Coach Beyond...

Coach Beyond Readiness Index
Coach Version
Technical Report

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I. Definition of Construct
The *Coach Beyond Readiness Index* assesses the degree to which coaches perceive they are able to support the holistic health and development of student-athletes.

II. Relevance for Practice
Studies have demonstrated that coaches who are trained and therein efficacious in teaching traditional sport skills and techniques AND positive youth development and social-emotional skills (e.g., leadership, coping, health, safety, etc.) are more likely to win, feel satisfied in their role, and report less stress (Anderson-Butcher & Bates, 2022; Bates & Anderson-Butcher, 2023). As such, it is important to assess coach efficacy in these domains to improve the climate and culture of youth sport, and to inform training needs in schools, districts, clubs, and community organizations.

III. Scale Description and Instructions
A. Items

As a coach, I am confident in my ability to…

Tactics and Techniques

1. Make strategic decisions in pressure situations.
2. Maximize team strengths during competitions.
3. Teach technical skills.
4. Teach basic technique/strategy.
5. Coach sport-specific skills for different positions/events.

Life Skill Development through Sport

6. Instill an attitude of respect for others among athletes.
7. Foster character development.
8. Promote good sportsmanship.
9. Teach life skills through sport.

Training and Conditioning

10. Implement appropriate endurance programs during the season.
11. Accurately assess the physical conditioning of athletes.
12. Prepare appropriate plans for off-season physical conditioning.

Social-Emotional Health

13. Address mental health concerns.
14. Reduce performance anxiety among athletes.
15. Prevent burnout among athletes.
16. Help athletes regulate their emotions.
17. Identify off the field stressors among athletes.

B. Response Options
 1 = Strongly disagree
 2 = Disagree
 3 = Neither agree nor disagree
 4 = Agree
 5 = Strongly agree

C. Instructions for Respondents

Indicate the extent to which you agree with the following statements about your general coaching behaviors. For each of the following statements, please fill in the ONE circle that best represents your answer.

D. Instructions for Scale Administers

Surveys can be self-administered or administered to coaches in person or online. Explain that the purpose of the survey is to learn more about their perceptions of their abilities to inform future training and educational opportunities offered in your school, community, organization, or club. Also, results can be used to demonstrate the skillsets of coaches in one's organization or community (e.g., our coaches are confident in their ability to help your student-athlete become a leader). They should select one answer per request, and make a choice based on the answer that best reflects how they feel. They may submit the survey when they have completed it.

IV. Scoring Procedures

An average of the response scores from the subscale items should be calculated and used as an indicator of efficacy in each domain, with higher scores suggesting that coaches perceive they have a higher degree of skills in the four domains or overall on the measure.

V. Psychometric Properties of the Scale

A. Description of Sample

A majority of participants (87%) identified as males and 13% as females. Moreover, 11% of participants were between the ages of 18 and 29, 22% were between the ages of 30 and 39, 32% were between the ages of 40 to 49, 24% were between the ages of 50 to 59, and 10% were 60 or older. A majority of the participants identified as White (89%), followed by Black/African American (4%), Hispanic/Latino (2%), Multi-racial (1%), and 4% chose not to identify their race. In total, 17% of coaches reported having less than five years of experience, 19% between six and ten years of experience, 33% between 11 to 20 years of experience, and 31% had 21 or more years of experience.

B. Factorial Validity

Once data were cleaned and screened, the dataset was randomly split in half in SPSS. The first subsample included 2,081 cases and the second subsample included 2,074 cases. Using the first subsample of split data (n = 2,081), we conducted exploratory factor analyses (EFA) procedures to examine the underlying factor structure of the measure using principal axis factoring and a Promax rotation method. We then tested the hypothesized model using CFA procedures in Mplus Version 8. All items on the measure were ordinal, justifying the use of the weighted least squares estimator adjusted for means and variances (WLSMV; Flora and Curran, 2004). In all model testing, multiple fit indices to evaluate the adequacy of the estimated models. An acceptable fit of a model was defined by the following: root mean square error of approximation (RMSEA) $\leq$ .05; comparative fit index (CFI) $\geq$ .95; and, Tucker-Lewis Index (TLI) $\geq$ .95 (see Bowen & Guo, 2012). In models with poor fit, we examined multiple sources of the poor fit such as low factor loadings, indicator R^2, residual correlations, and modification indices (M.I.s). Factor loadings under .40, squared multiple correlations well under .50, multiple residual correlations under .10, and multiple modification indices above the threshold .50 were considered for removal from factors (see Bowen & Guo, 2012). In addition to the CFA, reliability testing of the confirmed factor was conducted to establish internal consistency, for which a Cronbach's alpha greater than or equal to .70 was considered evidence of adequate reliability (Hair, Anderson, Tatham, & Black, 1998).

The final version of scale demonstrated reasonable overall fit, ML χ^2 =584.85, df = 113, RMSEA = .045, CFI = 0.96, p = 0.00, with all items loading on the four latent factors (completely standardized factor loadings ranging from 0.60 - 0.86). Standardized factor loadings and Cronbach's alphas were used to interpret overall model fit of the 17 items scale described in the Table below.

Item	Standardized Factor Loadings				Cronbach's α
	1	2	3	4	
Factor 1: Tactics and Techniques					0.92
18. Make strategic decisions in pressure situations.	0.60				
19. Maximize team strengths during competitions.	0.69				
20. Teach technical skills.	0.73				
21. Teach basic technique/strategy.	0.80				
22. Coach sport-specific skills for different positions/events.	0.76				
Factor 2: Life Skill Development through Sport					0.88
1. Instill an attitude of respect for others among athletes.		0.85			
2. Foster character development.		0.86			
3. Promote good sportsmanship.		0.68			
4. Teach life skills through sport.		0.67			
Factor 3: Training and Conditioning					0.87
1. Implement appropriate endurance programs during the season.			0.76		
2. Accurately assess the physical conditioning of athletes.			0.86		
3. Prepare appropriate plans for off-season physical conditioning.			0.82		
Factor 4: Social-Emotional Health					0.86
1. Address mental health concerns.				0.67	
2. Reduce performance anxiety among athletes.				0.75	
3. Prevent burnout among athletes.				0.68	
4. Help athletes regulate their emotions.				0.76	
5. Identify off the field stressors among athletes.				0.70	

Note. The stem of the measure reads: "As a coach, I am confident in my ability to…".

VII. Past and Future Scale Development

The current recommendation is to use the 17-item version of the measure as described in this report. Future scale development work should involve testing the psychometric properties of the scale with a larger sample of diverse coaches. Further, it may be worth considering modifying items and/or response format to increase the variability in the scores. Scale work is also needed to validate the Spanish version of this tool.

VIII. Summary

Overall, the results of the psychometric testing indicate initial support for the reliability and validity of the Coach Beyond Readiness Index. The use of this measure could provide valuable information about coach efficacy that can inform training and educational opportunities in youth sport and the professional development of sport personnel.

IX. Recommended Citation of Scale

When using the scale for program evaluation or research purposes, we recommend using the following citation:

Bates, S., Anderson-Butcher, D., & Amorose, A. J. (2023). *Coach Beyond Readiness Index.* LiFEsports Initiative, Columbus, OH, The Ohio State University.