Community and Youth Collaborative Institute School Experience Surveys-Technical Report



CAYCI Career and College Readiness Scale Middle/High School Student Version

Produced By: Dawn Anderson-Butcher, Anthony J. Amorose, Aidyn Iachini, and Annahita Ball

> Community and Youth Collaborative Institute College of Social Work The Ohio State University

THE OHIO STATE UNIVERSITY

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COLLEGE OF SOCIAL WORK

Community and Youth Collaborative Institute School Experience Surveys

COLLEGE AND CAREER READINESS

Middle & High School Student Version

I. Definition of Construct

The *Career and College Readiness* scale measures the extent to which secondary students perceive their self-efficacy and preparedness for post-secondary education and/or future careers.

II. Relevance for Practice

Research suggests student perceptions of their opportunities after high school are impacted by the levels of support and engagement they receive from their schools, families, teachers, and peers while in school (Conley, 2008; Kuh, 2007). For example, in schools where teachers reported higher expectations and strong support for college attendance, youth were more likely to apply to and enroll in college (Roderick, Coca, & Nagaoka, 2011). In addition, a positive school climate, parental involvement, and advanced coursetaking in high school are also predictive of college matriculation for youth (Ceja, 2006; Hoover-Dempsey, & Sandler, 1997; Jonas, Dougherty, Herrera, LaTurner, Garland, & Ware, 2012). Together, an assessment of college and career readiness can help parents, teachers, and schools explore how students perceive their capabilities for achieving their educational and occupational goals after high school.

III. Scale Description and Instructions

A. Items

- 1. What I learn in school will help me prepare for college.
- 2. I set goals that will help me get to college.
- 3. I am confident that I will go to college.
- 4. I am confident that I will get the job I want.
- 5. I am aware of careers that match my interests.
- 6. I am taking courses now that are needed to go to college.
- 7. I believe I can successfully transition to college after high school.

B. Response Options

Response options for each item include the following:

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Neither disagree or agree
- 4 = Agree
- 5 = Strongly agree

C. Instructions for Respondents

These questions ask you about your future. Please mark how strongly you feel about each sentence.

D. Instructions for Scale Administers

For complete instructions on how to administer the survey, reference the "Student Survey Directions" that are printed on the survey itself. Once each student has a survey, explain that the purpose of the survey is to learn more about their experiences at school. They should mark one answer per statement, selecting the choice that best reflects how they feel.

As students finish, look thoroughly through the surveys to make sure that they did not miss any items or questions. Please remember that students do NOT have to answer every question, but do encourage them to complete as much of the survey as possible. Remind students that their answers will help the school know how to best support them.

IV. Scoring Procedures

An average of the response scores from the 7 items should be calculated and used as an indicator of career and college readiness, with higher scores reflecting greater levels of motivation.

V. Psychometric Properties of the Scale (Middle/High)

A. Description of Sample

Participants used to test the psychometric properties of the scale included 1973 middle school (6-8th grade; 27.3%) and high school (9th-12th grade; 67.9%) students from around the states of Ohio and Utah. The participants included 926 males (46.9%) and 968 (49.1%) females. The students identified themselves as White/Non-Hispanic (48.8%), African American (3.3%), Latino/Latina (25.3%), Asian (6.6%), Native Hawaiian/Other Pacific Islander (2.9%), Mixed/Multi-Racial (3.6%), American Indian/Alaskan Native (2.0%), or other (3.7%), and 41.0% indicated they received a free or reduced lunch. Data on these students were collected as part of a needs assessment within each school's improvement planning process. All data were collected using the online instrument.

Sample	Mean	SD	Range	α
Full Sample ($N = 1973$)	3.87	.79	1-5	.88
Gender				
Males (<i>n</i> =926)	3.83	.81	1-5	.89
Females $(n = 968)$	3.92	.76	1-5	.87
Race/Ethnicity				
White/Non-Hispanic (<i>n</i> =962)	3.92	.76	1-5	.87
Other (<i>n</i> =1011)	3.83	.81	1-5	.89
Grade Level				
Middle School ($n = 539$)	4.02	.73	1-5	.87
High School ($n = 1340$)	3.83	.77	1-5	.87

B. Basic Descriptive Statistics and Relevant Group Differences

Note. Group specific data omits students who did not indicate their status. The groups were significantly different (p < .05); however, the effect sizes (η^2) for these comparisons indicated that group membership accounted for less 1% of the variance in the scores.

C. Relationship between Peer Relationship Scores and Other Student Perception Constructs

Construct ^a	<i>r</i> =
Academic Motivation	.65*
School Connectedness	.52*
Academic Press	.55*
Support for Learning	.57*
Internalizing Behaviors	.18*
Externalizing Behaviors	.34*
Parent Involvement and Support	.41*
Family and Community Connections	.51*
Social Skills	.51*

Construct ^a	<i>r</i> =
Peer Relationships	.47*
Safety	.48*
Diversity	.40*

Notes. ^a Average score on the respective subscale scores from the CAYCI surveys (Anderson-Butcher, Amorose, Iachini, & Ball, 2013). * relationship significant (p < .01).

D. Factorial Validity

A confirmatory factor analysis (CFA) was conducting using robust maximum likelihood estimation procedures in LISREL 9.2 (Scientific Software International, Inc., Chicago). The CFA model specified that the 7 items loaded on a single latent College and Career Readiness factor. The factor variance was freely estimated, as was the uniqueness for each item. No covariances between uniquenesses were modeled.

The overall fit of the model to the data was reasonably good based on commonly recommended cut off values for evaluating model fit (see Hu & Bentler, 1999), S-B $\chi^2 = 114.87$, df = 14, p = .00; RMSEA = .085 (90% CI = .079-.127), SRMR = .03; CFI = .97, IFI = .97. The table below presents the completely standardized factor loadings and uniquenesses for each item. Squared multiple correlations ranged from .39-.68. The modification indices did not suggest any major areas of local strain.

Item	Loading	Uniqueness
What I learn in school will help me prepare for college.	.69	.52
I set goals that will help me get to college.	.83	.31
I am confident that I will go to college.	.82	.33
I am confident that I will get the job I want.	.68	.54
I am aware of careers that match my interests.	.62	.61
I am taking courses now that are needed to go to college.	.63	.60
I believe I can successfully transition to college after high school.	.73	.47

VI. Past and Future Scale Development

An initial version of the scale (Middle/High School Student Version) included the following additional items: (1) "What I learn in school will help me get the job I want," (2) "I set goals that will help me get the job I want," (3) "I am confident I will graduate from high school," (4) "I am confident I will reach my career goals," (5) "I am motivated to get a job after high school," (6) "I understand how to apply to college," and (7) "I have opportunities to explore my career interests." Results from preliminary analyses indicated that these items either had poor distributions or did not fit well with the other scale items. Thus the current recommendation is to use the 7-item version of the measure as described in this report. Future scale development work may consider modifying the items and/or response format to increase the variability in the scores. Future work also is needed to validate the Spanish version of this scale, and to test for invariance in the factor structure across relevant groups and time.

VII. Summary

Overall, the results of the psychometric testing indicate some initial support for the reliability and validity of the College & Career Readiness scale with middle & high school students. The use of this measure can provide valuable information about student confidence towards career and college aspirations, as well as their current utilization of goal setting behaviors impacting these aspirations.

VIII. References

Conley, D. T. (2008). Rethinking college readiness. New Directions for Higher Education, 144, 3-13.

Ceja, M. (2006). Understanding the role of parents and siblings as information sources in the college choice process of Chicana students. *Journal of College Student Development*, 47, 87-103.

- Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67, 3-4.
- Jonas, D., Dougherty, C., Herrera, A. W., LaTurner, J., Garland, M., & Ware, A. (2012). High school predictors of college readiness: Determinants of high school graduates' enrollment and successful completion of first-year mathematics and English college courses in Virginia. Virginia Department of Education, National Center for Educational Achievement.

Kuh, G. D. (2007). What student engagement data tell us about college readiness. *Peer Review*, 9(1), 4-8.
Roderick, M., Nagaoka, J., & Coca, V. (2009). College readiness for all: The challenge for urban high schools. *The Future of Children*, 19, 185-210.

IX. Recommended Citation of Scale

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

Anderson-Butcher, D., & Amorose, A. J. (2012). Community and Youth Collaborative Initiative School Experience Surveys: Career and College Readiness Scale in Middle School and High School Students. Columbus, OH: College of Social Work, The Ohio State University.

If this scale is used along with additional Community and Youth Collaborative Initiative School Community Surveys, then the following citation would be appropriate to cover all scales:

Anderson-Butcher, D., & Amorose, A. J. (2012). Community and Youth Collaborative Initiative School Experience Surveys. Columbus, OH: College of Social Work, The Ohio State University.