32.1%) only lifted during off-season
- 23 (28.4%) lifted during season and off-season

Interesting Findings

- Of the 49 schools with weight-training programs:
- Only 2 run by Certified Athletic Trainers
- Only 10 run by Certified Strength & Conditioning Specialists
- The remainder run by Head or Assistant Coaches

Proof of Need for Education

- Of the 81 respondents:
- ***ONLY 27 (33.3%)*** **actively incorporated preventative exercises into their teams' daily routines**

Video as Medium of Education

- Should be informative, but not boring
- Should be easy to understand
- Should briefly cover only necessary background information
- Should present concepts that are easy to implement
- Focus should be prevention and preventative techniques for ACL injuries

Statistical Analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ATC at Practices	81	1	6	3.07	1.787
ATC at Games	81	1	6	4.10	1.758
Valid N (listwise)	81				

Statistics

		ATC at Practices	ATC at Games
N	Valid	81	81
	Missing	0	0

ATC at Practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	24	29.6	29.6	29.6
	Rarely	12	14.8	14.8	44.4
	On-Call	10	12.3	12.3	56.8
	Sometimes	14	17.3	17.3	74.1
	Usually	11	13.6	13.6	87.7
	Always	10	12.3	12.3	100.0
	Total	81	100.0	100.0	

ATC at Games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	6	7.4	7.4	7.4
	Rarely	19	23.5	23.5	30.9
	On-Call	3	3.7	3.7	34.6
	Sometimes	10	12.3	12.3	46.9
	Usually	19	23.5	23.5	70.4
	Always	24	29.6	29.6	100.0
	Total	81	100.0	100.0	

Group Statistics

	Sport Coached	N	Mean	Std. Deviation	Std. Error Mean
ATC at Practices	Basketball	36	3.50	2.007	.335
	Soccer	42	2.64	1.428	.220
ATC at Games	Basketball	36	4.36	1.726	.288
	Soccer	42	3.86	1.775	.274

Independent Samples Test

		Levene's Test for Equality of Variances	
		F	Sig.
ATC at Practices	Equal variances assumed	12.958	.001
	Equal variances not assumed		
ATC at Games	Equal variances assumed	.037	.848
	Equal variances not assumed		

Independent Samples Test

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
ATC at Practices	Equal variances assumed	2.195	76	.031	.86
	Equal variances not assumed	2.140	62.006	.036	.86
ATC at Games	Equal variances assumed	1.266	76	.209	.50
	Equal variances not assumed	1.269	74.762	.208	.50

Independent Samples Test

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
ATC at Practices	Equal variances assumed	.390	.079	1.635
	Equal variances not assumed	.401	.056	1.658
ATC at Games	Equal variances assumed	.398	-.289	1.297
	Equal variances not assumed	.397	-.287	1.295

Group Statistics

	Size Classification of School	N	Mean	Std. Deviation	Std. Error Mean
ATC at Practices	Small Public	41	2.93	1.849	.289
	Large Public	33	3.15	1.716	.299
ATC at Games	Small Public	41	3.78	1.878	.293
	Large Public	33	4.39	1.560	.272

Independent Samples Test

		Levene's Test for Equality of Variances	
		F	Sig.
ATC at Practices	Equal variances assumed	.192	.662
	Equal variances not assumed		
ATC at Games	Equal variances assumed	5.046	.028
	Equal variances not assumed		

Independent Samples Test

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
ATC at Practices	Equal variances assumed	-.536	72	.593	-.22
	Equal variances not assumed	-.541	70.500	.590	-.22
ATC at Games	Equal variances assumed	-1.504	72	.137	-.61
	Equal variances not assumed	-1.535	71.913	.129	-.61

Independent Samples Test

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
ATC at Practices	Equal variances assumed	.419	-1.060	.610
	Equal variances not assumed	.416	-1.053	.604
ATC at Games	Equal variances assumed	.408	-1.426	.199
	Equal variances not assumed	.400	-1.410	.183

Group Statistics

	Gender Coached	N	Mean	Std. Deviation	Std. Error Mean
ATC at Practices	Girls	29	3.17	1.834	.340
	Boys	29	3.03	1.991	.370
ATC at Games	Girls	29	4.17	1.814	.337
	Boys	29	3.86	1.787	.332

Independent Samples Test

		Levene's Test for Equality of Variances	
		F	Sig.
ATC at Practices	Equal variances assumed	1.396	.242
	Equal variances not assumed		
ATC at Games	Equal variances assumed	.001	.971
	Equal variances not assumed		

Independent Samples Test

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
ATC at Practices	Equal variances assumed	.274	56	.785	.14
	Equal variances not assumed	.274	55.626	.785	.14
ATC at Games	Equal variances assumed	.656	56	.514	.31
	Equal variances not assumed	.656	55.988	.514	.31

Independent Samples Test

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
ATC at Practices	Equal variances assumed	.503	-.869	1.145
	Equal variances not assumed	.503	-.869	1.145
ATC at Games	Equal variances assumed	.473	-.637	1.258
	Equal variances not assumed	.473	-.637	1.258

	0		Yes	
	Count	%	Count	%
Weights Coached by Head Coach	28	(41.8%)	39	(58.2%)
Weights Coached by Assistant Coach	53	(79.1%)	14	(20.9%)
Weights Coached by CSCS	57	(85.1%)	10	(14.9%)
Weights Coached by ATC	65	(97.0%)	2	(3.0%)

Descriptives

		N	Mean	Std. Deviation	Std. Error
ATC at Practices	West Tennessee	19	1.95	1.268	.291
	Middle Tennessee	30	3.77	1.654	.302
	East Tennessee	32	3.09	1.873	.331
	Total	81	3.07	1.787	.199
ATC at Games	West Tennessee	19	3.37	1.770	.406
	Middle Tennessee	30	4.67	1.539	.281
	East Tennessee	32	4.00	1.814	.321
	Total	81	4.10	1.758	.195

Descriptives

		95% Confidence Interval for Mean			
		Lower Bound	Upper Bound	Minimum	Maximum
ATC at Practices	West Tennessee	1.34	2.56	1	5
	Middle Tennessee	3.15	4.38	1	6
	East Tennessee	2.42	3.77	1	6
	Total	2.68	3.47	1	6
ATC at Games	West Tennessee	2.52	4.22	1	6
	Middle Tennessee	4.09	5.24	1	6
	East Tennessee	3.35	4.65	1	6
	Total	3.71	4.49	1	6

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
ATC at Practices	Between Groups	38.523	2	19.261	6.922	.002
	Within Groups	217.033	78	2.782		
	Total	255.556	80			
ATC at Games	Between Groups	20.122	2	10.061	3.456	.036
	Within Groups	227.088	78	2.911		
	Total	247.210	80			

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Region of Tennessee	(J) Region of Tennessee	Mean Difference (I-J)	Std. Error	Sig.
ATC at Practices	West Tennessee	Middle Tennessee	-1.82*	.489	.001
		East Tennessee	-1.15	.483	.052
	Middle Tennessee	West Tennessee	1.82*	.489	.001
		East Tennessee	.67	.424	.257
	East Tennessee	West Tennessee	1.15	.483	.052
		Middle Tennessee	-.67	.424	.257
ATC at Games	West Tennessee	Middle Tennessee	-1.30*	.500	.030
		East Tennessee	-.63	.494	.412
	Middle Tennessee	West Tennessee	1.30*	.500	.030
		East Tennessee	.67	.434	.279
	East Tennessee	West Tennessee	.63	.494	.412
		Middle Tennessee	-.67	.434	.279

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Region of Tennessee	(J) Region of Tennessee	95% Confidence Interval	
			Lower Bound	Upper Bound
ATC at Practices	West Tennessee	Middle Tennessee	-2.99	-.65
		East Tennessee	-2.30	.01
	Middle Tennessee	West Tennessee	.65	2.99
		East Tennessee	-.34	1.69
	East Tennessee	West Tennessee	-.01	2.30
		Middle Tennessee	-1.69	.34
ATC at Games	West Tennessee	Middle Tennessee	-2.49	-.10
		East Tennessee	-1.81	.55
	Middle Tennessee	West Tennessee	.10	2.49
		East Tennessee	-.37	1.70
	East Tennessee	West Tennessee	-.55	1.81
		Middle Tennessee	-1.70	.37

*. The mean difference is significant at the .05 level.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Concern for ACL Injury	80	1	4	3.45	.710
Prevalence of ACL Injury	79	1	4	3.18	.797
Valid N (listwise)	79				

Group Statistics

	Sport Coached	N	Mean	Std. Deviation	Std. Error Mean
Concern for ACL Injury	Basketball	36	3.39	.728	.121
	Soccer	41	3.54	.596	.093
Prevalence of ACL Injury	Basketball	36	3.25	.806	.134
	Soccer	41	3.07	.787	.123

Independent Samples Test

		Levene's Test for Equality of Variances	
		F	Sig.
Concern for ACL Injury	Equal variances assumed	.934	.337
	Equal variances not assumed		
Prevalence of ACL Injury	Equal variances assumed	1.005	.319
	Equal variances not assumed		

Independent Samples Test

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
Concern for ACL Injury	Equal variances assumed	-.979	75	.331	-.15
	Equal variances not assumed	-.966	67.753	.338	-.15
Prevalence of ACL Injury	Equal variances assumed	.973	75	.334	.18
	Equal variances not assumed	.971	73.222	.335	.18

Independent Samples Test

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
Concern for ACL Injury	Equal variances assumed	.151	-.448	.153
	Equal variances not assumed	.153	-.453	.157
Prevalence of ACL Injury	Equal variances assumed	.182	-.185	.539
	Equal variances not assumed	.182	-.186	.540

Group Statistics

	Gender Coached	N	Mean	Std. Deviation	Std. Error Mean
Concern for ACL Injury	Girls	29	3.59	.568	.105
	Boys	29	3.21	.861	.160
Prevalence of ACL Injury	Girls	29	3.41	.825	.153
	Boys	28	2.96	.881	.167

Independent Samples Test

		Levene's Test for Equality of Variances	
		F	Sig.
Concern for ACL Injury	Equal variances assumed	1.714	.196
	Equal variances not assumed		
Prevalence of ACL Injury	Equal variances assumed	.319	.575
	Equal variances not assumed		

Independent Samples Test

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
Concern for ACL Injury	Equal variances assumed	1.980	56	.053	.38
	Equal variances not assumed	1.980	48.491	.053	.38
Prevalence of ACL Injury	Equal variances assumed	1.989	55	.052	.45
	Equal variances not assumed	1.987	54.434	.052	.45

Independent Samples Test

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
Concern for ACL Injury	Equal variances assumed	.192	-.004	.763
	Equal variances not assumed	.192	-.006	.764
Prevalence of ACL Injury	Equal variances assumed	.226	-.003	.902
	Equal variances not assumed	.226	-.004	.903

Statistics

Weight Training Program

N	Valid	81
	Missing	0

Weight Training Program

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Off-Season	26	32.1	32.1	32.1
	In-Season	4	4.9	4.9	37.0
	Both Seasons	19	23.5	23.5	60.5
	Neither	14	17.3	17.3	77.8
	Athletes on Own	18	22.2	22.2	100.0
	Total	81	100.0	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Helpfulness of Video	81	2	4	3.46	.653
Valid N (listwise)	81				

Group Statistics

	Gender Coached	N	Mean	Std. Deviation	Std. Error Mean
Helpfulness of Video	Girls	29	3.66	.553	.103
	Boys	29	3.28	.702	.130

Independent Samples Test

		Levene's Test for Equality of Variances	
		F	Sig.
Helpfulness of Video	Equal variances assumed	2.313	.134
	Equal variances not assumed		

Independent Samples Test

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
Helpfulness of Video	Equal variances assumed	2.287	56	.026	.38
	Equal variances not assumed	2.287	53.079	.026	.38

Independent Samples Test

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
Helpfulness of Video	Equal variances assumed	.166	.047	.712
	Equal variances not assumed	.166	.047	.712

Group Statistics

	Sport Coached	N	Mean	Std. Deviation	Std. Error Mean
Helpfulness of Video	Basketball	36	3.39	.688	.115
	Soccer	42	3.55	.593	.091

Independent Samples Test

		Levene's Test for Equality of Variances	
		F	Sig.
Helpfulness of Video	Equal variances assumed	1.454	.232
	Equal variances not assumed		

Independent Samples Test

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
Helpfulness of Video	Equal variances assumed	-1.095	76	.277	-.16
	Equal variances not assumed	-1.082	69.652	.283	-.16

Independent Samples Test

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
Helpfulness of Video	Equal variances assumed	.145	-.447	.130
	Equal variances not assumed	.147	-.451	.134

Statistics

Payment for Video

N	Valid	75
	Missing	6

Payment for Video

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	56	69.1	74.7	74.7
	No	19	23.5	25.3	100.0
	Total	75	92.6	100.0	
Missing	System	6	7.4		
Total		81	100.0		

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sport Coached * Payment for Video	72	88.9%	9	11.1%	81	100.0%
Gender Coached * Payment for Video	53	65.4%	28	34.6%	81	100.0%

Crosstab

			Payment for Video		
			Yes	No	Total
Sport Coached	Basketball	Count	24	9	33
		% within Sport Coached	72.7%	27.3%	100.0%
		% within Payment for Video	43.6%	52.9%	45.8%
	Soccer	Count	31	8	39
		% within Sport Coached	79.5%	20.5%	100.0%
		% within Payment for Video	56.4%	47.1%	54.2%
Total		Count	55	17	72
		% within Sport Coached	76.4%	23.6%	100.0%
		% within Payment for Video	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.453[b]	1	.501		
Continuity Correction[a]	.156	1	.693		
Likelihood Ratio	.452	1	.502		
Fisher's Exact Test				.583	.346
Linear-by-Linear Association	.447	1	.504		
N of Valid Cases	72				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.79.

Crosstab

			Payment for Video		
			Yes	No	Total
Gender Coached	Girls	Count	23	5	28
		% within Gender Coached	82.1%	17.9%	100.0%
		% within Payment for Video	60.5%	33.3%	52.8%
	Boys	Count	15	10	25
		% within Gender Coached	60.0%	40.0%	100.0%
		% within Payment for Video	39.5%	66.7%	47.2%
Total		Count	38	15	53
		% within Gender Coached	71.7%	28.3%	100.0%
		% within Payment for Video	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.191[b]	1	.074		
Continuity Correction[a]	2.193	1	.139		
Likelihood Ratio	3.226	1	.072		
Fisher's Exact Test				.126	.069
Linear-by-Linear Association	3.131	1	.077		
N of Valid Cases	53				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.08.

Group Statistics

	Payment for Video	N	Mean	Std. Deviation	Std. Error Mean
ATC at Practices	Yes	56	2.95	1.731	.231
	No	19	3.58	1.895	.435
ATC at Games	Yes	56	4.04	1.768	.236
	No	19	4.37	1.739	.399

Independent Samples Test

		Levene's Test for Equality of Variances	
		F	Sig.
ATC at Practices	Equal variances assumed	.179	.674
	Equal variances not assumed		
ATC at Games	Equal variances assumed	.228	.635
	Equal variances not assumed		

Independent Samples Test

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
ATC at Practices	Equal variances assumed	-1.344	73	.183	-.63
	Equal variances not assumed	-1.284	28.881	.209	-.63
ATC at Games	Equal variances assumed	-.712	73	.479	-.33
	Equal variances not assumed	-.718	31.572	.478	-.33

Independent Samples Test

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
ATC at Practices	Equal variances assumed	.471	-1.571	.306
	Equal variances not assumed	.492	-1.640	.375
ATC at Games	Equal variances assumed	.468	-1.264	.599
	Equal variances not assumed	.464	-1.278	.612

Statistics

Preventative Exercises Incorporated

N	Valid	81
	Missing	0

Preventative Exercises Incorporated

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	27	33.3	33.3	33.3
	No	54	66.7	66.7	100.0
	Total	81	100.0	100.0	