A Life Skills Course for Student-Athletes:

First year results

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Introduction

American college student-athletes are faced with a variety of demands and issues that may benefit from support through counseling interventions (Chartrand & Lent, 1987; Hinkle, 1994). The common type of intervention for the college student-athlete is a combination of academic advising and tutorial programs. While, clearly helpful (Petitpas, Buntrock, Van Raalte, & Brewer, 1985), these types of programs are limited in scope and address only the academic piece of the situation (Danish, Petitpas, & Hale, 1993; Murray, 1995).

The NCAA has developed the CHAMPS/Life Skills Training courses to address these needs for college student-athletes. The University of Connecticut has taken this program and adapted it to its' First-Year Experience course (FYE) offered to all university freshman to assist the student-athletes in their adjustment to the demands of college life as a student-athlete. The course focuses on helping the student-athlete make responsible choices as a student and an athlete, provides experiences for the student-athlete to develop research skills, time management, coping skills, and preparation for academic demands such as tests and papers. While there are a variety of FYE courses for students, this course was developed for freshman student-athletes with versions being developed for sophomore, junior and senior student-athletes as they face different types of demands.

Methods

An instrument was developed based on the knowledge, attitudes and behaviors (KABs) associated with the components of the student-athlete FYE course. It contained 22 items using a 5-point response scale in each of the 3 domains (KABs).

Sample

The scale was administered to 115 student-athletes with 62 completed surveys returned. The final sample consisted of freshman student-athletes from 9 different sports, was 44% female, 55% were White, 23% were Black, and 5% were Hispanic. Thirty-five percent did not have a scholarship, 36% had a partial scholarship, and 29% had a full scholarship.

Instrumentation

The total alpha reliability estimate for the 66 items was .967, and the reliability estimates for the separate KAB domains revealed alpha reliabilities ranging from .88 to .97. A factor analysis of the 66 domain items revealed a 3-factor solution aligning with the KAB factor domains.

Students were also asked to indicate their academic goals for preparation after college and their athletic goals after college. An initial evaluation of the athletic goals of the student-athletes indicated very specific athletic goals. The most frequent goal was related to Olympic participation, followed by professional sports, and continued athletic participation. The academic goals appear less specific, often related to employment without a specific profession mentioned. These responses were related to graduate degrees, and professional success as accountants, teachers, and business leaders.

In addition to the student-athlete sample, a modified survey was administered to 260 students in the FYE who were not student-athletes to compare the responses regarding coping skills and academic skills of the two groups. Initial analyses indicates that the instrument is also very reliable for freshman who are not student-athletes and that their response patterns to the coping and academic skill items are very similar (see Schrader, Brown & Ataya, 2000 for a discussion of the results of the 260 student

sample). This finding suggests that he FYE course is meeting the needs of all students and that this instrument may be used to track the students who have participated in this study as they develop as students at the university.

This is the first year of the longitudinal study following student-athletes over their 4 years at the university as their academic and athletic skills increase, and as their needs and goals change over time. This study should add significantly to the growing literature focusing on the needs of student-athletes as both a student and an athlete as they enter college and graduate (Hinkle, 1994; Murray, 1997).

Instrument Properties

For reliability estimates, the scale is excellent. The total scale reliability is very high, with the subscale A likewise. Subscales K and B are a little lower, which is expected with a lesser number of items than the total scale, but still very good. The following table show the values.

Table 1.

Reliability Analysis Results - Cronbach's Alpha

Total Scale
Reliability Coefficients
N of Cases = 54.0 N of Items = 66
Alpha = **.9611**

Knowledge Scale
Reliability Coefficients
N of Cases = 59.0 N of Items = 22
Alpha = **.8764**

Attitude Scale
Reliability Coefficients
N of Cases = 61.0 N of Items = 22
Alpha = **.9643**

Behavior Scale
Reliability Coefficients

N of Cases = 56.0 N of Items = 22
Alpha = **.8975**

Studying the items individually, there is a general tendency of slightly negatively skewed distributions throughout the items. The descriptive statistics for each item is listed in Appendix A. The means are fairly high, given the five-point scale.

Summing the responses on each of the scale items and dividing the sum by the number of items created three scales. Through this system the scale was retained on the same 5-point scale as the individual items, facilitating he interpretation of the scales.

Table 2.

Scale Statistics

	Knowledge	**Attitude**	**Behavior**
N	62	62	62
Mean	3.8116	4.4238	3.7229
Median	3.8636	4.5000	4.0000
Mode	4.14	5.00	4.00
Std. Deviation	.4991	.5673	1.0994
Skewness	-.718	-1.111	-2.491
Std. Error of Skewness	.304	.304	.304
Kurtosis	1.714	2.107	6.521
Std. Error of Kurtosis	.599	.599	.599

In order to investigate whether the items for each subscale were related to each other more than to items from the other two subscales, a factor analysis was conducted. The factor analysis used principle components (requesting the first three components) for the extraction procedure and varimax for the rotation technique was used..

The results of the factor analysis are presented in Appendix B. The majority of the Attitude items have their highest loadings (in bold) on factor one and the majority of the Behavior items have their highest loadings on factor three. The Knowledge items did not clearly align in a single, homogenous factor.

An examination of the potential differences between the sexes revealed a significant difference for the Attitude and Behavior scales. Females had higher ratings than males for these two subscales. The results of the ANOVA are presented in Table 3 below. The means for the males and females for each of the scales are listed in Tables 4a and 4b.

Table 3.

ANOVA Results for Comparisons based on Sex for the Three Scales.

		Sum of Squares	df	Mean Square	F	Sig.
Knowledge	Sex	.470	1	.470	2.244	.140
	Within Groups	11.941	57	.209		
	Total	12.411	58			
Attitude	Sex	3.019	1	3.019	10.897	.002
	Within Groups	16.344	59	.277		
	Total	19.362	60			
Behavior	Sex	2.091	1	2.091	9.545	.003
	Within Groups	11.828	54	.219		
	Total	13.919	55			

Table 4a.

Descriptive Statistics Females

	N	Mean	Std. Deviation
Knowledge	26	3.9580	.4233
Attitude	27	4.6818	.3875
Behavior	25	4.2127	.4955

Table 4b.

Descriptive Statistics Males

	N	Mean	Std. Deviation
Knowledge	33	3.7782	.4829
Attitude	34	4.2340	.6139
Behavior	31	3.8240	.4449

Due to the fact that the sample was small and there was not a large distribution based on ethnicity, only Caucasian (n=34) and African-American (n=14) student athletes were compared on the three scales using t-tests. All other races had too few representatives in the sample. The results failed to reveal a significant difference on any of the three scales based on ethnicity ($p>0.05$).

No analysis was performed in respect to the variable sport because of the small sample and large distribution of sports. There were currently not enough athletes in each sport to make any conclusions on how this variable relates to others.

Discussion and Conclusions

The results of this study suggests that this Knowledge, Attitude and Behavior scale is reliable and valid, and that it may be used to establish a baseline for student athletes as they grow and develop during their years as a college student athlete.

This study presents baseline data upon which longitudinal data may be added to study growth and change in student-athletes across the three dimensions. Further studies are projected focusing on gender, ethnicity, and associated sport, as the longitudinal data is collected analyzed.

Student-athletes have special demands placed on them. Instructional support and the study of their coping systems will enable college counseling centers and the NCAA to develop and implement effective counseling and academic programs for student athletes to be successful in their academic and athletic goals.

References

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Appendix A

Descriptive Statistics for the Scale Items

	N	Mean	Std. Deviation	Skewness		Kurtosis	
		Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
K1	62	3.76	.90	-.332	.304	-.568	.599
K2	61	3.67	.96	-.802	.306	.627	.604
K3	62	3.60	.93	-.103	.304	-.803	.599
K4	62	3.42	1.05	.044	.304	-.818	.599
K5	62	3.94	.83	-.955	.304	1.819	.599
K6	62	4.24	.76	-.673	.304	-.176	.599
K7	62	3.68	.81	-.313	.304	-.219	.599
K8	62	4.23	.86	-1.266	.304	2.225	.599
K9	62	3.52	.88	-.051	.304	-.648	.599
K10	61	3.87	.69	-.436	.306	.527	.604
K11	62	3.52	.94	-.729	.304	.354	.599
K12	62	3.69	1.00	-.860	.304	.398	.599
K13	62	4.15	.83	-.640	.304	-.284	.599
K14	61	3.54	.83	.138	.306	-.507	.604
K15	62	3.85	.81	-.307	.304	-.316	.599
K16	61	4.25	.94	-1.136	.306	.385	.604
K17	62	3.58	1.03	-.362	.304	-.645	.599
K18	62	3.81	.90	-.569	.304	.382	.599
K19	62	4.24	.64	-.650	.304	1.221	.599
K20	62	4.03	.81	-.827	.304	.691	.599
K21	60	4.07	.90	-.857	.309	.173	.608
K22	62	3.60	1.09	-.528	.304	-.210	.599
A1	62	4.63	.68	-1.921	.304	3.381	.599
A2	62	4.55	.76	-1.781	.304	2.789	.599
A3	62	4.60	.64	-1.349	.304	.696	.599
A4	62	4.56	.62	-1.550	.304	3.431	.599
A5	62	4.27	.87	-1.341	.304	2.213	.599
A6	62	4.53	.65	-1.445	.304	2.639	.599
A7	62	4.16	.87	-.631	.304	-.630	.599
A8	62	4.16	.93	-.971	.304	.751	.599
A9	62	4.42	.80	-1.709	.304	4.141	.599
A10	62	4.47	.62	-.728	.304	-.407	.599
A11	62	4.39	.80	-1.225	.304	.997	.599
A12	62	4.63	.63	-1.907	.304	4.174	.599
A13	62	4.32	.78	-1.067	.304	.815	.599
A14	62	4.48	.72	-2.135	.304	7.766	.599
A15	62	4.42	.67	-.724	.304	-.520	.599
A16	62	4.45	.74	-1.211	.304	.889	.599
A17	62	4.19	.87	-.705	.304	-.491	.599
A18	62	4.40	.73	-1.063	.304	.659	.599
A19	62	4.39	.78	-1.677	.304	4.597	.599
A20	61	4.34	.81	-1.487	.306	3.300	.604
A21	62	4.56	.72	-1.898	.304	3.859	.599
A22	62	4.45	.80	-1.407	.304	1.322	.599
B1	58	3.97	.90	-.684	.314	-.105	.618
B2	58	4.02	.83	-.418	.314	-.505	.618
B3	58	3.72	.97	-.966	.314	.888	.618
B4	58	3.81	.96	-.579	.314	.045	.618
B5	58	4.09	.78	-.153	.314	-1.319	.618
B6	57	4.37	.67	-.597	.316	-.650	.623
B7	58	3.98	.81	-.594	.314	.158	.618

B8	58	3.55	1.23	-.416	.314	-.930	.618
B9	58	3.98	.91	-.985	.314	1.200	.618
B10	58	4.07	.70	-.737	.314	1.367	.618
B11	57	3.86	.88	-.547	.316	-.191	.623
B12	58	4.09	.84	-.530	.314	-.501	.618
B13	58	4.07	.88	-.462	.314	-.798	.618
B14	58	3.90	.95	-.807	.314	.505	.618
B15	58	4.03	.75	-.317	.314	-.383	.618
B16	58	4.12	.90	-1.292	.314	2.067	.618
B17	57	3.56	1.12	-.636	.316	.007	.623
B18	58	3.95	.96	-.871	.314	.539	.618
B19	58	4.29	.77	-.566	.314	-1.091	.618
B20	58	3.86	1.03	-.998	.314	.687	.618
B21	58	4.45	.65	-.779	.314	-.412	.618
B22	58	4.02	1.00	-1.017	.314	.595	.618
Valid N	54						

Appendix B

Rotated Component Matrix

	Component		
	1	2	3
K1	.184	.006	**.628**
K2	.304	.130	**.708**
K3	.202	.113	**.603**
K4	.271	.009	**.555**
K5	.008	**.416**	.393
K6	.163	**.555**	.295
K7	.187	**.301**	.204
K8	.352	**.313**	-.122
K9	**.480**	.003	.326
K10	**.629**	.230	.259
K11	.010	.093	**.468**
K12	**.541**	-.052	.277
K13	**.404**	.038	.151
K14	.416	.016	**.613**
K15	.149	**.512**	.329
K16	.143	**.713**	-.043
K17	**.483**	-.129	.204
K18	**.670**	.092	.125
K19	.201	**.611**	.050
K20	-.039	**.726**	.277
K21	**.367**	.268	-.106
K22	**.480**	.160	.331
A1	**.597**	.574	.036
A2	**.657**	.444	.030
A3	**.729**	.414	-.041
A4	**.718**	.380	.090
A5	**.756**	.320	.119
A6	**.526**	.497	.066
A7	**.653**	.285	.183
A8	**.747**	.328	.165
A9	**.706**	.418	.207
A10	**.701**	.437	.099
A11	**.625**	.480	.152
A12	**.673**	.146	.174
A13	**.730**	.094	.358
A14	**.663**	.469	.136
A15	**.610**	.380	.015
A16	.342	**.693**	.046
A17	**.492**	.391	.206
A18	.496	**.618**	.057
A19	.496	**.572**	.090
A20	.556	**.623**	.169
A21	.454	**.520**	.136
A22	**.421**	.418	.207
B1	.029	.018	**.796**
B2	.272	.237	**.672**
B3	.108	.178	**.585**
B4	.001	.127	**.653**
B5	.095	.339	**.421**
B6	.146	**.449**	.253

B7	.132	**.433**	.346
B8	.235	.323	**.449**
B9	-.170	.113	**.749**
B10	.017	-.101	**.489**
B11	-.411	.050	**.531**
B12	.251	.064	**.594**
B13	.161	.230	**.465**
B14	.245	.100	**.651**
B15	.188	.396	**.503**
B16	.103	**.507**	-.087
B17	.218	.216	**.412**
B18	.213	**.474**	.388
B19	.019	**.708**	.357
B20	.087	.309	**.339**
B21	.165	**.455**	.051
B22	.427	-.032	**.430**

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.