TABLE 18-1 SUMMARY OF MAJOR CONTENT SECTIONS OF A RESEARCH REPORT AND RELATED CRITICAL APPRAISAL GUIDELINES—cont'd

SECTION	CRITICAL APPRAISAL QUESTIONS TO GUIDE EVALUATION
Data Collection Methods and Procedures (see Chapter 14)	1. Physiological measurement: a. Is a rationale given for why a particular instrument or method was selected? If so, what is it? b. What provision is made for maintaining accuracy of the instrument and its use, if any? 2. Observation: a. Who did the observing? b. How were the observers trained and supervised to minimize bias? c. Was there an observation guide? d. Was interrater reliability calculated? e. Is there any reason to believe that the presence of observers affected the behavior of the subjects? 3. Interviews: a. Who were the interviewers? How were they trained and supervised to minimize bias? b. Is there any evidence of interview bias, and if so, what is it? How does it affect the strength and quality of evidence? 4. Instruments: a. What is the type and/or format of the instruments (e.g., Likert scale)? b. Are the operational definitions provided by the instruments consistent with the conceptual definition(s)? c. Is the format appropriate for use with this population? d. What type of bias is possible with self-report instruments? 5. Available data and records: a. Are the records or data sets used appropriate for the research question(s) or hypothesis(es)? b. What sources of bias are possible with use of records or existing data sets? 6. Overall, how was intervention fidelity maintained?
Reliability and Validity (see Chapter 15)	1. Was an appropriate method used to test the reliability of the instrument(s)? 2. Was the reliability of the instrument(s) adequate? 3. Was the appropriate method(s) used to test the validity of the instrument(s)? 4. Have the strengths and weaknesses related to reliability and validity of each instrument been presented? 5. What kinds of threats to internal and external validity are presented as weaknesses in reliability and/or validity? 6. How do the reliability and/or validity affect the strength and quality of evidence provided by the study findings?
Data Analysis (see Chapter 16)	1. Were the descriptive or inferential statistics appropriate to the level of measurement for each variable? 2. Are the inferential statistics appropriate for the type of design, research question(s) or hypothesis(es)? 3. If tables or figures are used, do they meet the following standards? a. They supplement and economize the text. b. They have precise titles and headings. c. They do not repeat the text. 4. Did testing of the research question(s) or hypothesis(es) clearly support or not support each research question or hypothesis?

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