

Information about PARCA-R questionnaire translations

The PARCA-R questionnaire has been translated into a number of languages other than English. To obtain a copy of the questionnaire in your preferred language, please use the links provided on the website (www.parca-r.info).

Please note that the PARCA-R questionnaire has only been standardised for use in the UK. The questionnaires available on the website are translations of the original English (UK) version and may not yet have been adapted, validated or standardised for use in other languages or countries. The table below provides information about the extent to which the available versions have been adapted and/or validated. Please exercise caution when using these translations, or when applying the UK normative data to derive standard scores for questionnaires completed in other languages. For more information about the translated versions, including information about ongoing validity studies, please contact the relevant authors as shown in the table below.

A list of published validation studies is also provided in the PARCA-R publication list, available on the website (www.parca-r.info).

Original English (UK) version					
Language	Direct translation	Adaptation	Validity studies	Standardisation	Contact
English (UK)	Not applicable	Not applicable	<p>Validity studies in the UK:</p> <p>Blaggan et al. A parent questionnaire for developmental screening in infants born late and moderately preterm. <i>Pediatrics</i> 2014;134(1):e55-62.</p> <p>Johnson et al. Validation of a parent report measure of cognitive development for very preterm infants. <i>Dev Med Child Neurol</i> 2004;46(6):389-97.</p> <p>Johnson et al. Developmental assessment of preterm infants at 2 years: validity of parent reports. <i>Dev Med Child Neurol</i> 2008;50(1):58-62.</p> <p>Validity studies in Australia & New Zealand:</p> <p>Martin et al. Identification of infants with major cognitive delay using parental report. <i>Dev Med Child Neurol</i> 2012;54(3):254-259.</p> <p>Martin et al. Performance of the Parent Report of Children's Abilities-Revised (PARCA-R) versus the Bayley Scales of Infant Development III. <i>Arch Dis Child</i> 2013;98(12):955-8.</p>	<p>UK standardisation:</p> <p>Standard scores for the non-verbal scale and language scale in children aged 23.5 to 27.5 months</p> <p>Johnson et al. Parent Report of Children's Abilities – Revised (PARCA-R). Technical and Interpretive Manual. University of Leicester, Leicester, 2019.</p> <p>Johnson et al. Standardisation of the Parent Report of Children's Abilities-Revised: a norm-referenced assessment of cognitive and language development at age 2 years. <i>Lancet Child Adolesc Health</i> 2019;3(1):709-712.</p>	PARCA-R team, Email: parca-r@le.ac.uk

Translations					
Language	Direct translation	Adaptation	Validity studies	Standardisation	Contact
Czech	Non-verbal cognitive scale: direct translation	Language scale: adaptation. For information about adaptation, see the Czech translation protocol available on the PARCA-R website.	No	No	Julie Zalmanova, Email: zalmanovajulie@gmail.com
Danish	Non-verbal cognitive scale only: direct translation	No	No	No	Klaus Boerch; Email: Klaus.Boerch@regionh.dk
Dutch (Belgium)	Non-verbal cognitive scale and language scale: direct translations	No	Validity study in Belgium: Vanhaesebrouck S, et al. Cognitive assessment of very low birth weight infants using the Dutch version of the PARCA-R parent questionnaire. <i>Early Hum Dev</i> 2014;90(12):897-900.	No	Sophie Vanhaesebrouck, Email: Sophie.Vanhaesebrouck@uzgent.be
Dutch (Netherlands)	Non-verbal cognitive scale and language scale: direct translations	No	No	No	Arno van Heijst, Email: arnovanheijst@me.com
Estonian	Non-verbal cognitive scale: direct translation	Language scale: adaptation. Comprises Estonian adaptation of the MacArthur-Bates Communicative Development Inventory: Words and Sentences.	No	No	Heili Varendi; Email: heili.varendi@ut.ee
Finnish	Non-verbal cognitive scale: direct translation	Language scale: adaptation. <u>Vocabulary checklist</u> : Finnish short form versions of the MacArthur Communicative Development Inventories (Toddler version). Reference: Stolt S & Vehkavuori S. 2018. <i>Sanaseula MacArthur-Bates Communicative Development Inventories -arviointimenetelmän lyhyt, suomalainen versio</i> [Finnish short form versions of the	Validity studies on the vocabulary checklist included in the Finnish PARCA-R: Validity of the Finnish short form versions have been assessed and information is presented in the manual of the method. Reference: Stolt S & Vehkavuori S. 2018. <i>Sanaseula. MacArthur-Bates Communicative Development Inventories -arviointimenetelmän lyhyt, suomalainen versio</i> [Finnish short form versions of the MacArthur	The word list included in the Finnish PARCA-R has been normed for Finnish children aged between 9 and 24 months. Reference: Stolt S. & Vehkavuori S. 2018. <i>Sanaseula. MacArthur-Bates Communicative Development Inventories -arviointimenetelmän lyhyt, suomalainen versio</i> [Finnish short form versions of the	Non-verbal scale translation: Petriina Munck; Email: petriina.munck@gmail.com Language scale translation: Suvi Stolt; E-mail: suvi.stolt@helsinki.fi

		<p>MacArthur Communicative Development Inventories]. Jyväskylä: Niilo Mäki Instituutti.</p> <p><u>How your child uses words (Qs 1-6)</u>: Questions are included in the Finnish, long form versions of the MacArthur Communicative Development Inventories; Reference: Lyytinen P. 1999. <i>Varhaisen kommunikaation ja kielen kehityksen arviointimenetelmä</i> [Finnish long form versions of the MacArthur Communicative Development Inventories]. Jyväskylä: Niilo Mäki Instituutti.</p> <p><u>How your child uses words (Qs 7-18)</u>: Questions have been translated and adapted for Finnish language by Prof Suvi Stolt.</p>	<p>Communicative Development Inventories]. Jyväskylä: Niilo Mäki Instituutti.</p> <p>Vehkavuori, S., Kämäräinen, M. & Stolt. S. 2021. Early receptive and expressive lexicons and language and pre-literacy skills at 5;0 years- A longitudinal study. <i>Early Human Development</i>, 156.</p> <p>Vehkavuori, S. & Stolt, S., 2019. Early lexicon and language skills at 42 months. <i>Clinical Linguistics & Phonetics</i>. 33 (9).</p>	<p>MacArthur Communicative Development Inventories]. Jyväskylä: Niilo Mäki Instituutti.</p>	
Flemish	Non-verbal cognitive scale and language scale: direct translations	No	No	No	<p>Non-verbal scale translation:</p> <p>Patrick van Reempts, Email: patrick.vanreempts@uantwerpen.be</p> <p>Language scale translation:</p> <p>Axel Franz, Email: Axel.Franz@med.uni-tuebingen.de (Language scale translation funded by EU under HC2020 project 667224; www.albino-study.eu)</p>
French	Non-verbal cognitive scale and language scale: direct translations	No	No	No	<p>Non-verbal scale translation:</p> <p>Patrick van Reempts, Email: patrick.vanreempts@uantwerpen.be</p> <p>Language scale translation:</p>

					Axel Franz, Email: Axel.Franz@med.uni-tuebingen.de (Language scale translation funded by EU under HC2020 project 667224; www.albino-study.eu)
German (Germany)	Non-verbal cognitive scale and language scale: direct translations	No	No	No	Rolf Felix Maier; Email: Rolf.maier@med.uni-marburg.de
German (Switzerland)	Non-verbal cognitive scale and language scale: direct translations	No	Validity study in Switzerland: Picotti E et al. Performance of the German version of the PARCA-R questionnaire as a developmental screening tool in two-year-old very preterm infants. <i>PLOS One</i> 2020;15(9):e0236289	No	Giancarlo Natalucci, Email: Giancarlo.Natalucci@usz.ch
Italian (Version 1)	Non-verbal cognitive scale and language scale: direct translations	No	Validity study in Italy: The validity of the non-verbal cognitive scale was assessed in Cuttini M et al. Cognitive assessment of very preterm infants at 2-year corrected age: performance of the Italian version of the PARCA-R parent questionnaire. <i>Early Hum Dev</i> 2012;88(3):159-63. Please note, the language scale in this version (Version 1) has not been validated.	No	Non-verbal scale translation: Marina Cuttini, Email: marina.cuttini@opbg.net Language scale translation: Axel Franz, Email: Axel.Franz@med.uni-tuebingen.de (Language scale translation funded by EU under HC2020 project 667224; www.albino-study.eu)
Italian (Version 2)	Non-verbal cognitive scale: direct translation:	Language scale: adaptation. In this version of the Italian questionnaire (Version 2), the authors adapted the language scale using the Italian version of the MacArthur Communicative Development Inventories Short Form. For further information see the cited publication.	Validity study in Italy: This version (Version 2) was validated in the following study: Cuttini M et al. Cognitive assessment of very preterm infants at 2-year corrected age: performance of the Italian version of the PARCA-R parent questionnaire. <i>Early Hum Dev</i> 2012;88(3):159-63.	No	Marina Cuttini, Email: marina.cuttini@opbg.net

Norwegian	Non-verbal cognitive scale and language scale: direct translations	No	No	No	Axel Franz, Email: Axel.Franz@med.uni-tuebingen.de (Translation funded by EU under HC2020 project 667224; www.albino-study.eu)
Polish	Non-verbal cognitive scale and language scale: direct translations	No	No	No	Non-verbal scale translation: Janusz Gadzinowski; Email: jgadin@gpsk.ump.edu.pl Language scale translation: Axel Franz, Email: Axel.Franz@med.uni-tuebingen.de (Language scale translation funded by EU under HC2020 project 667224; www.albino-study.eu)
Portuguese	Non-verbal cognitive scale: direct translation	No	No	No	Carina Rodrigues; Email: carina.rodrigues@ispup.up.pt
Romanian	Non-verbal cognitive scale: direct translation	No	No	No	Translated for use in the EPICE Study; Principal Investigator: Jennifer Zeitlin; Email: jennifer.zeitlin@inserm.fr
Russian	Non-verbal cognitive scale: direct translation	Language scale: adaptation of the MacArthur-Bates Communicative Development Inventory: Words and Sentences.	No	No	Heili Varendi; Email: heili.varendi@ut.ee
Spanish	Non-verbal cognitive scale and language scale: direct translations	No	No	No	Axel Franz, Email: Axel.Franz@med.uni-tuebingen.de (Translation funded by EU under HC2020 project 667224; www.albino-study.eu)
Swedish	Non-verbal cognitive scale and sentence complexity items: direct translations	Language scale vocabulary checklist: adaptation using the Swedish version of the MacArthur Communicative Development Inventories Short Form	No	No	Ulrika Aden; Email: Ulrika.aden@ki.se

Turkish	Non-verbal cognitive scale: direct translation	No	No	No	Ayşe Malerczyk-Aktas; Email: ayse.aktas@gmx.net
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