

Name of Tool	Early Assessment Risk List for Boys (EARL-20B)
Category	Youth Assessment: General Risk (Validated)
Author / Publisher	Augimeri and Colleagues
Year	2001

Description

- The EARL-20B is 20-item structured clinical risk assessment tool developed for use with boys aged 12 and under. In clinical settings, the age range falls between 6 and 11 years of age (Augimeri et al., 1998; 2001; 2011).
- The purpose of the EARL-20B is to assess risk and assist in the development of risk management plans that may counteract future offending and anti-social behaviour of high-risk boys.
- Items are categorised under three sections: (1) Family, (2) Child and (3) Responsivity. The 'Family' items assess the nature of familial support and other environmental factors (e.g. neighbourhood). The 'Child' items assess individual risk factors associated with the child. The 'Responsivity' items assess the ability and willingness of both the family and child to engage in services. Items are rated on a 3-point scale from 0 for not present, 1 for some presence and 2 for those with a clear presence. There is a 'clinical risk' column allowing clinicians to apply red flags to factors of particular concern
- Assessors have the opportunity to assign an overall clinical judgement rating of 'low,' 'moderate' or 'high' risk (Augimeri et al., 1998; 2001; 2019).

Age Appropriateness

For boys ages 12 and under.

Assessor Qualifications

The EARL-20B should be used by clinicians and other professionals experienced in working with high-risk children.

Strengths

- The EARL-20B is modelled on the structure and content of the HCR-20 (Webster, et al. 1997).
- The tool has been translated into six languages other than English (Swedish, Finnish, Norwegian, French, Dutch, and Japanese) and is adapted for use with other offending populations (i.e. Maori population in New Zealand).

Empirical Grounding



- Developed from adult assessment tools and juvenile offending screening assessments ([Augimeri et al., 2005](#)).
- The EARL-20B is based on research relating to child development and delinquency. Author related peer reviewed studies have shown the EARL assessments to be static and dynamic tools with its component factors having sound empirical grounding (Augimeri et al., 2011).

Inter-Rater Reliability	
a) UK Research	<ul style="list-style-type: none"> • Augimeri et al. (2001) - the composite EARL-20B scores attained a high ICC value of .80. • Hrynkiew-Augimeri (2005) - the EARL-20B composite score achieved an ICC value of .82 from a review of 100 common files. The three subscales attained moderate to high ICC values ranging between .55 and .79. • Enebrink et al. (2006a) - the EARL-20B total scores achieved moderate to large pearson correlation coefficients for proactive and reactive aggression at the 6- and 30-month follow-up periods compared to clinical judgement scores which were largely non-significant.
b) International Research	<ul style="list-style-type: none"> • Enebrink et al. (2006b) looked at a Swedish translation of the EARL-20B, which has some minor adjustments to the original. Poor IRR was obtained for Abuse/Neglect/Trauma and Coping Ability items (kappas of 0.30 and 0.38 respectively). The authors surmise that this could be the result of items being operationalised in a broad manner. The EARL-20B composite score achieved excellent inter-rater reliability (ICC = .92).

Validation History	
General Predictive Accuracy	
a) UK Research	<ul style="list-style-type: none"> • Augimeri et al. (2009) - using cox regression analysis, it was found that the composite scores were significantly related to an increased probability to engage in future criminal offences. • de Ruiter and Augimeri (2012) - the EARL-20B attained strong predictive accuracy between the composite scores (AUC = .77) and final risk judgement (.77) and delinquency reported by teachers. The EARL-20B composite scores also had moderate accuracy in predicting general (AUC = .62) and violent recidivism (AUC = .69) as documented in official police records.

	<ul style="list-style-type: none"> • de Ruiter and van Domburgh (2016) found through a Receiver Operating Characteristic (ROC) analysis that all EARL scales significantly predicted self-reported delinquency at 1- and 2-year follow up, a Disruptive Behavior Disorder (DBD) at 2-year follow up (range AUC = .70 to .79), new police registrations (range AUCs= .58 to .61), and new police registrations for violent offending (range AUCs = .59 to .69). • Enebrink et al. (2006a) found significant moderate to large correlation coefficients between the composite score and the total scores of reactive (hostile or affective) and proactive (goal-orientated, instrumental or predatory) aggression in a 6 month follow-up period ($r = .31$ and $.53$ respectively). At the 30-month follow-up period, these correlations had decreased to $.20$ (ns) for reactive aggression. • Hryniw-Augimeri (2005) - the mean composite EARL-20B scores were significantly higher for boys who were found guilty of an offence than for boys who were not found guilty. • Koegl (2011) - the composite EARL-20B score achieved a moderate AUC value of $.66$ for any conviction.
b) International Research	<ul style="list-style-type: none"> • In a sample of 573 boys, several items on EARL-20B were found to predict risk: Caregiver Continuity, Parenting Style, Onset of Behavioural Difficulties, Likeability, Peer Socialization, Authority Contact, Antisocial Attitudes, Antisocial Behaviour and Family Responsivity (Augimeri et al., 2010a). • In a longitudinal study with 379 boys, EARL-20B total scores significantly predicted conviction status between 15-20 years later (police records) for total offending (AUC = $.64$) and for three offence subtypes (i.e., property, person, administration of justice) with AUC values ranging between $.60$ and $.63$. The strongest predictors for being convicted for any offence were Antisocial Attitudes (OR = 2.64) and low Child Responsivity (OR = 2.20) (Koegl, Farrington and Augimeri, 2019).

Validation History

Applicability: Females

The EARL-21G (Levene et al. 2001) has been developed for use with high risk girls under the age of 12 – please refer to the ‘Responsivity’ section of RATED.

Validation History

Applicability: Ethnic Minorities



No empirical evidence available.

Validation History

Applicability: Mental Disorders



No empirical evidence available.

Contribution to Risk Practice

- The EARL-20B can aid assessors in identifying risk and responsivity factors specific to the individual's offending behaviours. These factors can also act as targets for change.
- The tool can contribute to the measurement of progress / deterioration in factors related to the individual's offending behaviours.
- The EARL-20B can contribute to the formulation of offence analyses and risk management plans.
- The EARL-20B was used in Edinburgh and is currently being used in Glasgow as part of SNAP® (Stop Now And Plan) pilot programs. The EARL-20B has also been used in New Zealand with the Maori population and in the United States with both African American and Hispanic children.
- The EARLs were developed in an applied accredited children's mental health centre initially as part of the assessment process for the evidence based SNAP model. The majority of SNAP children experience clinical levels of internalising and externalising behaviour problems associated with mental health issues (e.g., disruptive behaviour problems such as conduct and oppositional disorder; [Augimeri et al., 2017; 2018](#))

Other Considerations

- The EARL-20B does not have a single algorithm for assessing low, medium or high risk levels. Conversely, the final estimate of risk is calculated by weighing EARL-20B items and possible risk or protective factors on a case-specific basis ([Enebrink et al. 2006b](#)).
- The authors caution about the use of cut-off scores to make decisions about a boy's risk potential.
- Koegl (2011) found significant differences in relation to the costs of custodial and probation dispositions as a function of the three clinical risk judgement categories. Boys who were rated as 'high' and 'moderate' risk incurred the highest costs in comparison to boys classified as 'low' risk.
- No validation evidence for UK samples.
- Despite the fact that the assessment has been translated into various languages, there have been no studies looking at the tool's predictive validity in various ethnic groups.
- Other studies have used factor analysis methodology to validate the underlying constructs relating to the tool (e.g., confirmatory factor analysis).
- The majority of the current validation literature has been conducted by the authors of the EARL-20B.

- Fewer studies examining the predictive accuracy of the final judgement ratings.
- The EARL Pre-Checklist (EARL-PC: Augimeri et al., 2010b) has been recently developed as an abbreviated version of the full EARL assessments.
- The EARL-PC is designed to screen for risk factors in children that pose a potential risk of engaging in future antisocial behaviours. It was created in response to the need for a simpler, condensed version of the EARL for use by professionals working in the criminal justice and educational sectors in cases where it may not be feasible to administer a full assessment. There are no validation data available on the EARL-PC at present.