Please review all research grant application according to the criteria listed. Please mark an item with an asterisk (*) if you feel that it should be reviewed by someone else. Please use the comment section at the end of the review form to summarize your findings and recommendations.

I. **Research Study Meets PT Fund Guidelines**
   
   A. Is the research study related to physical therapy?
      
      ________ Yes (Continue review)
      
      ________ No (Since the research study is not related to physical therapy, completion of the review is not indicated. Reviewer to include notes to applicant regarding the rationale for rejecting the proposal).
      
   B. Does the review verify that the applicant checked the correct statement in describing the research?
      
      ________ Yes
      
      ________ No (check the statement that you believe best describes the research)
      
      ________ Evaluation of clinical effectiveness of therapeutic methods/devices
      
      ________ Assessment of interaction patient characteristics and therapeutic methods
      
      ________ Determination of accuracy, reliability, or validity of measurement methods/devices
      
      ________ Exploration of scientific basis for methods in physical therapy
      
      ________ Designing/demonstrating/testing of therapeutic methods and devices for use in patient care
      
      ________ Designing/demonstrating/testing of instructional methods/materials for improvement of physical therapist or physical therapist assistant educational programs or patient, family and public education
      
      ________ Descriptive research
      
      ________ Application of basic science to clinical intervention or methods
      
      ________ Other (explanation required)
II. Abstract

_________ (0-1) A. The abstract contains 500 words or less
        B. The abstract includes the following:
        __________ (0-1) 1. Brief background statement
        __________ (0-1) 2. Overall purpose of the study
        __________ (0-1) 3. Number of subjects/groups
        __________ (0-1) 4. Summary of procedures
        __________ (0-1) 5. Statistical tests used
        __________ (0-1) 6. Expected results
        __________ (0-1) 7. Relevance of study and implications for physical therapy practice
        __________ (0-1) C. The abstract is clearly written and in the appropriate form

_________ of __________ Total for Abstract section (Section II)

No minimum score required for Abstract section (Section II)

Comments:
III. Introduction

A. Rationale and Background

1. Theoretical rationale is logical, appropriate for current research and presented clearly

2. Background material comprehensive and well organized

3. Preliminary research in literature supports proposed research study or pilot studies have been carried out by authors in preparation for research study

4. Relevance to and impact of findings on practice of physical therapy outlined clearly

B. Objectives or Purpose of Research Study

1. Overall purpose of the study clearly stated and understandable

2. Specific objective/aims/hypotheses stated in measurable terms

3. Objectives/aims/hypotheses/expected results stated in sufficient detail for testing

4. Achievement of objectives will result in new valid information

Total for Introduction section (Section III)

Minimum score required for Introduction section (Section III) = 34/48 = 70%
(If < 34, do not approve, but continue review)

Section approved
Section approved with contingencies
Section not approved

Comments/Contingencies:
Rating Scale (Section IV)
NA = not applicable
0 = no information provided
1 = serious weakness; needs major revision
2 = some questions/problems; revisions needed
3 = minor problems with clarification required (contingent approval)
4 = minor problems; problems will not impact the quality of the study
5 = good, complete
6 = exceptional

IV. Methods

A. General
   _________ (0-6) 1. The methods are clearly presented and outlined
   _________ (0-6) 2. The methods are appropriate for the purpose/objectives/aims/hypotheses

B. Specific
   1. Research design and data analysis
      _________ (0-6) a. Research design is clearly summarized and appropriate for objectives, number of subjects, time, cost, etc.
      _________ (0-6) b. Dependent variables clearly identified
      _________ (0-6) c. Dependent variables measured objectively
      _________ (0-6) d. Design controls for confounding variables (e.g. control group, subject own control, random selection subjects, random assignment, blinding, subject history, subject maturation, learning)
   2. Subjects
      _________ (0-6) a. Selection and recruitment process described and reasonable
      _________ (0-6) b. Inclusionary and exclusionary criteria provided and appropriate
      _________ (0-6) c. Discussion of the potential for the research study to find statistically significant differences (e.g. sample size, effect size, are the instruments and statistical analyses sensitive enough to measure change, power)
      _________ (0-6) d. Number of subjects reasonable
      _________ (0-6) e. Method for handling dropouts outlined
      _________ (0-6) f. Assignment to treatment/control groups indicated

Section IV continued on the following page
Methods (continued)

3. Instruments and Measurements
   _________ (0-6) a. Clearly described and/or included
   _________ (0-6) b. Reliability information provided
   _________ (0-6) c. Evidence of validity provided
   _________ (0-6) d. Dependent variable is clearly related to the instruments and measures

4. Procedures
   _________ (0-6) a. Informed consent processes described
   _________ (0-6) b. Procedures clarified adequately so experiment could be repeated
   _________ (0-6) c. Procedures follow logical sequence
   _________ (0-6) d. Procedures are appropriate for objectives/aims
   _________ (0-6) e. Procedures are appropriate for hypotheses to be tested

5. Project Period
   _________ (0-6) a. Project period clearly outlined and reasonable

    _______ of _________ Total for Methods section (Section IV)

Minimum score required for Methods section (Section IV) = 92/132 = 70%
(If < 92, do not approve, but continue review)

_________ Section approved
_________ Section approved with contingencies
_________ Section not approved

Comments/Contingencies:
Rating Scales (Section V)

For 0-2 rated items: For 0-6 rated items:

0 = none NA = not applicable
1 = partial 0 = no information provided
2 = full 1 = serious weakness; needs major revision
          2 = some questions/problems; revisions needed
          3 = minor problems with clarification required (contingent approval)
          4 = minor problems; problems will not impact the quality of the study
          5 = good, complete
          6 = exceptional

V. Statistical Analysis

A. Experimental research (clinical or basic)

__________ (0-2) 1. Dependent variables adequately described

__________ (0-2) 2. Statistical tests adequately described

__________ (0-2) 3. Decision rule for accepting/rejecting hypotheses provided (Type I error).
          Experimentwise error addressed (or multiple testing)

__________ (0-2) 4. Statistical tests are based on the type of dependent variables (ratio, ordinal,
          nominal), number of subjects, and the expected distribution of the dependent
          variables

__________ (0-2) 5. Power analysis completed

__________ (0-6)  6. Planned statistical analysis is appropriate to adequately test hypotheses

OR

B. Descriptive, educational, evaluative, or administrative research

__________ (0-2) 1. Evaluation format clearly presented

__________ (0-2) 2. Evaluation directly related to objectives

__________ (0-2) 3. Statistical tests adequately described

__________ (0-2) 4. Evaluation instruments included to provide clarity

__________ (0-2) 5. Evaluation instruments have confirmed reliability and validity

__________ (0-6)  6. Statistical methods for analyzing results are appropriate

Section V continued on the following page
Minimum score required for Statistical Analysis section (Section V) = 11/16 = 70%
(If < 11, do not approve, but continue review)

Section approved

Section approved with contingencies
(For example, if line 6 < 3, then proposed statistical methodology may adversely impact the study and should be corrected)

Section not approved

Comments/Contingencies:

Rating Scale (Section VI)
0 = no information provided
1 = serious weakness; needs major revision
2 = minor problems with clarification required (contingent approval)
3 = minor problems; problems will not impact the quality of the study
4 = good, complete

VI. References

Reference list comprehensive/appropriate and in acceptable format

Total for References section (Section VI)

No minimum score required for References section (Section VI)

Comments/Contingencies:
Rating Scale (Section VII)
NA = not applicable
0 = no information provided
1 = serious weakness; needs major revision
2 = some questions/problems; revisions needed
3 = minor problems with clarification required (contingent approval)
4 = minor problems; problems will not impact the quality of the study
5 = good, complete
6 = exceptional

VII. Budget

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_________ of __________  Total for Budget section

No minimum score required for Budget section (Section VII)
Contingencies or revisions requested by reviewer:

Comments regarding items that may not be fundable or not recommended for funding:
VIII. Principal Investigator Has Previous Research Experience

__________ Yes
__________ No

If no, is the investigator collaborating with an experienced investigator?

__________ Yes, letter from experienced investigator is enclosed
__________ No

If no, do not approve, but continue review

No minimum score required for Research Experience section (Section VIII)
Note: If the principal investigator is new to research, a qualified mentor/investigator is required. Approval may be made contingent upon receipt of a letter of support and guidance from the mentor.

Comments:
IX. Mechanics and Flow

1. Format is appropriate; technical terms are adequately defined
2. Grammar, syntax and spelling are adequate; overall flow is logical

_________ of __________  Total for Mechanics and Flow section (Section IX)

No minimum score required for Mechanics and Flow section (Section IX)

Comments:

X. Potential Contribution to Physical Therapy Practice

Mark on the lines your assessment of the study’s potential contribution to the field. Convert your linear assessment to a numerical score.

0 5 10
Support physical therapy body of knowledge

0 5 10
Relevance to physical therapy practice

0 5 10
Publishable Study

_________ of __________  Total for Potential Contribution section (Section X)

No minimum score required for Potential Contribution section (Section X)

Comments:
XI. Human Subjects

A. Are human subjects to be included?
   ________ Yes
   ________ No

B. Is IRB committee approval *enclosed*?
   ________ Yes
   ________ No

C. Is IRB committee approval *pending*?
   ________ Yes
   ________ No

XII. Animal Subjects

A. Are animal subjects to be included?
   ________ Yes
   ________ No

B. Is IRB committee approval *enclosed*?
   ________ Yes
   ________ No

C. Is IRB committee approval *pending*?
   ________ Yes
   ________ No

No minimum score required for Subjects sections (Sections XI and XII)
Note that final approval is contingent upon IRB approval.
Comments:
XIII. Multiple-Site Studies

A. Is this a study involving multiple research sites/facilities?
   ______ No (no further question in this section)
   ______ Yes (list the research sites and complete section B below)
   1. _______________________________________________
   2. _______________________________________________
   3. _______________________________________________
   4. _______________________________________________
   5. _______________________________________________

B. Have all of the research sites/facilities approved the proposal?
   ______ Yes (IRB approval from each participating site is attached)
   ______ No (approved with contingencies)

No minimum score required for Multiple Site section (Section XIII)
Note that final approval is contingent upon IRB approval.
Comments/Contingencies:
Transfer scores to the table below. Check off approval levels.

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Comments for the Applicant

Strengths of Proposal

Weaknesses of Proposal/Questions

Contingencies if Approved

Recommendations for Further Review

________________________________________
Signature  Date