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The clarity and comprehensiveness of the Methods section is an important feature of research that is published in the Journal of Pediatric Psychology (JPP). The second in a series of editorials designed for authors (see Drotar, 2009, Journal of Pediatric Psychology, 34, 1–3 for the first editorial), this article provides suggestions to facilitate authors’ preparation and reviewers’ critique of methods sections. To maximize the quality of their reporting of study methods, authors should also consult the JPP website (www.jpepsy.oxfordjournals.org) and other published sources for additional guidance. (APA, 2001; Brown, 2003; Sifers, Puddy, Warren, & Roberts, 2002)

Provide an Overview of Study Design
To orient readers, it is useful for authors to provide a brief overview of study design and method that addresses key questions such as: how does the study design and method address the primary study question? Is this a descriptive or experimental study? Does the study have cross-sectional or prospective design? If an intervention is reported, is it a randomized or nonrandomized design? How many groups are included? The rationale for the primary research design considerations should be clarified in the study introduction.

Describe the Relationship of the Study to Other Published Reports from the Same Data Set
If study methods are based on a larger study or data set, this should be clearly stated in the cover letter as well as in the methods section. The goals of the larger study and the relationship between the larger study and the manuscript that was submitted should be clearly articulated. Reviewers need to identify the potential overlap and differences between the data that have been previously published, are in press, or under review and that contained in the submitted manuscript. In addition, publications and relevant study methods that have been derived from the larger study should be cited. Authors should deidentify such publications in their manuscript submission by substituting names and/or other identifying information in the text and references with letters (e.g., XXX). Names can be reinserted upon acceptance of the manuscript (see the JPP website for instructions concerning blinding of manuscripts).

Follow Published Standards for Reporting Study Methods
A recent publication (APA Publications and Communications Board Working Group on Journal Article Reporting Standards, 2008) describes standards for methods for the following types of manuscripts: reports of new data collection: studies using random and nonrandom assessment of participants to experimental groups, studies with an experimental manipulation or intervention, and meta-analyses. These standards and guidelines for observational longitudinal research (Tooth, Ware, Bain, Purdie, & Dobson, 2005) and qualitative studies that report interview and focus group data (Tong, Sainsbury & Craig, 2007) provide helpful instruction to authors.

Reporting Treatment Studies
Reporting of the methods of treatment and intervention studies place special demands on authors for clarity and comprehensiveness. Treatment or intervention procedures should be described in detail, including the following: rationale for treatment approach and components; how the treatment was conducted and by whom; how often sessions occurred and session length; methods of evaluating treatment fidelity; and information concerning the availability of treatment manuals. In the event their study is accepted for publication, authors may wish to place their treatment manual and other relevant procedural information on the JPP website to disseminate this information broadly.
Randomized and Nonrandomized Clinical Trials

In accord with the policies established by the Publications and Communications Board of the American Psychological Association, authors should use the Consolidated Standards of Reporting Trials (CONSORT) for studies reporting randomized clinical trials (RCTs) that are submitted to JPP (Begg et al., 1996; Moher, Schultz, & Altman, 2001; Stinson, McGrath & Yamada, 2003). Manuscripts submitted to JPP that report RCTs are required to include a checklist and flow diagram of the progress through the phases of the trial and a checklist (http://www.consortstatement.org/statement revised statement.htm#checklist) that identify where in the manuscript the various criteria are addressed. (The checklist should be placed in an appendix of the manuscript for review purposes.) Other useful guidelines have been developed for nonrandomized designs used to evaluate public health and mental-health interventions: The Transparent Reporting of Evaluations with Nonrandomized Designs (TREND) statement (Des Jarlais, Lyles, Crepaz, & the TREND Group, 2004) (available from http://www.trend-statement.org/asp/statement.asp).

Describe Relevant Human Participant Information and Ethical Considerations

Human participant and ethical issues should be clearly described in study methods. For example, it is very important to include a statement about institutional review board approval and the study’s data safety monitoring board if applicable. Other important human participant issues include informed consent and assent (Range & Cotton, 1995); methods for contacting and compensation received by participants; and procedures for vulnerable populations (e.g., identification and referral of individuals with depression or suicidal ideation) (Drotar et al., 2000; Raad, Bellinger, McCormick, Roberts, & Steele, 2008).

Methods of sampling are not always well described by investigators (Drotar & Riekert, 2000). However, such methods are important to include, especially in light of the frequency of relatively small samples and reliance on convenience samples in pediatric psychology research. Methods of sampling should be described in some depth, including specification of the eligibility or selection and exclusion criteria and rationale for their criteria, how the pool of eligible participants were sampled and participants were identified (e.g., chart review, lists of participants who fit the criteria) (Drotar & Riekert, 2000). Finally, if matching procedures were used, they should be clearly specified along with the rationale for using them.

Describe Study Participants, Nonparticipants, and Methods of Sampling

Demographic Characteristics of Study Participants

Descriptions of study participants in the text and/or tables should contain information concerning the sample size and relevant demographic characteristics (e.g., age, gender, socioeconomic status, race, and ethnicity) for each group that is studied. In addition, it is helpful for descriptions of samples of children with pediatric chronic health conditions to include relevant illness or condition-related characteristics such as duration, severity, and specific medical diagnoses. Finally, as applicable to the research design, demographic or other relevant characteristics of study groups should be compared statistically to identify group differences that could influence and potentially bias findings and may need to be considered in data analyses. The most important characteristics to be compared are those that are correlated with the primary outcomes.

Description of Nonparticipants

It is not uncommon that families of eligible participants refuse participation in pediatric psychology research. Nonparticipating families may differ from participants (e.g., greater family problems) in ways that affect the internal validity and/or generalizability of findings (Riekert & Drotar, 1999). Another source of potential bias involves the differences between study participants and those who were eligible but could not be reached to discuss participation or obtain consent.

In order to help readers understand the potential source of bias in sample participation, investigators should describe the number, percentage, and relevant characteristics (age, gender, etc.) of children from families who could not be contacted or who refused to consent, as well as the reasons for family refusals to participate if they are known. Statistical comparisons of the demographic characteristics of participants versus nonparticipants on relevant variables can help to ascertain sampling bias. Obtaining certain types of health protected information in order to compare characteristics of eligible participants versus nonparticipants is not possible under the Health Insurance and Portability Accountability Act. Nevertheless, study groups can be compared on other applicable characteristics (e.g., age, gender).

Description of Sample Attrition

Sample attrition refers to consented participants who do not complete specific procedures or the study as a whole. The number and reasons for sample attrition should
be summarized (e.g., could not be contacted, refused further participation, etc.). Sample attrition can bias study results because participants who experience greater psychological risk and family burden are more likely to drop out of studies than those who complete them (Drotar & Riekert, 2000). For this reason, investigators should report the results of analyses that compare demographic and other relevant (e.g., illness related) characteristics between participants who complete the study versus those that drop out (Zebracki et al., 2003).

Describe Study Procedures in Detail
Authors need to provide a sufficient level of detail to facilitate readers’ understanding of their study procedures and potential replication by other investigators. In writing their procedures section, authors should put themselves in the place of an investigator colleague who might want to replicate their research and address the question. “What would I need to know if in order to replicate this project?” (e.g., who were the participants? where were they recruited from?; what measures were used?; how, when, and where were they administered?, etc.) (Drotar, 2000).

Authors should describe the dates of study recruitment and data collection and the setting or settings in which participants were recruited and in which procedures were administered. Many of the studies in pediatric psychology involve multiple methods and procedures. For this reason, authors’ descriptions of order of administration of procedures; the timing of data collection for repeated measures or follow-up; how different measures were administered; how data were obtained (e.g., face to face interviews, chart review, etc.); by whom (e.g., research assistants, etc.), and with whom (e.g., mothers, fathers, children); are very important. Methods used to enhance quality of data collection and measurement are also very helpful to report including training given to research assistants and quality control procedures.

Describe Measures and Applicable Psychometric Characteristics
Reviewers and readers need to understand the rationale for the choice of measures, including the role of specific measures in the study design, including how measures relate to the study hypotheses and aims (e.g., primary measures directly related to study hypotheses, secondary measures, or covariates). Applicable information concerning scoring and coding of measures that are not readily in a manual should be reported along with complete references. Reliability (e.g., internal consistency, test-retest, or inter-rater) and validity data that pertain to the application of measures in similar populations should be described.

Authors should clearly indicate whether a measure was created for a specific study and the psychometric properties of the new measure. Moreover, if subscales or components of a measure were selected from a complete measure, the rationale for such selection and the psychometric properties of the subscales for the study sample should be reported. Similarly, if changes in standardized measure were made, these should also be clearly documented with the rationale for the medication and applicable data concerning the reliability and/or validity of the revised measure(s). Finally, if investigators are reporting information concerning a measurement development study or a review article, I recommend that they consult and use the new guidelines for measurement development studies and review articles that are available on the JPP website.

Provide an Overview of the Data Analytic Plan, Sample Size, and Power Considerations
It is very helpful for authors to provide an overview and rationale for their approach to data analysis including data reduction, descriptive analyses, hypothesis testing, and secondary analyses, as relevant. Other relevant statistical issues that are important to include are the intended sample size, how the sample size was described, and the actual sample size (if different from the intended sample size) and whether a priori power analyses were conducted (APA Publications and Communication Board Working Group on Journal Reporting Standards, 2008). Limitations in statistical power continue to be a salient threat to research in pediatric psychology given the small sample sizes that may be recruited.

Use the JPP Website to Provide Relevant Supplementary Material Concerning Study Methods
The associate editors of JPP and I recognize and appreciate that authors face a very difficult challenge in providing comprehensive information concerning study procedures while following guidelines for manuscript length. Information that is applicable to the description of study method (e.g., details concerning measures, treatment procedures, study recruitment, treatment manual, etc.) may not accommodate within the constraints of recommended manuscript length. For this reason, authors might wish to submit detailed information concerning study methods as
supplemental material on the JPP website with their initial manuscript. In addition, in the course of manuscript review authors may be requested by the managing editor to include information from methods as supplemental information on the website in order to reduce text. We are encouraging authors to make greater use of the website to share information concerning their study with other investigators.

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References