Language Development Research

An Open Science Journal

Policies and Procedures

Version 0.1. First draft: 30th October, 2019 (Ben Ambridge)

Version 0.2. Edited in response to Editorial Board Members' comments: 8th January 2020 (Ben Ambridge)

Version 0.3. Edited in response to votes by the Editorial Board: 6th March 2020 (Ben Ambridge)

Version 1.0 Approved by the Editorial Board by electronic ballot ending 31st March 2020 (24 Yes, 0 No, 6 Abstain); vote organized by Patricia J. Brooks, Head of the Editorial Board.

Version 1.1 Approved by the Editorial Board by electronic ballot ending 24th September March 2020 (26 Yes, 0 No, 0 Abstain); vote organized by Patricia J. Brooks, Head of the Editorial Board.

Version 1.2. Approved by the Editorial Board by electronic ballot ending 18th December 2020 (30 Yes, 0 No, 0 Abstain); vote organized by Patricia J. Brooks, Head of the Editorial Board.

Version 1.3. Approved by the Editorial Board by electronic ballot ending 15th December 2023 (24 Yes, 0 No, 0 Abstain); vote organized by Patricia J. Brooks, Head of the Editorial Board.

Note: Sections 3.1 *Professional Standards* and 5.1 *Author agreement* are based on https://lps.library.cmu.edu/ETHOS/site/submission-guidelines/ which have been approved by the Carnegie Mellon University legal team.

1 Title and scope of the journal

1.1 **Title.** The official title of the journal is *Language Development Research*. The subtitle of the journal, *An Open-Science Journal*, may be displayed on the journal website and elsewhere, but does not form part of the official title. In the context of these policies and procedures, "the journal" refers to *Language Development Research*.

1.2 **Scope**. The remit of the journal is to publish any empirical or theoretical paper that is relevant to the field of language development and that meets our criteria for rigour, without regard to the perceived novelty or importance of the findings. Relevance to the field of language development (typical and atypical, mono-, bi- and multi-lingual) is broadly construed so as to include, for example, studies of second language learning (or artificial language learning) in older children or adults, studies of nonhuman animals, computational modelling studies, studies or theories of the adult endpoint etc., provided that they are relevant to the issue of language development.

2 Establishment of the journal and its Policies and Procedures

2.1 **Initial Approvals**. Before the launch of the journal, the Editorial Board must formally approve (a) these policies and procedures, (b) the appointment of the proposed first Editor, **Ben Ambridge (University of Liverpool)** (c) the appointment of the proposed Editorial Board, **Ana Castro (Universidade NOVA de Lisboa), Arielle Borovsky (Purdue University), Beatriz de Diego (Midwestern University), Caroline Rowland (Max Planck Institute for Psycholinguistics), Courtenay Norbury (University College London), Daniel Walter (Emory University), Danielle Matthews (University of Sheffield), David Barner (University of Calfornia, San Diego), Donna Jackson-Maldonado (Universidad Autónoma de Querétaro), Dorothy Bishop (University of Oxford), Frank Wijnen (Utrecht Institute of Linguistics), Javier Aguado-Orea (Sheffield Hallam University), Jean-Pierre Chevrot (Université Grenoble Alpes), Josh Hartshorne (Boston College), Sam Jones (University of Lancaster), Katherine Messenger (University of Warwick), Kirsten Read (Santa Clara University), Lisa Hsin (Harvard University), Melanie Soderstrom (University of Manitoba), Monique Mills (University of Houston), Natalia Gagarina (Leibniz-Zentrum Allgemeine Sprachwissenschaft), Patricia Brooks (City University of New York), Philip Dale (University of New Mexico), Sharon Unsworth (Radboud University), Steven Gillis (Universiteit Antwepen), Tania Zamuner (University of Ottawa), Toby Mintz (University of Southern California), Tom Roeper (University of Massachusetts, Amherst), Virve-Anneli Vihman (University of Tartu), Weiyi Ma (University of Arkansas)**, and (d) the appointment of the proposed Head of the Editorial Board, **Patricia Brooks (City University of New York)**. In each case, approval is granted by means of a vote in which more than 50% of Editorial Board members participate (in order to reach quorum) and more than 50% of voting Editorial Board members vote in favour of approval; the vote to be organized by the head of the Editorial Board.

2.2 **Changes to policies and procedures.** Any of these policies and procedures can be changed at any time by means of a vote in which more than 50% of Editorial Board members participate (in order to reach quorum) and more than 50% of voting Editorial Board members vote in favour of the proposed change; the vote to be organized by the head of Editorial Board.

3 Standards and Misconduct

3.1 **Professional standards.** The journal expects editors, reviewers, and authors to respect the integrity of the research process and conform to rigorous standards in the citation and acknowledgement of the work of other scholars. The Editor, Action Editors, members of the Editorial Board, reviewers, and authors must act in a professional and fair way when completing their expected duties, and must not discriminate on the basis of gender, sexual orientation, religious or political beliefs, ethnicity, or geographical origin of the authors. The journal will not tolerate misconduct by its Editor, Action Editors, members of the Editorial Board, reviewers, or authors, including that of (but not limited to) plagiarism, harassment, and failing to uphold standards of professional conduct. (Note: the Janeway system on which the journal runs uses the term "Section Editor" for the role that is termed "Action Editor" in these Policies and Procedures).

3.2 The journal strives to follow the **Core Practices of the Committee on Publication Ethics** (**https://publicationethics.org/core-practices**) (COPE), which include

3.2.1 A clearly described process for handling **allegations of misconduct**.

3.2.2 Clear policies (that allow for transparency around who contributed to the work and in what capacity) regarding **authorship and contributorship**.

3.2.3 A clearly described process for handling **complaints against the journal**, its staff, Editorial Board or publisher.

3.2.4 Clear definitions of **conflicts of interest** and processes for handling conflicts of interest of authors, reviewers, editors, journals and publishers, whether identified before or after publication.

3.2.5 Policies on **data availability**

3.2.6 Policies on **ethical oversight**, including consent to publication, research using human subjects, and handling confidential data

3.2.7 Policies on **intellectual property**, including copyright and publishing licenses, any costs associated with publishing, what counts as prepublication that will preclude consideration, and what constitutes plagiarism/overlapping publication.

3.2.8 Policies on **journal management** including business model, processes for efficient running of an editorially independent journal, as well as the efficient management and training the Editorial Board and editorial staff.

3.2.9 A transparently described and well managed **peer review process**, including training for Action Editors and reviewers, and processes for handling conflicts of interest, appeals and disputes that may arise in peer review.

3.2.10 Mechanisms for **correcting, revising or retracting articles after publication**, and for allowing debate post publication through letters to the editor, or on an external moderated site, such as PubMed Commons or PubPeer.

4 Journal Management

4.1 **Editorial board**. The Editorial Board is responsible for overseeing the efficient running of an editorially independent journal, in particular approving and updating its policies and procedures, approving the appointment of the first Editor and Editorial Board, appointing subsequent Editors, and overseeing complaints, appeals, disputes and allegations of misconduct. The COPE guidelines state that journals should provide training for reviewers and board members. Since we have no budget, we are able to provide this training only in the form of these policies and procedures - see in particular the section on Peer review training.

4.2 **Business model**. The journal is not, nor is it published by, a public or private company, or a registered charity or non-profit organization. It simply provides a platform via which authors can obtain peer review for and publish their own academic research articles, as defined in the Author Agreement.

4.3 **Fees.** The journal does not charge any fees for access (e.g., subscription or download fees) or for publication (e.g., article processing charges).

4.4 **Hosting.** The journal is hosted by The Carnegie Mellon University Libraries Publishing Service (LPS) (https://lps.library.cmu.edu/), which also hosts the journal editorial system via which authors submit and publish their articles.

4.5 **Roles and Responsibilities**. The **Editorial Board** has overall collective responsibility for the journal. The **Head of the Editorial Board** organizes votes of the Editorial Board members and liaises with the Editor to ensure that quorate decisions taken by the Editorial Board are implemented. The **Editor** appoints Action Editors and the Statistics Consultant, screens papers for suitability for the journal, and assigns papers to Action Editors. The Editor is responsible for the day-to-day running of the journal, though ultimate responsibility for the journal lies collectively with the Editorial board. **Action Editors** invite peer reviewers and take publication decisions. The **Statistics Consultant** maintains guidelines for best practices in statistical analyses (accessed via the journal's website) and is available to consult with Action Editors and reviewers who have statistics-related questions with regard to papers they have been assigned. The responsibilities set out in the present section are intended merely as a guideline, other duties are outlined elsewhere, and are as implied by normal running of an academic journal.

4.6 **Appointment of the Editor**. The Editor is appointed by the Editorial Board, by means of a vote in which more than 50% of Editorial Board members participate (in order to reach quorum) and more than 50% of voting Editorial Board members vote in favour of the proposed Editor. The normal term of an Editor is five years (i.e., 60 months exactly), though (a) an Editor can resign at any time and (b) the Editorial Board can at any time vote to remove an Editor via the above voting procedure. No individual can serve more than one term as Editor.

4.7 **Appointment of Action Editors.** Action Editors are appointed by the Editor. The normal term of an Action Editor is four years (i.e., 48 months exactly), though (a) an Action Editor can resign at any time and (b) the Editorial Board can at any time vote to remove an Action Editor via the above voting procedure. No individual can serve two or more consecutive terms as an Action Editor. An individual may serve as both the Editor and an Action Editor (though not concurrently).

4.8 **Complaints procedures.** The journal has three distinct procedures:

4.8.1 Authors may appeal against publication decisions using the appeals procedure.

4.8.2 Any person may make an **allegation of misconduct** by an author, Action Editor, Editor, or member of the Editorial Board by emailing either the Editor or the Head of the Editorial Board (anonymously if they wish). Whether the initial allegation is made to the Editor or to the Head of the Editorial Board, The Editorial Board will determine any remedial action (such as retraction of the paper, overturning of a decision to reject a paper, or any other action they deem appropriate) by means of a vote in which more than 50% of Editorial Board members participate (in order to reach quorum) and more than 50% of voting Editorial Board members vote in favour of the proposed action; the vote to be organized by the head of the Editorial Board. **Note: On 5th March, 2020, the Editorial Board took a vote as to whether anonymous complaints should be allowed. The result was as follows: Yes (69.2%), No (30.8%), with 26 members of the board voting, and four abstentions.**

4.8.3 Any person may make a request for the **correction, revision or retraction** of a published article, whether or not an allegation of misconduct has been made, by emailing the Editor. Valid grounds for a correction, revision or retraction exist when, in the opinion of the Editor, a paper contains one or more substantive errors of fact (not simply a disagreement on matters of academic opinion). Requests for simple corrections and revisions will be dealt with by the Editor who will, if such corrections/revisions are deemed to be necessary, liaise with the authors to ensure that they are implemented. If the (a) request is for a retraction, or (b) the Editor considers a retraction may be necessary or (c) the authors dispute the Editor's suggested remedial action or do not respond to the Editor's correspondence or (d) the Editor is an author on the paper, the matter will be referred to the Editorial Board. The Editorial Board will determine any remedial action (such as correction or retraction of the paper) by means of a vote in which more than 50% of Editorial Board members participate (in order to reach quorum) and more than 50% of voting Editorial Board members vote in favour of the proposed action; the vote to be organized by the head of the Editorial Board.

5 Submission and peer-review process

5.1 **Author Agreement.** Authors shall agree to publish their article with *Language Development Research* ("the journal) under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 Unported (CC BY-NC 4.0) license (summary: https://creativecommons.org/licenses/by-nc/4.0/; full license: https://creativecommons.org/licenses/by-nc/4.0/legalcode). Authors hereby grant to *Language Development Research* and Carnegie Mellon University Libraries a nonexclusive, perpetual, worldwide license to reproduce, distribute, translate, transmit, prepare derivative works, and publish their contribution on the Internet. Authors represent and warrant that any article submitted is wholly original and not published or under review elsewhere (except for material in the public domain or used with permission of its owner). Authors represent and warrant that the submission is the work of the authors stated, and that all authors have agreed to its truthfulness and have given permission to publish the article with *Language Development Research*. Authors also shall defend, indemnify, and hold harmless the Editor, Action Editors, members of the Editorial Board, Carnegie Mellon University and its officers, trustees, agents, and employees from all liability arising from their work. In particular, authors warrant that submitted articles do not infringe upon any copyright, and do not constitute defamation or invasion of the right of privacy or publicity or any other rights of third parties. Authors shall notify the Editor of any factual errors that they discover in submitted articles and make any necessary changes the Editor may require to rectify the errors in a timely manner. *Language Development Research* reserves the right to remove an article at any time for any or no reason. **By submitting a manuscript to *Language Development Research*, authors are agreeing to abide by this Author Agreement and by all Policies and Procedures set out in the present document.**

5.2 **Preprints and conference presentations.** The journal accepts submissions of manuscripts previously posted on preprint servers such as Psyarxiv and the Open Science Framework and manuscripts previously presented at conferences, **provided** that manuscripts submitted to the journal do not contain copyright material. For example, if a manuscript has previously been published as part of a conference proceedings volume, the authors may have assigned copyright to the publisher of that volume, meaning that an identical or even substantially edited manuscript may not be submitted to the journal.

5.3 **Plagiarism**. The Committee on Publication Ethics (COPE) defines plagiarism as "rang[ing] from the unreferenced use of others' published and unpublished ideas, including research grant applications to submission under "new" authorship of a complete paper, sometimes in a different language". Papers submitted to the journal will be automatically checked with plagiarism detection software, and articles with large chunks of unattributed text from other published sources (including authors' own previous publications) will be rejected without review. Authors including long quotations from previous publications (including their own) must take particular care to check that they are compliant with copyright law, as set out in the Author Agreement. Any person wishing to make an allegation of plagiarism in a published article should follow the journal's complaints procedures for making an allegation of misconduct and/or a request for correction, revision or retraction.

5.4 **Article types.** The journal has three article types: regular articles, registered reports and results-redacted articles. No type of article has any word limit. Beyond this distinction, we do not specify article types, since regular articles may be of any form (e.g., experimental study, analysis of naturalistic data, literature review, meta-analysis, description of a new research or analysis tool, theoretical article, response to a previous article, book review, etc.) provided that they are relevant to the remit of the journal. Registered reports are a specialized format for empirical studies, in which peer review is conducted, on the basis of the Introduction and Methods (including data-collection and statistical-analysis plans) before the data are collected. Results-redacted articles are similar to registered reports in that peer review is conducted on the basis of the Introduction and Methods, but differ in that the data have already been collected and analyzed, but are redacted for the purposes of review. The aim of this format is to reduce a potential bias whereby "null" results cause reviewers to be more critical with regard to methodology and rationale than they would have been had the same study yielded "positive" results. Detailed guidelines for registered reports and results-redacted articles will be made available in separate documents. For empirical papers, the journal suggests that authors strive to meet the American Psychological Association's *Journal Article Reporting Standards* (https://apastyle.apa.org/jars), which are available for quantitative, qualitative and mixed-methods research (though this is a recommendation rather than a requirement)

5.5 **Authorship and contributorship**. Any article with more than one author must include an authorship and contributorship statement that details the contributions made by each author or contributor. The journal follows the policy of the International Committee of Medical Journal Editors (Website accessed 6th January 202 - http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html), such that all listed authors should meet all of the four criteria listed below. Colleagues that contribute to the work but do not qualify for authorship should be listed as contributors in the authorship and contributorship statement.

5.5.1 **Substantial contributions** to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work

5.5.2 **Drafting the work or revising it critically** for important intellectual content; AND

5.5.3 **Final approval** of the version to be published; AND

5.5.4 **Agreement to be accountable** for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

5.6 **Ethics statement**. Any research including human or participants must include an ethics statement detailing any necessary approvals obtained from an Institutional Review Board or University Ethics Committee. If approvals were not necessary (for example because the research uses previously-collected publicly-available data, or was conducted in a country which does not require approval for the type of research in question), this should be detailed in the ethics statement.

5.7 **Article submission process (regular articles)**

5.7.1 **Submission.** The author(s) submit the manuscript via the journal editorial website. Initial submissions can be in any format or style, but authors may wish to use the journal's supplied templates for published articles which are mandatory once articles have been accepted. The journal encourages the use of reproducible formats (e.g., TeX, Rmd/Jupyter). All articles must be written in English: American or British English may be used, but authors are encouraged to strive for consistency throughout the manuscript. In addition to an English abstract, authors may optionally submit translated abstracts in one or more additional languages. This option is available for any article type, but is particularly encouraged when the focus of the article is one or more languages other than English. Authors are wholly responsible for supplying, and ensuring the accuracy of, the translations of their abstract. Authors are strongly encouraged to suggest both proposed and opposed reviewers. The journal does not guarantee to invite proposed reviews, but guarantees not to invite opposed reviewers.

5.7.2 **Screening.** The Editor screens each submission for (a) relevance to the scope of the journal, (b) compliance with the policies and procedures set out here (e.g., adherence to data-sharing policy), (c) possible plagiarism, (d) quality of the written English and (e) scientific quality of the work. Manuscripts that do not pass this screening check are returned to authors with feedback and do not proceed to peer review. Manuscripts are not screened for perceived novelty, potential impact or importance of the findings; nor may Action Editors use such criteria when taking editorial decisions. Neither are manuscripts, **at this stage**, screened for formatting (since no particular format is required until an article has been accepted). However, because the journal employs no staff, it is crucial that for accepted articles, authors undertake their own spell checks, bibliography checking, grammar checking and typesetting (see "Accepted Papers" section below)

5.7.3 A **conflict of interest** arises when the Editor, an Action Editor, or a reviewer is an author on the submitted manuscript, or shares any of the following relationships with an author on the submitted manuscript: (a) works at the same institution, (b) has been a mentor/mentee (e.g., PhD or postdoctoral supervisor/mentor), (c) has published together within the past three years, (d) joint investigators on a grant or grant proposal or (e) personal relationship (e.g., spouse, parent, sibling etc.). Selection of Action Editors and invitation of reviewers, as described in the following two sections, must avoid such a conflict of interest. This constraint may be relaxed for papers published by large consortia with tens or hundreds of authors if this is unavoidable in the interests of securing sufficiently qualified reviewers. A conflict of interest also arises when the Editor, an Action Editor, reviewer or author has any commercial interest in any of the work described in the submitted manuscript (e.g., the study uses a questionnaire instrument published by a company in which the individual has shares, or from which they receive royalty payments). Selection of Action Editors and invitation of reviewers, as described in the following two sections, must avoid such a conflict of interest. If an author has any commercial interest in any of the work described in the submitted manuscript, they must include a **declaration of conflict of interests** statement in the manuscript. Such a statement is not required if no conflict of interests exists. Any conflict of interest identified after publication of the manuscript should be raised using the **allegations of misconduct procedure** set out above.

5.7.4 **Selection of Action Editor.** If the manuscript passes the screening check, the Editor assigns the paper to an Action Editor, taking care to avoid a conflict of interest (see previous section for definition). In cases where the Editor has a conflict of interests, the Editor will not assign the manuscript to an Action Editor. Instead, the Editor will notify all Action Editors, who will agree amongst themselves who should (a) conduct the initial screening check and (b) serve as Action Editor (either a single AE performing both tasks, or one conducting the initial screening check and another serving as AE).

5.7.5 **Invitation of reviewers.** The Action Editor sequentially invites reviewers, taking care to avoid a conflict of interest, until two have agreed to review the manuscript. In special circumstances (e.g., the two reviewers are diametrically opposed, or indicate that the opinion of a reviewer with particular statistical or methodological expertise is required), the Action Editor may invite additional reviewers as required. **Note: On 5th March, 2020, the Editorial Board took a vote on the number of reviews required in normal circumstances. The vote was in favour of two reviews (65.4%) rather than three (34.6%), with 26 members of the board voting, and four abstentions.**

5.7.6 **Criteria for reviewers.** The Action Editor may not invite individuals designated by the authors as opposed reviewers. The Action Editor is not obliged to invite individuals designated by the authors as proposed reviewers, though in practice will usually invite at least one. The Action Editor may not invite as a reviewer any individual who has a conflict of interests with an author (see the **Conflict of Interest** section for definition). In order to qualify as a potential reviewer, an individual must have recently published at least one first-author article in a relevant journal.No requirement with regard to seniority or employment status is imposed (e.g., a graduate student who meets the first-author publication requirement may serve as a reviewer).

5.7.7 **Delegation of reviews.** In normal circumstances, reviewers who have agreed to review a manuscript must review the manuscript themselves. However, reviewers may, with the advance permission of the Action Editor, involve a trainee (e.g., PhD student) in the reviewing processes, provided that they are willing to certify that they have carefully reviewed both the manuscript and the review, and will take responsibility for the final content of reviews.

5.7.8 **Deadline for reviews.** Reviewers are asked to complete their review within 30 days, with automatic reminders sent at 23, 30 and 50 days. If a reviewer has not submitted their review, or contacted the journal to request an extension, within 60 days, the reviewer is deemed to have withdrawn, and the Action Editor will invite a replacement. **Note: On 5th March, 2020, the Editorial Board took a vote on the deadline for review. The result was as follows: 30 days (65.4%), 21 days (19.2%), 45 days (7.7%), 15 days (7.7%), with 26 members of the board voting, and four abstentions.**

5.7.9 **Anonymization policy.** The journal operates a single-anonymous review policy and an optional double-anonymous review policy. That is, reviewers are anonymous to authors, unless they waive anonymity by clearly signing their review (we will not remove the names of reviewers who have signed their review). By default, authors are not anonymous to reviewers, since the journal encourages public posting and sharing of submitted preprints, via both academic sites such as Psyarxiv and OSF, which allow for anonymization, and public-facing social-media platforms such as Facebook and Twitter, which do not. However, authors may opt for double-anonymous review, in which they are additionally anonymous to reviewers. In this case, it is the authors' own responsibility to remove any identifying information from the manuscript and any posted preprints, data archives etc. The journal does not employ editorial administration staff, and will perform no anonymization checks.

5.7.10 **Copyright in reviews.** Reviewers own the copyright in their own reviews and are not required to transfer copyright to the journal, or to publish them under a CC-BY license. Consequently, authors of submitted manuscripts may not publish the reviews they receive, and may be in violation of copyright law if they do so.

5.7.11 **Action Editor decisions.** When an Action Editor has received the required reviews (in normal circumstances, two reviews), they will make an editorial decision from the following four options (a) accept, (b) revise and resubmit: minor revisions, (c) revise and resubmit: major revisions, (d) reject outright. The Action Editor will (via the editorial system) email this decision to the corresponding author along with the reviews and an Action Editor's decision letter which summarizes the reviews and any suggested/required changes. Note that editorial decisions are taken by the Action Editor responsible for the manuscript, not the Editor, though the Action Editor may seek advice from the Editor, particularly in cases where a concern exists over the extent to which an article complies with the policies and procedures set out here.

5.7.12 **Appeals.** Authors whose manuscripts have been rejected outright may appeal to the Editor, who will ask a new Action Editor to look at the manuscript and the reviews. If the new Action Editor agrees with the first, the decision stands. If the new Action Editor disagrees with the first, the Editor will take the publication decision. Authors who feel that the Editor has acted improperly or unfairly when dealing with their appeal should contact the Editorial Board via the published complaints procedures.

5.7.13 **Revise-and-resubmit papers.** Authors receiving a revise-and-resubmit decision should – if they choose to do so – resubmit their paper via the editorial website, including a detailed cover letter in which they respond to the points raised, and flag any changes made to the manuscript as a result. The journal does not impose any deadline for submitting a resubmission (since months or even years may be required if additional experimental work is suggested and undertaken). However, authors who decide to withdraw their paper should do so (via the editorial website) as soon as possible.

5.7.14 **Re-review.** Resubmitted revise-and-resubmit papers will be re-reviewed by the original reviewers wherever possible, though the Action Editor may invite an alternative if both original reviewers decline. The Action Editor will determine the number of re-reviews required to make a decision: zero (e.g., if the changes requested are very minor), one (e.g., if the paper is re-reviewed by the more critical of two reviewers, who now recommends acceptance), two (e.g., if the changes requested are major) or – exceptionally – three or more (e.g., in cases of continuing disagreement between reviewers).

5.7.15 **Revise-and-resubmit rounds.** There is no formal limit to the number of revise-and-resubmit rounds that a paper many undergo, but – in the interests of not unduly taking up reviewers' time – the Action Editor has discretion to reject outright a paper that appears to be making little progress in addressing any problems raised by the reviewers.

5.7.16 **Accepted papers.** When a paper has been accepted, the corresponding author will be notified via email, and asked to upload the final publication version of the article, typeset and formatted according to the published template, which is compulsory for accepted articles. Authors are entirely responsible for proofreading and typesetting their articles (including placing all figures and tables in the required location), providing alternative text for figures (for accessibility) and for correctly formatting and checking all references (the journal recommends the use of EndNote, Zotero, or Mendeley to manage citations). Authors are entirely responsible for spell-checking (the journal recommends the use of automatic spell-checking in Word or other software). In order to remain free of charge to both authors and readers, the journal does not employ any staff to conduct proofreading or typesetting; this model relies on authors taking full responsibility for these tasks. Accepted papers that do not conform to the published template will be returned to authors for reformatting.

5.7.17 **References.** References must follow the format set out in the current edition of the publication manual of the American Psychological Association. Digital Object Identifiers (DOIs) are encouraged.

5.8 Article submission process (registered reports)

5.8.1 **Registered reports** For a registered report (https://cos.io/rr/), peer review – of the Introduction and Methods sections only – takes place prior to data collection. The Methods section should include a detailed description of any statistical analyses that will be conducted (and, ideally, analysis code tested with simulated data).

5.8.2 **Initial review.** After one or more rounds of peer review (following the same procedure set out above), the Action Editor will take a decision of (a) reject outright or (b) accept in principle. When an article has received acceptance in principle, authors must archive the accepted article (i.e., the Introduction and Methods sections) in a public repository such as the Open Science Framework (the journal does not provide this facility). In order to aid discoverability, authors should add to this archived article, immediately below the title, "Stage 1 Registered Report accepted in principle at Language Development Research").

5.8.3 **Data collection.** Following acceptance in principle, authors collect the data according to the Methods outlined and the timeline agreed with the Action Editor.

5.8.4 **Commitment to acceptance.** The journal commits to publish the final article, regardless of the findings of the study, provided that all of the following conditions are met (a) No changes have been made to the accepted Introduction and Methods sections (except those agreed in advance with the Action Editor, see following section), (b) The study and statistical analyses have been conducted exactly according to the Methods outlined in the accepted-in-principle paper (except those agreed in advance with the Action Editor, see following section), though additional exploratory analyses are encouraged, provided they are clearly labelled as such), (c) The authors have kept to the timeline agreed with the Action Editor (unless a change has been agreed in advance with the Action Editor, see following section) and (d) The Discussion follows clearly from the reported Results. Action Editors will determine whether or not the article meets these criteria via one or more additional rounds of peer review (ideally with the original reviewers, if available).

5.8.5 **Changes.** In some cases, unforeseen circumstances will require changes to the Introduction (e.g., to correct clear errors of fact), to the agreed Methods (e.g., if the planned sample size cannot be reached before funding runs out) or to the agreed statistical analyses (e.g., if, after acceptance in principle, the authors come across a paper demonstrating that their planned analysis is not appropriate for the data type in question). In such scenarios, the authors should discuss the proposed changes with the Action Editor *before* making them. The Action Editor will consult with the original reviewers and the Editor and determine whether the proposed changes are sufficiently minor in order for the paper to continue as a registered report, and, if so, what additional text should be included to highlight the changes made. If not, the authors must either withdraw their paper, or submit it as a regular article.

5.9 **Post-publication review.** Readers of published articles are invited to use the PubPeer website at https://pubpeer.com/ to offer post-publication review/commentary, to which authors are encouraged (but not required) to respond. Readers are also encouraged to install the PubPeer browser plugin, which displays comments when readers are viewing articles on the *Language Development Research* journal website. Another route for post-publication review is via a Letter to the Editor, which will be considered for publication following the same process as any submission. Alternatively, a request for correction, revision or retraction can be made via the journal's dedicated procedure.

6 Open Science

The overriding principle of the journal's open science policy is that everything that can reasonably be publicly shared must be publicly shared. On the one hand, the journal has no desire to reject - or discourage submission of - studies for which sharing is genuinely impossible or infeasible. On the other hand, the journal takes the view that, in normal circumstances, the scientific community has the right to scrutinize the data, analysis code and materials on which a published study is based.

6.1 **Open science.** Sharing of preprints and the accepted article is highly recommended. Sharing of data, analysis code and experimental materials is mandatory, unless authors have agreed an exemption with the journal at the point of submission. In order to proceed to peer review, submitted articles must include a “**Data, code and materials availability statement**” which includes links to permanent repositories (with Digital Object Identifiers [DOIs] wherever possible) and details of any exemptions agreed. Authors applying for an exemption should submit their article in the usual way, setting out the reason for their application in the “Comments to Editor” box. Exemptions are granted by the Editor, but for complex cases, the Editor may first discuss the proposed exemption with the Editorial Board. Generally, exemptions to data/code/materials sharing will be granted only where it is impossible or infeasible (e.g., prohibitively expensive) due to insurmountable concerns regarding participant confidentiality or restrictions imposed by an ethics committee, institutional review board, funder, or local rules, regulations or laws. Each application will be considered on its own merits, but some examples of applications that are likely to be successful are as follows:

Exemption likely to be granted	Exemption unlikely to be granted
Data sharing is expressly prohibited by an ethics committee, institutional review board, funder, or local rules, regulations or laws.	The authors did not mention data sharing in their application to an ethics committee, IRB or funder (if such permission is required, it is the authors’ responsibility to obtain it).
The copyright in the data/code/materials is held by a third party (e.g., the authors used a standardized test as part of their materials, created a corpus of copyright children’s books, or used a paywalled dataset).	The authors wish to retain copyright in the data/code/materials, and/or retain the exclusive right to conduct subsequent studies or analyses.
The nature of the population (e.g., small / hard to reach / clinical sample) is such that there is a risk of de-anonymization.	The authors did not request explicit permission from participants to share anonymized data. (In most jurisdictions, permission is not required for sharing fully anonymized data; If such permission is required, it is the authors’ responsibility to obtain it).
Anonymization, while possible in principle, is infeasible in terms of cost and/or researcher time (e.g., full transcription/coding of day-long audio recordings; video recordings of signed languages).	

6.2 **Prior availability**. If data/code/materials are already publicly available (e.g., CHILDES corpora, many government datasets), with or without a free application process, researchers should provide the relevant permanent links in their “Data, code and materials availability statement”, and do not need to duplicate the material in their own project repository.

6.3 **“As open as possible”.** Where full sharing is not possible for one of the reasons above, authors should, when applying for the relevant exemption, set out the steps that they will take to make the data/code/materials as open as possible. One option, for example, is to deposit data with a service such as the UK Data Service which has separate categories for (in addition to Open Data) Safeguarded and Controlled Data, and separate application procedures for each. Any such arrangements must be documented in the paper’s “Data, code and materials availability statement”. The principle of “as open as possible” will also apply when the journal considers exemption requests. For example, if an exemption is granted on the basis of confidential data, authors will still be required (unless separate exemptions are granted) to share materials and analysis code. Where one or more exemption is agreed, the authors must ensure that it would be possible for a third party to verify the veracity of their findings should a question arise, and their “Data, code and materials availability statement” should clearly articulate a plan for making the necessary data/code/materials available.

6.4 **Data sharing.** Following the principle of “as open as possible”, data should be shared at as raw a level as possible without compromising participant anonymity. For example, if authors created new audio or video recordings which they then transcribed and coded, they should share the transcriptions, and the coded data (unless relevant exemptions have been granted), but not the actual recordings (unless they have explicit permission from the participants to do so). In normal circumstances, data aggregated at the participant or item level, rather than individual participant-by-participant and trial-by-trial data, would not meet the journal’s requirements.

6.5 **Code sharing.** Unless an exemption has been granted, authors are required to share all the analysis code that would be required for a colleague to reproduce all summaries (e.g., figures/tables) and analyses reported in the paper. Code must be included not just for the final analyses, but for any preprocessing/data-cleaning steps. Note that many point-and-click statistics packages (including SPSS and Stata) can additionally generate analysis code (syntax) files for sharing. If authors used a package (e.g., JASP) or website that does not generate shareable code, they should instead share a screen grab video of the analysis, or a document setting out point-by-point the steps taken. In either case, authors must double check that following the video/document yields the same output as the analysis reported in the paper.

6.6 **Sharing of experimental materials.** Unless an exemption has been granted, authors are required to share all materials that would be required for a colleague to replicate the study (e.g, questionnaires, ratings-scales, pictures, animations or videos, audio recordings, visually-presented sentences etc.). In particular, if the authors used software such as PsychoPy, jsPsych, PEBL, etc. they should be sure to share the code needed to run the experiment and, for online platforms such as Gorilla, links to the online experiment.

6.7 **Hosting.** The journal itself does not offer hosting for data/code/materials. Instead, authors should use websites such as the Open Science Framework (https://www.osf.org/) Figshare (https://figshare.com/), TalkBank (https://talkbank.org), Databrary (https://nyu.databrary.org/) or Github (https://github.com/), providing the relevant links in their "Data, code and materials availability statement". Other sites may be used, but authors must use permanent repositories, not personal/institutional websites, or folders on platforms such as Dropbox, Google Drives etc. *Language Development Research* is the official journal of the Talkbank system https://talkbank.org/, and, as such, the journal requests that any new corpora reported in LDR papers be posted to the relevant TalkBank site: CHILDES (Child Language Data Exchange System), PhonBank, Homebank, or one of the dedicated Multilingualism, Clinical or Adult Conversation banks.

6.8 **Review**. As part of the peer-review process, reviewers are requested to verify compliance with the journal's Open Science policies by - to the extent that they feel competent to do so - replicating the statistical analyses reported in the article, and verifying that the experimental materials that have been made available are sufficient to replicate the study. The journal aspires, if a team of suitable volunteers can be put together, to instigate a formal process of full data, code and materials review for each accepted empirical paper. In the meantime, informal checks will be made by the peer-reviewers, the Action Editor handling the paper and the Editor.

6.9 **Disclaimer.** Notwithstanding all of the Open Science policies set out above, authors are wholly responsible for fully complying with all laws and regulations in the jurisdictions in which the data are collected, hosted and published (e.g., copyright and data-protection regulations) and for fully complying with all regulations and protocols put in place by an ethics committee, institutional review board, funder, University or other institution.

7 Data analysis and reporting standards

7.1 **Data analysis:** Authors must not engage in **p-hacking** (i.e., cherry-picking analyses to yield a desired result) or **selective reporting** (https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1002106; http://www.stat.columbia.edu/~gelman/research/unpublished/p_hacking.pdf). All studies that were conducted as part of a particular project should be reported, regardless of the outcome. The reporting of null results is crucial in order to avoid publication bias (http://www.p-curve.com/; https://journals.sagepub.com/doi/full/10.1177/0956797614557866).

7.2 **Data analysis: Under-studied languages/populations.** Work on under-studied languages/populations is particularly encouraged, and the journal recognizes that, when studying such languages/populations, it may be more difficult to meet best practices regarding factors such as sample size. Nevertheless, this recognition represents a lower standard for publication, not a lower standard of evidence: These limitations must be flagged up prominently in the Abstract and Discussion, and conclusions should be appropriately tentative. Two useful papers that set out these considerations are https://scholarspace.manoa.hawaii.edu/bitstream/10125/24731/gawne_et_al.pdf and https://journals.sagepub.com/doi/full/10.1177/0142723715602350

7.3 Quantitative analyses.

7.3.1 **Best practices in quantitative data analysis.** The journal's statistics consultant maintains detailed guidelines for best practices in quantitative data analysis, which can be accessed via the journal website. These guidelines should be closely followed by authors, reviewers and Action Editors.

7.3.2 **Reporting standards.** Authors should follow the reporting standards set out in *Journal Article Reporting Standards for Quantitative Research in Psychology: The APA Publications and Communications Board Task Force Report*: https://www.apa.org/pubs/journals/releases/amp-amp0000191.pdf. Randomized control trials should follow the CONSORT guidelines: https://www.equator-network.org/reporting-guidelines/consort/

7.3.3 **Pre-registration** of all statistical analyses is preferred, ideally in the form of code for freely available analysis software (e.g., R), ideally tested on simulated data (e.g., simR package). Authors are also encouraged to pre-register their sample size, exclusion criteria, experimental methods and stimuli (https://osf.io/8uz2g/). The journal does not provide a repository for pre-registration materials, analysis code or simulated data; authors should instead use a public repository such the Open Science Framework (https://osf.io/), linked to in the manuscript. For research that could be classified as "medical research involving human subjects" authors must comply with the World Medical Association Declaration of Helsinki (https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/), which states that "Every research study involving human subjects must be registered in a publicly accessible database before recruitment of the first subject". For non-medical research, pre-registration of statistical analyses (or any of part of the study design) is not mandatory. However, where analyses are not pre-registered, the journal will expect to see a particularly clear justification for the analysis choices made, and evidence of the extent to which the analyses report hold under alternative justifiable analyses. If authors subsequently discover an error in a pre-registered analysis, they should instead/additionally report a corrected analysis, alongside a clear explanation of the reasons for the departure from the pre-registered analysis

7.3.4 **Exploratory/unplanned analyses** (i.e., analyses conceived after having seen the data) are encouraged. However, whether or not a pre-registration was submitted, authors must clearly differentiate analyses that were planned before seeing the data from exploratory/unplanned analyses. That is, authors must never hypothesize after results are known (HARKing; http://goodsciencebadscience.nl/?p=347)

7.3.5 **Sample size.** Ideally, authors should either (a) pre-register a sample-size (ideally calculated on the basis of data from previous studies and/or simulated data; e.g., (https://www.journalofcognition.org/articles/10.5334/joc.10/) or (b) use a sequential testing procedure, which can be done in both frequentist (http://daniellakens.blogspot.com/2014/06/data-peeking-without-p-hacking.html) and Bayesian analysis frameworks (https://link.springer.com/article/10.3758/s13423-017-1230-y). Data-peeking (i.e., running analyses, then testing more participants in an attempt to reach a criterion for statistical significance) is expressly prohibited (https://neuroneurotic.net/2016/08/25/realistic-data-peeking-isnt-as-bad-as-you-thought-its-worse/), unless it is acknowledged and corrected for (e.g., https://www.sciencedirect.com/science/article/pii/S0163638318300894)

7.4 **Qualitative analyses**. Authors should follow the reporting standards set out in *Journal Article Reporting Standards for Qualitative Primary, QualitativeMeta-Analytic, and Mixed Methods Research in Psychology: The APAPublications and Communications Board Task Force Report* https://www.apa.org/pubs/journals/releases/amp-amp0000151.pd. For health-related qualitative research, authors should follow the SRQR guidelines https://www.equator-network.org/reporting-guidelines/srqr/

7.5 Systematic review and meta analyses

7.5.1 **PRISMA.** All systematic reviews and meta-analyses should follow the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) checklist (http://www.prisma-statement.org/documents/PRISMA%202009%20checklist.pdf) and flow diagram (http://www.prisma-statement.org/PRISMAStatement/FlowDiagram.aspx, which together constitute the PRISMA Statement (http://www.prisma-statement.org/PRISMAStatement/)

7.5.2 **Systematic reviews with health implications** should be pre-registered with the Campbell Collaboration (https://www.campbellcollaboration.org/), the Cochrane Collaboration (https://www.cochrane.org/) or PROSPERO (https://www.crd.york.ac.uk/prospero/).

8 Peer review training for Action Editors and reviewers

8.1 The **Core Practices of the Committee on Publication Ethics** suggest peer review training for Action editors and reviewers. Since the journal has no budget, we are not able to offer full training but, in lieu, offer the guidance below.

8.2 Functions of peer review.

8.2.1 The primary function of peer review is to act as a "**stamp of approva**l" on published papers. This does not mean, of course, that reviewers/action editors agree with the conclusions of a paper, or are confident that any empirical findings will replicate. It simply means that, in their view, the paper is free from serious errors of methodology, analysis or reasoning that would call into question its main conclusions, and that the authors have reported their work transparently, mentioning relevant limitations.

8.2.2 A secondary function of peer review is to **improve the paper**. For example, reviewers may request that authors include important omitted references that are relevant to the goals of the paper, rewrite sections that are unclear, give more details about a particular experimental or analysis method etc. Reviewers should take care not to suggest changes that are matters of mere personal preference, but only those that – in their judgment – would result in a clearer paper. Reviewers should show restraint when suggesting additional (non-pregregistered) analyses, since each additional analysis increases the probability of spurious results. Reviewers should also show restraint when suggesting additional experimental work, which can be prohibitively costly for the authors: No single study, or set of studies, is definitive, and it will almost always be the case that further studies would help to clarify the picture. However, unless the conclusions of the paper are undermined without them, additional studies should normally be reserved for future papers, and not insisted upon by reviewers.

8.2.3 For selective, commercial journals, a function of peer review is to help Editors and Action Editors to select for publication only papers that meet some **threshold for novelty, innovation, likely citation rate etc**. Given the remit of *Language Development Research* to "publish any empirical or theoretical paper that is relevant to the field of language development and that meets our criteria for rigour, without regard to the perceived novelty or importance of the findings" this function does not apply. Relevance to the field will be determined largely by the initial screening process (though reviewers are free to offer the opinion that a paper is not relevant to the field). The job of peer reviewers for this journal is largely to help the Action Editor assess the extent to which the paper meets our criteria for rigour.

8.3 Structure of a review.

8.3.1 **Length**. In most cases, the optimal length for a first review is 1-2 pages (single spaced). Reviews that are considerably shorter often lack detail regarding exactly what changes the author is suggesting. Reviews that are considerably longer often overstep the line that divides improving the paper from rewriting the paper on the authors' behalf. That said, this is clearly just a rule of thumb, and longer or shorter reviews will be entirely appropriate in many cases. The second (or subsequent) review of a paper will typically be much shorter, simply summarizing whether or not any changes suggested in the previous round have been made satisfactorily. In some cases, one or more of the original reviewers is not available, and the Action Editor will invite one or more new reviewers for the revised paper. In such cases, new reviewers should focus primarily on assessing whether the points made in the first round of revisions have been dealt with satisfactorily, and not request additional changes unless the scientific merit of the paper would be seriously compromised without them.

8.3.2 **Introduction.** Most reviewers start with a brief summary of the paper. This is generally helpful, as it allows the authors, reviewers and Action Editor to check that everyone is on the same page with regard to the main goals, findings and conclusions of the paper. This can normally be accomplished in just a single paragraph of a few sentences.

8.3.3 **Recommendation.** Next reviewers should give a summary of their recommendation – a) accept, (b) revise and resubmit: minor revisions, (c) revise and resubmit: major revisions, (d) reject outright – and a brief justification. Given our commitment to transparency, *Language Development Research* encourages reviewers to make explicit recommendations of this type in the body of their review (note that some other journals discourage or prohibit reviewers from making explicit recommendations of this type).

8.3.4 **Major issues.** Next, reviewers should detail the major issues that justify their recommendation. Where these constitute problems of methods, analyses, reasoning etc., reviewers should give some indication of the seriousness of the problem, and how it should be addressed. For example, a reviewer might raise an underlying theoretical or methodological problem that they feel is sufficient to merit outright rejection, because it would not be possible to address the problem without redoing the work from scratch. More commonly, a reviewer might raise a problem that would merit rejection were it not addressed, but that can be addressed by a new statistical analysis or the addition of a control group. Reviewers should be mindful here of the burden on researchers, and suggest additional analyses or testing only when the conclusions of the study are undermined without them, not when they would be merely helpful, useful or interesting. In many cases a reviewer will raise a problem that is relatively serious, and cannot be meaningfully addressed with a new analysis etc., but that can be simply acknowledged in the text, and left for future research (i.e., in a new paper) to address.

8.3.5 **Minor issues.** Next, reviewers should detail issues that have little or no bearing on their recommendation per se, but that should be addressed in the interests of improving the paper. These might include lack of citations of key papers in the area, insufficient detail regarding an experimental or analysis method etc.

8.3.6 **Reframing**. Historically, it has not been uncommon for reviewers and/or Action Editors to suggest that the authors “reframe” a study, rewriting the Introduction to set-up hypotheses that were, in fact, formulated only after seeing the data. However, there is increasing recognition that so-called HARKing (hypothesizing after results are known) contributes to publication bias, and so should be discouraged by reviewers and Action Editors. To be clear, it will sometimes be appropriate for reviewers to request a very limited number of new analyses, including to test theoretical positions that were not mentioned in the submitted version of the paper. However, authors must be explicit regarding which analyses were planned in advance, and which were added after seeing the data.

8.3.7 **Writing quality**. If the overall standard of written English is low, reviewers should make it clear exactly what needs to be done to reach publishable standard: Does the paper just need a careful proofread, or does almost every sentence need to be rewritten? Reviewers should refrain from suggesting that authors request the help of a native English speaker, since not all highly-proficient writers of academic English are native speakers, and vice versa. Rather, authors whose papers are deemed insufficient with regard to the quality of written English (whether at the review stage or at the Editor’s screening stage) should decide for themselves what remedial action to take, which may include using a commercial service or software product (e.g., Grammarly)

8.3.8 **Proofreading**. Most commercial journals employ professional proofreaders, meaning that there is no need for reviewers to list typos. However, since *Language Development Research* has no budget to employ proofreaders, the journal would greatly appreciate reviewers listing all typos that they spot (except for passages of text that are likely to be removed or entirely rewritten as a result of requested major revisions). However, this is by no means a requirement for reviewers; ultimately, authors are responsible for their own proofreading.

8.3.9 **Review of data, code and materials.** Reviewers are requested (but not required) to verify compliance with the journal’s Open Science policies by downloading the materials made available by the authors and - to the extent that they feel competent to do so - replicating the statistical analyses reported in the article, and verifying that the experimental materials that have been made available are sufficient to replicate the study.