

BISQ-R and BISQ-R SF and Scoring

BISQ-R and BISQ-R SF

The Brief Infant Sleep Questionnaire (BISQ) was originally created by Dr. Avi Sadeh and has been completed on over 150,000 infants and toddlers. It has been expanded and revised from its original form and has been widely used in studies throughout the world. An age-based norm-referenced scoring system has been developed. These norms are currently based on US data, with the intention of development of norms in other countries (see section below on translations).

BISQ-R scores

BISQ-R full and short form version subscores and composite scores ARE:

- Intended for research use
- Based on preliminary validation data, as published in:
 - Mindell JA, Gould RA, Tikotzky L, Leichman ES, & Walters RM. (2019). Normative scoring system for the Brief Infant Sleep Questionnaire – Revised (BISQ–R). *Sleep Medicine*, 63, 106-114. DOI: <https://doi.org/10.1016/j.sleep.2019.05.010>

BISQ-R full and short version subscores and composite scores ARE NOT:

- Intended for or validated in the context of clinical use
- Intended for individual participant use or interpretation of the numeric scores

Two versions of the BISQ-R are available to be scored:

- **BISQ-R**: The BISQ-R (full version) is the complete, expanded version and includes the 19 questions that comprise the scoring system.
- **BISQ-R SF**: The BISQ-R SF (short form) includes the 19 scored questions and one additional sleep duration question.

Scores are intended for research purposes. Each subscale and the total score are scaled from 0 to 100, with higher scores denoting better sleep quality, more positive perception of infant sleep, and parent behaviors that promote healthy and independent sleep.

- **Infant Sleep (IS) subscale**: 5 questions regarding sleep patterns: sleep onset latency, number and duration of night wakings, longest stretch of sleep, and total night sleep
- **Parent Perception (PP) subscale**: 3 questions regarding caregiver perceptions of bedtime difficulty, overnight sleep, and overall child sleep problems.
- **Parent Behavior (PB) subscale**: 11 questions about sleep ecology, including bedtime routine consistency, bedtime, parental behavior at time of sleep onset and following night wakings, and sleep locations at time of sleep onset and following night wakings.
- **Total score (T)**: Average of the 3 subscale scores

BISQ-R and BISQ-R SF Scoring System

User Guidelines and Responsibilities:

1. Reading, complying with, and agreeing to Terms of Use.
2. Obtaining Institutional Review Board (IRB) approval and necessary amendments for all study components.
3. Ensuring that there is no identifying information on the excel sheet to be uploaded for scoring, including but not limited to:
 - First names, last names, IP addresses, location, zip codes, phone numbers, email addresses.
4. Ensuring that the data are provided as per file format sample via an Excel spreadsheet.

Application criteria

Please include items 1-5 on a separate word document. Submit the document via email along with the signed/scanned terms of use agreement. Submission of data to the BISQ-R Scoring System is free of charge and contingent on the following criteria:

1. Name, title, institution
2. Disclosure of any funding sources
3. Brief summary (~150 words) of research project including aims, timing of assessment use, whether or not intervention occurred or will occur, method of data collection (e.g., paper/pencil, Qualtrics system, app delivery), language of administration, country of administration, basic demographic information if available, etc.
4. Inclusion of statement that the project has received Institutional Review Board (IRB) approval by a university or institutional review board (and date).
5. Agreement that individual level scores will not be given to participants at any point during or after the study, as these results are not meant for clinical use; instead, they should be reported in aggregate form for research purposes only.
6. Principal Investigator signed "Terms of Use/Agreement"

System Procedures

Once application has been approved, BISQ-R data in an excel file are to be provided as summarized below and outlined in the instructional procedures document.

An excel file for the BISQ-R or BISQ-R SF will be provided, which will include variable names and exact coding. Note that no identifying information should be included in the data file. Be sure to use non-identifiable information for each child and survey submission identifier. If any identifying information is included, the file will be deleted. Additional information regarding sharing of any personally identifiable information can be found in the Privacy section.

Terms of use

1. Use and access of the BISQ-R assessment, originally published by Avi Sadeh (2004) and subsequently revised, is open access and free to the public.
2. Submission of data to the BISQ-R Scoring Team will result in individual submission level scores in accordance with the version of the scoring system at the time of submission.
3. The Pediatric Sleep Council, Babysleep.com, and/or the BISQ-R team accept no responsibility for:
 - a. Researcher release of participant identifying information.
 - b. Reviewing IRB proposals and/or ensuring that use of the BISQ-R is documented in the approved IRB.
4. Researchers are bound to the parameters set by their own IRB approval.

Privacy

Should identifying information remain on the uploaded file, the individual researcher will be responsible for reporting any privacy breach to his or her own institution as defined by the individual institution's protocol. Pediatric Sleep Council and/or individuals managing the BISQ-R online scoring system shall not be held liable for privacy violations related to researcher-uploaded data. Identifying information includes, but is not limited to: first name, surname, zipcode, county or region/zone, email address, street address, and IP address.

Requirements for any subsequent publications/presentations

Reference:

Inclusion of reference to development and BISQ-R scoring in methods section:

Mindell JA, Gould RA, Tikotzky L, Leichman ES, & Walters RM. (2019). Normative scoring system for the Brief Infant Sleep Questionnaire – Revised (BISQ-R). *Sleep Medicine*, 63, 106-114. DOI: <https://doi.org/10.1016/j.sleep.2019.05.010>

Authorship when mutually agreed upon:

No authorship is required or requested on any publications resulting from the use of the BISQ-R, unless active involvement of a BISQ-R team member in the study is mutually agreed upon.

General forms BISQ-R Instructions:

1. Download the appropriate sample excel form
2. Arrange your data to match the sample
 - a. Ensure exact match to correct variable name
 - b. Ensure exact match to variable order
 - c. Ensure numeric data are submitted in the correct units and in “number” format
 - d. Ensure all multiple choice responses are recorded using indicated numeric coding
 - e. Remove any personally identifying information
 - f. Create unique identifiers for
 - i. child participants
 - ii. survey submissions
 - iii. caregivers (if more than one caregiver completes a survey on one child)
3. Save the file as “RESEARCHERNAME_DATE.XLXS”
 - Use a team researcher’s name for identification purposes
4. If you have additional questions on your project survey, be sure they are presented LAST on the spreadsheet, and do not reveal any identifying information
5. Save and send

**Terms of Use Agreement
BISQ-R and BISQ-R SF Scoring System**

I, _____(name), _____(title),
affiliated with _____(university/medical center/employer) agree to
the following terms in the context of the BISQ-R and BISQ_R SF Scoring System.

I understand that:

1. Any and all data submissions must be de-identified. Any files containing personally identifiable information will be deleted.
2. It is my responsibility to report any necessary privacy breaches of personally identifiable information that are included on the submitted data file.
3. Submission of my individually de-identified data file will result in receipt of scores at the individual survey submission level.
4. The function and purpose of the BISQ-R and BISQ-R SF scores are for research purposes only, and not intended or validated for provision of clinical feedback to families.

Further, my research proposal has been approved by the following Institutional Review Board (IRB):

IRB Institution/Name

Initial approval date

If you agree, indicate agreement to inclusion of de-identified data in continued development of the BISQ-R and public dissemination of BISQ-R development research by initialing below.

___ Agree

If you agree, indicate agreement to inclusion of data in future publications that compile results from BISQ-R by initialing below.

___ Agree

Signed:

Researcher Printed Name

Signature

Date