

CORE OUTCOME AREAS LITERATURE REVIEW

Table of Measures for Core Outcome Areas for Runaway and Homeless Youth

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PREPARED BY GRAY MATTERS TECHNOLOGY SERVICES
FOR THE FAMILY AND YOUTH SERVICES BUREAU (FYSB)



NOTE: Inclusion in this resource is not an endorsement from FYSB; and the instruments included are not rated or ranked. Rather, because users' priorities and needs vary, this resource is intended to be a summary of information about currently available instruments that may be able to support users in selecting which instruments to use for program planning and evaluation.

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LITERATURE REVIEW ANNOTATED TABLE OF MEASURES: FOUR CORE OUTCOME AREAS FOR RUNAWAY AND HOMELESS YOUTH

Background and Theoretical Approach

This literature review was developed by Gray Matters Technology Services in response to the federal Family and Youth Services Bureau (FYSB) request to identify and summarize key information about measures related to the agency's four core outcome areas for homeless youth:

- **Safe and Stable housing** – assuring safe, stable housing for youth that is sustainable over time;
- **Permanent connections** – establishing lasting social and community supports through connections with healthy, positive role models, mentors, and peers;
- **Education and/or employment** – completing formal education and training that supports the acquisition of jobs paying a living wage and the development of career paths;
- **Social-emotional well-being** – enhancing well-being in relation to positive interpersonal and intrapersonal functioning, e.g., problem severity, hopefulness, and satisfaction.

As the only federal agency dedicated to providing services to runaway and homeless youth (RHY), FYSB operates the Basic Center, Transitional Living (including Maternity Group Homes for Pregnant and Parenting Youth), and Street Outreach Programs. These programs fund grantees working with runaway and homeless youth (RHY) across the nation, monitor the performance and outcome of RHY services, and provide a network of support services to youth and the grantee projects that serve them.

FYSB's efforts are part of an ongoing improvement process centered on outcomes for homeless youth, as illustrated in the U.S. Interagency Council on Homelessness (USICH) Unaccompanied Homeless Youth Intervention Model in Figure 1, below. As part of its work with USICH, FYSB prioritized the four core outcome areas as key indicators of the impact of FYSB Programs and grantee services on RHY, including those living on the street. These outcome areas are incorporated into *Opening Doors*, the nation's first comprehensive federal strategic plan to prevent and end homelessness (released in 2010) and are key components of *The Framework to End Youth Homelessness* (2013). For FYSB, these core outcome areas are at the heart of the agency's focus on better measuring, reporting, and utilizing outcome data on services to RHY. Reliable data on RHY, even accurate estimates of the number of runaway and homeless youth, have historically been difficult to obtain, and the available research is somewhat limited and

dated.¹ Through this literature review, FYSB is summarizing information about recent research on the reliability and validity of outcome measures that can be used to track and measure outcomes for the federal RHY Program and each of its grantees, and to inform service development and improvement.

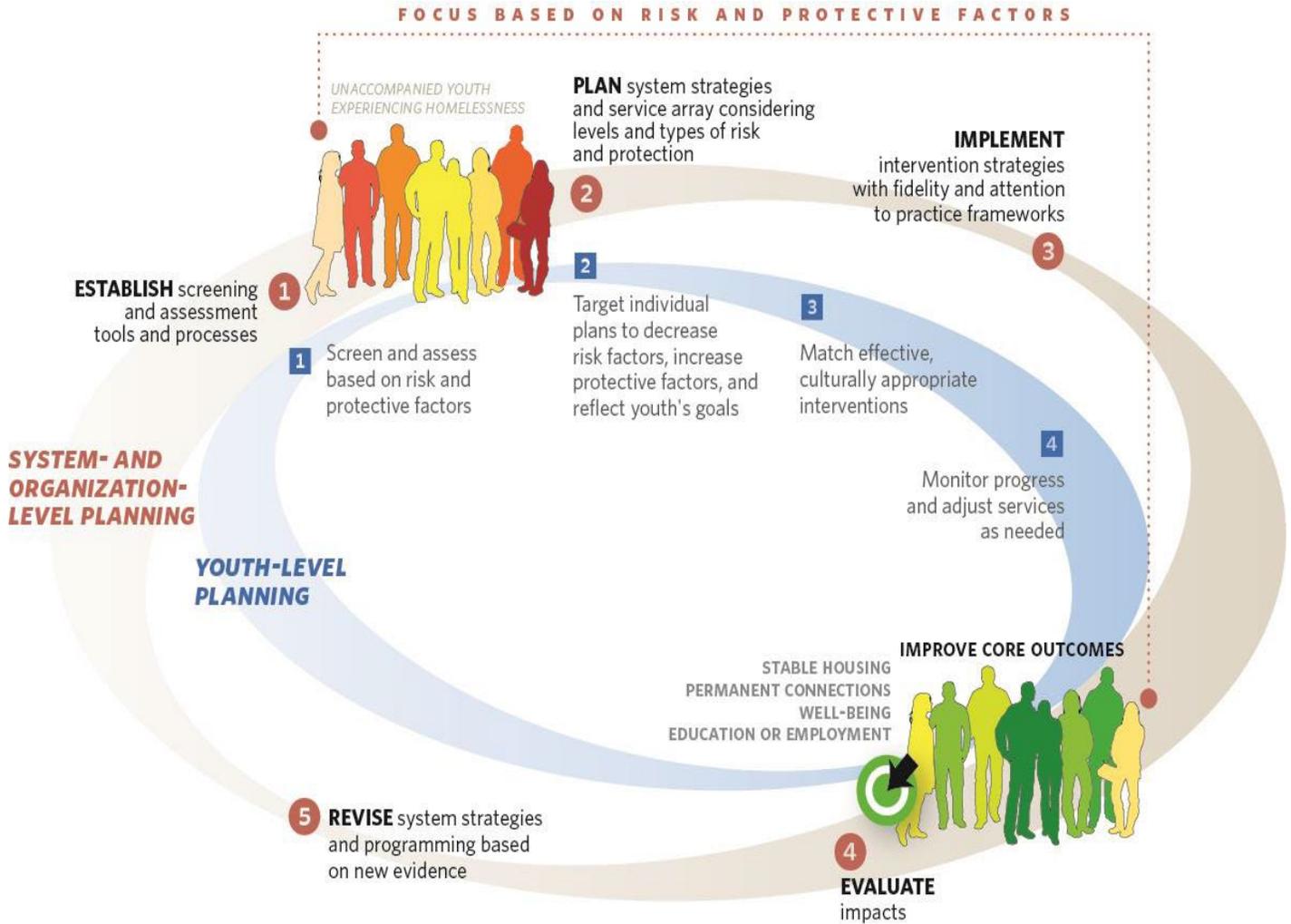


Figure 1. Focus Based on Risk and Protective Factors

Structure of the Review and Report

This literature review was designed to create a resource summarizing recent information about measures of FYSB’s four core outcome areas. FYSB identified the following information criteria as critical for supporting practitioners and policy makers in making decisions regarding program planning and evaluation:

- Specific outcome(s) measured

¹ *Runaway and Homeless Youth: Demographics and Programs*, Congressional Research Service, Adrienne L. Fernandez-Alcantara, April 26, 2018

- Age group of target population
- Populations the measure has been tested or implemented with
- Estimates of reliability
- Evidence of validity
- Methods of implementation
- Strengths
- Weaknesses
- Associated costs.

FYSB presents this information in table format in a Table of Measures that includes an annotated bibliography of key sources of information about each measurement instrument included in the table. In addition, this Table includes a list of recent publications retrieved during the literature search that may help users in program planning and evaluation, including selecting which measurement instruments to utilize.

Literature Review: Research Design

This literature review includes computer searches of major bibliographic databases, e.g., PsychINFO, MEDLINE/PubMed, EBSCOhost (SocINDEX and Psychology and Behavioral Sciences Collection) and JSTOR, as well as extended searches utilizing Google and other broad web-based search tools. The review focuses on publications that address one or more of the following questions:

- What are current measures of the four core outcome areas?
- What are the costs and availability of the measures identified?
- What are the psychometric properties of these measures in RHY and youth populations?
- What are key issues, findings, and recommendations in the field that should be considered in selecting measures of the four core outcome areas?

These questions grew out of FYSB's determination of the priority issues related to policy and practice for RHY identified by researchers, practitioners, and policy makers, relevant to the four core outcome areas and RHY. This includes an understanding of important gaps in information related to RHY, including current priority issues in the field related to the core outcome areas and to youth outcomes in general, as well as important gaps in information and recent innovations in providing services to improve outcomes for RHY.

This search includes scholarly journal articles and government documents, as well as dissertations, master's theses and meeting abstracts. Theses and dissertations were a major vehicle for reporting psychometrics of measures of education and employment, and to a lesser degree, well-being.

Key search terms included, but were not limited to:

Well-being

- Mental Health
- Health
- Substance use/abuse
- Well-being
- Social well-being
- Physical well-being
- Emotional well-being
- Emotional health
- Safety
- Risk (and risk factors)
- Assets (social-emotional)
- Independence/interdependence, independent functioning
- Coping
- Self-esteem

Permanent Connections

- Permanent connections
- Community connections
- Social support
- Support systems
- Attachment (family, social, school, community)
- Mentors
- Relationships (family, peer, positive)
- Youth-adult partnerships
- Relationships
- Social-emotional health

Education

- Reading
- Literacy
- Reading motivation
- Math/mathematics
- Academic success
- Academic success predictors
- Academic preparedness/readiness
- Academic motivation

Employment

- Employment outcomes
- Employment status
- Employment readiness
- Career planning
- Financial literacy

Housing

- Housing
- Shelter
- Stable housing
- Safe housing
- Housing predictors
- Basic needs
- Couch surfing
- Affordability (related to housing)

Each search was conducted using the key terms alone, as well as in conjunction with other modifiers, including:

- **Age and demographics**
 - Runaway youth
 - Homeless youth
 - At-risk youth
- **Measurement**
 - Measures and measuring
 - Outcomes
 - Assessment
 - Testing
 - Achievement
- **Intervention/Treatment**

The searches were carried out using a 'snowball' approach – beginning with key search terms (and modifiers). They were then expanded to include additional key words identified in the initial research results as search terms in the next round of reviews. This process was repeated until key words no longer yielded additional/new results. These search methods led to both quantitative and qualitative sources. The primary sources identified in this way were then examined for additional references to appropriate sources.

The focus within each of these searches was on: descriptions of measure and measurement and how to implement those measures; reports on psychometrics; setting up an evaluation framework; and developing frameworks in conjunction with program models. Evaluation frameworks also included identifying and/or affirming factors related to specific outcomes, such as self-esteem as a factor affecting well-being and support systems as a factor in establishing and maintaining permanent connections.

Inclusion/Exclusion Criteria

The criteria for considering literature for inclusion focused on relevance, age, and quality of the research (e.g., peer-reviewed journals and replicated results), including content:

1. Relevant to the four core outcome areas and related research questions;
2. Published since 2008 OR fundamental or formative research conducted some time ago that included information on seminal studies of psychometrics (typically supported by narrower, more recent, specific outcome studies). Formative research on psychometrics may not have been repeated, owing to the cost and other resources required for such studies;
3. Published in English, though not limited to results from English speaking countries;

4. Documented in peer-reviewed journals, government agency reports, master's theses or dissertations, instrument developer web sites, reputable trade journals or news media reports. The review was expanded beyond peer-reviewed articles and government reports because accepted theses and dissertations often include detailed information about youth needs, intervention effectiveness, and outcome measures. Some psychometric testing has been conducted for thesis or dissertation work. Journalistic sources were also considered since professional reporting to colleagues or investigative media reports may be valuable sources of peer commentary, qualitative data, and rich program description. These sources were included when they were the sole sources of relevant information, or when they included information that supplemented other sources; and
5. Accessible without exceeding the project budget or deadlines.

Searches focused on research conducted with late elementary school-aged children and adolescents, and relevant research among young adults (typically 18-25), and families (which included children and adolescents). While the initial focus was on work involving RHY, few studies were conducted solely with this population; and psychometrics were seldom established with RHY alone. Thus, the target population was expanded to include youth, and, where information was available, groups that overlap with RHY in one or more characteristics, such as at-risk youth and people who are homeless. Qualitative studies were included if they reported on one or more of the following: case studies; relevant research methods issues; program design, implementation, and/or evaluation; or policy issues related to measuring the core outcome areas.

How the Literature Review Is Organized

The following compendium of measures is a list of potential tools for measuring the impact of interventions designed to support this population or those similar to it. It is intended as a resource that identifies current, relevant measuring instruments that can be used by stakeholders to gather client data and use it effectively in program planning and evaluation. The compendium of measures is organized by each of the four core outcome areas in the following order: Permanent Connections, Well-Being, Education, Employment, and Safe and Stable Housing. Within each area, additional categories that emerged are provided. For example, the category Well-Being comprises subcategories for both Physical and Social-Emotional Well-Being. The annotated bibliography developed through this review has been incorporated into the compendium, and addresses why each reference was included, such as reporting on the psychometrics of a measure, appropriateness and utilization with RHY, utilization with other youth populations, or concerns or issues with utilizing a measure. Within each category, the citations are organized alphabetically by the last name of the lead author who is identified by title, affiliation, and field of interest. In addition, the Supplemental References section after the compendium identifies several documents that may be useful for assessing which measures would be most appropriate for program planning and evaluation, or for interpreting evaluation

results. These references, along with brief summaries of content, are presented by outcome area. References that apply to multiple outcome areas are presented at the end of the Supplemental References section. Immediately following that section is a glossary of terms.

Psychometrics: Regarding Validity and Reliability

Where applicable, thresholds for adequate validity and reliability are presented in the glossary and noted in the text. In many cases, there is not a clear threshold. For example, results of factor analyses show the degree to which measures reflect theories or abstract constructs. The minimum requirement for this depends upon the user's purposes. It is not necessary for practitioners to have a detailed understanding of psychometrics to select appropriate measures. It is important to understand the value of an instrument that has demonstrated at least modest validity and reliability over an untested instrument, and to consider whether the types and degrees of reliability and validity demonstrated indicate that an instrument is appropriate for the intended use. Helpful definitions for and types of validity and reliability are provided in the glossary.



CORE OUTCOME AREA: PERMANENT CONNECTIONS

ADOLESCENT POSITIVE PEER RELATIONSHIP SCALE

OVERVIEW/BASIC STRUCTURE and SCALES

The Adolescent Positive Peer Relationship Scale consists of self-reports by parents and youth, in a web-based, online format, which is age-appropriate for adolescents. There are no subscales within the instrument.

TARGET POPULATION(S)

This scale is utilized with adolescents, and the psychometrics (validity and reliability) have been established with a national sample of that same age group.

PSYCHOMETRICS

VALIDITY: Concurrent Validity: correlates significantly with other relevant measures. Factor Construct has been confirmed with factor analysis.

RELIABILITY: Strong reliability with Cronbach's alpha of .86 for parents. .91 for adolescents.

WEAKNESSES

- Examples of use in applied research not found.

STRENGTHS

- Validated, demonstrating strong reliability.
- Age-appropriate measure for the majority of RHY population (adolescents).
- No cost for acquisition or use.

KEY REFERENCES

Lippman, L., Guzman, L., & Moore, K. A. (2012). Measuring Flourishing among Youth: Findings from the Flourishing Children Positive Indicators Project. Presentation by Child Trends.

This presentation paper describes a project supported by Child Trends focused on measuring aspects of flourishing that matter for improving child outcomes. The instrument includes measures for selected constructs of flourishing chosen because no measures existed for adolescents; existing measures requiring refinement for diverse populations; promising work done with small, convenience samples that required further testing; and/or long scales needed to be shortened for use. The study sample included 2,421 parents, 1,915 adolescents (ages 12-17), and 1,846 complete parent-adolescent dyads.

The Child Trends DataBank includes regularly updated data on more than 125 indicators of the well-being of children and youth. The organization authored the first federal report on: *America's Children: Key National Indicators of Well-Being*.

A-COPE (ADOLESCENT COPING ORIENTATION FOR PROBLEM EXPERIENCES – DEVELOPING SOCIAL SUPPORT SCALE)

OVERVIEW/BASIC STRUCTURE and SCALES

The A-COPE is a self-report questionnaire completed by the youth consisting of 12 scales, including: Seeking Professional Support, Ventilating Feelings, Seeking Diversions, Self-Reliance, Social Support, Solving Family Problems, Avoiding Problems, Spiritual Support, Investing in Close Friends, Engaging in a Demanding Activity, Humor, and Relaxing. The Social Support Scale is of most interest in relation to permanent outcomes connections, providing information on the youth's social networks and support systems (both formal and informal).

TARGET POPULATION(S)

Youth ages 11-18. Some researchers suggest a separate factor structure for early adolescents.

PSYCHOMETRICS

VALIDITY: Validity coefficients reported as .40. Correlations with A-COPE-derived scales generally show that the items are tapping important aspects of adolescent coping.

RELIABILITY: Reliability coefficients reported as .86. Cronbach's scale alpha reliabilities ranged from .50 to .76 (from .60 to .75 in another study). Data yielded internal consistency reliability coefficients (Cronbach's alpha) of .78 for the social support coping strategy scale and .77 for the detrimental coping strategies scale.

WEAKNESSES

- Scored differently across studies so comparison is difficult.

STRENGTHS

- The items are short and easy to understand.
- Has been used with diverse populations and versions exist in multiple languages, including Spanish and Chinese.
- No cost for acquisition or use.

KEY REFERENCES

Chapman, P. L., & Mullis, R. L. (1999). Adolescent coping strategies and self-esteem. *Child Study Journal*, 29(1), 69.

This article discusses a study of the relationships between self-esteem and coping strategies in adolescence. A sample of 361 male and female adolescents in Grades 7 through 12 were assessed using the Adolescent Coping Orientation for Problem Experiences (A-COPE). Self-esteem was assessed by the Coopersmith's Self-Esteem Inventory. More than two-thirds (68%) of participants were African American; and 32% were European American, with a mean age of 15.5 years. Adolescents were found to utilize all twelve coping strategies identified in the A-COPE scale. Multivariate analyses revealed that adolescents with lower self-esteem utilized more avoidance coping strategies than adolescents with higher self-esteem.

Paula L. Chapman is a research scientist focusing on traumatology and psychophysiology at the James A. Haley Veteran's Hospital in Tampa, FL.

Plunkett, S. W., & Henry, C. S. (1999). Adolescent perceptions of interparental conflict, stressors, and coping as predictors of adolescent family life satisfaction. *Sociological Inquiry*, 69(4), 599-620.

This article reports the results of a study that examined the relationship between adolescent reports of selected demographic variables, interparental conflict, stress, coping strategies, and life satisfaction. The sample comprised 155 adolescents ranging from 14 to 18 years of age who completed self-report questionnaires. The frequency with which adolescents reported using behaviors to manage problems or difficult situations was assessed using seven of the twelve subscales of the A-COPES. Results demonstrated significant relationships between family life satisfaction and the other constructs being studied, including adolescent coping strategies.

Scott W. Plunkett Ph.D. is a professor of Psychology at California State University, Northridge and is the author of over 80 research articles, with a focus on Latinx adolescents.

Recklitis, C. J., & Noam, G. G. (1999). Clinical and developmental perspectives on adolescent coping. *Child Psychiatry and Human Development*, 30(2), 87-101.

This article describes the results of a study examining the relationship between psychological development, coping strategies and symptomatology. The sample was 302 12-16-year-old patients in a psychiatric hospital. Subjects completed the A-COPE and additional instruments. The article provides an example of utilizing the A-COPE to measure coping strategies in an adolescent population with mental illness.

Christopher J. Recklitis is the Principal Investigator and Director of Research for the Perini Family Survivors' Center in Boston, and an assistant professor of pediatrics at Harvard Medical School. His research focuses on understanding the development of effective screening measures for detecting distress/stress. He earned a Ph.D. in psychology from Boston University.

Sveinbjornsdottir, S. & Thorsteinsson, E. B. (2008). Adolescent coping scales: A critical psychometric review. *Scandinavian Journal of Psychology*, 49 (6), 533–548.

This article discusses current issues with defining and measuring adolescent coping. The authors describe the rationale and development of six adolescent coping scales, including A-COPE, and critique methods of developing each scale. The authors report that developers of adolescent coping scales are generally not following best practice in test development. They report that the original factor structure reported for A-COPE was not replicated in four independent studies. The authors also report that internal consistency is low (Cronbach's alpha .70) for three factors and that some scales comprise only three items, which can distort reliability estimates.

Sigrun Sveinbjornsdottir is a professor and researcher at the University of Akureyri, Iceland

CHILD AND ADOLESCENT SOCIAL SUPPORT SCALE (CASSS)

OVERVIEW/BASIC STRUCTURE and SCALES

The CASSS 60 item self-report with Likert scale responses, which assesses socially supportive behaviors. Respondents include sources of support: parents, teachers, classmates, close friends, and school personnel. There are 12 items for each source of support. Each corresponds to types of behavior descriptive of social support: emotional, instrumental, informational, and appraisal.

TARGET POPULATION(S)

Ages 8-12 and ages 12-18 (different versions for each age group). Psychometrics established with Youth ages 8-18, including adolescents in grades 9-12 and court-involved female youth.

PSYCHOMETRICS

VALIDITY: Factor analysis revealed a clear five-factor structure, consistent with the Parent, Teacher, Classmate, close Friend, and School subscales. Significantly correlated, $r = .55$, $p = .001$ with the SSSC Social Support Scale for Children total score and with the Social Support Appraisals Scale total score, $r = .56$, $p = .001$. Subscales with alpha coefficients of .94-.96.

RELIABILITY: Reliability coefficients reported as .86. Cronbach's scale alpha reliabilities ranged from .50 to .76 (from .60 to .75 in another study). Data yielded internal consistency reliability coefficients (Cronbach's alpha) of .78 for the social support coping strategy scale and .77 for the detrimental coping strategies scale.

WEAKNESSES

- Larger (60 item) instrument, requiring more time for completion.

STRENGTHS

- Extensive use, validation and reliability data.
- Identifies distinct support from parent, teacher, classmate, and close friend. Each source subscale measures four types of social support including emotional, instrumental, appraisal, and informational.
- No cost of acquisition or use.

KEY REFERENCES

Coyle, S., & Malecki, C. K. (2018). The association between social anxiety and perceived frequency and value of classmate and close friend social support. *School Psychology Review, 47*(3), 209-225.

This article discusses a study utilizing the CASSS to examine the relationship between social support from classmates and close friends and social anxiety in a sample of 377 adolescent students in grades 9–12. The results of the study suggest that both the frequency and importance placed on support from classmates and close friends is associated with social anxiety. The frequency of support was negatively associated with social anxiety. However, the importance placed on support behaviors was positively associated with symptoms of social anxiety, and the importance of support moderated the relationship between the frequency of social support and social anxiety: the highest levels of anxiety were associated with low levels of support in the presence of high importance.

Samantha Coyle is an assistant professor at Montclair State University (NJ). Her research focuses on social support for youth and young adults and negative peer interactions such as bullying.

Crosby, S. D., Somers, C. L., Day, A. G., Zammit, M., Shier, J. M., Baroni, B. A. (2017). Examining school attachment, social support, and trauma symptomatology among court-involved, female students. *Child and Family Studies 26*(9).2539–2546. DOI 10.1007/s10826-017-0766-9.

This article reports on a study assessing a sample of female, court-involved secondary school students, exploring the relationship between school attachment and school involvement, school social support (from peers, teachers, and other staff), and trauma symptomatology. The students were residential placement students exposed to a trauma-informed teaching intervention. Three subscales of the CASSS were used: Social Support from Teachers, Social Support from People in My School in General (e.g., school staff, administrators), and Social Support from Classmates. The students had experienced high trauma exposure, as indicated by their high trauma symptomatology. Unexpectedly, they also had high school attachment, which was associated with lower trauma symptoms. Conversely, students reported lower levels of social support (from their classmates), associated with significantly higher trauma symptomatology.

Shantel D. Crosby, PhD, LCSW is an Assistant Professor in the Kent School of Social Work at the University of Louisville (KY). Her research focuses on trauma, particularly as it relates to youth and youth in the juvenile justice system.

Demaray, M. K., Malecki, C. K., Davidson, L. M., Hodgson, K.K., & Rebus, P. J. (2005). The relationship between social support and student adjustment: A longitudinal analysis. *Psychology in the Schools, 42(7)*, 691-706.

This study examines the relationship of multiple types of perceived social support to adolescent adjustment. The sample included 82 students from two at-risk urban middle schools. Utilizing the Child and Adolescent Social Support Scale (CASSS) and the Behavior Assessment System for Children (BASC; C. R. Reynolds & R. W. Kamphaus, 1998), data were collected at three time points to assess the relationship between social support and student adjustment behaviors over time. The authors identified a relationship between support from parents and clinical maladjustment and emotional symptoms at six month and one-year follow-ups. Support from classmates was related to students' emotional symptoms one year later, and school support was related to school maladjustment one year later even after earlier school maladjustment was taken into account.

Michelle Kilpatrick Demaray is a Professor of School Psychology in the Psychology Department at Northern Illinois University interested in the measurement of social support and how social support is related to outcomes for youth.

Demaray and Malecki are the authors of multiple peer-reviewed studies on the impact of social supports on school-age youth.

Flaspohler, P. D., Elfstrom, J. L., Vanderzee, K. L., Sink, H. E., & Birchmeier, Z. (2009). Stand by me: The effects of peer and teacher support in mitigating the impact of bullying on quality of life. *Psychology in the Schools, 46(7)*, 636-649.

This article discusses the results of a study of the effects on perpetrators and victims of bullying in a sample of 4,331 elementary and middle school children utilizing representative items from the 24 CASSS items measuring teacher and peer social support. Six items regarding teachers and six regarding peers were utilized to limit the length of the survey developed for this study. Results suggest that students who bully and/or are bullied experience reduced life satisfaction and support from peers and teachers compared to "bystanders" (children who are neither victims nor perpetrators of bullying). Analyses demonstrate that support from peers and positive adults might mitigate the impact of bullying on the quality of life of victims.

Paul D. Flaspohler is the Director of Research and Evaluation at Miami University (Oxford, OH). He holds a PH.D. in Clinical Community Psychology. His work focuses on integrating teaching, research, and service through modeling and involving students in self-evaluation, through community and school-based research projects, and through teaching about using research and evaluation in the service of communities and school.

Malecki, C. K., & Demaray, M. K. (2002). Measuring perceived social support: Development of the child and adolescent social support scale (CASSS). *Psychology in the Schools, 39(1)*, 1-18.

This study analyzed and revealed evidence of CASSS reliability, a four-factor structure (Parent, Teacher, Classmate, and Close Friend subscales), and construct validity. The study utilized a large, representative sample of 1,110 students in grades 3 through 12 from schools in Massachusetts, Wisconsin, Minnesota, Illinois, and Nebraska, with 32% of students being minorities. The results of this study indicate that the CASSS covaries as

predicted with the clinically important constructs of self-concept, social skills, and behavioral indicators. There is evidence that the CASSS can be used to understand child and adolescent perceived social support.

Christine K. Malecki is Director of the School Psychology Program and full professor at Northern Illinois University. Her research interests include the study of students' perceived social support and how that support is related to their adjustment and academic achievement, how social support may be important for victims of bullying and bullies, the study of curriculum-based measurement (CBM) in writing and reading, and innovative school psychological service delivery (problem-solving and response to intervention).

Menon, V., & Demaray, M. K. (2013). Child and Adolescent Social Support Scale for healthy behaviors: Scale development and assessment of the relation between targeted social support and body size dissatisfaction, *Children's Health Care, 42* (1).45–66. DOI: 10.1080/02739615.2013.753800.

This study utilized a new version of the CASSS, the Social Support Scale for Healthy Behaviors (CASSS-HB) to address the lack of reliable and valid measurement tools to assess social support specifically for healthy behaviors pertaining to childhood obesity. The study sample included 121 students, grades three to five. Results indicated that the CASSS-HB showed preliminary evidence of reliability and validity as a measure of targeted social support for healthy behaviors in children. Youth who were categorized as obese scored higher on a score of body dissatisfaction than healthy weight or overweight youth.

Michelle Demaray is the author of multiple peer-reviewed studies on the impact of social supports on school age youth.

Vinita Menon is a clinical psychologist, and staff in Department of Psychology, Northern Illinois University.

Suldo, S. M., Friedrich, A. A., White, T., Farmer, J., Minch, D., & Michalowski, J. (2009). Teacher support and adolescents' subjective well-being: A mixed-methods investigation. *School Psychology Review, 38*(1), 67.

This article presents results of a mixed-methods study conducted to identify the relationship between perceived social support (enacted by teachers) and the subjective well-being (SWB) of middle school students. Just over 400 students completed self-report measures of SWB and social support; and 50 students participated in focus groups to identify students' perceptions of teacher behaviors that the students felt communicated support. CASSS was used to measure students' perceptions of social support. SWB among adolescents was associated with a variety of schooling experiences, particularly their perceptions of teacher support. Findings from a simultaneous regression analysis indicated that perceived teacher support accounted for 16% of the variance in students' SWB, and that emotional support and instrumental support uniquely predicted SWB. Themes emerging from the focus groups included: students perceive teachers to be supportive primarily when they attempt to connect with students on an emotional level, use diverse and best-practice teaching strategies, acknowledge and boost students' academic success, demonstrate fairness during interactions with students, and foster an environment in which questions are encouraged.

Shannon M. Suldo, PH.D. is an Assistant Professor in the school of Psychology Program at the University of South Florida. Her research interests pertain to subjective well-being during youth and the social-emotional functioning of adolescents, as well as applications for strengths-based assessment and intervention.

Tian, L., Tian, Q., & Huebner, E. S. (2016). School-related social support and adolescents' school-related subjective well-being: The mediating role of basic psychological needs satisfaction at school. *Social Indicators Research*, 128 (1).105–129.

This article discusses a study conducted to:(1) test a theoretically-based model proposing that the satisfaction of three basic psychological needs at school mediates the relationship between school-related social support (i.e., teacher support and classmate support) and school-related subjective well-being and (2) explore the invariance of the model across gender and age groups. The study utilized the Chinese version of the CASSS translated and validated by Yang et al. (2010). The sample included 1476 Chinese adolescents (early adolescents = 676), with a median age of 15.5 and with roughly half being male. Structural equation modeling was used to examine and validate the hypotheses, demonstrating that school-related social support was related (at a statistically significant level) to subjective well-being.

Lili Tian is the Director of the Department of Applied Psychology in School of Psychology, and Director of Women's Study Center at South China Normal University. Her research interests include child and youth development and health promotion. Her main research field is student's subjective well-being. She led the team to develop a series of measures, including the Elementary School Students' Subjective Well-Being in School Scale, Adolescents' Subjective Well-Being in School Scale, Brief Students' Subjective Well-Being in School Scale, and Students' Basic Psychological Needs at School Scale. She earned a Ph.D. in psychology from South China Normal University.

Liu W., Mei, J., Tian, L., & Huebner, E. (2016). Age and gender differences in the relation between school-related social support and subjective well-being in school among students. *Social Indicators Research*, 125 (3).1065–1083.

The authors investigated age and gender differences in the relation between students' school-related social support (i.e., teacher support and classmate support) and subjective well-being (SWB) in school settings. Items measuring teacher support and classmate support were from two subscales of the CASSS, collected from a sample of 2,158 students in Grades 4 through 11 in China on two separate occasions, 6-weeks apart. Findings indicated both teacher support and classmate support significantly related to increases over time in school satisfaction, moderated by gender, with teacher support having the greater impact.

Wang Liu was affiliated with South China Normal University School of Politics and Administration at the time of this publication. He has published several articles about measuring well-being in adolescents.

DEVELOPMENTAL ASSETS PROFILE (DAP)

OVERVIEW/BASIC STRUCTURE and SCALES

The DAP is an online survey that can be analyzed and reported for aggregate and individuals online or by the user. Scales include External Assets, Internal Assets, and Context. Social support and social context are distinct asset scales.

The cost for acquisition and use is \$250.00 minimum for up to 100 surveys, includes analysis and report. \$2 for each additional survey.

TARGET POPULATION(S)

Adolescents from the general population; runaway and homeless youth; and delinquent youth. Psychometrics established with multiple samples of secondary school students, grades 6-12.

PSYCHOMETRICS

VALIDITY: Correlates in expected direction with high-risk behavior patterns, thriving indicators, and self-reported grades.

RELIABILITY: Cronbach's alpha = .81. Test-retest reliability of .79.

WEAKNESSES

- In anecdotal use, programs have identified concerns with questions being interpreted differently over time and thus skewing scores.

STRENGTHS

- Previously implemented with runaway and homeless youth.

KEY REFERENCES

Search Institute (2018). Developmental Assets Profile: Technical Summary. Online: <https://www.search-institute.org/wp-content/uploads/2017/11/DAP-Psychometric-Information.pdf>.

This is a technical summary of the Developmental Assets Profile (DAP) built on 40 developmental assets which provide the foundation for positive youth development models. The document summarizes the results of extensive psychometric testing of the DAP with a wide range of youth populations, demonstrating the instrument as a reliable, valid and stable measure of youth strengths and supports. Research includes two field tests in 2004 with samples of 1,300 students, grades 6-12 and 1,100 students in grades 8-12. The latter sample broadened geographic representation and increased the ethnic and racial diversity of students in the sample. The results of subsequent reliability tests across the US and internationally are also presented, using analysis of data from 8 sample communities, with similar results in studies in 18 other countries.

The Search Institute has been at the forefront of asset-based approaches to youth, identifying 40 positive supports and strengths that young people need to succeed. As part of its positive youth development research, researchers at the Search Institute have surveyed about 6 million young people in the United States and around the world over the past 25 years to understand: how young people experience Developmental Assets, variations in those experiences for different groups of young people, and how experiences of assets relate to key outcomes, including both high-risk behaviors and thriving.

Heinze, H. J., (2013). Beyond a bed: Support for positive development for youth residing in emergency shelters, *Children and Youth Services Review*, 35(2), 278-286.

This article reports on the results of a study examining environmental and personal characteristics that support positive development among youth residing in emergency shelters. The DAP was used to measure external and internal developmental assets and adapted to additionally measure agency assets, i.e., external assets specific to the shelter setting. Eighty-two youth completed the assessment, during their shelter stay, and youth asset scores were positively correlated with measures of healthy functioning. Youth completing multiple surveys reported decreases in distress and increases in life satisfaction, health behavior, positive caregiver relationship, and internal assets during shelter stay. In addition, agency asset scores were higher than external asset (e.g., family and school) asset scores, and Youth reported increases in assets and adaptive functioning during shelter stay.

Hillary J Heinze's research focuses on homeless youth. She is on the faculty of Wayne State University and the University of Michigan-Flint, Department of Psychology. Her work focuses on positive developmental supports and resources and adaptive functioning within settings that provide services to vulnerable youth.

Wilson-Ahlstrom, A., Yohalem, N., DuBois, D., Ji, P., Hillaker, B., & Weikart, D. P. (2014). From soft skills to hard data: Measuring youth program outcomes. Forum for Youth Investment. Washington, DC.

This practitioner's guide is designed as tool to assist practitioners in choosing conceptually grounded and psychometrically strong measures of important skills and dispositions that go beyond academic achievement and other distal youth outcomes like risk behavior, mental health, and employment. In an effort to facilitate access to good measurement tools, the guide provides information on validity, reliability, and appropriate uses of multiple assessments. The authors cite substantial evidence of the reliability of the DAP and moderate evidence of the DAP's validity (the highest rating for nearly all the assessments).

Alicia Wilson-Ahlstrom was the Director of Field Learning and Research at the Forum for Youth Investment, where she served on staff for 15 years. She is currently an independent consultant on child and youth policy. She earned Master of Social Work and Master of Public Policy degrees from the University of Michigan.

RICKTER SCALES

OVERVIEW/BASIC STRUCTURE and SCALES

There are three Rickter Scales that address the core outcome area of Permanent Connections. They have the same target populations, psychometrics, strengths and weaknesses. The **Positive Activities for Young People** set of Rickter Scales includes (relationships with) adults, young people, safety, education, time, stress, esteem, choice, and help. The **Youth** set of Rickter Scales address Difficult Situations, Alcohol, Drugs, Offending Behavior, Health, Motivation, Relationships, Living Situation, Peer Influences, and Employment/Training/Education/Volunteering. The **Life After School** scale is a 10-item scale measuring youth plans for post-secondary school transition. While each of the Rickter scales is available free online, there is a \$49 fee for scale and support materials package, and a cost of \$164 for training (which authors highly recommend for any user).

TARGET POPULATION(S)

Utilized with at-risk youth. Psychometrics established with young offenders and substance abusers (adolescents).

PSYCHOMETRICS

VALIDITY: Clients and supervisors have confirmed face validity. Clients and supervisors report that the scale accurately assesses barriers to change and progress made toward behavioral change. Clients and providers indicate that scale scores accurately indicate self-efficacy, decision-making skills, motivation, and education.

RELIABILITY: Provider and client assessments of clients' initial distance from target outcomes and distance traveled at subsequent assessment points align.

WEAKNESSES

- Available studies do not report quantitative estimates of psychometric properties

STRENGTHS

- Designed specifically for use with high-risk clients, especially those who are "socially excluded."
- Designed to collect data on contextual factors affecting clients' ability to achieve targeted outcomes.
- Designed to measure progress and motivation.
- Encourages focus on client strengths. Has been reported as useful in overcoming the sense that problems are permanent.

KEY REFERENCES

Armstrong, E. (n.d.) Rickter Scale case study: The Cedar Foundation Training and Brain Injury Services. *Northern Ireland ESF Review*, 3.

This brief case study presents results of a case study in which 26 projects used Rickter Scales to assess employability. A total of 672 individuals provided reviews of the projects. Reviews consistently reported that the Rickter Scale was an accurate and useful measure of progress toward goal achievement.

Elaine Armstrong is Director of Employment and Community Inclusion at the Cedar Foundation in Belfast, Northern Ireland. She earned a master's degree in health psychology from Ulster University.

George, K. (2013). *Scaling new heights in VET: Adapting the Rickter Scale Process to improve and monitor the journey of marginalized groups toward employability*. Prepared by Northumbria University for Lifelong Learning Program.

This report describes the rationale and process of developing the Rickter Scale and refining it with practitioners who offer employability training in four European countries (Germany, Greece, Italy, UK). The author discusses the importance of assessing soft outcomes as indicators of progress toward hard outcomes, such as employment. The author notes that the instrument was designed to empower clients, to facilitate identification of barriers to goal achievement and to plan strategies for overcoming these barriers.

Karen George is a researcher at Northumbria University and an expert in community participation in policy and practice. She earned a Ph.D. in information science from Northumbria University.

Hughes, D. (2010). *The Rickter Scale: Making a difference*. Online:

<http://www.rickterscale.com/assets/docs/Rickter%20Paper%20Dr%20Diedre%20Hugest%20Master%2017%20Nov%202010.pdf>

This paper discusses the rationale, development, usefulness, and applications of the Rickter Scale. The assessment was designed to support interviewers and vulnerable clients at-risk for social exclusion in defining goals and planning to achieve them. This includes identifying barriers, contextual factors, such as peer and community norms, economic opportunities, and self-esteem, that can affect goal achievement. Assessment is a shared decision-making process using motivational interviewing techniques. The approach is "interpretivist"- emphasizing clients' subjective interpretation of social reality, rather than objective measures of goal achievements. The developers intended for Rickter Scales to supplement quantitative objective measures by offering insight into client perspectives regarding whether and how goals can be achieved. In addition, the scales provide information about client competencies and learning styles, which can be used in planning how to make progress toward goal achievement. Both clients and providers indicate the scale has face validity. In addition, clients and service providers both report that scale scores are accurate and useful indicators of changes that occur during interventions. Interrater reliability is indicated by a study of 25 client-provider pairs

whose assessments of the client's situation and expectations aligned. Content validity was indicated by client and provider reports that scale scores accurately indicated self-efficacy, decision making skills, motivation, and success in education.

Deirdre Hughes, OBE is an associate fellow at the Warwick Institute for Employment Research (IER), University of Warwick. She conducts research in educational policy, vocational education and social science.

Rolfe, H. (2003). *Developing good practice in Connexions: Techniques and tools for working with young people*. National Institute of Economic and Social Research.

This guidebook describes how to use Rickter Scales in practice. It also discusses the scales' purpose and what users have said about the utility of the scales. The author reports that clients have found the assessment process useful to perceiving problems to be solvable rather than as permanent states. Clients also expressed appreciation that assessment reports provide visible indicators of progress.

Heather Rolfe is the Associate Director of Employment and Social Policy at the National Institute of Economic and Social Research in the UK. She is an expert on barriers to employment. She earned a Ph.D. in technological change and skill from Southampton University.

Wood, N. & Stead, K. (n.d.). *Rickter Scale manual: A guide for practitioners using the Rickter Scale process*. Prepared by Northumbria University for Lifelong Learning Programme.

This users' manual by the scale developers provides a conceptual map of the scale, a description of the assessment process, guidelines for use, and instructions for interpreting responses and developing action plans for clients. It also includes a discussion of the principles of strength-based interventions.

Nan Wood is Director of Operations at the Rickter Company. She is an expert in youth services and at-risk youth. She earned a diploma in supported employment and certificates in mentoring and coaching from Oxford University.

SHOOTING STAR (PEOPLE AND SUPPORT)

OVERVIEW/BASIC STRUCTURE and SCALES

This scale is part of the Outcomes Star suite of instruments. A trained service provider (staff) completes this instrument while soliciting input from youth. Scales include Aspiration, Contribution, Confidence, Learning, **People and Support, Communicating**, Readiness for Change, Investment.

TARGET POPULATION(S)

Primary and secondary school students, Shooting Star is derived from Outcomes Star, designed for homeless populations. Psychometrics established with primary and secondary students.

PSYCHOMETRICS

VALIDITY: Expert review of content, correlates with direct measures.

RELIABILITY: Interrater (reliability) $r = .80$.

WEAKNESSES

- While the scale is free online, users are highly encouraged to purchase training at variable costs, which have to be negotiated in advance with Triangle Consulting Social Enterprise.

STRENGTHS

- The instrument has been normed with youth.

KEY REFERENCES

MacKeith, J. (2014). Assessing the reliability of the Outcomes Star in research and practice. *Housing, Care and Support*, 17(4), 188-197.

This paper describes a pilot to test an approach to measuring inter-rater reliability of the Outcomes Star suite of tools, as part of the tools co-operative development. A sample of 24 workers scored a tested case study. The case study approach and metrics were then evaluated for validity and accessibility. Initial evaluation suggests good inter-rater reliability, reaching the accepted threshold of 0.8 for the inter-rater reliability coefficient. Three outlying workers were excluded. The reliability for the full ten-point scale was moderate. As noted in the reference below, the author was part of the Outcomes Star development team.

MacKeith, J. (2011). The development of the Outcomes Star: a participatory approach to assessment and outcome measurement. *Housing, Care and Support*, 14(3), 98-106.

This paper describes the development process for the Outcomes Star, a suite of tools designed in the United Kingdom to simultaneously measure and support change in vulnerable people. The paper describes the theoretical and philosophical underpinnings of an approach which aims to embody both research- and values-based practice in empowerment and respect for the individual. The author, who was part of the development team, describes extensive consultations with practitioners and users, and relates these to the needs and strengths of service users, the contemporary policy framework, as well as wider research in the field. The Outcomes Star draws on the core principles of Action Research and Participatory Action Research and applies them to assessment and outcome measurement. The author acknowledges that no formal research has been conducted on the usefulness of the Star approach. However, there has been a rapid adoption of this approach within the UK and in other countries, which the paper argues stems from Outcomes Star being rooted in a philosophy that: a) is more responsive to needs of service provider staff; and b) more closely reflects the experience of those receiving services, than traditional measures.

Joy MacKeith is co-director of Triangle Consulting Social Enterprise and co-author of Outcomes Star measures. Her experience includes providing services to people who are homeless, teaching at the London School of Economics, and program evaluation.

SOCIAL COMPETENCE

OVERVIEW/BASIC STRUCTURE and SCALES

This instrument includes web-based parent and youth self-reports, available online, with no subscales.

TARGET POPULATION(S)

Examples of utilization with specific populations were not found, though the instrument was normed on national sample of adolescents.

PSYCHOMETRICS

VALIDITY: Concurrent validity demonstrated, as results correlate significantly with observable, identified behaviors, including fighting, smoking, depression, grades. Factor structure confirmed with factor analysis.

RELIABILITY: Cronbach's alpha ranged from .62 for parent to .79 for adolescent.

WEAKNESSES

- No examples of use in applied research were found.

STRENGTHS

- The instrument has been normed with adolescents.
- No cost for acquisition or use.

KEY REFERENCES

Lippman, L., Guzman, L. & Moore, K. A. (2012). Measuring Flourishing among Youth: Findings from the Flourishing Children Positive Indicators Project. Presentation by Child Trends.

This presentation paper describes a project supported by Child Trends focused on measuring aspects of flourishing that matter for improving child outcomes. The instrument includes measures for selected constructs of flourishing chosen because no measures existed for adolescents; existing measures requiring refinement for diverse populations; promising work done with small, convenience samples that required further testing; and/or long scales needed to be shortened for use. The study sample included 2,421 parents, 1,915 adolescents (ages 12-17), and 1,846 complete parent-adolescent dyads.

The Child Trends DataBank includes regularly updated data on more than 125 indicators of the well-being of children and youth. The organization authored the first federal report on: *America's Children: Key National Indicators of Well-Being*.

Lippman, L., Guzman, L. & Moore, K. A. (2012). Measuring Flourishing among Youth: Findings from the Flourishing Children Positive Indicators Project. Presentation by Child Trends.

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The Child Trends DataBank includes regularly updated data on more than 125 indicators of the well-being of children and youth. The organization authored the first federal report on: *America's Children: Key National Indicators of Well-Being*.

SOCIAL PROVISIONS SCALE

OVERVIEW/BASIC STRUCTURE and SCALES

The scale is this 24-Item self-report survey assessing Presence and Absence of Social Attachment, Social Integration, and Reassurance. It measures six functions of Social Relationships: Attachment, Social Integration, Reassurance of Worth, Reliable Alliance, Guidance, and Opportunity for Nurturance.

TARGET POPULATION(S)

Young adults (e.g., post-secondary students). General adult population. Psychometrics established with general population, including university students, beneficiaries of social assistance, and persons diagnosed with psychosis, as well as with adolescents in US military families, 56% of whom were living in the United States.

PSYCHOMETRICS

VALIDITY: Discriminates and distinguishes between the general population, those receiving social assistance, and psychotic persons. Factor analysis has confirmed a six-factor structure corresponding to the six social functions being measured. Good reliability (all subscales $\alpha > 0.70$) and strong evidence of validity, with total scale scores significantly related to other assessments of social network size and satisfaction. Total scale internal reliability for caregivers was $\alpha = 0.92$.

RELIABILITY: Good internal consistency and measures are stable over time. Internal consistency for total scores ranges from 0.85 to 0.92; alpha coefficients for subscales range from 0.64 to 0.76. Internal reliability was high. Reliability α of .88 in use with youth under 18. Past studies have found also good reliability (all subscales $\alpha > 0.70$).

WEAKNESSES

- Validity and reliability were primarily determined with adults.

STRENGTHS

- Scoring mechanism accesses qualitative data on the specific nature of support available across Weiss's well-recognized categories of support (Weiss, 1974).
- Relatively short tool with simple format.
- Measures six functions of social relationships relevant to social connections.
- No cost to acquire or use the instrument.

KEY REFERENCES

Caron, J. (1996). L'Échelle de provisions sociales: Une validation Québécoise. *Santé Mentale au Québec, 21(2)*, 158-180.

[Translated from French] This paper presents the results of the Quebec validation of Social Provisions Scale through two studies. The Scale was administered to a total of 790 individuals: 387 undergraduate university students participated in the first study and, 266 people from the general population participated in the second study. The latter study included, 79 beneficiaries of social assistance and 58 persons diagnosed with psychosis. The results show that the scale has good internal coherence, and moderate correlations between the different social provisions support the validity of the multi-dimensional construction of social support. An analysis of the variance and discriminating analysis demonstrated high discriminating ability among each of the sub-scales.

Jean Caron is on the faculty and a principal investigator at the Douglas Mental Health University Institute, Department of Psychiatry at McGill University in Montreal, Canada and on staff in the Psychosocial Division, Douglas Hospital Research Centre (Montreal). His recent epidemiological work has made it possible to clarify the relationship between social support and quality of life, specifically with disadvantaged populations.

Caron, J. (2012). Predictors of quality of life in economically disadvantaged populations in Montreal. *Social Indicators Research, 107(3)*, 411-427.

This study attempts to clarify the relative contribution of social support to the quality of life of economically disadvantaged populations in two low-income neighborhoods of Montreal. Researchers interviewed a random sample of 417 social assistance recipients in their homes. The Social Provisions Scale was used to assess the availability of social support components. Among the 17 variables included in a multiple regression analysis, emotional support and support providing reassurance of worth accounted for most of the variance in the quality of life predicted by the model. Psychological distress also accounted for a fair amount of variance in quality of life and younger people and people experiencing food insecurity showed a lower quality of life. Study results indicate that access to social support plays a role in protecting against chronic stress which may result from conditions such as poverty and homelessness.

See above detail on author.

Lucier-Greer, M., Arnold, M. L., Grimsley, R. N., Ford, J. L., Bryant, C., & Mancini, J. A. (2016). Parental military service and adolescent well-being: Mental health, social connections, and coping among youth in the USA, *Child and Family Social Work, 21 (4)*, 421–432.

This article discusses research into the association between parental military work factors and the adolescent's well-being. Data were collected from 1,036 military youth, using subscales from the Social Provisions Scale to assess social connections as well as the guidance measure (the presence of someone to whom the adolescent could rely in times of need). Using a within-group design, researchers examined adolescents' well-being related to multiple family factors, including parental absence and school and neighborhood transitions. Two parental work factors primarily influenced adolescent's well-being, parental paygrade/rank and engagement in military-sponsored activities. Parental paygrade/rank was the only

factor uniformly related to poorer well-being. Engaging in military-sponsored activities served as a resource and was related to enhanced well-being.

Mallory Lucier-Greer is an assistant professor in the Department of Family and Child Sciences, Florida State University, Tallahassee, FL. Her research and publications focus on family stress, protective family processes, and youth development within the context of the family.

Miller-Graff, L. E., Howell, K. H., Martinez-Torteya, C., & Grein, K. (2017). Direct and indirect effects of maltreatment and social support on children's social competence across reporters. *Child Psychiatry & Human Development, 48(5), 741-753.*

This study examined the direct and indirect effects of multiple factors on social competence as a key characteristic of resilience. Key factors examined included the impact of maltreatment on children's social competence, the promotive role of child and caregiver social support, and other factors contributing to reports of child social competence. Structural equation modeling was used to evaluate the impact/influence of Child Protective Services report history, child adjustment, and child and caregiver social support on social competence with 783 caregiver-child pairs. Pairs were tracked from when children were between ages 8 and 12 until age 21. Social support, assessed using the Social Provisions Scale, was found to be a significant promotive factor of social competence, with caregiver social supports predicting higher levels of parent-reported child social competence. Child social support predicted self-reported child social competence. Findings reinforce the assertion that both caregiver and child social support networks are critical to promoting child well-being after adversity.

Laura E. Miller-Graff is a core faculty member at the Department of Psychology at the Kroc Institute for International Peace Studies at Notre Dame University. Miller-Graff's research seeks to explain how various systems (i.e. individual, family, and community) interact to promote or inhibit healthful development following violence exposure. In addition to conducting basic research on the effects of violence on development. She also seeks to identify effective intervention practices for children and families affected by violence.

Monson, E., Brunet, A., & Caron, J. (2015). Domains of quality of life and social support across the trauma spectrum. *Social Psychiatry and Psychiatric Epidemiology, 50(8), 1243-1248.*

This article reports methods and results of a study that assessed quality of life and social support among four groups: those with current post-traumatic stress disorder (PTSD); those with remitted PTSD; those who did not develop PTSD in spite of exposure to trauma; and those with no history of trauma. The sample comprised 2,433 individuals, ages 15 to 65. Quality of life and social support outcomes were measured with face-to-face structured interviews using the 24-item Social Provisions Scale and other standardized instruments. Contrary to most previous findings, individuals suffering from PTSD did not report lower overall social support. Outcomes suggested that remission from PTSD is associated with improved quality of life.

Eva Monson is a professor at the University of Sherbrooke and a researcher at the Charles-Le Moyne Research Center (Saguenay – Lac-Saint-Jean, Quebec, Canada) working in health research and innovation.

McGale, N., McArdle, S., & Gaffney, P. (2011). Exploring the effectiveness of an integrated exercise/CBT intervention for young men's mental health, *British Journal of Health Psychology*, 16 (3), 457–471.

This pilot study compared effects of a team-based, psychosocial sport intervention with an individual exercise intervention and a no intervention control on young men's mental health. A total of 104 adults, ages 18 to 40, participated in a 10-week randomized control trial and an 8-week post-intervention follow-up. Participants completed the Beck Depression Inventory – 2nd Edition (BDI-II), the Social Provisions Scale, and a short qualitative questionnaire at pre-intervention, week 5 post-intervention, and at week 8 follow-up. The individual exercise condition demonstrated significantly greater perceived social support than the team-based condition at week 5, and greater perceived support than the control group at week 8 follow-up.

Nadine McGale is a Research Fellow at the City University of London in the Division of Health Services Research and Management and, as a Ph.D. student, conducted research at the School of Health and Human Performance, Dublin City University (Ireland).

McGrath, B., Brennan, M. A., Dolan, P., & Barnett, R. (2014). Adolescents and their networks of social support: real connections in real lives? *Child and Family Social Work*, 19 (2), 237–248.

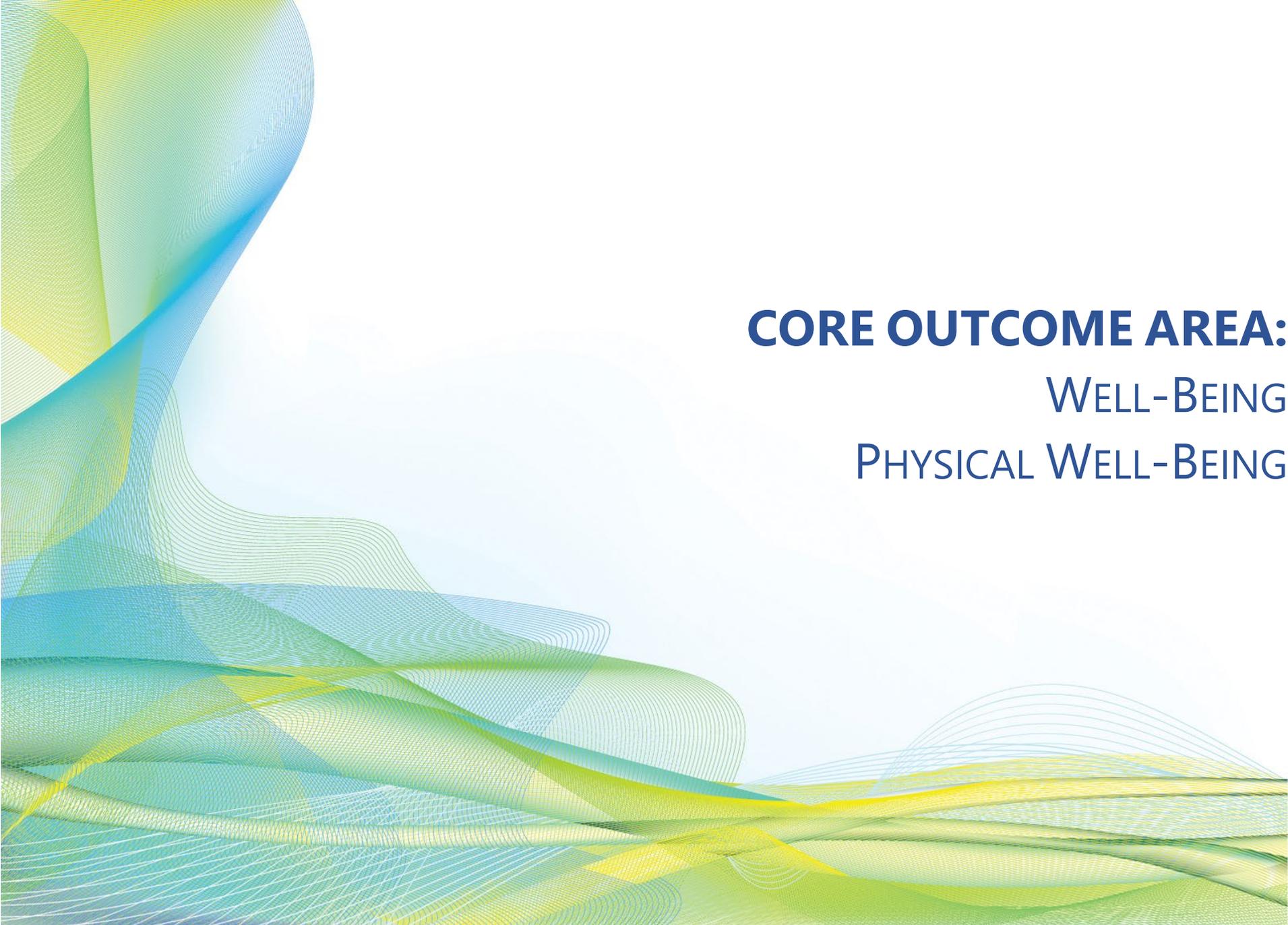
This paper examined research into a broad range of factors shaping youth social support and youth well-being, utilizing mixed methods research in two groups of youth within school settings – 322 youth in Ireland and 285 youth in Florida. Researchers investigated how the connection between social support and well-being bears out in these two different sociocultural contexts; how social supports differ among youth in both countries; and what relationships exist between well-being and types and sources of support. Sources and types of social support were assessed using the Social Provisions Scale. Findings indicate that social esteem and emotional social support are related to well-being.

Brian McGrath is the Program Director and a lecturer at the School of Political Science & Sociology, National University of Ireland, Galway, Ireland. His research includes a focus on rural youth and communities.

Richardson, E. W., Mallette, J. K., O'Neal, C. W., & Mancini, J. A. (2016). Do youth development programs matter? An examination of transitions and well-being among military youth. *Journal of Child and Family Studies*, 25(6), 1765-1776.

This article presents a correlational study examining the association between internal and external military family contextual factors and well-being outcomes in the youth within those families, including anxiety and self-efficacy. A sample of 749 children of active duty military members, ages 11–14 participated. Data were analyzed using structural equation modeling. The provision of resources gained from social relationships, including relationships with friends, family, and community members, were assessed using the Social Provisions Scale. Results indicated that military youth who reported more social provisions experienced fewer depressive symptoms and more self-efficacy.

Evin W. Richardson is Doctoral Candidate and Graduate Research Assistant at the Department of Human Development and Family Science, University of Georgia, Athens. Her research has focused on caregiver and family relationships, and their impact on adolescents.



CORE OUTCOME AREA: WELL-BEING PHYSICAL WELL-BEING

ADOLESCENT HEALTH REVIEW (AHR)

OVERVIEW/BASIC STRUCTURE and SCALES

The Adolescent Health Review is a self-administered computerized assessment with no subscales. Cost information could not be determined.

TARGET POPULATION(S)

High school students, clients in behavioral treatment. High school students in chemical dependency programs. Residents of juvenile correctional facilities. Psychometrics established with each of these populations.

PSYCHOMETRICS

VALIDITY: Summary article reports content and criterion validity, without quantitative estimates.

RELIABILITY: Not found.

WEAKNESSES

- No quantitative detail found for validity or reliability.

STRENGTHS

- Normed with high-risk youth.
- Low time burden (to complete).

KEY REFERENCES

Bradford, S., & Rickwood, D. (2012). Psychosocial assessments for young people: A systematic review examining acceptability, disclosure and engagement, and predictive utility, *Adolescent Health, Medicine and Therapeutics*, 3, 111-25. DOI:[10.2147/AHMT.S38442](https://doi.org/10.2147/AHMT.S38442).

This article discusses a review of psychosocial assessment instruments that can be used with the general population of young people presenting for health care. The authors reviewed the psychometric properties of multiple instruments, including the Adolescent Health Review (AHR), to identify the types of instruments most acceptable to young people, the capacity of each instrument to increase youth disclosure and improve their engagement with service provider staff, and whether each instrument can be used to predict change. The search strategy complied with the relevant sections of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement, which provides guidelines for reporting of meta-analyses. A total of 89 published articles were identified, covering 31 different assessment instruments. The authors found that self-administered instruments such as the AHR were most acceptable to young people, with no clear preference for computer-based versus pen-and-paper formats. In addition, while the review indicated that most psychosocial assessments can improve rates of disclosure and enhance engagement, users did not always respond to some of the most serious identified risks. Psychometrics for the Adolescent Health Review were not found within the research reviewed for this article.

Sally Bradford is a Senior Project Manager at Lifeline Australia, where she oversees projects to improve suicide prevention services. She is also a clinical psychologist. She earned a Ph.D. in clinical psychology from the University of Canberra, Australia.

Harrison, P. A., Beebe, T. J., & Park, E. (2001). The Adolescent Health Review: A brief, multidimensional screening instrument, *Journal of Adolescent Health*, 29(2), 131-139.

This paper discusses an effort to develop a brief, multidimensional screening instrument for adolescents that addresses psychosocial domains critical to adolescent preventive health care services. This was a secondary analyses of survey data obtained in 1995 from a sample of 76,159 students in grades 9 and 12, as well as 893 adolescents from juvenile correctional facilities, 500 adolescents from chemical dependency treatment programs, and 575 adolescents from residential behavioral treatment programs. A comprehensive set of 300 survey items was used in a series of discriminant analyses to determine which items best distinguished males and females in each clinical sample from their counterparts in the school sample. The items selection for the Adolescent Health Review was guided both by empirical analyses and clinical judgment. The final screen is comprised of 33 demographic and clinical items that address a variety of psychosocial domains. Advantages of the AHR include: a requirement of only a few minutes (averaging 3 minutes) to complete the computerized, self-administered screen; immediate scoring automatically; and an easy-

to-read risk-assessment profile. Since the AHR items were drawn from a large epidemiologic survey, normative profiles are available for each age and gender subgroup.

Patricia Harrison, Ph.D. is the Director of Research and Program Development at the Minnesota Department of Health and Family Support.

Harrison, P. A., Beebe, T. J., Park, E., & Rancone, J. (2003). The Adolescent Health Review: Test of a computerized screening tool in school-based clinics, *Journal of School Health*, 73(1), 15-20.

This article discusses the results of a study to test the viability of a stand-alone screening process in school-based health centers, including the acceptance of such a process by patients and providers. Altogether, 692 patients (83% female, 67% minority) completed the Adolescent Health Review (AHR), with the sample drawn from seven school-based clinics located in six high schools and one alternative school in an urban school district. A computerized version of the AHR was utilized, with automated administration, scoring, and report generation. The AHR generated useful risk and risk factor data. According to clinic staff, use of the AHR increased routine screening and the process was well accepted by patients and providers. Providers benefited from the opportunity to discuss risks with patients by using the printed reports to facilitate conversation and develop health care plans.

See above reference for author information.

FORM 90 TIMELINE FOLLOWBACK (TLFB)

OVERVIEW/BASIC STRUCTURE and SCALES

Addresses medical care utilization, patterns and frequency of drug and alcohol use. The Form 90 is a semi-structured interview that combines previously validated timeline follow-back procedure (Sobell & Sobell, 1992) and grid averaging (Miller & Marlatt, 1994) to record daily use of different substances for the past 90 days.

TARGET POPULATION(S)

Adolescents. Psychometrics established in multiple studies in 2010 and more recently with problem drinkers, male and female normal drinkers in the general population, and black and white male and female college students.

PSYCHOMETRICS

VALIDITY: Developed for National Institute on Alcohol Abuse and Alcoholism (NIAAA)-funded Project Match. Very high correlations occurred for total drinking days, jail days, and hospital days across six studies. Cross-validation demonstrated for alcohol and cannabis use measures in other previously validated instruments, including the Global Appraisal of Individual Needs (GAIN) and Form 90 among adolescents in substance abuse treatment.

RELIABILITY: Data derived from the TLFB method generally have high test-retest reliability across multiple populations of drinkers. Good test-retest reliability over 1–2 weeks for days of alcohol ($r = 0.78$) and cannabis ($r = 0.87$) use during the past 30 days, high reliability over 1 week in days of alcohol use ($r = 0.83$), drug use ($r = 0.92$), alcohol dependence symptoms ($r = 0.87$), and drug dependence symptoms ($r = 0.76$). Preliminary findings with adolescent samples suggest that Form 90 is internally reliable and sensitive to pre–post reductions in adolescents' substance abuse.

WEAKNESSES

- Primary focus of instrument: substance use. Medical care measures are focused on hospitalization and drug treatment.

STRENGTHS

- Utilizes proven self-report methodologies.
- No cost to obtain or administer. Requires no training or certification of staff. Scale is easily accessible and understood.
- Number of days of use, medical care, etc. could be easily compared to results during program (indicating sustainable health in relation to abstinence). Pre/post possible for longer term programs.

KEY REFERENCES

Bartle-Haring, S., Slesnick, N., Collins, J., Erdem, G., & Buettner, C., (2012). The utility of mentoring homeless adolescents: A pilot study, *The American Journal of Drug and Alcohol Abuse*, 38(4): 350–358.

The purpose of this pilot study was to examine the impact of mentoring among a group of homeless adolescents. The youth in the sample, ages 14 to 20, were also receiving substance abuse treatment. The Form 90, developed for National Institute on Alcohol Abuse and Alcoholism (NIAAA)-funded Project, was used to assess the severity of drug and alcohol use among adolescents. The study utilized a longitudinal design, which included assessment at three points: baseline, 3 months, and following the completion of treatment (6 months post-baseline). Findings based on the Form 90 showed that adolescents with a history of mentoring in addition to treatment were likely to experience an associated decrease in problem consequences related to substance use.

Suzanne Bartle-Haring is director of the marriage and family therapy program and a professor in the human sciences department at Ohio State University. She is an expert in at-risk youth issues. She earned a Ph.D. in family science from the University of Connecticut.

Dennis, M.L., Funk, R., Godley, S. H., Godley, M. D., & Waldron, H. (2004). Cross-validation of the alcohol and cannabis use measures in the Global Appraisal of Individual Needs (GAIN) and Timeline Followback (TLFB; Form 90) among adolescents in substance abuse treatment, *Addiction*, 99 (s2), 120-128.

This article discussed an examination of the comparability, reliability, and predictive validity of two instruments used to assess alcohol use and dependence: the Global Appraisal of Individual Needs (GAIN) and the Form 90 Timeline Followback (TLFB) methods. Working with a sample of 101 adolescents admitted to a treatment program in the United States, youth were interviewed with the GAIN at intake, and again within one week with a variation of TLFB, called Form 90. Results revealed that the measures had: (a) excellent comparability across the two instruments; (b) deteriorating reliability once reported peak Blood Alcohol Concentration levels exceeded 0.50 and the peak marijuana usage exceeded 19 joints; and (c) similar and strong relationships to the number of abuse/dependence symptoms across other measures and instruments. The corresponding measures from the two instruments produced comparable results. If the cross-validation of these two measures generalizes to adolescents treated in out-patient settings and other adolescent treatment populations, the GAIN and Form 90 may provide useful core alcohol measures for meta-analyses.

Michael L. Dennis is Senior Research Psychologist and Director of the GAIN Coordinating Center at Chestnut Health Systems, Normal, IL.

Kelly, J. F., Kaminer, Y., Kahler, C. W., Hoepfner, B., Yeterian, J., Cristello, J. V., & Timko, C. (2017). A pilot randomized clinical trial testing integrated 12-Step facilitation (iTSE) treatment for adolescent substance use disorder, *Addiction*, 112 (12), 2155–2166.

This article discussed the testing of the efficacy of a novel integrated TSE. The study utilized a parallel-group, randomized clinical trial (RCT) comparing 10 sessions of either motivational enhancement therapy/cognitive-behavioral therapy (a sample of 30) or a novel integrated 12-Step facilitation (iTSE, with a sample of 29). The Brief Symptom Inventory was utilized as a pre/post measure. The average age of participants was 16.8 years, and the youth were predominantly white (78%) and male (73%). Follow-up assessments were conducted using the TFLB at 3, 6, and 9 months following entry into (outpatient) treatment. Youth in the iTSE group did show greater 12-Step attendance and a significant advantage at all follow-up points for substance-related consequences. Other results were not significantly different across treatments.

John Kelly is the founder and director of Recovery Research Institute at Massachusetts General Hospital and a professor of addiction medicine at Harvard Medical School department of psychiatry. He earned a Ph.D. in psychology from University of California, San Diego.

Miller, W. R., & Del Boca, F. K. (1994). Measurement of drinking behavior using the Form 90 family of instruments. *Journal of Studies on Alcohol, Supplement*, (12), 112-118.

This article describes use of grid averaging to measure alcohol use. It informed development of the TLFB.

Slesnick, N., & Prestopnik, J. L. (2009). Comparison of family therapy outcomes with alcohol-abusing, runaway adolescents, *Journal of Marital and Family Therapy* 35(3), 255–277.

This article reports on a study comparing home-based Ecologically Based Family Therapy (EBFT) and Functional family therapy (FFT) with traditional, less intensive case management. The Form 90 was utilized to track improvements in substance use/abuse. All study participants were engaged into the project through one of two runaway shelters in Albuquerque, New Mexico. To be eligible for the program, the adolescent had to have a primary alcohol problem (e.g., alcohol dependence and marijuana abuse but not vice versa) and be between the ages of 12 and 17. In this study, youth participants were paid for completing the pretreatment assessment as well as each follow-up assessment. The authors found that for both groups receiving family therapy, the percentage days of drug and alcohol use significantly decreased over time, while use returned to near-baseline levels for the youth participating in more typical case management.

Natasha Slesnick is a professor of human development and family science at Ohio State University; she is also a clinical psychologist. Her expertise is in substance abusing homeless youth. She earned a Ph.D. in clinical psychology from the University of New Mexico.

Sobell, L. C., & Sobell, M. B. (1992). Timeline Followback. In *Measuring Alcohol Consumption* (pp. 41-72). Humana Press, Totowa, NJ.

This article discusses the development and administration of the Timeline Followback (TLFB), noting that self-reports were the only viable method for retrospectively measuring drinking with any precision as of the early 1990s. The article identifies multiple memory aids incorporated into the TLFB to strengthen validity and reliability, and provides psychometric information, including a high test-retest reliability across multiple sample populations, very high correlations with other quantitative measures (e. g., medical interventions required), and a high degree of correspondence between subjects' self-reports and official records, indicating validity. Concurrent validity was also determined by comparing TLFB data with two established measures of alcohol-related disabilities—Alcohol Dependence Scale (ADS) and the Short Michigan Alcohol Screening Test. The authors recommend use of the TLFB when trying to determine changes in alcohol use/consumption after services/intervention.

Linda Sobell is the Associate Director of clinical training and President's Distinguished Professor of Excellence at the Nova Southeastern University department of clinical and school psychology. She earned a Ph.D. in psychology from University of California, Riverside.

Waldron, H. B. & Kaminer, Y. (2004). On the learning curve: Cognitive-behavioral therapies for adolescent substance abuse, *Addiction*. 99 (s2),93–105.

This article reviews findings from controlled trials of cognitive behavioral therapies (CBT) for adolescents whose behavior includes substance abuse. Studies representing randomized clinical trials (RCT) were reviewed using criteria provided by CBT researchers. Substance use was measured using the Timeline Followback (TLFB) method. Even when allowing for prominent differences in design and methodology, the studies reviewed provide consistent empirical evidence that group and individual CBT are associated with significant and clinically meaningful reductions in adolescent substance use.

Holly Barrett Waldron is Director of the Center for Family and Adolescent Research at Oregon Research Institute. She is an expert in family functional therapy for youth with substance abuse, delinquency, or depression issues. She earned a Ph.D. in clinical psychology from the University of Utah, Salt Lake City.

Whipple, C. R., Jason, L. A., & Robinson, W. L. (2016). Housing and abstinence self-efficacy in formerly incarcerated individuals, *Journal of Offender Rehabilitation*, 55(8) 548–563.

This article reports the results of a study examining how time in diverse housing situations affects abstinence self-efficacy in formerly incarcerated individuals, with substance use measured by the Form 90 for 6 months prior to the interview. More time spent in recovery situations was associated with increased abstinence self-efficacy, while more time spent in precarious situations was associated with decreased abstinence self-efficacy.

Christopher Whipple is a doctoral student in community psychology at DePaul University. His research focuses on violence and substance abuse among adolescents.

OUTCOMES STAR: HOMELESSNESS STAR

OVERVIEW / BASIC STRUCTURE and SCALES

This scale is part of the Outcomes Star suite of instruments. Service provider completes the instrument while soliciting input (verbally) from service user.

Multiple subscales (most relevant are bolded):

Motivation and Taking Responsibility; **Self-Care** and Living Skills; Managing Money and Personal Administration; Social Networks and Relationships; Drug and Alcohol Misuse; **Physical Health; Emotional and Mental Health**; Meaningful Use of Time; Managing Tenancy and Accommodation; and Offending.

TARGET POPULATION(S)

Homeless individuals, including adults and youth transitioning into adulthood.
Psychometrics established with homeless individuals.

PSYCHOMETRICS

VALIDITY: Factor construct confirmed by factor analysis. Content validity supports improved service delivery. Correlation with other relevant measures demonstrates convergent validity.

RELIABILITY: Reliability evidenced by Cronbach's alpha of .91.

WEAKNESSES

- Authors recommend training, for which there is a fee. Fees are negotiated.

STRENGTHS

- Validated instrument normed with youth/young adults.
- Includes specific scales for physical, emotional, and mental health.

KEY REFERENCES

Good, A. & Lamont, E. (2018). Outcomes Star psychometric factsheet: Homelessness Star. Triangle Consulting Enterprise, Ltd. Wilbury Villas, UK.

This fact sheet summarizing instrument psychometric properties was produced by the instrument developers. Internal consistency was very good. Factor analysis supported construct validity. Service providers report that the instrument is useful for assessing clients and for measuring change in targeted outcomes.

Anna Good is a research analyst at Triangle Consulting. She developed the Star suite of measures and tests their psychometric properties. She earned a D.Phil. in behavioral change interventions from the University of Sussex.

Mackeith, J. (2014). Assessing the reliability of the Outcomes Star in research and practice. *Housing, Care and Support*, 17(4), 188-197.

This report describes the methods and results of assessing the Outcome Star's inter-rater reliability. A total of 24 service providers applied the instrument in a field setting to test usability, interrater reliability, and utility. Interrater reliability was good. The authors conclude that it is important to train users in how to use these scales in order to ensure consistent use.

Joy MacKeith is co-director of Triangle Consulting Social Enterprise and co-author of Outcomes Star measures. Her experience includes providing services to people who are homeless, teaching at the London School of Economics, and program evaluation.

OUTCOMES STAR: MY STAR

OVERVIEW/BASIC STRUCTURE and SCALES

This scale is part of the Outcomes Star suite of instruments. Service providers complete the instrument while soliciting input (verbally) from service user.

Multiple subscales (most relevant bolded): **Physical Health**; Where You Live; Being Safe; Relationships; Feelings and Behavior; Friends; Confidence/Self-Esteem; Education/Learning.

TARGET POPULATION(S)

Children and youth in foster or residential care, vulnerable children, ages 4-18.
Psychometrics established with those populations.

PSYCHOMETRICS

VALIDITY: Factor structure confirmed with factor analysis. Content Validity: Service professionals found it useful for treatment planning.

RELIABILITY: Cronbach's alpha of .80.

WEAKNESSES

- Training is required for the My Star scale. Fee for training must be negotiated.

STRENGTHS

- Validated instrument normed with youth.

KEY REFERENCES

Mackeith, J. (2014). Assessing the reliability of the Outcomes Star in research and practice. *Housing, Care and Support*, 17(4), 188-197.

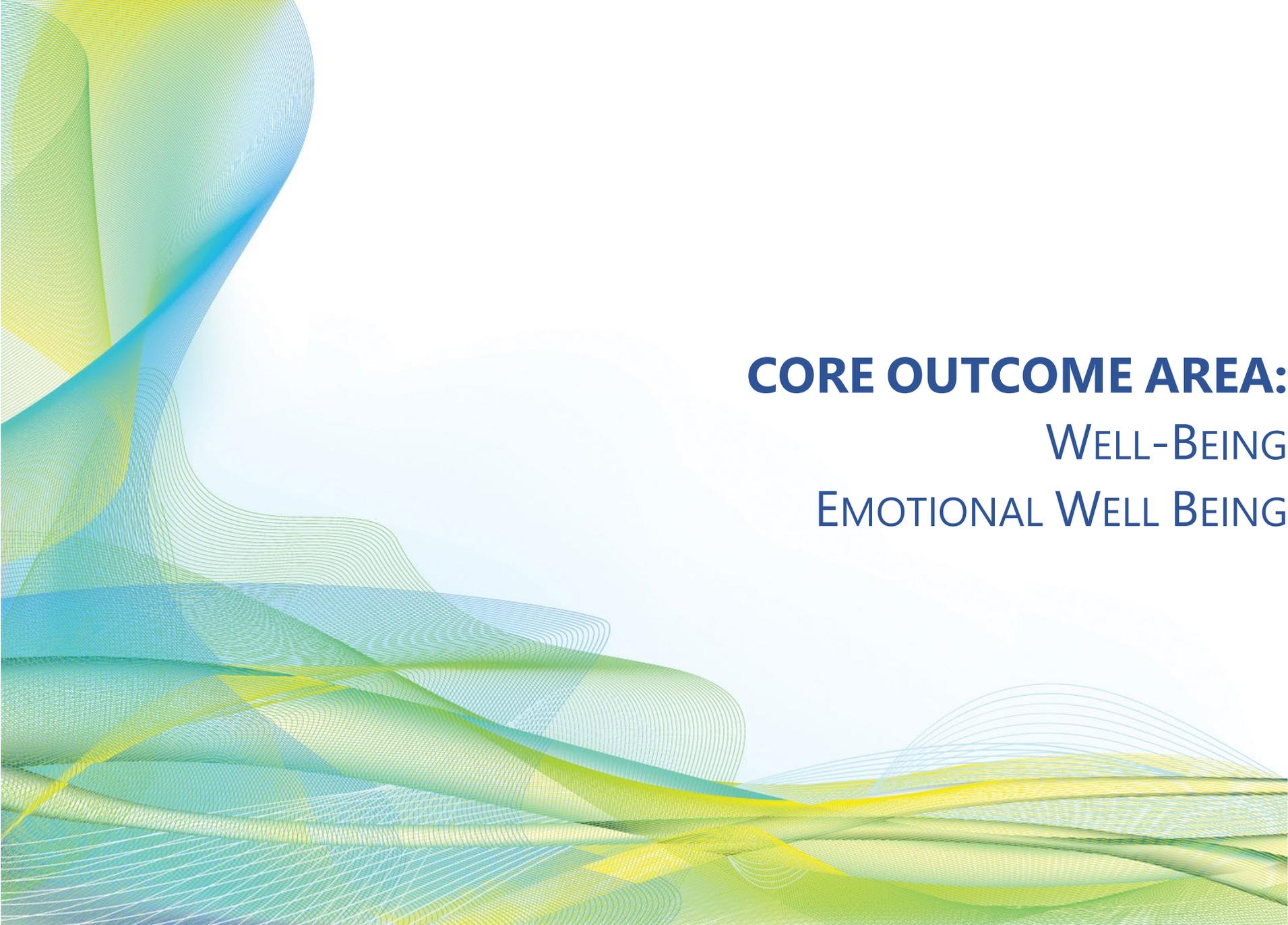
This report describes the methods and results of assessing the Outcome Star's inter-rater reliability. A total of 24 service providers applied the instrument in a field setting to test usability, interrater reliability, and utility. Interrater reliability was good. The authors conclude that it is important to train users in how to use these scales in order to ensure consistent use.

Joy MacKeith is co-director of Triangle Consulting Social Enterprise and co-author of Outcomes Star measures. Her experience includes providing services to people who are homeless, teaching at the London School of Economics, and program evaluation.

Good, A. & Lamont, E. (2018) Outcomes Star™ Psychometric Factsheet: My Star. Triangle Consulting Enterprise, Ltd. Wilbury Villas, UK.

This fact sheet was produced by the instrument developers. Internal consistency of the measure was very good. Service providers reported that responses were useful for treatment planning and for measuring change in targeted outcomes.

Anna Good is a research analyst at Triangle Consulting. She developed the Star suite of measures and tests their psychometric properties. She earned a D.Phil. in behavioral change interventions from the University of Sussex.



CORE OUTCOME AREA:
WELL-BEING
EMOTIONAL WELL BEING

BRIEF SYMPTOM INVENTORY (BSI)

OVERVIEW/BASIC STRUCTURE and SCALES

A 53-item checklist self-report measure that assesses psychological symptom patterns. For RHY use, measures three global indices of distress: General Severity Scale (GSI) indicates level of current distress, Positive Symptom Distress Index (PSDI) indicates whether a person is adding to their stress by the way he or she responds, and Positive Symptom Total (PST) shows total number of symptoms the client reports experiencing, even at low levels. Costs: \$135 starter kit, with material for 50 students. Approximately \$2 per youth for answer sheets and profile forms.

TARGET POPULATION(S)

Adolescents (as well as adults). Psychometrics established with adolescent nonpatients as well as patients. The adolescent norms are based on populations in six separate schools in two states. Approximately 58% of the sample was white, and the mean age was 15.8.

PSYCHOMETRICS

VALIDITY: The reliability, validity, and utility of the BSI instrument have been tested in more than 400 research studies. Validity well established: mean scores from 3 sub-scales (depression α of .83, anxiety α of .82, and obsessive/compulsive α of .80) were used as indicators of a latent variable of emotional distress.

RELIABILITY: Reliability tested using internal consistency, test-retest, and alternate forms reliability, resulting in coefficients ranging from .68 to .91. All subscales on the BSI's parent instrument, except the Psychoticism scale, had high construct validity. Reduction in length from the parent instrument has not altered convergent reliability. Internal consistency reliabilities for subscales ranged from alpha coefficients of .71 (PSY) to .85 (DEP); test retest reliabilities ranged from .68 to .91.

WEAKNESSES

- Focused on symptomology rather than assets, though global indices include responses to stress.
- Master's degree and training requirements to administer.

STRENGTHS

- BSI is brief, taking much less time to administer than comparable instruments, but has significant correlation in depression, anxiety, and hostility subscales. Takes less than 10 minutes to complete.
- Requires only a 6th grade reading level.
- Can be administered remotely (though this requires additional software and associated costs).

KEY REFERENCES

Derogatis, L. R. (1993). BSI Brief Symptom Inventory: Administration, Scoring, and Procedure Manual (4th Ed.), National Computer Systems, Minneapolis, MN.

This manual summarizes how to administer, score, and interpret the BSI. It includes information about psychometrics. The author reports that completion time is typically 4 minutes. The author notes that *this instrument is commonly correlated with the SCL-90-R test which also has been deemed reliable in assessing functional, psychosocial, and psychological status.*

Leonard Derogatis developed the BSI and several other psychological assessments. He earned a Ph.D. in psychology from Catholic University.

Kelly, J. F., Kaminer, Y., Kahler, C. W., Hoepfner, B., Yeterian, J., Cristello, J. V. & Timko, C. (2017). A pilot randomized clinical trial testing integrated 12-Step facilitation (iTsf) treatment for adolescent substance use disorder, *Addiction*, 112 (12), 2155–2166.

This article discussed the testing of the efficacy of a novel integrated TSF. The study utilized a parallel-group, randomized clinical trial (RCT) comparing 10 sessions of either motivational enhancement therapy/cognitive-behavioral therapy (a sample of 30) or a novel integrated 12-Step facilitation (iTsf, with a sample of 29). The Brief Symptom Inventory was utilized as a pre/post measure. The average age of participants was 16.8 years, and the youth were predominantly white (78%) and male (73%). Follow-up assessments were conducted using the TFLB at 3, 6, and 9 months following entry into (outpatient) treatment. Youth in the iTsf group did show greater 12-Step attendance and a significant advantage at all follow-up points for substance-related consequences. Other results were not significantly different across treatments.

John Kelly is the founder and director of Recovery Research Institute at Massachusetts General Hospital and a professor of addiction medicine at Harvard Medical School department of psychiatry. He earned a Ph.D. in psychology from University of California, San Diego.

Milburn, N., Liang, L., Lee, S., & Rotheram-Borus, M. J., Rosenthal, D., Mallett, S., Lightfoot, M. & Lester, P. (2009). Who is doing well? A typology of newly homeless adolescents, *Journal of Community Psychology*, 37 (2), 135–147.

This article discusses the growing evidence to support developing new typologies for homeless adolescents focused less on the risks associated with being homeless, and more on the positive attributes (or assets) of homeless adolescents. Using cluster analysis techniques, the authors analyzed protective factors, as well as risk factors, in a sample of newly homeless adolescents recruited in Los Angeles County, California in the United States, and in Melbourne, Australia. The BSI was utilized to measure stress factors. The study identified three criteria for selection of participants: (a) age ranging from 12 to 20 years; (b) spent at least two consecutive nights away from home without parent's or guardian's permission if under age 17 years or was told to leave home; and (c) had been away from home for 6 months or less. The study results identified three distinct clusters of newly homeless adolescents: 1) those who are protected and doing relatively well while out of home with more protective than risk factors; 2) those who are at-risk; and 3) those who are at-risk, owing to more risk than protective factors. *This typology has implications for the design and implementation of services and interventions for newly homeless adolescents to reconnect them with stable housing situations.*

Norweeta G. Milburn, Ph.D. is a Professor-in-Residence in the Department of Psychiatry and Biobehavioral Sciences at the UCLA Semel Institute Center for Community Health. Her research focus includes homelessness, family interventions, and mental health. As a principal investigator of National Institute of Mental Health and NIDA studies of homeless and African American youth, she has examined paths into and out of homelessness.

Morlan, K. K., & Tan, S. Y. (1998). Comparison of the Brief Psychiatric Rating Scale and the Brief Symptom Inventory, *Journal of Clinical Psychology*, 54(7), 885-894.

This article discusses the advantages of self-report measures, as well as their possible deficits. The authors discuss criteria for evaluating scales. The Brief Psychiatric Rating Scale (BPRS) and the Brief Symptom Inventory (BSI) were compared. Both instruments were found to have high reliability and validity. *Correlations of the BPRS total score with the total scores on the BSI were significant as were correlations of the depression, anxiety, and hostility subscales on each instrument.* While the BPRS has been widely used and has been evaluated as one of the very best rating scales, it requires more time and the use of experienced raters, as compared to the BSI. The authors identify the BSI as also being highly evaluated and one of the best brief self-report measures, which requires much less professional time, concluding that *either scale could be used for a brief assessment of overall symptomatology, depression, anxiety, and hostility.*

Siang-Yan Tan is a licensed clinical psychologist and psychology professor at Fuller Theological Seminary. He earned a Ph.D. in psychology from McGill University.

Moskowitz, A., Stein, J. A., & Lightfoot, M. (2013). The mediating roles of stress and maladaptive behaviors on self-harm and suicide attempts among runaway and homeless youth. *Journal of youth and adolescence*, 42(7), 1015-1027.

The study discussed in this article examined the roles of stress and maladaptive behaviors as mediators between demographic and psychosocial background characteristics and self-injurious outcomes through the lens of the stress process paradigm. The BSI was used to assess emotional distress in a sample of 474 runaway and homeless youth (RHY) ages 12-24, from Los Angeles County. The researchers hypothesized that mediators of maladaptive behaviors would predict self-harming behaviors and suicide attempts. The sample was 41 % female, 17 % White, 32.5 % African American, 21.5 % Hispanic/Latino, and included sexual minorities, youth whose parents had used drugs, and youth with a history of emotional distress. The mediating factors of maladaptive behaviors and recent stress were significant predictors of self-harm, whereas only recent stress was a significant predictor of suicide attempts.

Amanda Moskowitz is a pre-doctoral intern at the Michael E. DeBakey Veterans Affairs Center in Houston, TX. She is a clinical psychology doctoral student at Stanford University, and holds a master's degree in clinical psychology. Her focus areas include depression, anxiety, and suicide.

Piersma, H. L., Boes, J. L., & Reaume, W. M. (1994). Unidimensionality of the Brief Symptom Inventory (BSI) in adult and adolescent inpatients, *Journal of Personality Assessment*, 63(2), 338-344.

This article describes a study investigating the factor structure of the BSI for adult and adolescent psychiatric inpatients. A sample of 217 adults and 188 adolescents completed the BSI upon admission and again at discharge from a private psychiatric hospital. Utilizing principle components factor analyses, the authors found that BSI measures a unidimensional construct of general psychological distress.

Harry Piersma was a clinical psychologist who provided services at Pine Rest Christian Mental Health Services and conducted research on psychiatric assessment. He held a Ph.D. in psychology.

Rosario, M., Schrimshaw, E. W., & Hunter, J. (2012). Homelessness among lesbian, gay, and bisexual youth: Implications for subsequent internalizing and externalizing symptoms. *Journal of Youth and Adolescence*, 41(5), 544-560.

This article reports on a longitudinal study investigating the relationship between homelessness and subsequent psychological symptoms for LGB (lesbian, gay and bisexual) youth. Specifically, the authors looked at whether homeless LGB youth reported greater symptomology, and also examined potential mediators in the development of such symptomology. A sample of 156 LGB youth were interviewed, using the BSI to measure symptoms of depression and anxiety, with (49% of the youth being female and 78% non-White). Nearly half of the youth reported past homeless experiences. *The study found that homelessness was associated with subsequent symptoms of anxiety, depression, conduct problems, and substance abuse, even after controlling for childhood sexual abuse and early development of sexual orientation.* Among the factors that mediated between homelessness and the subsequent development of symptomology were stressful life events, negative social relationships, and social support from friends. *These findings suggest the need for interventions to reduce stress and enhance social support among LGB youth with a history of homelessness in order to reduce psychological symptoms.*

Margaret Rosario is a psychology professor at the City University of New York. Her expertise is in the psychology of health decisions and adaptive functioning in at-risk populations.

E. W. Schrimshaw is an Associate Professor of Sociomedical Sciences at Columbia University conducting research on relationships and LGBTQ issues related to health and well-being.

Schwannauer, M., & Chetwynd, P. (2007). The Brief Symptom Inventory: A validity study in two independent Scottish samples, *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, 14(3), 221-228.

This study discussed in this article examines the validity and factor structure of the BSI in two Scottish samples, utilizing both confirmatory factor analysis (CFA) and exploratory factor analysis (EFA). In this study, the BSI was administered to 161 primary care attenders and 459 clinical psychology patients. Confirmatory and exploratory factor analysis suggested a 3-factor model of psychological distress: anxiety, depression, and general distress.

Matthias Schwannauer is head of school and professor of clinical psychology at the University of Edinburgh. He earned a Ph.D. in applied clinical psychology from the University of Marburg.

CHILDREN'S HOPE SCALE (CHS)

OVERVIEW/BASIC STRUCTURE and SCALES

The Children's Hope Scale is a 12-item paper and pencil assessment completed by youth with no subscales.

TARGET POPULATION(S)

Homeless youth. Low socioeconomic status minority adolescents (up to age 16). Children/youth with chronic illness. Boys with ADHD. Psychometrics established with 4th-6th graders in Oklahoma public schools, 7-13-year-old boys with ADHD, and children and youth with cancer, sickle cell anemia, or arthritis.

PSYCHOMETRICS

VALIDITY: Concurrent: Correlates significantly and in expected direction with parents' assessments, self-assessments of competence. Correlates in expected direction with control, self-worth, depression, and hopelessness. Factor structure confirmed by factor analysis.

RELIABILITY: Cronbach's alpha of .77 and test-rest reliability range of .71 to .73.

WEAKNESSES

- None found.

STRENGTHS

- Implemented with homeless youth.
- Validated Spanish version.
- Relatively short and thus easy to administer.
- No cost.

KEY REFERENCES

Li, Y. (2018). Fostering social emotional learning in homeless youth. Presentation at American Educational Research Association Annual Meeting.

This conference paper describes a longitudinal study of social-emotional learning with a sample of 115 homeless youth in Grades 5 through 12 at a school that exclusively serves youth who are homeless. Assessments included the Children's Hope Scale. Results suggest that individual therapy may support social-emotional skills development.

Yaoran Li is a managing researcher at University of San Diego. Her expertise includes quantitative modeling of social-emotional learning processes. She earned a Ph.D. in educational psychology from University of Missouri, Columbia.

Palido-Martos, M., Jimenez-Moral, J. A., Lopez-Zafra, E. & Ruiz, J.R. (2014). An adaptation of the Children's Hope Scale in a sample of Spanish adolescents, *Child Indicators Research*, 7(2), 267-278.

This article describes an analysis of the psychometric properties of a Spanish language version of the Children's Hope Scale (CHS). The respondent sample included 388 adolescents between 12 and 18 years of age. The authors conducted confirmatory factor analysis, correlational analysis, and measured internal consistency with Cronbach's alpha, and concluded the Spanish language version had adequate psychometric properties. The results of a confirmatory factor analysis validated the original theoretical structure.

Manuel Pulido-Martos is a professor of psychology at the University of Jaen. He conducts research on emotional intelligence.

Roesch, S. C., Duangado, K. M., Vaughn, A.A., Aldridge, A. A. & Villodas, F. (2010). Dispositional hope and the propensity to cope: A daily diary assessment of minority adolescents, *Cultural Diversity and Ethnic Minority Psychology*, 16 (2), 191-198.

The authors assessed dispositional hope as a predictor of daily coping strategies among a sample of 126 low socioeconomic status racial minority adolescents. Participants completed diaries that described stress they experience and the strategies they used to address stress. The Children's Hope Scale was used to measure dispositional hope. Multilevel modeling indicated that hope does predict coping strategy. The article discusses the unique predictive ability of components of hope, as well as the role of hope as a protective factor for minority adolescents.

Scott Roesch is a psychology professor at San Diego State University. His expertise is in statistical modeling, and stress and coping. He earned a Ph.D. in psychology from the University of Nebraska, Lincoln.

Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L., Danovsky, M., ... & Stahl, K. J. (1997). The development and validation of the Children's Hope Scale. *Journal of pediatric psychology, 22*(3), 399-421.

This article summarizes the methods and results of developing and validating the Children's Hope Scale. The authors developed the item pool with experts, then tested the scale with six samples of children and youth ages 8 to 16 years. The authors calculated Cronbach's alpha to measure internal consistency, assessed test-retest reliability, and determined correlations with other relevant measures. Results suggest that the scale evidences internal consistency and is relatively stable over retesting. The scale exhibits convergent, discriminant, and incremental validity. The authors also discuss the limitations and uses of the scale.

Charles Snyder was a Wright Distinguished Professor of Clinical Psychology at the University of Kansas, Lawrence. He was a pioneer in the field of positive psychology. His research focused on hope as a motivator.

HARTER'S SELF-PERCEPTION PROFILE FOR ADOLESCENTS (SPPA) – FOR CHILDREN (SPPC)

OVERVIEW/BASIC STRUCTURE and SCALES

Self-administered paper instrument that can be set up for online access. With nine (9) subscales, six (6) for both children and adolescents: Scholastic Competence, Social Acceptance, Athletic Competence, Physical Appearance, Behavioral Conduct, and Global Self-Worth. There are three (3) additional scales for adolescents: Job Competence, Romantic Appeal, and Close Friendships.

TARGET POPULATION(S)

Youth 12 and older (another version is available for younger children). Psychometrics established with adolescents, African American adolescents, adolescents in other countries, including Norway, and Australian high school students.

PSYCHOMETRICS

VALIDITY: The a priori factor structure was confirmed overall. Convergent validity found for all subscales in revised edition.

RELIABILITY: The internal consistency alpha values for the subscales (original/revised versions) were: Scholastic Competence .60/.69; Social Acceptance .56/.76; Athletic Competence .66/.79; Physical Appearance .76/.87; Romantic Appeal .65/.75; Close Friends .75/.78; and Global Self-Worth .68/.77. Reliability of the revised edition was higher for all subscales except Close Friends. Mean alphas for original revised version: 66.5/77.3. Kaiser's Measure of Sampling Adequacy, an indicator of the reliability of the relations between pairs of variables, suggested good factorability of the items (.80).

WEAKNESSES

- Acceptable validity and reliability, but not as strong as some instruments.
- Some researchers find two-stage answers overly complicated, but no research has tied this to reduced validity or reliability.

STRENGTHS

- Harter's self-perception profiles occupy a central position among instruments with a domain specific conceptualization and operationalization of self-evaluation and have been widely used in a large body of research. Normed with diverse adolescent populations, including African Americans.
- No cost.

KEY REFERENCES

Cairns, E., McWhirter, L., Duffy, U., & Barry, R. (1990). The stability of self-concept in late adolescence: Gender and situational effects, *Personality and individual differences*, 11(9), 937-944.

The authors assessed the stability of self-concept as measured by the Harter's Self-Perception Profile by comparing responses of 2,490 adolescents who completed the assessment, then retested after 18 months. Results indicated relative stability. They also showed that environment, time, and gender influence self-esteem.

Ed Cairns is an internationally renowned expert in social identity and group conflict. He is a psychology professor at the University of Ulster. He earned a Ph.D. in psychology from Queen's University, Belfast.

Rudasil, K. M. & Callahan, C. M. (2008). Psychometric characteristics of the Harter Self-Perception Profiles for adolescents and children for use with gifted populations, *Gifted Child Quarterly*, 52 (1), 70-86.

This article presents methods and results for replicating assessment of the Harter Self-Perception Profile reliability and validity among gifted children and adolescents. Results indicate the measure is appropriate for these populations.

Kathleen Moritz Rudasil is an associate professor of educational psychology at the University of Louisville. She is an expert on the relationship between children's temperament and academic and social success. She earned a Ph.D. in educational psychology from the University of Virginia.

Schumann, B. C., Striegel-Moore, R. H., McMahon, R. P., Waclawiw, M. A., Morrison, J. A., & Schreiber, G. B. (1999). Psychometric properties of the Self-Perception Profile for children in a biracial cohort of adolescent girls: The NHLBI Growth and Health Study, *Journal of Personality Assessment*, 73(2), 260-275.

The authors used Harter's Self-Perception Profile to assess 2,379 Black and White girls aged 9 and 10, in a study of risk factors for obesity. The authors compared psychometrics for Black and White girls and found that they differed. Internal consistency was lower for measurement of Black girls. Factor analysis indicated that the relationships between items defining self-esteem are different for White and Black girls. The scale's internal consistency is higher for White girls than for Black girls. The authors recommend caution in interpreting Black girls' scores on this scale.

Barbara Schumann was a senior researcher with the National Heart, Lung, and Blood Institute Growth and Health Study group.

Stewart, P. K., Roberts, M. C., & Kim, K. L. (2010). The psychometric properties of the Harter self-perception profile for children with at-risk African American females. *Journal of Child and Family Studies*, 19(3), 326-333.

This article describes methods and results of testing the psychometric properties of the Harter Self-Perception Profile with African American girls. A sample of 92 African American girls, median age 12 years, participated. Exploratory factor analysis showed that factor structure is different for African American girls than for that found in seminal psychometric studies. Cronbach's alpha indicates internal consistency is lower when assessing African American girls. For this sample, correlation with the Rosenberg Self-esteem Scale was low, indicating less convergent validity than with earlier samples. The authors conclude the scale may not be a valid assessment for African American girls.

Peter K. Stewart is an expert in development, standardization, and psychometric analysis of assessment instruments. He earned a Ph.D. in clinical child psychology from the University of Kansas, Lawrence.

Thomson, N. R., & Zand, D. H. (2002). The Harter self-perception profile for adolescents: psychometrics for an early adolescent, African American sample, *International Journal of Testing*, 2(3-4), 297-310.

The authors assessed psychometrics of the Harter Self-Perception Profile using data from a sample of 174 African American adolescents (ages 11-14 years). Results for the whole sample replicated Harter's original findings. The authors also found gender differences. They recommend updates to improve validity for measuring African American girls.

Nicole Renick Thomson is a research analyst at Wyman Center, a non-profit organization providing services and advocacy for economically disadvantaged youth. Dr. Thomson earned a Ph.D. in developmental psychology from St. Louis University.

Wichstrom, L. (1995). Harter's Self-Perception Profile for Adolescents: Reliability, validity, and evaluation of the question format, *Journal of Personality Assessment*, 65(1), 100-116.

This article reports on the development of a brief version of the Harter Self-Perception Profile. The author developed a briefer version of the scale, then assessed the psychometric properties of original and revised versions of the scale with a nationally representative sample of 11,315 Norwegian adolescents. Results indicated that the revised version was easier to administer, more reliable, and more valid.

Lars Wichstrom is a professor and chair of the Research Group for Human Development at the Norwegian University of Science and Technology.

POSITIVE INDICATORS PROJECT LIFE SATISFACTION SCALE

OVERVIEW/BASIC STRUCTURE and SCALES

This scale includes self-reports by youth as well as parent reports administered in a web-based format online, with no subscales.

TARGET POPULATION(S)

12-17-year-olds. Psychometrics established with a nationally representative sample of 12-17-year-olds and parents of adolescents.

PSYCHOMETRICS

VALIDITY: Factor structure confirmed with factor analysis. Concurrent validity: correlates significantly with fighting, smoking, depression, grades.

RELIABILITY: Cronbach's alpha for Parent of .72 and .80 for Adolescent.

WEAKNESSES

- Optimally includes third party completion by parent in addition to youth, which is not feasible for many RHY.
- Psychometrics established only with non-US populations.

STRENGTHS

- Tested with adolescents on a national basis.
- No cost.

KEY REFERENCES

Lippman, L., Guzman, L. & Moore, K. A. (2012). Measuring Flourishing among Youth: Findings from the Flourishing Children Positive Indicators Project. Presentation by Child Trends.

This slide presentation that accompanied a webinar summarizes findings from the Flourishing Children Positive Indicators project. The project's purpose was to develop measures that reflect flourishing among children or adolescents and that address a gap in the field. The presentation lists measurement issues, describes the constructs measured, study methods, and findings about measures' reliability and validity. It includes discussion of the Life Satisfaction Scale.

Laura Lippman was the Senior Education Program Director at Child Trends. She is an expert on measuring outcomes related to success and well-being in children and adolescents. She earned a master's degree in demography from Georgetown University.

SATISFACTION WITH LIFE SCALE (SWLS)

OVERVIEW/BASIC STRUCTURE and SCALES

This is a paper and pencil instrument with no subscales that has been utilized in multiple languages and European and Asian cultures.

TARGET POPULATION(S)

Homeless adults in Spain, Chinese secondary school students, Turkish undergraduate students, male prison inmates, female abuse victims, students with disabilities, and clinical psychology patients. Psychometrics developed with diverse large samples from multiple countries, young adults, secondary school students, clinical psychology patients, students with disabilities, female abuse victims, male prison inmates.

PSYCHOMETRICS

VALIDITY: Principal axis factor analysis confirms unidimensionality. Significantly positively correlates with other life satisfaction measures, positive affect, and well-being. Negatively correlates with anxiety, depression, distress.

RELIABILITY: Cronbach's alpha of .87 and test-retest reliability of .82.

WEAKNESSES

- Some debate regarding implications of scale's correlation with social desirability.
- Psychometrics established with special needs populations other than RHY.

STRENGTHS

- Previous implementation with homeless individuals.
- Available in multiple languages.
- No cost.

KEY REFERENCES

Calvo, F. & Carbonell, X. (2018). Using Facebook for improving the psychological well-being of individuals experiencing homelessness: Experimental and longitudinal study. *Journal of Medical Internet Research: Mental Health*, 5 (4), e59.

The article presents an example of using the scale to assess individuals experiencing homelessness, whose primary language was Spanish. The authors report that they developed and validated a Spanish language version of the scale for this study. The study compared effects of Facebook and Office software training on self-esteem, self-efficacy, and life satisfaction in a sample of 92 people experiencing homelessness.

Fran Calvo is an associate professor of psychology at the University of Girona and manager of harm reduction programs. His expertise is in homelessness, harm reduction, and substance abuse. He is a doctoral student in psychology at the University of Ramon Llull and holds a master's degree in health psychology.

Deniz, M. E. & Isik, E. (2010). Positive and negative affect. Life satisfaction and coping with stress by attachment styles in Turkish students. *Psychological Reports*, 107(2), 480-490.

This research article presents results of a study of how attachment style relates to affect, life satisfaction, and coping with stress. Participants were 421 undergraduate students in Turkey. Life Satisfaction was measured with the Life Satisfaction Scale. The article provides an example of using the measure with young adults.

Mehmet Deniz is an associate professor of education science at Selcuk University. He is an internationally known expert on school-based psychological services. He earned a Ph.D. in psychological services in education from Selcuk University.

Pavot, W., & Diener, E. (2009). Review of the Satisfaction with Life Scale. In *Assessing well-being* (pp. 101-117). Springer, Dordrecht.

This article summarizes development of the scale, studies conducted to establish norms with diverse populations, psychometric properties, how the scale has been used, and questions for future research. The scale is included in an appendix.

William Pavot is a psychology professor at Southwest Minnesota State University and an expert in the study of happiness. He earned a Ph.D. in psychology from the University of Illinois, Urbana-Champaign.

Ed Diener is the lead developer of the Satisfaction with Life Scale. He is a psychology professor at the University of Utah and the University of Virginia, and a senior scientist at the Gallup Organization. He is an internationally known expert in the study of happiness. He earned a Ph.D. in psychology from the University of Washington.

Proctor, C. L., Linley, P. A. & Maltby, J. (2009). Youth life satisfaction measures: A review. *The Journal of Positive Psychology*, 4 (2), 128-144.

This article presents a review of current measures of life satisfaction appropriate for youth. It presents information about constructs measured, appropriate populations, reliability, validity, strengths, and weaknesses. It includes discussion of the Satisfaction with Life Scale.

Carmel Proctor is director of the Positive Psychology Research Centre. She is an expert on positive psychology, and adolescent life satisfaction and well-being. She earned a Ph.D. in psychology from the University of Leicester.

Sun, R. C. F. & Shek, D. T. L. (2010). Life satisfaction, positive youth development, and problem behavior among Chinese adolescents in Hong Kong. *Social Indicators Research*, 95 (3), 455-474.

This article presents results of a study conducted with 7,151 secondary school students in Hong Kong. The authors replicated an earlier study with this cohort on the relationships between life satisfaction, behaviors, and development. The study is an example of using the Satisfaction with Life Scale with adolescents.

Rachel Sun is an education professor at the University of Hong Kong. She is an expert in positive adolescent development. She earned a Ph.D. from the University of Hong Kong.

MENTAL HEALTH CONTINUUM-SHORT FORM (MHC-SF)

OVERVIEW/BASIC STRUCTURE and SCALES

This is a paper and pencil instrument with no subscales that has been utilized in multiple languages and European and Asian cultures.

TARGET POPULATION(S)

Adults, including those ages 18-29 (Dutch). Post-secondary students (French Canadian). Psychometrics established with those same populations of Dutch adults and post-secondary students in Canada.

PSYCHOMETRICS

VALIDITY: Confirmatory factor analysis confirmed the 3-factor structure in emotional, psychological, and social well-being. Subscales correlated well with corresponding aspects of well-being and functioning, showing convergent validity. Discriminant validity against the Hospital Anxiety and Depression Scale confirmed. The short form of the MHC has shown discriminant validity in adolescents (ages 12-18) and adults in the U.S., in the Netherlands, and in South Africa.

RELIABILITY: Internal reliability was high for the total MHC-SF (alpha of 0.89), as well as for the subscales of Emotional Well-being (alpha of 0.83) and Psychological Well-Being (alpha of 0.83), and adequate for the subscale Social Well-Being (alpha of 0.74). Subscales have good internal reliability and each of the subscales is predictive of the corresponding subscale at follow-up of 3 and 9 months. Test-retest reliability estimates for the long form scales ranged from .57 for the overall psychological well-being domain, .64 for the overall emotional well-being domain, to .71 for the overall social well-being domain.

WEAKNESSES

- Psychometrics are based on non-English speaking samples: only 22% of these were young adults (in the Dutch study), and none were youth.

STRENGTHS

- Short form, easily completed in a short period of time.
- High validity and reliability on Psychological and Social Well-Being.
- No cost.

KEY REFERENCES

Doré, I., O’Loughlin, J. L., Sabiston, C. M., & Fournier, L. (2017). *Psychometric evaluation of the Mental Health Continuum–Short Form in French Canadian young adults*, *The Canadian Journal of Psychiatry*, 62(4), 286-294.

This article presents methods and results of psychometric assessment of the Mental Health Continuum- Short Form in a sample of 1,485 French-speaking post-secondary students in Canada. Results indicate that the measure is reliable and valid for assessing mental health as a construct distinct from mental illness.

Isabelle Dore is a post-doctoral research fellow in kinesiology and physical education at the University of Toronto. She conducts research on epidemiology and public health. She earned a Ph.D. from the University of Montreal.

Keyes, C. L. M., Wissing, M., Potgieter, J. P., Temane, M., Kruger, A., & Van Rooy, S. (2008). *Evaluation of the Mental Health Continuum-Short Form (MHC-SF) in Setswana-speaking South Africans*, *Clinical Psychology & Psychotherapy*, 15(3), 181–192.

This study applied a continuous assessment and a categorical diagnosis of the presence of mental health (described here and in other literature as flourishing), and the absence of mental health (characterized in this study as languishing) to a random sample of 1050 Setswana-speaking adults in the Northwest province of South Africa. Factor analysis revealed that the mental health continuum-short form (MHC-SF) replicated the three-factor structure of emotional, psychological and social well-being found in US samples. The internal reliability of the overall MHC-SF Scale was 0.74. The total score on the MHC-SF correlated 0.52 with a measure of positive affect, between 0.35 and 0.40 with measures of generalized self-efficacy and satisfaction with life, and between 0.30 and 0.35 with measures of coping strategies, sense of coherence, and community collective self-efficacy. Confirmatory factor analysis also supported the two-continua model of mental health and mental illness found in the USA.

Corey Keyes is a sociology professor at Emory University. He is an expert in positive psychology and mental health. He earned a Ph.D. in sociology from the University of Wisconsin, Madison.

Lamers, S. M., Westerhof, G. J., Bohlmeijer, E. T., ten Klooster, P. M., & Keyes, C. L. (2011). *Evaluating the psychometric properties of the mental health continuum-short form (MHC-SF)*, *Journal of Clinical Psychology*, 67(1), 99-110.

This article presents results of a study of 1050 Setswana-speaking adults in South Africa who responded to the Mental Health Continuum. Factor analysis, internal consistency assessment, and correlational analysis replicated psychometric results found with US samples. Results revealed high internal and moderate test-retest reliability. Subscales correlated positively with measures of well-being and functioning, indicating convergent validity. Results indicate that mental health is a construct distinct from mental illness, that can be reliably assessed with the MHC-SF.

Sanne Lamers is a psychology professor at University of Twente (Netherlands), where she earned a Ph.D. in psychology. She is an expert in positive psychology.

Rose, T., Joe, S., Williams, A., Harris, R., Betz, G., & Stewart-Brown, S. (2017). Measuring mental well-being among adolescents: a systematic review of instruments. *Journal of Child and Family Studies*, 26(9), 2349-2362.

This review used systematic review methods to identify and assess comprehensive instruments in terms of their content, conceptual relevance for youth, and responsiveness to change. The review identified 11 instruments that fit specified inclusion criteria, and all scales included one or more indicators of both feeling and functioning. The MHC was one of few scales that included items representing emotional well-being, psychological well-being, and social well-being. The findings emphasize the importance of validating adult-developed instruments for youth and ensuring the instrument's cultural and conceptual relevance within groups of adolescents.

Theda Rose is an assistant professor at the University of Maryland School of Social Work, Baltimore, MD. Her research focuses on adolescent mental health promotion, measurement of adolescent mental well-being, school- and community-based adolescent mental health promotion interventions, positive youth development, and program evaluation. She earned a Ph.D. in social work from Catholic University.

(THE) OHIO SCALES

OVERVIEW/BASIC STRUCTURE and SCALES

A self-report survey using Likert Scales with simple checkoff responses, the Ohio Scales use three parallel forms to gather information on youth (ages 9–18), parents, and workers (clinical service providers). The Ohio Scales-Short Form is a 48-item measure that includes scales for four domains: Problem Severity (20 items), Functioning (20 items), Hopefulness (4 items), and Satisfaction with Service (4 items).

TARGET POPULATION(S)

Youth 12 and older. Youth 8-11. Youth 5-18. Psychometrics established with youth 12 years and older, youth in the Juvenile Justice system, youth ages 5 to 18, and a population (ages 12–18) derived from Ohio’s Behavioral Health Juvenile Justice Initiative, a diversion program for youth with behavioral health issues.

PSYCHOMETRICS

VALIDITY: Scales significantly correlated with the Behavior Assessment System for Children (BASC), providing evidence for concurrent validity. The standardized factor correlation coefficients show moderate to high correlations with the subscales.

RELIABILITY: The Ohio Scales Problem Severity scale has been shown to be valid and reliable in both longer and shorter versions. The shorter version has also demonstrated excellent internal consistency for both parent and youth reports (α of .91 and .92). The scale generated three factors that were consistent across raters: externalizing, internalizing, and delinquency problems. Factors are identical to those identified by Baize (2001) in his independent analysis.

WEAKNESSES

- Utilizes three forms (youth, parent, and agency worker), with parent responses typically more difficult to acquire in RHY programs. The three forms, however, can be used independently without loss of validity or, reliability.
- Larger number of items than other measures. Likert responses use three different scales, and this might be confusing.

STRENGTHS

- Short form, easily completed in a short period of time.
- High validity and reliability on psychological and social well-being.
- No cost.

KEY REFERENCES

Bonadio, F. T., & Tompsett, C. (2017). The factor structure of the Ohio Scales: a practical measure of psychological symptoms in youth, *Journal of Child and Family Studies*, 26(1), 101-117.

This article presents results and methods for assessing psychometric properties of the Ohio Scales using archival data from a community mental health agency. The authors assessed the concurrent validity of the Ohio Scales with the Child Behavior Checklist and Youth Self Report. Results indicate the scale has concurrent and discriminant validity.

Francis Tony Bonadio is a social work professor at the University of Maryland. He is an expert in the effectiveness of mental health services for children, adolescents, and families. He earned a Ph.D. in clinical psychology from Bowling Green State University.

Dowell, K. A., & Ogles, B. M. (2008). The Ohio scales youth form: Expansion and validation of a self-report outcome measure for young children, *Journal of Child and Family Studies*, 17(3), 291-305.

This article presents results of a study to assess the psychometric properties of the Ohio Scales Youth Form in a sample of 147 children aged 8 to 11 years. The authors compared clinical and comparison samples. Participants were retested after 1 week to support analysis of test-retest reliability. In addition, convergent validity was assessed with scores on the Behavioral Assessment System for Children (BASC). Results indicate that the scale distinguishes clinical and non-clinical samples, demonstrates adequate test-retest reliability, and has construct validity. The authors conclude that the scale is reliable and valid for children 9 years and older but may not be appropriate for assessing younger children.

Kathy Dowell is a psychology professor at the University of Minnesota. Her research focuses on mental health services for children and families. She earned a Ph.D. in clinical psychology from Ohio University.

Tossone, K., Kretschmar, J., Butcher, F., & Harris, L. (2016). Validating the Ohio scales in a juvenile justice sample of youth with behavioral health issues, *Journal of Child and Family Studies*, 25(4), 1218-1228.

This article presents methods and results of a study to validate the Ohio Scales in a sample of 2,246 12-18-year-old youth in the justice system. The authors conducted factor analyses to assess construct structure. Results indicate the scales are a valid measure of internalizing and externalizing.

Krystal Tossone is a senior research associate and statistician at the Begun Center for Violence Prevention Research and Education at Case Western University. Her research focuses on mental health issues among youth in the juvenile justice system. She earned a Ph.D. in public health from Kent State University.

Turchik, J. A., Karpenko, V., & Ogles, B. M. (2007). Further evidence of the utility and validity of a measure of outcome for children and adolescents, *Journal of Emotional and Behavioral Disorders, 15*(2), 119-128.

This article presents results of a study to assess validity of the Ohio Scales. The authors compared scale scores with DSM-IV data and parent, agency worker, and youth reports to establish convergent validity. The sample included 3,569 youth ages 5 to 18, who had DSM-IV diagnoses. Results indicate convergent and predictive validity. The authors conclude that the scale is valid and can be useful for treatment planning and program evaluation for this population.

Jessica Turchik is a research health science specialist at Veterans Affairs Palo Alto Health Care System. She studies aggression and post-traumatic stress disorder. She earned a Ph.D. in clinical psychology.

ROSENBERG SELF-ESTEEM SCALE (RSES)

OVERVIEW/BASIC STRUCTURE and SCALES

The Rosenberg Self-Esteem Scale is a self-report questionnaire with 10 items and 4 possible responses indicating level of agreement. There are no subscales.

TARGET POPULATION(S)

Adolescents and adults from diverse populations. Psychometrics established with representative samples from the US and other countries.

PSYCHOMETRICS

VALIDITY: Negatively correlates with depression, anxiety, stress. Positively correlates with well-being.

RELIABILITY: Cronbach's alpha of .91.

WEAKNESSES

- None found.

STRENGTHS

- Validated in numerous studies.
- Easy to administer and score.
- No cost.

KEY REFERENCES

Rosenberg, M. (1979). *Conceiving the self*. New York, NY: Basic Books.

This book, by the author of the Rosenberg Self-Esteem Scale, provides a detailed discussion of the study and measurement of self-concept. Rosenberg presents a theoretical framework, discusses environmental effects on self-concept, and discusses issues related to measurement and research.

Morris Rosenberg was a sociology professor at the University of Maryland. He was an expert on self-concept and developed the Rosenberg Self Esteem Scale. He earned a Ph.D. in sociology from Columbia University.

Sinclair, S. J., Blais, M. A., Gansler, D. A., Sandberg, E., Bistis, K., & LoCicero, A. (2010). Psychometric properties of the Rosenberg Self-Esteem Scale: Overall and across demographic groups living within the United States. *Evaluation & the health professions*, 33(1), 56-80.

This article presents results of a study to assess psychometric properties of the Rosenberg Self-Esteem Scale in a representative sample of 503 US adults.

Samuel Sinclair is a psychology professor at Harvard Medical School. He specializes in psychological evaluation, psychometrics, and scale development. He earned a Ph.D. in clinical psychology from Suffolk University.

RICKTER SCALE: CHANGING TRACKS 1 (YOUTH WELL-BEING)

OVERVIEW/BASIC STRUCTURE and SCALES

Among the Rickter Scales identified in this review, there are two scales that address the core outcome area of Well-Being: Changing Tracks, noted here, and Youth-Personal Development (described below). Both scales have the same target populations, psychometrics, strengths and weaknesses as the **Positive Activities for Young People** set of Rickter Scales described under the core outcome area Permanent Connections. The Changing Tracks 1 scale includes subscales for Employment/Training/Education, Relationships, **Confidence**, **Motivation**, Alcohol/Drugs, **Self-Awareness**, Communication, Accommodation, Bullying, and **Well-Being/Happiness**. Bolded scales are those most relevant to outcome area of well-being. While each of the Rickter Scales is available free online, there is a \$49 fee for a scale and support materials package, and a cost of \$164 for training (which authors highly recommend for any user).

TARGET POPULATION(S)

Utilized with at-risk youth. Psychometrics established with young offenders and substance abusers (adolescents).

PSYCHOMETRICS

VALIDITY: Clients and supervisors have confirmed face validity. Clients and supervisors report that the scale accurately assesses barriers to change and progress made toward behavioral change. Clients and providers indicate that scale scores accurately indicate self-efficacy, decision-making skills, motivation, and education.

RELIABILITY: Provider and client assessments of clients' initial distance from target outcomes and distance traveled at subsequent assessment points align.

WEAKNESSES

- Available studies do not report quantitative estimates of psychometric properties.

STRENGTHS

- Designed specifically for use with high-risk clients, especially those who are "socially excluded."
- Designed to collect data on contextual factors affecting clients' ability to achieve targeted outcomes.
- Designed to measure progress and motivation.
- Encourages focus on client strengths. Has been reported as useful in overcoming the sense that problems are permanent.

KEY REFERENCES

Armstrong, E. (n.d.) Rickter Scale case study: The Cedar Foundation Training and Brain Injury Services. *Northern Ireland ESF Review*, 3.

This brief case study presents results of a case study in which 26 projects used Rickter Scales to assess employability. A total of 672 individuals provided reviews of the projects. Reviews consistently reported that the Rickter Scale was an accurate and useful measure of progress toward goal achievement.

Elaine Armstrong is Director of Employment and Community Inclusion at the Cedar Foundation in Belfast, Northern Ireland. She earned a master's degree in health psychology from Ulster University.

George, K. (2013). *Scaling new heights in VET: Adapting the Rickter Scale Process to improve and monitor the journey of marginalized groups toward employability*. Prepared by Northumbria University for Lifelong Learning Program.

This report describes the rationale and process of developing the Rickter Scale and refining it with practitioners who offer employability training in four European countries (Germany, Greece, Italy, UK). The author discusses the importance of assessing soft outcomes as indicators of progress toward hard outcomes, such as employment. The author notes that the instrument was designed to empower clients, and to facilitate identification of barriers to goal achievement and to plan strategies for overcoming these barriers.

Karen George is a researcher at Northumbria University and an expert in community participation in policy and practice. She earned a Ph.D. in information science from Northumbria University.

Hughes, D. (2010). *The Rickter Scale: Making a difference*. Online:

<http://www.rickterscale.com/assets/docs/Rickter%20Paper%20Dr%20Deirdre%20Hughes%20Master%202017%20Nov%202010.pdf>

This paper discusses the rationale, development, usefulness, and applications of the Rickter Scale. The assessment was designed to support interviewers and vulnerable clients at-risk for social exclusion in defining goals and planning to achieve them. This includes identifying barriers, contextual factors, such as peer and community norms, economic opportunities, and self-esteem, that can affect goal achievement. Assessment is a shared decision-making process using motivational interviewing techniques. The approach is "interpretivist"- emphasizing clients' subjective interpretation of social reality, rather than objective measures of goal achievements. The developers intended for Rickter Scales to supplement quantitative objective measures by offering insight into client perspectives regarding whether and how goals can be achieved. In addition, the scales provide information about client competencies and learning styles, which can be used in planning how to make progress toward goal achievement. Both clients and providers indicate the scale has face validity. In addition, clients and service providers both report that scale scores are accurate and useful indicators of changes that occur during interventions. Interrater reliability is indicated by a study of 25 client-provider pairs

whose assessments of the client's situation and expectations aligned. Content validity was indicated by client and provider reports that scale scores accurately indicated self-efficacy, decision making skills, motivation, and success in education.

Deirdre Hughes, OBE is an associate fellow at the Warwick Institute for Employment Research (IER), University of Warwick. She conducts research in educational policy, vocational education and social science.

Rolfe, H. (2003). Developing good practice in Connexions: Techniques and tools for working with young people. National Institute of Economic and Social Research.

This guidebook describes how to use Rickter Scales in practice. It also discusses the scales' purpose and what users have said about their utility. The author reports that clients have found the assessment process useful to perceiving problems to be solvable rather than as permanent states. Clients also expressed appreciation that assessment reports provide visible indicators of progress.

Heather Rolfe is the Associate Director of Employment and Social Policy at the National Institute of Economic and Social Research in the UK. She is an expert on barriers to employment. She earned a Ph.D. in technological change and skill from Southampton University.

Wood, N. & Stead, K. (n.d.). Rickter Scale manual: A guide for practitioners using the Rickter Scale process. Prepared by Northumbria University for Lifelong Learning Programme.

This users' manual by the scale developers provides a conceptual map of the scale, a description of the assessment process, guidelines for use, and instructions for interpreting responses and developing action plans for clients. It also includes a discussion of the principles of strength-based interventions.

Nan Wood is Director of Operations at the Rickter Company. She is an expert in youth services and at-risk youth. She earned a diploma in supported employment and certificates in mentoring and coaching from Oxford University.

RICKTER SCALE: YOUTH – PERSONAL DEVELOPMENT

OVERVIEW/BASIC STRUCTURE and SCALES

Among the Rickter Scales identified in this review, this is the second of two Scales that address the core outcome area of Well-Being - Changing Tracks, noted above, and Youth – Personal Development described here. Both scales have the same target populations, psychometrics, strengths and weaknesses as the **Positive Activities for Young People** set of Rickter Scales described under the core outcome area of Permanent Connections. The Youth – Personal Development scale includes subscales for Education/Training, Skills, **Self-Esteem, Motivation**, Information, **Health** [Well-Being], Supports, Achievements, Control, and Expectations. The subscales most relevant to the outcome area of well-being are bolded. *SEE Changing Tracks, above for cost information.*

TARGET POPULATION(S)

Utilized with at-risk youth. Psychometrics established with young offenders and substance abusers (adolescents).

PSYCHOMETRICS

VALIDITY: Clients and supervisors have confirmed face validity. Clients and supervisors report that the scale accurately assesses barriers to change and progress made toward behavioral change. Clients and providers indicate that scale scores accurately indicate self-efficacy, decision-making skills, motivation, and education.

RELIABILITY: Provider and client assessments of clients' initial distance from target outcomes and distance traveled at subsequent assessment points align.

WEAKNESSES

- Available studies do not report quantitative estimates of psychometric properties.

STRENGTHS

- Designed specifically for use with high-risk clients, especially those who are “socially excluded.”
- Designed to collect data on contextual factors affecting clients' ability to achieve targeted outcomes.
- Designed to measure progress and motivation.
- Encourages focus on client strengths. Has been reported as useful in overcoming the sense that problems are permanent.

KEY REFERENCES

Armstrong, E. (n.d.) Rickter Scale case study: The Cedar Foundation Training and Brain Injury Services. *Northern Ireland ESF Review*, 3.

This brief case study presents results of a case study in which 26 projects used Rickter Scales to assess employability. A total of 672 individuals provided reviews of the projects. Reviews consistently reported that the Rickter Scale was an accurate and useful measure of progress toward goal achievement.

Elaine Armstrong is Director of Employment and Community Inclusion at the Cedar Foundation in Belfast, Northern Ireland. She earned a master's degree in health psychology from Ulster University.

George, K. (2013). *Scaling new heights in VET: Adapting the Rickter Scale Process to improve and monitor the journey of marginalized groups toward employability*. Prepared by Northumbria University for Lifelong Learning Program.

This report describes the rationale and process of developing the Rickter Scale and refining it with practitioners who offer employability training in four European countries (Germany, Greece, Italy, UK). The author discusses the importance of assessing soft outcomes as indicators of progress toward hard outcomes, such as employment. The author notes that the instrument was designed to empower clients, and to facilitate identification of barriers to goal achievement and to plan strategies for overcoming these barriers.

Karen George is a researcher at Northumbria University and an expert in community participation in policy and practice. She earned a Ph.D. in information science from Northumbria University.

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This paper discusses the rationale, development, usefulness, and applications of the Rickter Scale. The assessment was designed to support interviewers and vulnerable clients at-risk for social exclusion in defining goals and planning to achieve them. This includes identifying barriers, contextual factors, such as peer and community norms, economic opportunities, and self-esteem, that can affect goal achievement. Assessment is a shared decision-making process using motivational interviewing techniques. The approach is "interpretivist"- emphasizing clients' subjective interpretation of social reality, rather than objective measures of goal achievements. The developers intended for Rickter Scales to supplement quantitative objective measures by offering insight into client perspectives regarding whether and how goals can be achieved. In addition, the scales provide information about client competencies and learning styles, which can be used in planning how to make progress toward goal achievement. Both clients and providers indicate the scale has face validity. In addition, clients and service providers both report that scale scores are accurate and useful indicators of changes that occur during interventions. Interrater reliability is indicated by a study of 25 client-provider pairs

whose assessments of the client's situation and expectations aligned. Content validity was indicated by client and provider reports that scale scores accurately indicated self-efficacy, decision making skills, motivation, and success in education.

Deirdre Hughes, OBE is an associate fellow at the Warwick Institute for Employment Research (IER), University of Warwick. She conducts research in educational policy, vocational education and social science.

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This guidebook describes how to use Rickter Scales in practice. It also discusses the scales' purpose and what users have said about their utility. The author reports that clients have found the assessment process useful to perceiving problems to be solvable rather than as permanent states. Clients also expressed appreciation that assessment reports provide visible indicators of progress.

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CORE OUTCOME AREA:
EDUCATION AND/OR
EMPLOYMENT EDUCATION
MOTIVATION

ADAPTIVE READING MOTIVATION MEASURE

OVERVIEW/BASIC STRUCTURE and SCALES

This measure utilizes online self-reports by youth, with scoring in multiple subscales, including Reading Self-Efficacy, Intrinsic Motivation, Extrinsic Motivation, Social Motivation, Preference for Autonomy, Reading Avoidance.

TARGET POPULATION(S)

5th -12th graders in general population. Psychometrics established with the same population.

PSYCHOMETRICS

VALIDITY: Item Response Theory confirmed construct validity, correlates with reading scores, scores measuring academic progress and self-efficacy.

RELIABILITY: Full-scale (45 items) demonstrated Cronbach's alpha of .93.

WEAKNESSES

- Some subscales have Cronbach's alpha <.70.

STRENGTHS

- Developmentally appropriate, validated measure.
- No cost.

KEY REFERENCES

Davis, M. H., Tonks, S. M., Hock, M., Wang, W. & Rodriguez, A. (2018) A review of reading motivation scales, *Reading Psychology*, 39 (2),121-187, DOI: 10.1080/02702711.2017.1400482.

This article describes the importance of reading motivation as a predictor of reading achievement and development. It also presents descriptions of the constructs measured, psychometric properties, and appropriate age group for several measures of reading motivation. It concludes with discussion of information gaps in the field of reading motivation research.

Marcia Davis is an education professor at the Johns Hopkins University. She is an expert on reading comprehension and motivation and school engagement. She earned a Ph.D. in educational psychology from the University of Maryland.

Donovan, E. (2013). Understanding reading motivation for at-risk adolescent girls. *Literacy Information and Computer Education Journal*, 2 (1), 1333-1341.

This article describes the relationship between 4th through 8th grade girls' identification as delinquent and their reading motivation. Authors conducted key informant interviews about identity, delinquency, and reading motivation. Results were used to assess how delinquent identity is related to resisting authority and low reading motivation, and to recommend approaches to reducing delinquency and increasing reading motivation in this population.

Erin Donovan is an assistant professor of middle level education at Coastal Carolina University. Her research focuses on literacy education. She earned a Ph.D. in curriculum and instruction from the University of North Carolina, Charlotte.

CHILDREN'S ACADEMIC INTRINSIC MOTIVATION INVENTORY (CAIMI)

OVERVIEW/BASIC STRUCTURE and SCALES

This inventory is read to the youth by the administering staff administrator and the youth responds using a 5-point Likert scale. Subscales include Intrinsic Motivation for Reading, Intrinsic Motivation for Math, Intrinsic Motivation for Social Studies, Intrinsic Motivation for Science, and Intrinsic Motivation for General School Learning. Manual costs \$28, and there is a fee of \$79 for each set of 25 test booklets.

TARGET POPULATION(S)

Students in general population; gifted students; students with learning disabilities; students with a broad range of home environments; samples include substantial proportions of economically disadvantaged students. Psychometrics established with 4th- 8th grade students.

PSYCHOMETRICS

VALIDITY: Factor analysis confirmed four factors: reading, math, general motivation, and preference for difficult schoolwork. Significant positive correlations with IQ and reading achievement.

RELIABILITY: Range for subscales alpha of .71 to .92.

WEAKNESSES

- None found.

STRENGTHS

- Developmentally appropriate, validated measure.

KEY REFERENCES

Davis, M. H., Tonks, S. M., Hock, M., Wang, W. & Rodriguez, A. (2018) A review of reading motivation scales, *Reading Psychology*, 39 (2),121-187, DOI: 10.1080/02702711.2017.1400482.

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Dittrich, C. E. (1998). A comparison of the academic intrinsic motivation of gifted and non-gifted fifth graders taught using computer simulations and traditional teaching methods. Dissertation. University of North Texas. Denton, TX.

This dissertation provides an example of using the Children's Academic Intrinsic Motivation Inventory (CAIMI) to assess intrinsic academic motivation among gifted and non-gifted 5th grade students. It includes a detailed section about CAIMI psychometrics.

Biographical information on Dr. Dittrich was not found. Her chair, James Laney, is an education professor at the University of North Texas, with expertise in generative teacher-learning theory. He earned a Ph.D. in education from the University of California, Los Angeles.

Frasier, M. M., Martin, D., García, J. H., Finley, V. S., Frank, E., Krisel, S., & King, L.L. (1995). A new window for looking at gifted children. Storrs: University of Connecticut, The National Research Center on the Gifted and Talented.

This guidebook offers information about training education professionals to identify giftedness among diverse children, including those who are economically disadvantaged or have limited English proficiency. It includes a detailed description of CAIMI, including psychometric data. CAIMI is included in a list of measurement resources. The authors state that the list is not an endorsement of any measure. The book offers discussion of issues related to assessing students from diverse backgrounds.

Mary M. Frasier was an educational psychology professor at the University of Georgia and founder of the Torrance Center for Creative Studies. She was an internationally known expert on gifted education, specializing in assessing talent in low-income and minority students. She earned a Ph.D. in education psychology from University of Connecticut.

Gottfried, A. E., Fleming, J. S. & Gottfried, A. W. (2008). Role of cognitively stimulating home environment in children's academic intrinsic motivation: A longitudinal study. *Child Development*, 69(5), 1448-1460.

This article by the developer of CAIMI presents a description of the instrument, its psychometrics, and its theoretical basis. For this longitudinal study, CAIMI was used to assess intrinsic academic motivation's relationship to home environment between ages 9 and 13.

Adele Gottfried is an educational psychology professor at California State University, Northridge. She is an internationally known expert on academic intrinsic motivation. She earned a Ph.D. in educational psychology from the City University of New York.

Zisimopoulos, D. A., & Galanaki, E. P. (2009). Academic intrinsic motivation and perceived academic competence in Greek elementary students with and without learning disabilities. *Learning Disabilities Research & Practice*, 24(1), 33-43.

This article provides an example of using the CAIMI to assess reading motivation among a sample of 980 5th and 6th grade students with learning disabilities. The study compared reading motivation among students with and without learning disabilities. Results indicate that students with learning disabilities have lower intrinsic motivation.

Dimitri Zisimopoulos is a primary school counselor and lecturer on special education at the University of Nicosia (Greece). He earned a Ph.D. in special education from the University of Athens.

RICKTER SCALE: YOUTH – LIFE AFTER SCHOOL

OVERVIEW /BASIC STRUCTURE and SCALES

Among the Rickter Scales identified in this review, this scale addresses the core outcome area of Education – Motivation with a single 10-item scale measuring youth plans for post-secondary school transition. While each of the Rickter Scales is available free online, there is a \$49 fee for the scale and support materials package, and a cost of \$164 for training (which authors highly recommend for any user).

TARGET POPULATION(S)

Utilized with at-risk youth. Psychometrics established with young offenders and substance abusers (adolescents).

PSYCHOMETRICS

VALIDITY: Clients and supervisors have confirmed face validity. Clients and supervisors report that the scale accurately assesses barriers to change and progress made toward behavioral change. Clients and providers indicate that scale scores accurately indicate self-efficacy, decision-making skills, motivation, and education.

RELIABILITY: Provider and client assessments of clients' initial distance from target outcomes and distance traveled at subsequent assessment points align.

WEAKNESSES

- Available studies do not report quantitative estimates of psychometric properties.

STRENGTHS

- Designed specifically for use with high-risk clients, especially those who are “socially excluded.”
- Designed to collect data on contextual factors affecting clients' ability to achieve targeted outcomes.
- Designed to measure progress and motivation.
- Encourages focus on client strengths. Has been reported as useful in overcoming the sense that problems are permanent.

KEY REFERENCES

Armstrong, E. (n.d.) Rickter Scale case study: The Cedar Foundation Training and Brain Injury Services. *Northern Ireland ESF Review*, 3.

This brief case study presents results of a case study in which 26 projects used Rickter Scales to assess employability. A total of 672 individuals provided reviews of the projects. Reviews consistently reported that the Rickter Scale was an accurate and useful measure of progress toward goal achievement.

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SELF-REGULATION QUESTIONNAIRE- LEARNING (SRQ-LEARNING)

OVERVIEW/BASIC STRUCTURE and SCALES

This Questionnaire can be completed by youth using paper-and-pencil or online, measuring autonomous and controlled learning motivation or regulation.

TARGET POPULATION(S)

Used in studies of at-risk youth, including adolescents. The city of Cleveland (2015) administered the test with high school dropouts. Psychometrics developed with elementary and secondary school students.

PSYCHOMETRICS

VALIDITY: Kroner et al. (2017) demonstrated discriminant and convergent validity with other measures.

RELIABILITY: Cronbach's alpha range of .75 - .88.

WEAKNESSES

- None found.

STRENGTHS

- Validated test, previously used with at-risk youth.
- No cost.

KEY REFERENCES

Cleveland, B. G. (2015). An Examination of the primary motivational factors affecting participation in general education development degree programs in the state of Alabama, Dissertation. Auburn University, Auburn, Alabama.

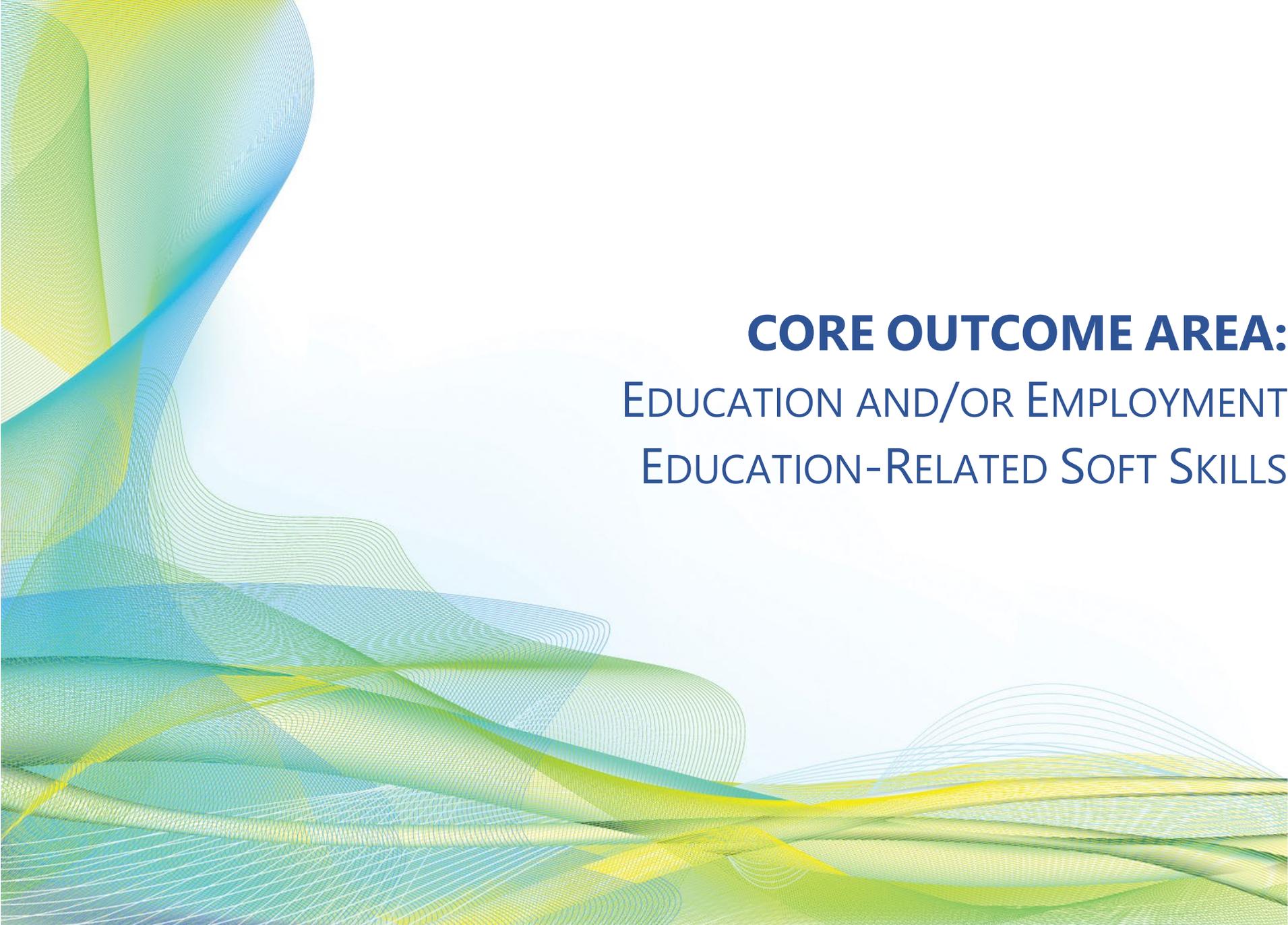
This dissertation study examined reasons students who drop out of high school enroll in GED programs, with an emphasis on the roles of autonomous and controlled regulation. The SRQ-Learning was used to assess self-regulation and motivation. The dissertation included a description of the measure's psychometric characteristics. The author stated that the instrument has good internal consistency and is a valid measure of academic learning motivation.

Bethany Cleveland is an instructional designer at the Air University School of Graduate Professional Military Education.

Kroner, J., Goussios, C., Schaitz, C., Streb, J. & Sosic-Vasic, Z. (2017). The construct validity of the German academic self-regulation questionnaire (SRQ-A) within primary and secondary school children. *Frontiers in Psychology*, 8, PMC5479903.

This article provides an example of using the SRQ-Academic to assess 8-14-year-old students. The aim was to adapt and validate the measure for German students. The article provides a summary of the measure's psychometric characteristics. The authors conclude that the measure has good internal consistency and is a valid measure of academic learning motivation for German students.

Julia Kroner is a clinical psychologist and doctoral student at the University of Ulm Department of Psychiatry and Psychotherapy.



CORE OUTCOME AREA:
EDUCATION AND/OR EMPLOYMENT
EDUCATION-RELATED SOFT SKILLS

RICKTER SCALE: OPPORTUNITY READY

OVERVIEW/BASIC STRUCTURE and SCALES

Among the Rickter Scales identified in this review, this is a single 10-item scale measuring confidence with transition from secondary school. While each of the Rickter scales is available free online, there is a \$49 fee for the scale and support materials package, and a cost of \$164 for training (which authors highly recommend for any user).

TARGET POPULATION(S)

Youth preparing to transition to adulthood.

Utilized with at-risk youth. Psychometrics established with young offenders and substance abusers (adolescents).

PSYCHOMETRICS

VALIDITY: Clients and supervisors have confirmed face validity. Clients and supervisors report that the scale accurately assesses barriers to change and progress made toward behavioral change. Clients and providers indicate that scale scores accurately indicate self-efficacy, decision-making skills, motivation, and education.

RELIABILITY: Provider and client assessments of clients' initial distance from target outcomes and distance traveled at subsequent assessment points align.

WEAKNESSES

- Available studies do not report quantitative estimates of psychometric properties

STRENGTHS

- Designed specifically for use with high-risk clients, especially those who are "socially excluded."
- Designed to collect data on contextual factors affecting clients' ability to achieve targeted outcomes.
- Designed to measure progress and motivation.
- Encourages focus on client strengths. Has been reported as useful in overcoming the sense that problems are permanent.

KEY REFERENCES

Scottish Executive Social Research (2005). The national evaluation of the Careers Scotland inclusiveness project.

<https://www2.gov.scot/Resource/Doc/37428/0009690.pdf>.

This report presents conclusions and recommendations from a national evaluation of projects designed to provide services to support 16-24-year-olds' transition to employment, with a focus on improved services for economically disadvantaged youth. It includes examples of projects using Rickter assessments to support planning and monitoring progress.

Scottish Executive Social Research provides research-based evidence and advice to Scottish government officials to inform policy.

Armstrong, E. (n.d.) Rickter Scale case study: The Cedar Foundation Training and Brain Injury Services. *Northern Ireland ESF Review*, 3.

This brief case study presents results of a case study in which 26 projects used Rickter Scales to assess employability. A total of 672 individuals provided reviews of the projects. Reviews consistently reported that the Rickter Scale was an accurate and useful measure of progress toward goal achievement.

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RICKTER SCALE: YOUTH – EDUCATION

OVERVIEW/BASIC STRUCTURE and SCALES

Among the Rickter Scales identified in this review, this is a single 10-item scale designed to measure satisfaction with current education and skills. While each of the Rickter scales is available free online, there is a \$49 fee for the scale and support materials package, and a cost of \$164 for training (which authors highly recommend for any user).

TARGET POPULATION(S)

Youth, minors who require adult care.

Utilized with at-risk youth. Psychometrics established with young offenders and substance abusers (adolescents).

PSYCHOMETRICS

VALIDITY: Clients and supervisors have confirmed face validity. Clients and supervisors report that the scale accurately assesses barriers to change and progress made toward behavioral change. Clients and providers indicate that scale scores accurately indicate self-efficacy, decision-making skills, motivation, and education.

RELIABILITY: Provider and client assessments of clients' initial distance from target outcomes and distance traveled at subsequent assessment points align.

WEAKNESSES

- Available studies do not report quantitative estimates of psychometric properties

STRENGTHS

- Designed specifically for use with high-risk clients, especially those who are “socially excluded.”
- Designed to collect data on contextual factors affecting clients' ability to achieve targeted outcomes.
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SHOOTING STAR (SOFT LEARNING SKILLS, READINESS FOR CHANGE)

OVERVIEW/BASIC STRUCTURE and SCALES

Derived from the Outcomes Star, this instrument is designed for homeless populations, with subscales for Aspiration, Contribution, Confidence, Learning, People and Support, Communicating, Readiness for Change, and Investment. A trained service provider completes Shooting Star while soliciting input from the youth.

TARGET POPULATION(S)

Primary and secondary school students. Psychometrics established with the same populations.

PSYCHOMETRICS

VALIDITY: Expert review of content, correlates with direct measures.

RELIABILITY: Interrater (reliability) $r = .80$.

WEAKNESSES

- While the scale is free online, training to administer it is encouraged and the fee for training varies and must be negotiated with Triangle Consulting Social Enterprise.

STRENGTHS

- Validated instrument normed? with youth.
- The People and Support subscale could also be utilized in assessing the PERMANENT CONNECTIONS outcome area.

KEY REFERENCES

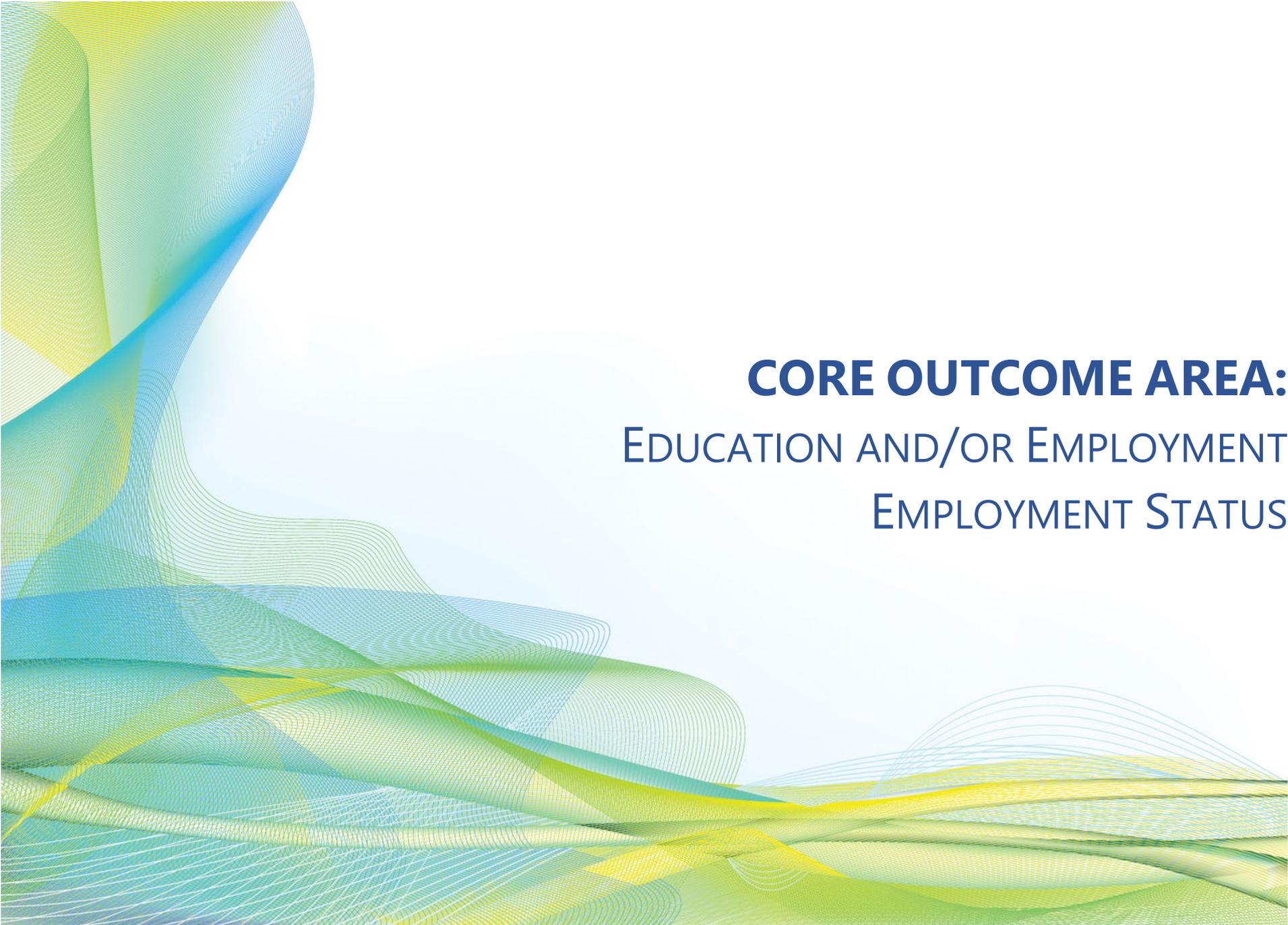
Mackeith, J. (2014). Assessing the reliability of the Outcomes Star in research and practice. *Housing, Care and Support*, 17(4), 188-197.

This report describes the methods and results of assessing the Outcome Star's inter-rater reliability. A total of 24 service providers applied the instrument in a field setting to test usability, interrater reliability, and utility. Interrater reliability was good. The authors conclude that it is important to train users in how to use these scales in order to ensure consistent use.

MacKeith, J. (2011). The development of the Outcomes Star: a participatory approach to assessment and outcome measurement. *Housing, Care and Support*, 14(3), 98-106.

This report describes the process of developing the Outcomes Star as well as the theoretical foundations for the instrument and its development process. Developers conducted a literature review, interviews with service providers and consumers, and workshops with service providers and consumers to develop items and refine definitions of targeted outcomes, including readiness to change. After developing an initial scale, Star instruments were tested in the field, then revised based on provider and consumer feedback.

Joy MacKeith is co-director of Triangle Consulting Social Enterprise and co-author of the Outcomes Star measures. Her experience includes providing services to people who are homeless, teaching at the London School of Economics, and program evaluation.



CORE OUTCOME AREA: EDUCATION AND/OR EMPLOYMENT EMPLOYMENT STATUS

AMERICAN COMMUNITY SURVEY (ACS)

OVERVIEW/BASIC STRUCTURE and SCALES

This survey, designed to support employment population estimates, can be conducted online or by telephone interview. Online data go to the Census Bureau, but interview results can be held in program. There are no subscales.

TARGET POPULATION(S)

Community level data throughout the United States. Psychometrics established with the US population.

PSYCHOMETRICS

VALIDITY: Accuracy data are based on population estimates, not reliability or validity of individual responses

RELIABILITY: As with validity, accuracy data are based on population estimates, not reliability or validity of individual responses.

WEAKNESSES

- Data are based on broad population estimates.

STRENGTHS

- Publicly available offline tool could be used to obtain individual-level data. Includes questions about reasons for unemployment, plans for returning to work.
- No cost.

KEY REFERENCES

American Community Survey: Accuracy of the Data (2017). https://www2.census.gov/programs-surveys/acs/tech_docs/accuracy/ACS_Accuracy_of_Data_2017.pdf?#.

This document provides information about the accuracy and validity of the American Community Survey, sponsored by the US Census Bureau. It describes the sampling framework and design, weighting methodology, potential sources of error, and measures of error.

EMPLOYMENT STATUS

OVERVIEW/BASIC STRUCTURE and SCALES

This is a basic record of employment, with data gathered through self-report of youth or through a review of their employment records.

TARGET POPULATION(S)

Working age youth and young adults. Psychometrics have not been established, as this is a simple record of reported employment.

PSYCHOMETRICS

VALIDITY: N/A

RELIABILITY: N/A

WEAKNESSES

- Wages vary widely, and thus employment does not indicate a common or standard level of support for financial independence.
- Accuracy (and thus validity) of this type of self-report is unknown.

STRENGTHS

- Requires no inference, direct measure of the outcome.
- No cost.

KEY REFERENCES

Ferguson, K. M. (2018). Employment outcomes from a randomized controlled trial of two employment interventions with homeless youth. *Journal of the Society for Social Work and Research*, 9 (1), 1-21.

This article presents results of a randomized control trial comparing the effectiveness of an individual placement and support intervention with a social enterprise intervention with a sample of 72 homeless youth, ages 16 to 24-years-old. It provides an example of employment status as a target outcome for this population. The article includes a section describing measures: ever worked, job tenure, weekly hours worked, total labor networks, income from survival behaviors. (Results indicated that both interventions were effective and that neither was significantly more effective than the other).

Kristen Ferguson is an associate professor at Arizona State University School of Social Work. Her expertise is on factors that contribute to youth homelessness. She earned a Ph.D. in social work from the University of Texas, Arlington.

Making Cents International. (2013). 2013 State of the field in youth economic opportunities.

This guidebook for practitioners, researchers, educators, employers, youth, and policy makers summarizes discussions at an international conference of stakeholders in youth economic opportunity issues. Multiple experts discussed advances in the field, lessons learned, challenges, evaluation, priorities, and gaps. The document includes a chapter on monitoring, evaluation, and assessment. This includes discussion of measures and how to select them. It also includes a chapter on working with marginalized, vulnerable, or at-risk youth. It describes a financial diary data collection method that can be used to collect multiple indicators of employment and related outcomes.

Making Cents International is a research, education, evaluation, and consulting business that advances global economic opportunities for youth and adults.

Savage, M., Devine, F., Cunningham, N., Taylor, M., Li, Y., Hjellbrekke, J., & Miles, A. (2013). A new model of social class? Findings from the BBC's Great British Class Survey experiment. *Sociology*, 47 (2), 219-250.

This article presents results of a latent class analysis of responses to the Great British Class Survey, the largest survey on social class ever conducted in the UK, with 161,400 respondents. The survey includes detailed questions about social, cultural, and economic capital. The article discusses these concepts and their implications. It includes a section on measures of economic capital as well as a discussion of the association between class and occupation. The article and survey items may be useful for considering variations in how different types of jobs reflect employment success. In addition, measures of social, economic, and cultural capital may also serve as indicators of success.

Mike Savage is a professor at the London School of Economics. He is an internationally acclaimed expert in social stratification and inequality.

SOCIOECONOMIC MOBILITY

OVERVIEW/BASIC STRUCTURE and SCALES

This is a United Kingdom government survey, with questions available online, utilizing the Nuffield (Goldthorpe) class schema or taxonomy for class structure.

TARGET POPULATION(S)

Working age youth and adults. Psychometrics established with British population.

PSYCHOMETRICS

VALIDITY: Criterion validity indicated by association between class category, employment, earnings, authority relations, and control over work activities.

RELIABILITY: Not found.

WEAKNESSES

- Based on United Kingdom norms.
- Reliability not determined.

STRENGTHS

- Easy to administer, little time burden.
- Although designed for use with broad populations, provides individual results.
- No cost.

KEY REFERENCES

Evans, G. (1992). Testing the validity of the Goldthorpe class schema. *European Sociological Review*, 8(3). 211-232.

The author analyzed correlations between Nuffield (Goldthorpe) classification and occupational characteristics. The authors analyzed a random sample of 1,770 surveys. Results indicate a strong relationship between class membership and employment and wage conditions.

Geoffrey Evans is a professor of the Sociology of Politics at Oxford University. His expertise is in social inequality.

Savage, M., Devine, F., Cunningham, N., Taylor, M., Li, Y., Hjellbrekke, J., & Miles, A. (2013). A new model of social class? Findings from the BBC's Great British Class Survey experiment. *Sociology*, 47(2), 219-250.

This article presents a discussion of the importance of socioeconomic class and references the Nuffield class schema as the most widely validated measure. The authors propose an alternate model, but also describe the rationale and development of the Nuffield class schema, as well as examples of its use in research.

Mike Savage is a professor at the London School of Economics. He is an internationally acclaimed expert in social stratification and inequality.

GREAT BRITISH CLASS SURVEY

OVERVIEW/BASIC STRUCTURE and SCALES

This British government Survey utilizes the New Model of Social Class and is self-administered online, with no subscales.

TARGET POPULATION(S)

Working age youth and adults. Psychometrics developed with British population.

PSYCHOMETRICS

VALIDITY: Construct validity confirmed with latent class analysis.

RELIABILITY: Not found.

WEAKNESSES

- Based on United Kingdom norms.
- Reliability not determined.

STRENGTHS

- Easy to administer, little time burden.
- Although designed for use with broad populations, provides individual results.
- No cost.

KEY REFERENCES

Savage, M., Devine, F., Cunningham, N., Taylor, M., Li, Y., Hjellbrekke, J., & Miles, A. (2013). A new model of social class? Findings from the BBC's Great British Class Survey experiment. *Sociology*, 47 (2), 219-250.

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LENGTH OF EMPLOYMENT

OVERVIEW/BASIC STRUCTURE and SCALES

Data is drawn from youth's self-report or their employment records. There are no subscales.

TARGET POPULATION(S)

Working age youth and adults. Psychometrics NA.

PSYCHOMETRICS

VALIDITY: Validity of this type of self-report unknown.

RELIABILITY: N/A

WEAKNESSES

- Wages vary widely; not all jobs are adequate to support financial independence
- Validity unknown.

STRENGTHS

- Requires no inference, direct measure of the outcome.
- No cost.

KEY REFERENCES

Ferguson, K. M. (2018). Employment outcomes from a randomized controlled trial of two employment interventions with homeless youth. *Journal of the Society for Social Work and Research*, 9 (1), 1-21.

This article presents results of a randomized control trial comparing the effectiveness of an individual placement and support intervention with a social enterprise intervention with a sample of 72 homeless youth, ages 16 to 24-years-old. It provides an example of employment status as a target outcome for this population. The article includes a section describing measures: ever worked, job tenure, weekly hours worked, total labor networks, income from survival behaviors. Results indicated that both interventions were effective and that neither was significantly more effective than the other.

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US CENSUS SURVEY OF INCOME AND PROGRAM PARTICIPATION, EMPLOYMENT AND EARNINGS SECTION (SIPP-EMPLOYMENT AND EARNINGS)

OVERVIEW/BASIC STRUCTURE and SCALES

Data is drawn from youth's self-report on paper and pencil survey of employment earnings. There are no subscales.

TARGET POPULATION(S)

Adults, young adults. Psychometrics established with U. S. population.

PSYCHOMETRICS

VALIDITY: Census accuracy statements discuss population coverage - no individual validity or reliability data.

RELIABILITY: As above, with validity.

WEAKNESSES

- Accuracy data are based on population estimates. Data are not based on reliability or validity of individual responses.

STRENGTHS

- Publicly available and can be used to obtain individual-level data.
- Questions address employment status, job type, wages, weekly hours worked, reasons for unemployment, and detailed questions about work situation.

KEY REFERENCES

Making Cents International. (2013). 2013 State of the field in youth economic opportunities.

This guidebook for practitioners, researchers, educators, employers, youth, and policy makers summarizes discussions at an international conference of stakeholders in youth economic opportunity issues. Multiple experts discussed advances in the field, lessons learned, challenges, evaluation, priorities, and gaps. The document includes a chapter on monitoring, evaluation, and assessment. This includes discussion of measures and how to select them. It also includes a chapter on working with marginalized, vulnerable, or at-risk youth. It describes a financial diary data collection method that can be used to collect multiple indicators of employment and related outcomes.

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Savage, M., Devine, F., Cunningham, N., Taylor, M., Li, Y., Hjellbrekke, J., & Miles, A. (2013). A new model of social class? Findings from the BBC's Great British Class Survey experiment. *Sociology*, 47 (2), 219-250.

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Mike Savage is a professor at the London School of Economics. He is an internationally acclaimed expert in social stratification and inequality.

US Census Bureau, US Bureau of Labor Statistics. (2006). Technical Report 66: Design and Methodology.

This technical report describes the design, data collection, and estimation procedures for the US Census. It includes discussions of errors and data quality.

WAGES

OVERVIEW/BASIC STRUCTURE and SCALES

Data is drawn from youth's self-report or employment records (paycheck stubs) provided by youth. There are no subscales.

TARGET POPULATION(S)

Working age youth and young adults. Psychometrics N/A.

PSYCHOMETRICS

VALIDITY: N/A

RELIABILITY: N/A

WEAKNESSES

- Wages vary widely; not all jobs are adequate to support financial independence. Validity of this type of self-report unknown.

STRENGTHS

- Requires no inference, direct measure of the outcome.

KEY REFERENCES

Making Cents International. (2013). 2013 State of the field in youth economic opportunities.

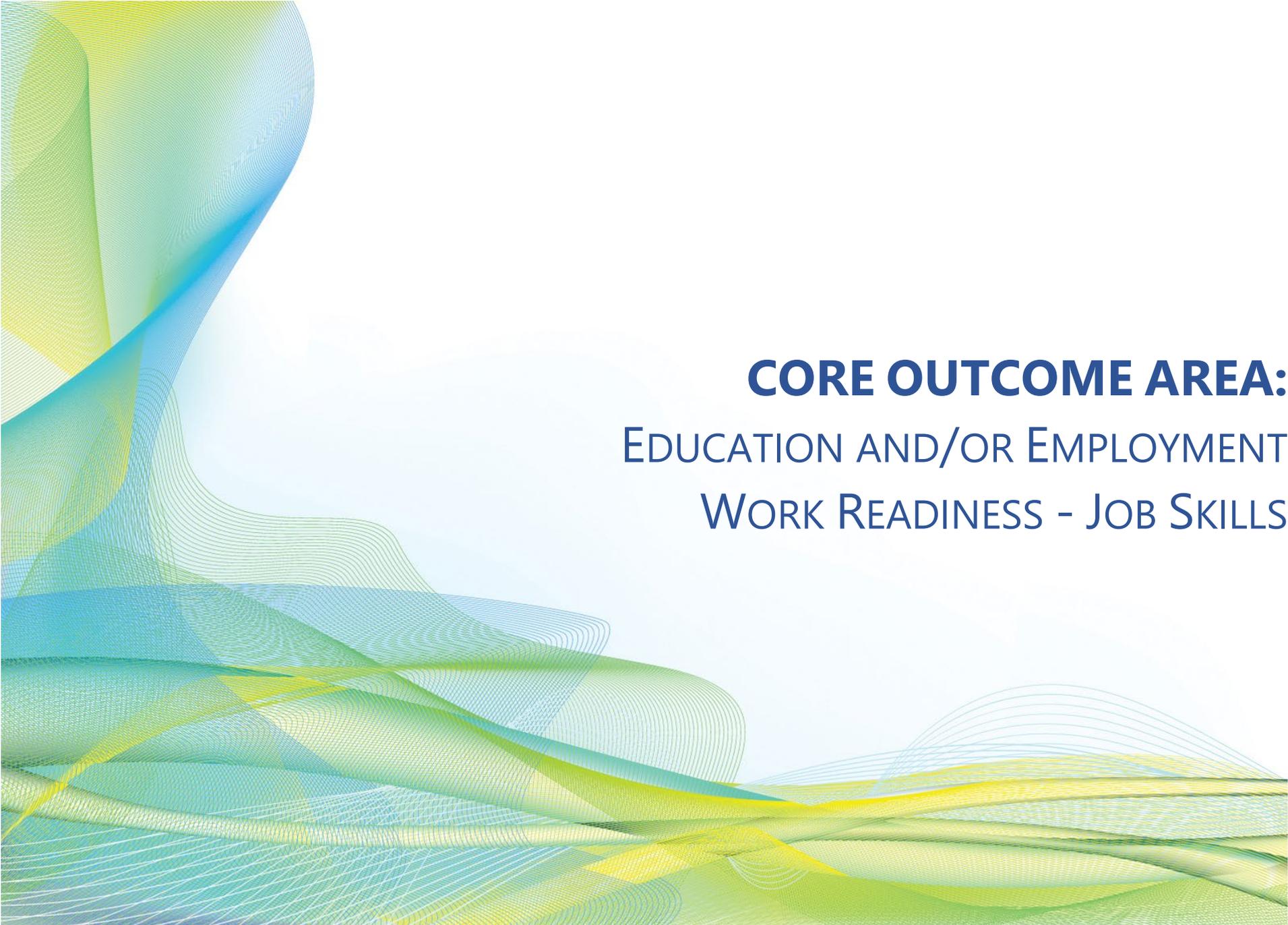
This guidebook for practitioners, researchers, educators, employers, youth, and policy makers summarizes discussions at an international conference of stakeholders in youth economic opportunity issues. Multiple experts discussed advances in the field, lessons learned, challenges, evaluation, priorities, and gaps. The document includes a chapter on monitoring, evaluation, and assessment. This includes discussion of measures and how to select them. It also includes a chapter on working with marginalized, vulnerable, or at-risk youth. It describes a financial diary data collection method that can be used to collect multiple indicators of employment and related outcomes.

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CORE OUTCOME AREA:
EDUCATION AND/OR EMPLOYMENT
WORK READINESS - JOB SKILLS

ACT WORKKEYS (WORKPLACE READINESS)

OVERVIEW/BASIC STRUCTURE and SCALES

ACT administers the WORKKEYS online or paper and pencil test at select times and sites. Individual assessments (and subscale reports) are provided for Applied Math, Graphic Literacy, Workplace Documents, Applied Technology, Business Writing, Workplace Observation, and Fit.

TARGET POPULATION(S)

Youth in transition to adulthood and adults, nationally. Psychometrics established with national samples of test takers.

PSYCHOMETRICS

VALIDITY: Skill levels assessed with employers and educators; item writing specialists developed items to align with skill levels; correlates with corresponding ACT scores. Aligns with National Network of Business and Industry Association employability skills. Aligns with skills identified in job profiles.

RELIABILITY: Item response analysis confirms unidimensional scales and reliable measurement.

WEAKNESSES

- Must be administered by an ACT test center, and thus is only available on a schedule determined by ACT.
- Costs vary widely by ACT Test Center.

STRENGTHS

- Validated with a large, representative sample.
- Successful completers can earn a Workplace Readiness Certificate.

KEY REFERENCES

ACT (2017). Evidence supporting the use of the ACTWorkKeys National Readiness Certificate.

<http://www.act.org/content/dam/act/unsecured/documents/NCRC-Validity-Evidence-06.21.17.pdf>

This technical paper summarizes the most recent evidence about ACTWorkKeys validity. It includes a summary of the validation process as well as pending research.

ACT is a non-profit organization that develops and administers achievement tests, assessments and learning resources. ACT conducts research on assessment utilization, utility and psychometric characteristics.

COMPREHENSIVE ADULT STUDENT ASSESSMENT SYSTEM (CASAS) WORKFORCE SKILLS CERTIFICATION SYSTEM (WSCS)

OVERVIEW/BASIC STRUCTURE and SCALES

Administrator assesses skill sets with computer, including (subscales for) Reading Comprehension, Math, Critical Thinking, Problem Solving, Personal Qualities, Customer Care. Cost of \$10 to \$35 per scale, minimum order of 10 copies for each of those scales.

TARGET POPULATION(S)

Individuals 16 years and older. Psychometrics established with national samples of youth and adults, as well as input from subject matter experts.

PSYCHOMETRICS

VALIDITY: Website reports validation by the US Departments of Education and Labor – specific research not found.

RELIABILITY: Summary reports reliability has been assessed and meets US Department of Education standards – specific research not found.

WEAKNESSES

- Public reports of psychometrics are not available.
- Required administration fee for each individual assessment.

STRENGTHS

- Aligns with US Department of Education and US Department of Labor standards.

KEY REFERENCES

CASAS National Consortium. (2009). Aligning CASAS competencies and assessments to basic skills content standards. CASAS.

https://www.casas.org/docs/pagecontents/aligncomptocontentstandards_2009.pdf?Status=Master.

This technical report summarizes the rationale, development, and validation of CASAS assessments.

Comprehensive Adult Student Assessment Systems (CASAS) is a non-profit organization that develops and administers competency assessments, which are approved by the U.S. Department of Education and the U.S. Department of Labor.

NATIONAL OCCUPATIONAL COMPETENCY TESTING INSTITUTE (NOCTI) WORKPLACE READINESS ASSESSMENTS

OVERVIEW/BASIC STRUCTURE and SCALES

These assessments are self-administered by youth online. Subscales include Reading, Writing, Math, Speaking and Listening, Computer Applications and Digital Media, Reasoning/Problem Solving/Decision Making, Understanding the Big Picture, Work Ethics, Positive Attitude, Independence and Initiative, Self-Presentation, Attendance, Collaboration, Personal Health and Wellness, Entrepreneurship, Personal Finance, Work Ethic. Fee for testing, with range of costs depending on test sites. Examples found of \$25 to \$50.

TARGET POPULATION(S)

Youth transitioning to adulthood and adults across US aspiring for careers associated with NOCTI Business Solutions tests. Psychometrics established with test takers

PSYCHOMETRICS

VALIDITY: Content validity confirmed; aligned with O*Net national academic standards

RELIABILITY: Defined as meeting “rigorous standards.” but reports with quantitative reliability estimates were not found.

WEAKNESSES

- Testing fee.
- Specific data supporting reliability not found.
- Requires grantee to work with NOCTI.

STRENGTHS

- Used by employers to assess workplace readiness.
- Validated measure of workplace readiness.
- Students who pass can be certified for target job skills.

KEY REFERENCES

NOCTI (2016). NOCTI Assessment Development Brochure. Big Rapids, MI.

<https://www.nocti.org/pdf/Assessment%20Development%20Brochure-%20Web%20version.pdf>

This brochure summarizes the process of estimating the reliability and validity of NOCTI assessments.

Walter, R. A. & Kapes, J. T. (2003). Development of a procedure for establishing occupational examination cut scores. *Journal of Industrial Teacher Education*, 40 (3), <https://scholar.lib.vt.edu/ejournals/JITE/v40n3/walter.html>.

The authors convened an expert panel to develop cut scores for early childcare and education certification, describe the process, and discuss issues with this approach to assessing competency. The authors describe challenges to creating normative data, compare advantages and disadvantages of a range of approaches, and compare results of these approaches.

Richard Walter is an associate professor of education at Pennsylvania State University. He specializes in workforce development and education. He earned a Ph.D. in vocational industrial education from Pennsylvania State University.

WORK READINESS SCALE (WRS)

OVERVIEW/BASIC STRUCTURE and SCALES

Scale is self-administered online by youth. Subscales include Personal Characteristics, Organizational Acumen, Work Competence, and Social Intelligence.

TARGET POPULATION(S)

College graduates, youth in transition to adulthood. Psychometrics established with college graduates.

PSYCHOMETRICS

VALIDITY: Analysis confirmed factor validity.

RELIABILITY: Strong validity with Cronbach's alpha of .96.

WEAKNESSES

- Data only found on use with college graduates.
- Costs are unknown – users must contact authors to obtain test and negotiate cost.

STRENGTHS

- Validated assessment of soft skills associated with employment.

KEY REFERENCES

Caballero, C. L., Walker, A. & Fuller-Tyskiewicz, M. (2011). The Work Readiness Scale (WRS): Developing a measure to assess work readiness in college graduates. *Journal of Teaching and Learning for Graduate Employability*. 2(2). 41-54.

This article describes the process of developing and validating the Work Readiness Scale. The authors conducted interviews with 30 professional experts to identify components of work readiness, then used expert review, item analysis, and factor analysis to construct the scale.

Catherine Caballero is a lecturer at Deakin University, where she earned a master's degree in organizational and industrial psychology.

WORK STAR

OVERVIEW/BASIC STRUCTURE and SCALES

This scale is part of the Outcomes Star suite of instruments. Trained service providers complete the assessment while soliciting input from youth. Subscales include Job Skills and Experience, Aspiration and Motivation, Job Search Skills, Basic Skills, Workplace and Social Skills, Health and Well-Being, and Readiness to Change.

TARGET POPULATION(S)

Youth (transitioning to adulthood) not already employed, in school, or in training. Youth from economically disadvantaged communities, including teen parents and youth in the justice system. Psychometrics established with youth not already employed, in school, or in training from economically disadvantaged communities; teen parents, and youth in the justice system.

PSYCHOMETRICS

VALIDITY: Analysis confirmed factor validity.

RELIABILITY: Cronbach's alpha of .85.

WEAKNESSES

- Authors strongly recommend training to administer, with a training fee to be negotiated with publisher.

STRENGTHS

- Validated instrument normed with at-risk youth.

KEY REFERENCES

Good, A. & Lamont, E. (2018). Outcomes Star psychometric fact sheet: Work Star (2nd ed.). Triangle Consulting Social Enterprise, Ltd. Brighton, East Sussex, UK.

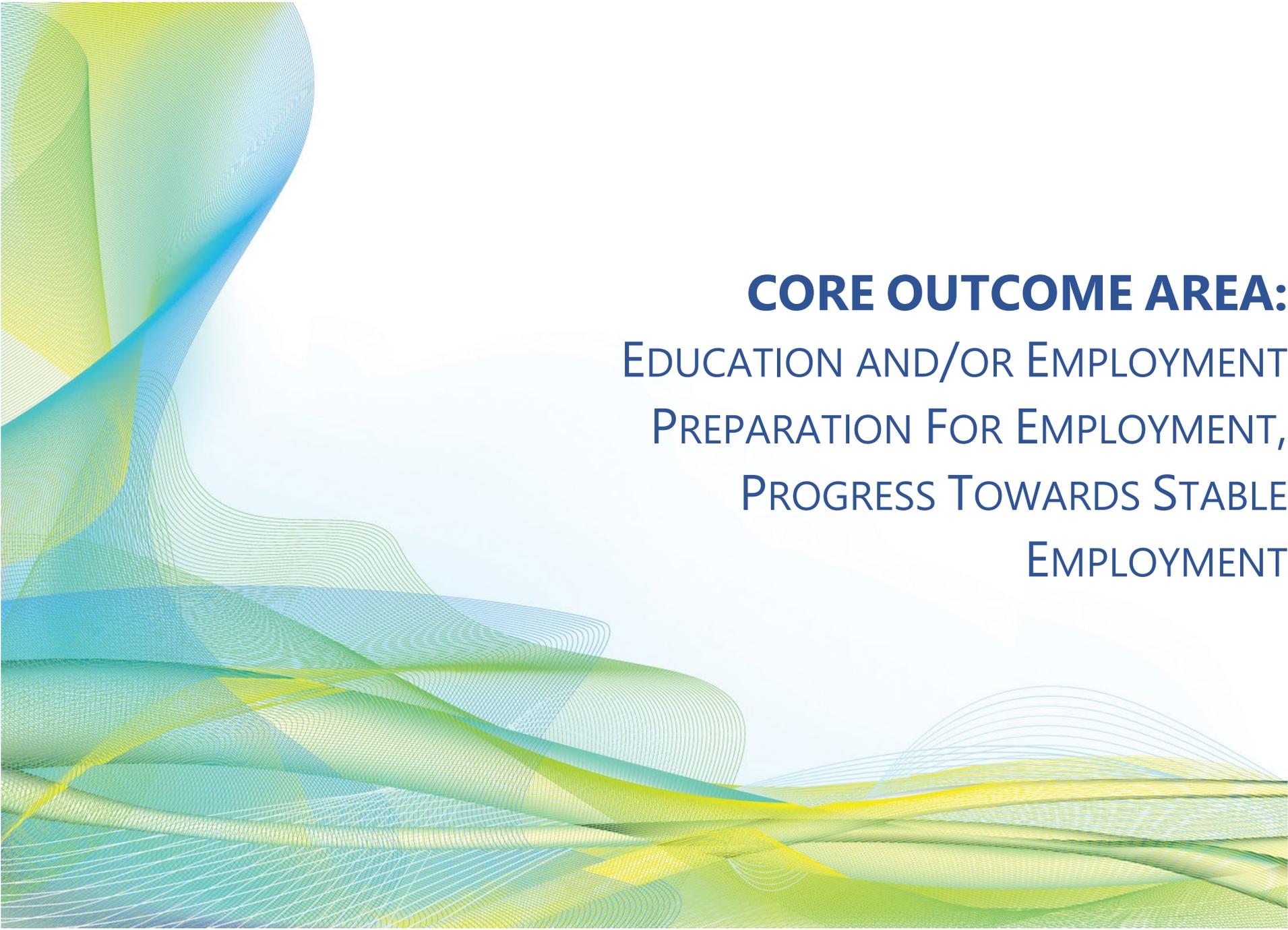
This fact sheet summarizes the psychometric properties of Outcomes Star assessments.

Anna Good is a research analyst at Triangle Consulting. She earned a D.Phil. in behavior change interventions from the University of Sussex.

Scott, D. & Hansberry, P. (2015). Developing a common approach to supporting the progression of young people towards employment: Pilot project using Work Star- Evaluation Report. Hounslow 14-19/Connexions Team. London, UK.

This report summarizes the processes and results of a pilot test using Work Star to assess results of a collaborative effort among six community-based partners to reengage vulnerable youth in education and/or employment and training. The report describes the training for using Work Star, presents project case studies, and discusses scoring and use of Work Star.

David Scott is head of the London Borough of Hounslow 14-19 Service, which provides career advice for adolescents, including those who are homeless. He earned a master's degree in educational management and leadership from the University of Kingston.



CORE OUTCOME AREA:
EDUCATION AND/OR EMPLOYMENT
PREPARATION FOR EMPLOYMENT,
PROGRESS TOWARDS STABLE
EMPLOYMENT

EMPLOYMENT PRECARIOUSNESS SCALE (EPRES)

OVERVIEW/BASIC STRUCTURE and SCALES

Interviewer administers survey. There are no sub-scales.
No information found on costs.

TARGET POPULATION(S)

Workers in Spain and Chile – adults and youth transitioning into adulthood.
Psychometrics established with workers in Spain and Chile.

PSYCHOMETRICS

VALIDITY: Exploratory analysis confirmed factor validity. Correlation with psychosocial work environment measures and perceived health indicates convergent validity.

RELIABILITY: Cronbach's alpha over 0.70 for all subscales and the global score.

WEAKNESSES

- Data not found on use in the US.
- Authors must provide scale.
- Cost information unavailable.

STRENGTHS

- Employment precariousness is emerging as an important issue in assessing employment outcomes.

KEY REFERENCES

Vives, A., Amable, M., Ferrer, M., Moncada, S., Llorens, C., Muntaner, C., & Benach, J. (2010). The Employment Precariousness Scale (EPRES): Psychometric properties of a new tool for epidemiological studies among waged and salaried workers. *Occupational and environmental medicine*, 67 (8), 548-555.

This article describes the processes of developing and validating the EPRES. The authors surveyed 6,968 workers in Spain. The authors found that the full scale and all subscales had good internal consistency. Factor analysis confirmed that responses align with the theoretical foundation of the scale. Scores on EPRES correlated in the expected direction with other psychosocial work environment measures. The authors conclude that this is a promising tool for assessing work precariousness.

Alejandra Vives, MD, Ph.D. is a professor of public health at the Pontifical Catholic University of Chile.

RICKTER SCALES: ENTRY TO EMPLOYMENT

OVERVIEW/BASIC STRUCTURE and SCALES

Among the Rickter Scales identified in this review, this scale is implemented by a trained service provider as part of motivational interviewing and planning. Subscales include Happiness; Control; Importance; Type of Work; Skills; Progress; Communication; Money; Cost of Living; and Education/Training. While each of the Rickter Scales is available free online, there is a \$49 fee for scale and support materials package, and a cost of \$164 for training (which authors highly recommend for any user).

TARGET POPULATION(S)

Youth transitioning to adulthood. Psychometrics developed for use with unemployed people with a background of multigenerational unemployment.

PSYCHOMETRICS

VALIDITY: Internal studies have confirmed face validity, moderate correlation with other relevant indicators.

RELIABILITY: "Adequate test-retest reliability" and moderate correlation with other relevant indicators found in internal studies.

WEAKNESSES

- Cost for training to administer; authors highly recommend training.
- Psychometrics are primarily from internal research.

STRENGTHS

- Designed to measure progress and motivation.

KEY REFERENCES

Hughes, D. (2010). The Rickter Scale: Making a difference.

<http://www.rickterscale.com/assets/docs/Rickter%20Paper%20Dr%20Deirdre%20Hughes%20Master%2017%20Nov%202010.pdf>.

Deirdre Hughes, OBE is an associate fellow at the Warwick Institute for Employment Research (IER), University of Warwick. She conducts research in educational policy, vocational education, and social science.

RICKTER SCALES: PROGRESS TOWARD EMPLOYMENT

OVERVIEW/BASIC STRUCTURE and SCALES

Among the Rickter Scales identified in this review, this scale is implemented by a trained service provider as part of motivational interviewing and planning. Subscales include Progress; Money; Communication; Control; Stress; Transport; Support; Influencing; Health; Motivation. While each of the Rickter scales is available free online, there is a \$49 fee for scale and support materials package, and a cost of \$164 for training (which is highly recommended for any user).

TARGET POPULATION(S)

Youth transitioning to adulthood. Psychometrics developed for use with unemployed people with a background of multigenerational unemployment.

PSYCHOMETRICS

VALIDITY: Internal studies have confirmed face validity, moderate correlation with other relevant indicators.

RELIABILITY: "Adequate test-retest reliability" and moderate correlation with other relevant indicators found in internal studies.

WEAKNESSES

- Cost for training to administer, authors highly recommend training.
- Psychometrics are primarily from internal research.

STRENGTHS

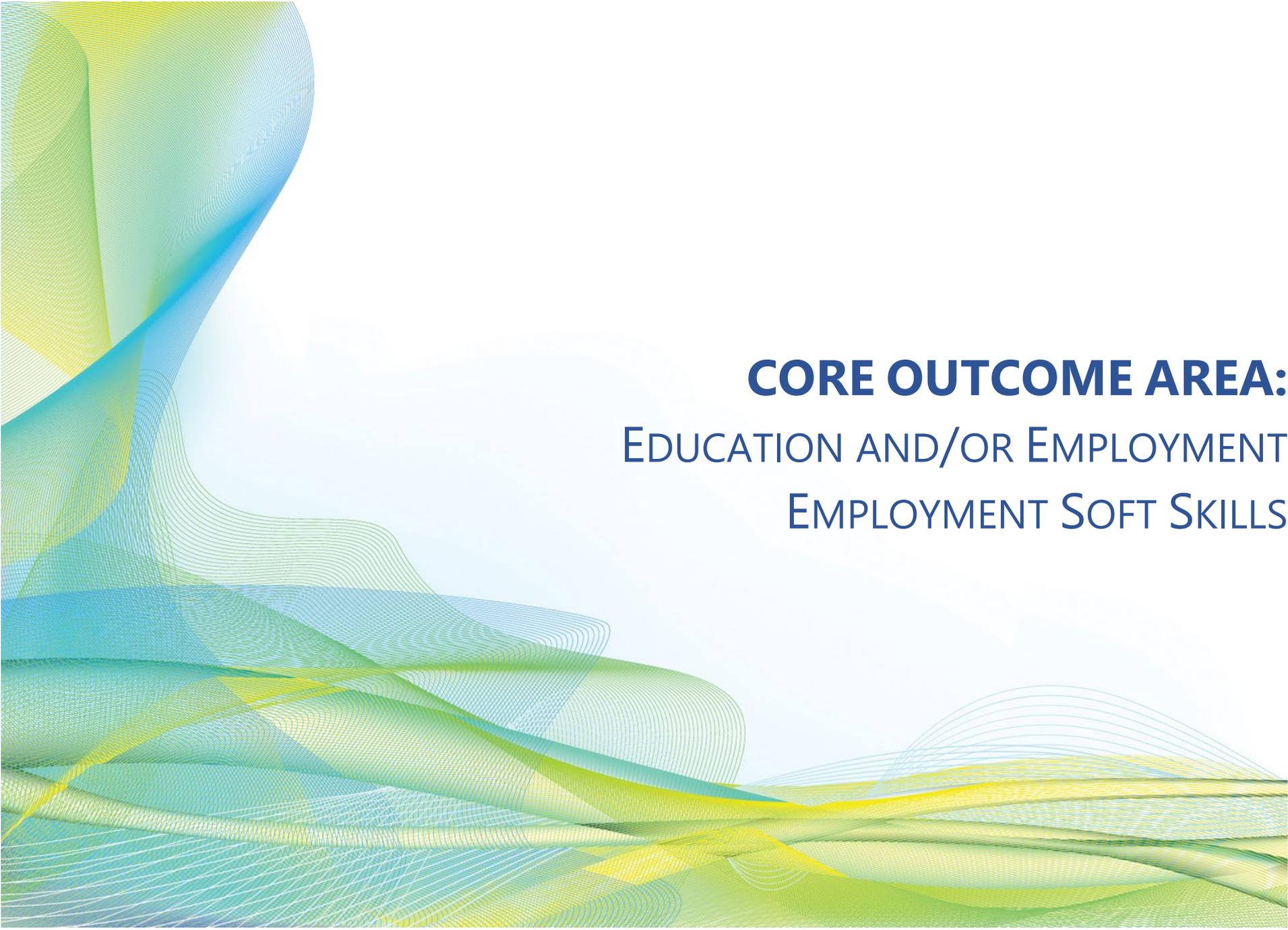
- Designed to measure progress and motivation.

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<http://www.rickterscale.com/assets/docs/Rickter%20Paper%20Dr%20Deirdre%20Hughes%20Master%2017%20Nov%202010.pdf>.

Deirdre Hughes, OBE is an associate fellow at the Warwick Institute for Employment Research (IER), University of Warwick. She conducts research in educational policy, vocational education, and social science.



CORE OUTCOME AREA:
EDUCATION AND/OR EMPLOYMENT
EMPLOYMENT SOFT SKILLS

DISPOSITIONAL MEASURE OF EMPLOYABILITY (DME)

OVERVIEW/BASIC STRUCTURE and SCALES

Self-administered paper and pencil questionnaire with no subscales.

TARGET POPULATION(S)

Human resources managers in South Africa, employees in the UK. Psychometrics established with employees in the UK.

PSYCHOMETRICS

VALIDITY: Analysis confirmed factor validity. Correlates with positive affect and commitment related to organizational changes. Predicts employment.

RELIABILITY: Cronbach's alpha of .76.

WEAKNESSES

- No data found on use in the US.

STRENGTHS

- Validated assessment of soft skills related to employment.
- No cost.

KEY REFERENCES

Botha, K. (2011). The relationship between dispositional employability and career success of human resources management practitioners. Thesis. University of Pretoria. Pretoria, South Africa.

This master's thesis study assessed the relationship between dispositional employability and career success. The author reviews literature on the constructs of employability and career success, including theoretical frameworks. A sample of 155 human resources managers in multiple employment sectors participated in the study. Their responses to the Dispositional Measure of Employability were analyzed to assess reliability and validity.

Karien Botha conducted this study under the supervision of Professor Nicolene Barkhuizen in the University of Pretoria Department of Industrial Psychology.

JOB SEARCH ATTITUDES INVENTORY (JSAI)

OVERVIEW/BASIC STRUCTURE and SCALES

Self-administered paper-and pencil. Subscales include Luck vs. Planning, Uninvolved vs. Involved, Help from Others vs. Self-Help, and Passive vs. Active. Cost of \$95 per instrument, with discounts for larger quantity purchases.

TARGET POPULATION(S)

Unemployed adults, unemployed adults with disabilities. Psychometrics established with unemployed adults in placement counseling or workforce development programs.

PSYCHOMETRICS

VALIDITY: Content validity established by basing items on job search research literature, interviews with unemployed people, and career and job placement counselors. Construct validity: correlates with relevant behaviors.

RELIABILITY: Cronbach's alpha range of .85 to .91; test-retest reliability range of .60 to .76; split half reliability range of .53 to .81.

WEAKNESSES

- High cost compared to other measures.

STRENGTHS

- Validated assessment of soft skills related to employment.

KEY REFERENCES

Liptak, J. J. (2015). *Job Search Attitudes Inventory Administrator's Guide (5th Ed.)*. JIST Publishing, Inc. St. Paul, MN.

This administrator's guide provides instructions for administering, scoring, and interpreting the Job Search Attitudes Inventory. The guidebook describes the theoretical basis for the instrument and the process of developing it. The guidebook presents reliability and validity data and describes how these were determined.

John Liptak is the associate director of the Experiential Learning and Career Development office at Radford University, and a leading developer of quantitative assessments. He earned an Ed.D. in counselor education from Virginia Technical University.

Middleton, T. (2018). *The effectiveness of the three-module job training intervention on job search knowledge, job search attitude knowledge, and job survival/maintenance knowledge*. Dissertation. University of Arkansas, Fayetteville. Fayetteville, AR.

This dissertation provides an example of using the JSAI with a sample of young adults (mean age= 26 years) with disabilities (n=26). The study assessed the impact of an intervention that aimed to increase employment-related knowledge among people with disabilities. The dissertation includes a detailed description of the instrument and its psychometric properties.

Tris Middleton is a licensed clinical social worker. She earned a Ph.D. in rehabilitation from the University of Arkansas.

JOB SEARCH KNOWLEDGE SCALE (JSKS)

OVERVIEW/BASIC STRUCTURE and SCALES

Paper and pencil questionnaire completed by youth with subscales: Identifying Job Leads, Direct Application to Employers, Resumes and Cover Letters, Employment Interviews, Following Up. Cost of \$67.95 for 25 copies of the scale, large quantity discounts.

TARGET POPULATION(S)

Unemployed adults, unemployed adults with disabilities. Psychometrics established with participants in career counseling, job training programs, and prison populations.

PSYCHOMETRICS

VALIDITY: Content validity established by basing items on job search research literature, interviews with unemployed people, career and job placement counselors. Construct validity: measures correlate with behaviors relevant to job knowledge.

RELIABILITY: Cronbach's alpha range of .85 to .91; test-retest reliability range of .60 to .76; split half reliability range of .53 to .81.

WEAKNESSES

- Some cost for acquiring copies of instrument, though cost is low.

STRENGTHS

- Cronbach's alpha range of .75 to .91; test-retest reliability range of .79-.90.

KEY REFERENCES

James Bell Associates (2015). Measuring child welfare outcomes: A compendium of standardized instruments. Prepared for the US Department of Health and Human Services Administration on Children and Families Children’s Bureau.

This document serves as a compendium of common child-, caregiver-, family-, and organization-level instruments that have been used to measure changes in child welfare–related outcomes. It provides information for each instrument about the outcome measured, data collection procedures, age group the instrument is intended to assess, and relevant references. It includes a description of the Job Search Knowledge Scale.

James Bell Associates is a research and consulting business that specializes in child welfare and child and family development.

Liptak, J. J. (2005). Job search knowledge scale. Indianapolis, IN: JIST Works.

This is a citation for the Job Search Knowledge Scale itself.

Liptak, J. J. (2015). Job Search Knowledge Scale (3rd Ed.). JIST Publishing, Inc. St. Paul, MN.

This administrator’s guide provides instructions for administering, scoring, and interpreting the Job Search Knowledge Scale. The guidebook describes the theoretical basis for the instrument and the process of developing it. The guidebook presents reliability and validity data and describes how these were determined.

John Liptak is the associate director of the Experiential Learning and Career Development office at Radford University, and a leading developer of quantitative assessments. He earned an Ed.D. in counselor education from Virginia Technical University.

Middleton, T. (2018). The effectiveness of the three-module job training intervention on job search knowledge, job search attitude knowledge, and job survival/maintenance knowledge.

This dissertation provides an example of using the Job Search Knowledge Scale with a sample of young adults (mean age= 26 years) with disabilities (n=26). The study assessed the impact of an intervention that aimed to increase employment-related knowledge among people with disabilities. The dissertation includes a detailed description of the instrument and its psychometric properties.

Tris Middleton is a licensed clinical social worker. She earned a Ph.D. in rehabilitation from the University of Arkansas.

RICKTER SCALES: JOB READINESS

OVERVIEW/BASIC STRUCTURE and SCALES

Among the Rickter Scales identified in this review, are 2 scales that address employment soft skills. The Job Readiness Scale includes subscales for Coping; Control; Energy; Confidence; Influence; Choice; Direction; Stress; Support; and Happiness. While the Rickter Scales are available free online, there is a \$49 fee for scale and support materials package, and a cost of \$164 for training (which authors highly recommend for any user).

TARGET POPULATION(S)

Utilized with at-risk youth. Psychometrics established with young offenders and substance abusers (adolescents).

PSYCHOMETRICS

VALIDITY: Clients and supervisors have confirmed face validity. Clients and supervisors report that the scale accurately assesses barriers to change and progress made toward behavioral change. Clients and providers indicate that scale scores accurately indicate self-efficacy, decision-making skills, motivation, and education.

RELIABILITY: Provider and client assessments of clients' initial distance from target outcomes and distance traveled at subsequent assessment points align.

WEAKNESSES

- Available studies do not report quantitative estimates of psychometric properties.

STRENGTHS

- Designed specifically for use with high-risk clients, especially those who are "socially excluded."
- Designed to collect data on contextual factors affecting clients' ability to achieve targeted outcomes.
- Designed to measure progress and motivation.
- Encourages focus on client strengths. Has been reported as useful in overcoming the sense that problems are permanent.

KEY REFERENCES

Armstrong, E. (n.d.) Rickter Scale case study: The Cedar Foundation Training and Brain Injury Services. *Northern Ireland European Social Fund Review*, 3.

This brief case study presents results of a case study in which 26 projects used Rickter Scales to assess employability. A total of 672 individuals provided reviews of the projects. Reviews consistently reported that the Rickter Scale was an accurate and useful measure of progress toward goal achievement.

Elaine Armstrong is Director of Employment and Community Inclusion at the Cedar Foundation in Belfast, Northern Ireland. She earned a master's degree in health psychology from Ulster University.

George, K. (2013). *Scaling new heights in VET: Adapting the Rickter Scale Process to improve and monitor the journey of marginalized groups toward employability*. Prepared by Northumbria University for Lifelong Learning Program.

This report describes the rationale and process of developing the Rickter Scale and refining it with practitioners who offer employability training in four European countries (Germany, Greece, Italy, UK). The author discusses the importance of assessing soft outcomes as indicators of progress toward hard outcomes, such as employment. The author notes that the instrument was designed to empower clients, and to facilitate identification of barriers to goal achievement and to plan strategies for overcoming these barriers.

Karen George is a researcher at Northumbria University and an expert in community participation in policy and practice. She earned a Ph.D. in information science from Northumbria University.

Hughes, D. (2010). *The Rickter Scale: Making a difference*. Online:

<http://www.rickterscale.com/assets/docs/Rickter%20Paper%20Dr%20Deirdre%20Hughes%20Master%2017%20Nov%202010.pdf>

This paper discusses the rationale, development, usefulness, and applications of the Rickter Scale. The assessment was designed to support interviewers and vulnerable clients at-risk for social exclusion in defining goals and planning to achieve them. This includes identifying barriers, contextual factors, such as peer and community norms, economic opportunities, and self-esteem, that can affect goal achievement. Assessment is a shared decision-making process using motivational interviewing techniques. The approach is "interpretivist"- emphasizing clients' subjective interpretation of social reality, rather than objective measures of goal achievements. The developers intended for Rickter Scales to supplement quantitative objective measures by offering insight into client perspectives regarding whether and how goals can be achieved. In addition, the scales provide information about client competencies and learning styles, which can be used in planning how to make progress toward goal achievement. Both clients and providers indicate the scale has face validity. In addition, clients and service providers both report that scale scores

are accurate and useful indicators of changes that occur during interventions. Interrater reliability is indicated by a study of 25 client-provider pairs whose assessments of the client's situation and expectations aligned. Content validity was indicated by client and provider reports that scale scores accurately indicated self-efficacy, decision making skills, motivation, and success in education.

Deirdre Hughes, OBE is an associate fellow at the Warwick Institute for Employment Research (IER), University of Warwick. She conducts research in educational policy, vocational education and social science.

Rolfe, H. (2003). Developing good practice in Connexions: Techniques and tools for working with young people. National Institute of Economic and Social Research.

This guidebook describes how to use Rickter Scales in practice. It also discusses the scales' purpose and what users have said about their utility. The author reports that clients have found the assessment process useful to perceiving problems to be solvable rather than as permanent states. Clients also expressed appreciation that assessment reports provide visible indicators of progress.

Heather Rolfe is the Associate Director of Employment and Social Policy at the National Institute of Economic and Social Research in the UK. She is an expert on barriers to employment. She earned a Ph.D. in technological change and skill from Southampton University.

Wood, N. & Stead, K. (n.d.). Rickter Scale manual: A guide for practitioners using the Rickter Scale process. Prepared by Northumbria University for Lifelong Learning Programme.

This users' manual by the scale developers provides a conceptual map of the scale, a description of the assessment process, guidelines for use, and instructions for interpreting responses and developing action plans for clients. It also includes a discussion of the principles of strength-based interventions.

Nan Wood is Director of Operations at the Rickter Company. She is an expert in youth services and at-risk youth. She earned a diploma in supported employment and certificates in mentoring and coaching from Oxford University.

RICKTER SCALES: PROGRESS TOWARD EMPLOYMENT

OVERVIEW/BASIC STRUCTURE and SCALES

Among the Rickter Scales identified in this review, are 2 scales that address employment soft skills. The Progress Towards Employment Scale includes subscales for Boundaries; Control; Perseverance; Learning; Direction; Support; Choice; Information; Progress; Confidence. While each of the Rickter Scales is available free online, there is a \$49 fee for scale and support materials package, and a cost of \$164 for training (which authors highly recommended for any user).

TARGET POPULATION(S)

Utilized with at-risk youth. Psychometrics established with young offenders and substance abusers (adolescents).

PSYCHOMETRICS

VALIDITY: Clients and supervisors have confirmed face validity. Clients and supervisors report that the scale accurately assesses barriers to change and progress made toward behavioral change. Clients and providers indicate that scale scores accurately indicate self-efficacy, decision-making skills, motivation, and education.

RELIABILITY: Provider and client assessments of clients' initial distance from target outcomes and distance traveled at subsequent assessment points align.

WEAKNESSES

- Available studies do not report quantitative estimates of psychometric properties.
- Fee for training, which authors highly recommend.

STRENGTHS

- Designed specifically for use with high-risk clients, especially those who are "socially excluded".
- Designed to collect data on contextual factors affecting clients' ability to achieve targeted outcomes.
- Designed to measure progress and motivation.
- Encourages focus on client strengths. Has been reported as useful in overcoming the sense that problems are permanent.

KEY REFERENCES

Armstrong, E. (n.d.) Rickter Scale case study: The Cedar Foundation Training and Brain Injury Services. *Northern Ireland ESF Review*, 3.

This brief case study presents results of a case study in which 26 projects used Rickter Scales to assess employability. A total of 672 individuals provided reviews of the projects. Reviews consistently reported that the Rickter Scale was an accurate and useful measure of progress toward goal achievement.

Elaine Armstrong is Director of Employment and Community Inclusion at the Cedar Foundation in Belfast, Northern Ireland. She earned a master's degree in health psychology from Ulster University.

George, K. (2013). *Scaling new heights in VET: Adapting the Rickter Scale Process to improve and monitor the journey of marginalized groups toward employability. Prepared by Northumbria University for Lifelong Learning Program.*

This report describes the rationale and process of developing the Rickter Scale and refining it with practitioners who offer employability training in four European countries (Germany, Greece, Italy, UK). The author discusses the importance of assessing soft outcomes as indicators of progress toward hard outcomes, such as employment. The author notes that the instrument was designed to empower clients, and to facilitate identification of barriers to goal achievement and to plan strategies for overcoming these barriers.

Karen George is a researcher at Northumbria University and an expert in community participation in policy and practice. She earned a Ph.D. in information science from Northumbria University.

Hughes, D. (2010). *The Rickter Scale: Making a difference. Online:*

<http://www.rickterscale.com/assets/docs/Rickter%20Paper%20Dr%20Deirdre%20Hughes%20Master%202017%20Nov%202010.pdf>

This paper discusses the rationale, development, usefulness, and applications of the Rickter Scale. The assessment was designed to support interviewers and vulnerable clients at-risk for social exclusion in defining goals and planning to achieve them. This includes identifying barriers, contextual factors, such as peer and community norms, economic opportunities, and self-esteem, that can affect goal achievement. Assessment is a shared decision-making process using motivational interviewing techniques. The approach is "interpretivist"- emphasizing clients' subjective interpretation of social reality, rather than objective measures of goal achievements. The developers intended for Rickter Scales to supplement quantitative objective measures by offering insight into client perspectives regarding whether and how goals can be achieved. In addition, the scales provide information about client competencies and learning styles, which can be used in planning how to make progress toward goal achievement. Both clients and providers indicate the scale has face validity. In addition, clients and service providers both report that scale scores

are accurate and useful indicators of changes that occur during interventions. Interrater reliability is indicated by a study of 25 client-provider pairs whose assessments of the client's situation and expectations aligned. Content validity was indicated by client and provider reports that scale scores accurately indicated self-efficacy, decision making skills, motivation, and success in education.

Deirdre Hughes, OBE is an associate fellow at the Warwick Institute for Employment Research (IER), University of Warwick. She conducts research in educational policy, vocational education and social science.

Rolfe, H. (2003). Developing good practice in Connexions: Techniques and tools for working with young people. National Institute of Economic and Social Research.

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Heather Rolfe is the Associate Director of Employment and Social Policy at the National Institute of Economic and Social Research in the UK. She is an expert on barriers to employment. She earned a Ph.D. in technological change and skill from Southampton University.

Wood, N. & Stead, K. (n.d.). Rickter Scale manual: A guide for practitioners using the Rickter Scale process. Prepared by Northumbria University for Lifelong Learning Programme.

This users' manual by the scale developers provides a conceptual map of the scale, a description of the assessment process, guidelines for use, and instructions for interpreting responses and developing action plans for clients. It also includes a discussion of the principles of strength-based interventions.

Nan Wood is Director of Operations at the Rickter Company. She is an expert in youth services and at-risk youth. She earned a diploma in supported employment and certificates in mentoring and coaching from Oxford University.



CORE OUTCOME AREA: SAFE AND STABLE HOUSING

OUTCOMES STAR: MY STAR

OVERVIEW /BASIC STRUCTURE and SCALES

This scale is part of the Outcomes Star suite of instruments Trained service providers complete while soliciting input from service user (youth). Subscales include Physical Health; Where You Live; Being Safe; Relationships; Feelings and Behavior; Friends; Confidence/Self-Esteem; and Education/Learning.

TARGET POPULATION(S)

Children (up to age 18) in foster or residential care or other vulnerable children.
Psychometrics established with those same populations.

PSYCHOMETRICS

VALIDITY: Factor structure confirmed with factor analysis. Content validity: Service professionals found it useful for treatment planning.

RELIABILITY: Reliability indicated by Cronbach's alpha of .80.

WEAKNESSES

- While the instrument and scales are free, required training necessitates that fees be negotiated; therefore, upfront cost is unknown.

STRENGTHS

- Validated instrument normed with youth.

KEY REFERENCES

Good, A. & Lamont, E. (2018). Outcomes Star psychometric factsheet: Homelessness Star. Triangle Consulting Enterprise, Ltd. Wilbury Villas, UK.

This fact sheet summarizing instrument psychometric properties was produced by the instrument developers. Internal consistency was very good. Factor analysis supported construct validity. Service providers report that the instrument is useful for assessing clients and for measuring change in targeted outcomes.

Anna Good is a research analyst at Triangle Consulting. She developed the Star suite of measures and tests their psychometric properties. She earned a D.Phil. in behavioral change interventions from the University of Sussex.

MacKeith, J. (2014). Assessing the reliability of the Outcomes Star in research and practice. *Housing, Care and Support*, 17(4), 188-197.

This paper describes a pilot to test an approach to measuring inter-rater reliability of the Outcomes Star suite of tools, as part of the tools co-operative development. A sample of 24 workers scored a tested case study. The case study approach and metrics were then evaluated for validity and accessibility. Initial evaluation suggests good inter-rater reliability, reaching the accepted threshold of 0.8 for the inter-rater reliability coefficient. Three outlying workers were excluded. The reliability for the full ten-point scale was moderate. As noted in the reference below, the author was part of the Outcomes Star development team.

MacKeith, J. (2011). The development of the Outcomes Star: a participatory approach to assessment and outcome measurement. *Housing, Care and Support*, 14(3), 98-106.

This paper describes the development process for the Outcomes Star, a suite of tools designed in the United Kingdom to simultaneously measure and support change in vulnerable people. The paper describes the theoretical and philosophical under-pinnings of an approach which aims to embody both research- and values-based practice in empowerment and respect for the individual. The author, who was part of the development team, describes extensive consultations with practitioners and users, and relates these to the needs and strengths of service users, the contemporary policy framework, as well as wider research in the field. The Outcomes Star draws on the core principles of Action Research and Participatory Action Research and applies them to assessment and outcome measurement. The author acknowledges that no formal research has been conducted on the usefulness of the Star approach. However, there has been a rapid adoption of this approach within the UK and in other countries, which the paper argues stems from Outcomes Star being rooted in a philosophy that: a) is more responsive to needs of service provider staff; and b) more closely reflects the experience of those receiving services, than traditional measures.

HOUSING, EDUCATION, AND INCOME TIMELINE (HEIT)

OVERVIEW/BASIC STRUCTURE and SCALES

The HEIT incorporates an interview, self-report timeline, and calendar. Respondents are asked at baseline to list each of their residences over the previous year, and then asked to update that information at subsequent interviews.

TARGET POPULATION(S)

Adults and young adults, adolescents. Psychometrics developed with homeless adolescents and adults.

PSYCHOMETRICS

VALIDITY: The HEIT has shown adequate validity in previous studies of homeless adolescents and adults. In recent years, a growing body of literature has focused on the use of timeline and calendar techniques in social and medical surveys. By providing the respondent with a graphical time frame, they facilitate access to long-term memory and have been shown to have beneficial effects on data quality.

RELIABILITY: The HEIT has shown adequate reliability in previous studies with homeless adolescents and adults.

WEAKNESSES

- Requires interview where recall issues may affect results.
- Limited reliability demonstrated in research.

STRENGTHS

- Specific to homeless populations.
- Expands typical measurement of 'housed or not housed'.
- Can be used to inquire on full history at each contact, allowing for missed follow up or aftercare contacts.
- No cost.

KEY REFERENCES

Braciszewski, J. M., Toro, P. A., & Stout, R. L. (2016). Understanding the attainment of stable housing: A seven-year longitudinal analysis of homeless adolescents. *Journal of Community Psychology, 44*(3), 358-366.

In response to the lack of longitudinal studies of the homeless youth population, this study examined the course and risk factors for homelessness in a sample of 243 homeless adolescents followed over a 7-year period. The HEIT provided a record of residential, academic, and employment histories for study participants, based on a calendar method in which respondents were asked at baseline to list each of their residences over the previous year. Although the vast majority of youth in the study returned to stable housing quickly, early experiences of homelessness at young ages had a substantial negative effect on future housing. The data suggest that family reunification interventions may serve this population well. Preparing youth for returning home may not only prevent subsequent homeless episodes but also improve their overall functioning.

Jordan M. Braciszewski is an assistant scientist at the Henry Ford Health System, the Center for Health Policy and Health Service Research. His research focuses on substance abuse in adolescents, specifically those who have been in foster care.

ADDITIONAL REFERENCES: The following studies employed life history calendars similar to the HEIT.

Fowler, P. J., Toro, P. A., & Miles, B. W. (2009). Pathways to and from homelessness and associated psychosocial outcomes among adolescents leaving the foster care system, *American Journal of Public Health, 99*(8), 1452-1458.

The authors studied the prevalence and nature of housing problems among adolescents leaving foster care because of their age. In the study, housing and psychosocial outcomes areas were evaluated over a 2-year follow-up period for a sample of 265 adolescents who left the foster care system in 2002 and 2003 in a large Midwestern metropolitan area. Timelines were used to calculate living situations at 3-month intervals for the initial 2 years after participants had exited foster care. Housing transitions were measured using a life history calendar. Analyses revealed four housing classifications: over half of the participants (57%) had experienced stable housing situations since their exit from foster care. Those in the remaining 3 categories, however, endured housing problems, with one in five (20%) being chronically homeless during the follow-up period. The authors found that housing instability was related to emotional and behavioral problems, physical and sexual victimization, criminal conviction, and being a high school dropout.

Patrick J. Fowler is an Associate Professor in the Brown School and Division of Computational and Data Sciences at Washington University in St. Louis. His research aims to prevent homelessness and its deleterious effects on child, family, and community well-being. Recent research focuses

on cross system collaborations to prevent child maltreatment associated with family homelessness, as well as youth homelessness in the transition from foster care to adulthood.

Frederick, T. J., Chwalek, M., Hughes, J., Karabanow, J., & Kidd, S. (2014). How stable is stable? Defining and measuring housing stability. *Journal of Community Psychology, 42*(8), 964-979.

In an effort to better assess housing stability, a key concept in housing and homelessness practice, policy, and research that the authors assert remains poorly defined and conceptualized, this study employed in-depth qualitative interviews with 51 young people transitioning from homelessness over the course of a year to examine the core dimensions of housing stability. For this study, the authors defined housing stability as the extent to which an individual's customary access to housing of reasonable quality is secure. The responses were then plotted on a timeline, comparable to the HEIT model. Based on their results, the authors suggest a brief 13-question scale that measures housing security, which has not been further researched for psychometrics.

Tyler J. Frederick is an Assistant Professor on the faculty of Social Science and Humanities at Ontario Tech University in Canada. He previously conducted post-doctoral research at the Toronto Centre for Addictions and Mental Health. Youth homelessness is a focus of his research, and he has provided supervision of research in this area. His current and planned research includes: the role of identity and social space in shaping subsistence decision-making among homeless young people; the transition away from homelessness for youth; and access to mental health services among homeless young people.

Freedman, D., Thornton, A., Camburn, D., Alwin, D., & Young-DeMarco, L. (1988). The life history calendar: A technique for collecting retrospective data, *Sociological Methodology, 18*, 37-68.

This paper details the authors' selection, design, and use of a life history calendar (LHC), which incorporates the key structures of the HEIT model, to collect retrospective life course data. This study utilized a sample of nine hundred 23-year-olds living in the US who were originally interviewed in 1980. Each respondent was asked about the incidence and timing of life events in the nine years since their 15th birthday. The authors report on (a) the concept, uses, and advantages of the LHC, (b) the time units and domains used, (c) the mode of recording the responses and the decisions and problems involved, (d) interviewer training, and (e) coding. Results indicate the accuracy of retrospective data: (a) only four of the calendars had missing data in any month; (b) the data obtained in 1980 about current work, school attendance, marriage, and children showed a remarkable correspondence to the retrospective 1985 LHC reports of these events; (c) the interviewers were positive about the LHC's ability to increase respondent recall.

Deborah Freedman was an economics professor at the University of Michigan, where she also earned her Ph.D. in economics. She was an expert in the relationship between economics and fertility, family planning, and attitudes towards marriage and sex roles.

Sobell, L. C., & Sobell, M. B. (1992). Timeline Followback. In *Measuring Alcohol Consumption* (pp. 41-72). Humana Press, Totowa, NJ.

This article discusses the development and administration of the Timeline Followback, (TLFB) noting that self-reports were the only viable method for retrospectively measuring drinking with any precision as of the early 1990s. The article identifies multiple memory aids incorporated into the TFLB to strengthen validity and reliability, and provides psychometric information, including a high test-retest reliability across multiple sample populations, very high correlations with other quantitative measures (e. g., medical interventions required), and a high degree of correspondence between subjects' self-reports and official records, indicating validity. Concurrent validity was also determined by comparing TLFB data with two established measures of alcohol-related disabilities—Alcohol Dependence Scale (ADS) and the Short Michigan Alcohol Screening Test. The authors recommend use of the TLFB when trying to determine changes in alcohol use/consumption after services/intervention.

Linda Sobell is the Associate Director of clinical training and President's Distinguished Professor of Excellence at the Nova Southeastern University department of clinical and school psychology. She earned a Ph.D. in psychology from University of California, Riverside.

Van Der Vaart, W., & Glasner, T. (2007). Applying a timeline as a recall aid in a telephone survey: A record check study, *Applied Cognitive Psychology, 21*(2), 227-238.

This study examines the effects of a timeline tool that was employed as a visual recall aid for respondents in a standardized telephone survey. A sample of 233 Dutch opticians participated in a randomized controlled trial. Participants were asked to recall consumer transactions. The authors selected this topic for recall because it would allow assessment of the effects of the timeline aid on a difficult recall task. The timeline used was designed to apply to recall of any topic area. The treatment group was provided with a timeline recall aid; control group participants were interviewed using conventional techniques. Responses were compared to a database considered the gold standard for this type of information. Results show the timeline to enhance recall, especially of difficult information. The authors also provide a discussion of the advantage and limitations of employing the timeline in relation to underlying cognitive mechanisms.

Wander Van Der Vaart is on the faculty of the Department of Social Research Methodology, Faculty of Social Sciences, VU University Amsterdam, the Netherlands. The focus of his research is on tailor-made data collection procedures for people who by their complicated situation or lesser abilities experience high task difficulty as a respondent. His specialties include survey research, interview and questionnaire methods, cognitive and social aspects of data collection methods, autobiographical memory, and aided recall methods.

SUPPLEMENTAL REFERENCES

The literature yielded several documents that may be useful for assessing which measures would be most appropriate for program planning and evaluation, or for interpreting evaluation results. These references, along with brief summaries of content and author qualifications, are presented by outcome area. References that apply to multiple outcome areas are presented at the end of this section.

PERMANENT CONNECTIONS

Cronley, C., & Evans, R. (2017). Studies of resilience among youth experiencing homelessness: A systematic review. *Journal of Human Behavior in the Social Environment*, 27(4), 291–310.

This article systematically reviews studies exploring resilience among youth experiencing homelessness. The 21 studies reviewed represent four methodologies: qualitative (33%), survey and secondary data analysis (38%), quantitative (9%), and mixed method (9.5%) designs. Analysis of the studies indicates that youth experiencing homelessness rely on informal social networks for survival, and that spirituality, mental health, and creativity are associated with enhanced coping. The article also identifies the need for more experimental and intervention studies to support evidence-based resilience practices. Additionally, the authors conclude that researchers need be aware of how stereotypical pejorative paradigms (problem-oriented thinking) may negatively affect innovative, strengths-based scholarship.

Courtney Cronley is an associate professor at the University of Texas, Arlington whose research focuses on homelessness and poverty. She holds a Ph.D. in Social Work from the University of Tennessee, Knoxville.

MacKeith, J., Graham, K. & Burns, S. (2010). Review of outcomes tools for the homelessness sector, 2nd ed. Prepared by Triangle Consulting for the London Housing Foundation. Willbury Villas, UK. Online:

<https://www.homeless.org.uk/sites/default/files/siteattachments/Guide%20to%20Outcomes%20Tools%20Second%20Edition.pdf>

This guidebook provides a discussion of the purpose and process of outcome measurement, including selection of appropriate measures. It is written for social service providers, especially those serving people in need of supported housing. The guide includes an appendix of resources that describe outcomes tools.

Joy MacKeith is co-director of Triangle Consulting Social Enterprise and co-author of Outcomes Star measures. Her experience includes providing services to people who are homeless, teaching at the London School of Economics, and program evaluation.

EMOTIONAL WELL-BEING

Carlier, I. V., Meuldijk, D., Van Vliet, I. M., Van Fenema, E., Van der Wee, N. J., & Zitman, F. G. (2012). Routine outcome monitoring and feedback on physical or mental health status: evidence and theory, *Journal of Evaluation in Clinical Practice*, 18(1), 104-110.

This article summarized the results of a literature search of the evidence base concerning randomized controlled trials (RCTs) that support the provision of feedback on routine outcome monitoring (ROM) results to mental health care professionals and patients. Included were 52 RCTs concerning ROM and feedback with adult or older patients. None included with children or adolescents. *There appears to be a positive impact of ROM on diagnosis and monitoring of treatment, and on communication between patient and therapist. Other results were less clear*

Ingrid V. E. Carlier is the Head of Research on Routine Outcome Monitoring and an Associate Professor at Leids University Medical Center in the Netherlands.

EDUCATION

Gewertz, C. (Nov. 14, 2011). Higher education is goal of GED overhaul. *Education Week*.

This article describes the rationale and approach for the first major redesign of the General Education Development program since its inception in 1942. The changes were inspired by an identified need for the GED to be a step toward post-secondary proficiency, not an end in itself. Changes include new curricula and test content as well as counseling support and updated professional development for teachers. Scores now include not only high school completion equivalence, but also college readiness.

Catherine Gewertz is a senior contributing writer to Education Week who covers stories on assessment and secondary education pathways. Ms. Gewertz was the 2019 winner of the National Council on Measurement in Education's Excellence in Public Communication Award.

Hart, R., Casserly, M., Uzzell, R., Palacios, M., Corcoran, A., & Spurgeon, L. (2015). Student Testing in America's Great City Schools: An Inventory and Preliminary Analysis. *Council of the Great City Schools*.

This report from the Council of the Great City Schools presents a survey of assessment practices, including an inventory of the range and number of tests administered in 66 urban school systems. The report identifies the entities requiring each test and describes test burden. It also presents parental perspectives, lessons learned, and recommendations for improving testing systems. The report includes a section on assessments for special populations. Results describe test uses and limitations, including limitations in informing caretakers about students' progress.

Ray Hart is Director of Research for the Council of Great City Schools. He has provided analytic and technical support for several research and educational institutions, including the US Department of Education and the US Department of Housing and Urban Development. He earned a Ph.D. in Evaluation and Measurement from Kent State University.

Kearns, L. L. (2011). High-Stakes Standardized Testing & Marginalized Youth: An Examination of the Impact on Those Who Fail. *Canadian Journal of Education*, 34(2), 112-130.

This article presents results of an in-depth qualitative study about the effects on youth of failing a standardized literacy test. A total of 11 youth participated in in-depth key informant interviews; five participated in a focus group. Results indicated that failing lowered self-esteem and reinforced a sense of marginalization. Participants reported humiliation and self-doubt, and increased stress about testing. The author argues that high-stakes standardized testing has negative effects on marginalized youth. She suggests developing alternative approaches that are appropriate for diverse test-takers and that encourage engagement with learning institutions, rather than increase the likelihood of students perceiving themselves to be academic failures.

Laura-Lee Kearns is an associate professor of education at St. Francis Xavier University in Antigonish, Nova Scotia, Canada. Her expertise is in culturally appropriate education for vulnerable populations. She earned her Ph.D. in Education from the Ontario Institute for Studies in Education at the University of Toronto.

Patterson, M. B., Zhang, J., Song, W. & Guison-Dowdy, A. (2010). Crossing the Bridge: GED credentials and postsecondary educational outcomes. Year One Report. GED Testing Service.

This report on Year 1 results of a longitudinal study of 148,649 GED candidates who passed the test just after enhancements including transition services and alignment with Common Core standards. Passing the test was associated with increased likelihood of enrolling in post-secondary education. However, only about 12 percent of those who enrolled graduated from a post-secondary program. The authors suggest a need for mentoring, remedial services, and additional supports to overcome barriers to college graduation. The authors recommend further research to identify these barriers.

Margaret Becker Patterson is a principal researcher at Safal Partners, an education management consulting firm. She specializes in adult education evaluation. Her experience includes serving as Research Director at GED Testing Service as well as administration and teaching. Dr. Patterson earned a doctoral degree in education research from the University of Kansas.

Peterson, R. (2016). Educational Experiences and Goals of Homeless Youth and Barriers to Reaching these Goals. Master's thesis. All Graduate Theses and Dissertations. 4933.

<https://digitalcommons.usu.edu/etd/4933>

For this master's thesis study, the author surveyed 165 homeless youth about their educational goals and career aspirations. Results indicated that most participants did not have career goals. Among those who did, educational goals were often inadequate to support their career aspirations. Results suggest that some work experience may support development of occupational identity. The author recommends that intervention programs encourage career exploration and teach clients the connections between education and careers.

Rachel Peterson has 8 years of experience delivering education and other services for homeless youth. Her experience includes program administration and evaluation. She earned a Master of Science degree in Psychology- School Counseling from Utah State University. She is currently a doctoral student and researcher in prevention science at Washington State University, Vancouver.

Rosen, J. A., Porter, S. R. & Rogers, J. (2017). Understanding student self-reports of academic performance and course-taking behavior. *American Educational Research Association Open*. Doi 10.1177/2332858417711427

The authors analyzed High School Longitudinal Study data, which included student and parent survey data as well as high school transcripts for more than 23,000 students. Data were collected when students were in 9th, 11th, and 12th grades. The authors compared student survey responses about whether and when they had taken math classes, and what grades they had earned. The purpose was to assess the accuracy of self-reports. Accuracy regarding whether a class was taken was high (95%). Accuracy was lower with respect to when the class was taken. Specifically, reports of when a student had completed Algebra I were more accurate the earlier a student had taken the class. Similarly, students were more accurate in reporting high grades than low grades. The authors suggest that inaccurate reports may be due to embarrassment regarding poor performance. They suggest interpreting students' self-reports about school performance with caution.

Jeffrey Rosen is a senior research education analyst at Research Triangle Institute. His expertise is in survey measurement and at-risk student populations. He earned a Ph.D. in public policy studies and graduate certification in survey methodology from Ohio State University.

Tienken, C. H., Colella, A. Angelillo, C., Fox, M., McVahill, K.R. & Wolfe, A. (2016). Predicting middle level state standardized test results using family and community demographic data. *Research in Middle Level Education*, 40 (1) 1-13.

The authors tested regression models that predicted scores on state-mandated standardized tests of mathematics and language arts using community demographic variables. The sample included more than 300 New Jersey schools. The authors found that scores could be predicted accurately by the percentage of families in a community with an annual income of more than \$200,000, the percentage of families in poverty, and the percentage of people with bachelor's degrees. The authors argue that standardized test scores reveal more about the community in which a student lives than the amount a student has learned. They also argue that standardized test scores are not optimal for measuring changes in knowledge.

Christopher Tienken is an associate professor of education leadership, management, and policy at Seton Hall University. He earned an Ed.D. from Seton Hall University.

York, T. T., Gibson, C., & Rankin, S. (2015). Defining and Measuring Academic Success. *Practical Assessment, Research & Evaluation, 20*.

This literature review describes how academic success has been operationalized by professionals, and why definitions of academic success have been ambiguous. They present a critique of earlier work and Astin's Inputs-Environment-Outcomes theoretical framework. They report that academic success is most frequently defined as academic achievement, accomplishment of learning objectives, and acquisition of skills and competencies. In addition, some measures assess career success, persistence, or satisfaction. The authors argue that grades and grade point averages are problematic measures of academic success because they are frequently not valid measures of learning, because they are not measured reliably, and because grades indicate only a narrow aspect of academic success. The authors note that valid measurement of academic success may be especially an issue for vulnerable populations. They encourage a measurement approach that considers environmental context. The article includes an appendix that describes several measurement tools.

Travis York is an assistant professor of higher education leadership at Valdosta State University. His research focus is access to and success in higher education among underserved populations.

EMPLOYMENT**Bond, G. R., Campbell, K. & Drake, R. E. (2012). Standardizing measures in four domains of employment outcomes for individual placement and support. *Psychiatric Services, 63*, 751-757.**

The authors note that employment outcomes are not measured consistently, presenting challenges for comparing and generalizing evaluation data. The authors assessed correlations between multiple indicators of employment to assess their relationships and to compare results of previous intervention evaluations. The authors identify four domains of employment outcomes: job acquisition, duration, hours worked weekly, and total hours and wages. They demonstrated that measures correlate and that job acquisition, often the easiest outcome data to obtain, is a good proxy for employment outcomes.

Garry R. Bond is a senior research associate at the Rockville Institute. He also was a senior researcher at the Individual Placement and Support Employment Center at the Geisel School of Medicine, Dartmouth University. His research focuses on supported employment, especially for people with serious mental illness. He earned a Ph.D. in psychology from the University of Chicago.

Hahn, H., Derrick-Mills, T. & Spaulding, S. (2018). Measuring employment outcomes in TANF. Prepared by Urban Institute for US DHHS Administration on Children and Families Office of Planning, Research, and Evaluation.

This reference for practitioners and policy makers describes challenges and opportunities relevant for measuring employment outcomes of participants in the Temporary Assistance for

Needy Families program. Issues and recommendations may be useful for others assessing employment outcomes in vulnerable or at-risk populations. The authors discuss contextual factors that affect employment outcomes. The report includes sections on the principles and practice of performance measurement, defining measures of employment outcomes, and considerations in planning high-quality data collection and analysis.

Heather Hahn is a senior fellow at the Center for Labor, Human Services, and Population at the Urban Institute. She is an expert on education and labor policy issues, with an emphasis on support for needy families. She earned a Ph.D. in political science from Stanford University.

Kluve, J., Puerto, S., Stoeterau, J., Weidenkaff, F., Witte, M., Robalino, D., ... & Rother, F. (2014). Protocol: Interventions to improve labour market outcomes of youth: A systematic review of active labour market programmes. *Campbell Systematic Reviews*, 10(1), 1-109.

This systematic review examines the impact of youth employment interventions on labor market outcomes of young people. The review summarizes findings from 113 reports of 107 interventions in 31 countries. All studies included had experimental or quasi-experimental design. Findings indicate that many interventions for disadvantaged youth are effective. The report includes several descriptions of interventions, how their outcomes were measured, and evaluation results.

Jochen Kluve is a professor of empirical labor economics at Humboldt University, Berlin. He specializes in evaluating labor market programs. He earned a Ph.D. in economics from the University of Heidelberg.

Kornfeld, R., & Bloom, H.S. (1999). Measuring program impacts on earnings and employment: Do unemployment insurance wage reports from employers agree with surveys of individuals? *Journal of Labor Economics*, 17(1), 168-197.

The authors compared wage records submitted to state unemployment offices with self-report surveys for an initial sample of 17,217 individuals and a follow-up sample of 5,468 individuals. Results indicate that the data sources are generally competent. However, wage records frequently omit income from informal job activities, which are common among young men with criminal records. The authors discuss factors that affect accuracy of different types of wage reports.

Robert Kornfeld is a senior economist at ABT Associates. He earned a Ph.D. in economics from Harvard University

Lindsay, J. & Babb, S. (2015). Measuring employment outcomes for workforce development. Produced by fhi360 for the US Agency for International Development.

This report summarizes current measures of employment outcomes based on a review of more than 100 resources. The report includes an index of measures, a bibliography of resources, and a discussion of the range of available measures as well as limitations.

John Lindsay is the Global Practice Lead for Workforce Development and Youth at DAI, an international development company. He earned a master's degree in international relations and affairs from the New School University.

Negoita, M. & Dunham, K. (2013). Designing a performance measurement system for career pathways. Prepared by Social Policy Research Associates for US Department of Labor.

This resource provides guidance for career pathways system collaboratives aiming to develop performance measurement systems. It provides examples of measures and how they can be used to assess short-, mid-, and long-term outcomes. The authors describe a process for selecting measures and metrics and for setting outcome targets.

Marian Negoita is a senior associate at Social Policy Research Associates. His expertise is in workforce development policy. He earned a Ph.D. in sociology from the University of California, Davis.

Scottish Executive Social Research (2005). The national evaluation of the Careers Scotland inclusiveness project. <https://www2.gov.scot/Resource/Doc/37428/0009690.pdf>.

The Scottish Executive Enterprise Transport and Lifelong Learning Department implemented inclusiveness projects to address support needs for post-secondary transitions. An independent evaluator assessed program processes and outcomes over 3 years. This report presents the evaluation background, methods, and results. It includes descriptions of outcomes measures used with youth as well as project case studies that include descriptions of internal evaluation and monitoring approaches.

Scottish Executive Social Research supports research conducted to inform Scottish government policy.

MULTIPLE OUTCOME AREAS

James Bell Associates (2015). Measuring child welfare outcomes: A compendium of standardized instruments. Prepared for the US Department of Health and Human Services Administration on Children and Families Children's Bureau.

This compendium lists and describes common child-, caregiver-, family-, and organization-level instruments that have been used to measure changes in child welfare-related outcomes. It provides information for each instrument about the outcome measured, data collection procedures, age group the instrument is intended to assess, and relevant references.

James Bell Associates is a research and consulting business that specializes in child welfare and child and family development.

Jim Casey Youth Opportunities Initiative (2013). Practice Pathways Tool: Helping young people transitioning from foster care to adulthood.

This practice improvement tool provides recommendations for practices to improve youth transitions from foster care to adulthood in multiple domains, including employment, education, housing, health, and permanent connections. It offers information about performance measurement and data collection appropriate for evaluating outcomes of different practice models.

The Jim Casey Youth Opportunities Initiative is an Annie E. Casey Foundation effort to increase opportunities for youth transitioning from foster care. It advocates for policies and practices, teaches self-advocacy and leadership, develops tools, and supports research.

Tabachnik, B. G., & Fidell, L. S. (2001). Using multivariate statistics (4th ed.). Boston, MA: Allyn & Bacon.

This statistical textbook offers detailed discussion of reliability and validity, how they are established, and implications for behavioral research, intervention, and evaluation.

Barbara Tabachnik was a psychology professor at California State University at Northridge. She was an expert in advanced statistical methods and a Western Psychological Association Lifetime Achievement awardee. She earned a Ph.D. in psychology from the University of California, Los Angeles.

GLOSSARY

This glossary includes separate sections, presented at the end, with a breakout of terms related to *reliability*, *validity*, and *factor analysis*.

Archival data: Data in existing records, such as medical billing records, Census reports, or school behavioral incident files.

Contextual variables: Variables in the physical or social environment that can affect relationships between predictor and outcome variables.

Correlation: The degree to which the quantitative values of one variable are associated with quantitative values of another. Values range from -1.0 to 1.0. Negative correlation means that as the value of one variable increases, the value of the other variable decreases. Positive correlation means that as the value of one variable increases, so does the other. A value of 0 means there is no statistical association between the variables.

Cross-validation: Checking results by re-testing with multiple samples from the same study population.

Externalizing behaviors: Maladaptive behaviors directed toward other people or the environment.

Internalizing behaviors: Maladaptive behaviors directed toward oneself.

Item response theory: Theory that acknowledges individual test items may differ in the degree to which they are related to the construct being measured. It is used to assess item difficulty or predictive value, and to modify measures to improve accuracy and efficiency.

Latent class analysis: A type of structural equation modeling that classifies individuals into groups based on their responses to a set of indicator variables.

Mixed-methods research: Research that includes both quantitative and qualitative methods of data collection and analysis.

Multiple regression analysis: A method for predicting one variable from data on multiple other variables. It is an extension of linear regression, in which data on one variable are used to predict values of another variable.

Norms: In the context of psychometric testing, “norms” are established by representing data on a normal distribution (bell-shaped curve). “Normal” behavior or performance is closer to the mean, or mid-point. Scores further from the mean are abnormal or exceptional. In a normal distribution, 95 percent of people score within 2 standard deviations (a statistical measure of how data are distributed) of the mean.

Operationalization: Defining abstract concepts in terms of measurable variables and processes for collecting data.

Pilot study: A preliminary small-scale study conducted to inform planning of a larger study.

Psychometrics, psychometric data: Psychometrics is the study of behavioral measurement. Psychometric data describe the properties of behavioral measures, typically reliability and validity.

Qualitative data: Non-numeric data, typically used to provide insight regarding reasons for relationships between variables, and about contexts for behaviors.

Quantitative data: Numeric data.

Randomized controlled trial: A study conducted to assess the impact of one or more treatments or interventions, in which participants are randomly assigned to a treatment or control group. Control group conditions allow comparison of outcomes when a treatment/intervention is present with when it is not. Randomization protects against bias in group assignments.

Representative sample: A sample selected to reflect the entire population in terms of key characteristics (e.g., demographics).

Retrospective measurement: Study of data on participants' previous experiences with and exposure to predictive factors. Data may include documentation, participants' recollections, and recollections of people who know participants.

Risk factors: Variables associated with increased risk of an undesirable outcome.

Statistical significance: An interpretation of statistical data regarding the probability that results were due to chance. A significant result implies that the results were most likely not due to chance.

Statistical variance: A statistical measure of how far a set of observations is dispersed around the mean. The more variance accounted for by a statistical model, the more accurate the model is in predicting outcomes.

Structural equation modeling: An analytic technique combining factor analysis and multiple regression analysis to model causal paths between variables and factors. Models can include multiple predictors and outcomes.

Unidimensionality: In psychometrics, unidimensionality refers to whether a scale is measuring one construct, or a latent variable.

Reliability and Types of Reliability

Reliability: Statistical reliability refers to the degree to which a measure produces consistent results across similar conditions. Reliability is a component of validity. A measure cannot be valid if it is not also reliable.

Cronbach's alpha: Cronbach's alpha is an indicator of a measure's internal consistency. It is calculated by assessing correlations between individual item scores and the overall test score then comparing results to score variance. Scores range from 0 to 1, with higher scores indicating higher internal consistency, an indication that scale items are measuring the same construct. Cut-offs for "poor," "adequate", and "good" consistency depend on the construct and related theory. However, scores less than 0.50 are generally considered to indicate inadequate internal consistency. Many methodologists define scores between 0.65 and 0.80 as "adequate."

Internal consistency/internal reliability: The degree to which all scale items measure the same construct.

Inter-rater reliability: The degree to which multiple judges will assign the same scores when administering the same measure to the same people.

Split half reliability: Correlation between scores on two halves of a measure administered to the same people. If items measure the same construct, the correlation should be high, indicating internal reliability.

Test-retest reliability: The degree to which the same test yields consistent results for the same person under the same conditions.

Validity and Types of Validity

Validity: Measure validity refers to the extent to which a measure assesses what it is supposed to, may refer to one or more specific types of validity.

Concurrent validity: The degree to which scores on a measure correlate with other established measures of the same construct. It is usually used to find out if one measure can be substituted for another that would be more difficult to administer. Concurrent validity is a type of criterion validity.

Construct validity: The extent to which a measure assesses what it is supposed to, in general.

Content validity: The extent to which an instrument measures all aspects of a construct.

Convergent validity: The degree to which a measure correlates with other measures to which it should be related.

Criterion validity: The extent to which a measure is related to an outcome, either a directly observable concrete outcome (predictive validity) or another established measure (concurrent validity).

Discriminant validity: The degree to which a measure does not correlate with other measures to which it should not be related.

Face validity: The extent to which a measure subjectively appears to measure what it is intended to measure.

Predictive validity: The degree to which a measure is correlated with concrete outcomes (e.g., correlation between an employability measure and employment). Predictive validity is a type of criterion validity.

Factor Analysis Terms

Factor analysis: Factor analysis is a statistical method that analyzes patterns of correlations between observed variables to assess whether they are indicators of an underlying, or latent, construct, referred to as a "factor."

Confirmatory factor analysis: An approach to factor analysis that assesses how well observed data match theoretical understanding of a construct.

Factor structure: The pattern of correlations between variables and factors found through factor analysis.

Latent factor: An unobserved factor underlying observed variables that explains their correlations.

Principal axis factor analysis: An approach to factor analysis that identifies the lowest number of factors that accounts for variance shared among a set of variables.