NATA Research & Education Foundation

Free Communications Abstract Submission - Peer Reviewed Track Instructions

Instructions for Abstract Preparation and Submission

Please read all instructions before preparing and submitting the abstract. Individuals may submit only one Original Research Abstract or Clinical Case Study Abstract as the primary (presenting) author, but may submit unlimited abstracts as a secondary author.

Original Research abstracts must be written to the accepted scientific standards of a research area and should present findings pertaining to healthcare issues related to the athletic training profession. The Clinical Case Study Abstract should present a unique individual athletic injury case of general interest to the NATA membership.

Formatting Instructions

- It is recommended you prepare your abstract in a word processing program in accordance with the following instructions. You will later copy/paste the text into corresponding online fields in the Abstract Manager system.
- The body of the abstract for Original Research is limited to 450 words. The body of the abstract for a Clinical Case Study is limited to 600 words.
- Each abstract is carefully reviewed for scientific merit, methodologic quality, innovation and impact on the practice of athletic training and considered for inclusion in our free communications program. Abstracts should always contain detailed results that directly address the research question and support the stated conclusions.
- Abstracts fall into one of the 6 categories (Basic Research, Survey Research, Meta-analyses & Systematic Reviews, Qualitative Research, Level 1-3 Clinical Case studies and Level 4 Clinical Case studies; the author is responsible for determining the most applicable category for structuring their abstract. Authors should choose the format that seems to best fit your study.
- See formatting guidelines and suggested content in the examples below

Review Criteria for All Original Research Abstracts:

- Completeness of requested information in each structured heading.
- Overall clarity of writing
- Originality of research and or contribution to the literature or knowledgebase
- Methods and results address the primary objective
- Consistency between purpose, results and conclusions
- Adequacy of sample size to support conclusions
- For case reports: Uniqueness of case to the practice of athletic training

Abstract Preparation Guidelines:

1. Basic Research

- Basic Sciences (e.g. muscle tissue biopsy, EMG, etc)
- Epidemiology (e.g. cohort, case-control, intervention, clinical trial)
- Biomechanics (e.g. motion analysis, jump landing characteristics)

Context	Write a sentence or two summarizing the rationale for the study, providing a reason for the study question and/or uniqueness of study. Finish by stating the precise objective(s) or question(s) addressed in the abstract, including hypotheses if applicable
Methods	Please describe succinctly the methods of the study performed (you do not need to include any additional sub-headings). The following should be included (where applicable): Study design (Clinical trial, cohort, cross-section, controlled laboratory study, etc) and setting, patient population (include appropriate data for age, height, mass, time from surgery, etc); Intervention (where applicable), outcome measures (including specific units of measure where appropriate), data processing, statistical analyses and other appropriate information needed to evaluate the scientific quality of your abstract. Exact P-values are required but should be reported to support data. For examples - means/standard deviations reported with associated P-value.
Results	The main results of the study should be given. Comparative reports must include descriptive data (e.g., proportions, means, rates, odds ratios or correlations), accompanying measures of dispersion (e.g., ranges, standard deviations or confidence intervals) and inferential statistical data. Where appropriate, results should be accompanied by the exact level of statistical significance.
Conclusions	Summarize or emphasize the new and important findings of the study. The conclusion must be consistent with the study objectives and results as reported and should be no more than three to four sentences. If possible, relate implications of the findings for clinical practice.

2. Survey Research

- Instrument development (e.g. validation and reliability, psychometrics)
- Cross-sectional survey (e.g. paper, web-based, or interview questionnaires)

Survey Research	Context	Write a sentence or two summarizing the rationale for the study, providing a reason for the study question and/or uniqueness of study. Finish by stating the precise objective(s) or question(s) addressed in the abstract, including hypotheses if applicable
Survey Research	Methods	Please describe succinctly the methods of the study performed (you do not need to include any additional sub-headings). Describe the overall study design of the project reported (e.g., cross sectional, case-control, longitudinal or controlled intervention trial). Describe the environment of the study and relevant information to determine transferability of the findings. Describe the target population, sample selection procedures (ie population based, convenience sample, random sample, etc.) and important aspects of the final subject pool (i.e., number, average age, years of experience or gender) including final response rate. Clearly identify variables that support the objectives, all instruments used, relevant accuracy/reliability information and any data manipulation. Clearly identify statistical analyses.
Survey Research	Results	The main results of the study should be given. Reports must* include descriptive data (e.g., proportions, means, rates, odds ratios or correlations), accompanying measures of dispersion (e.g., ranges, standard deviations or confidence intervals) and inferential statistical data. Where appropriate, results should be accompanied by the exact level of statistical significance.
Survey Research	Conclusions	Summarize or emphasize the new and important findings of the study and relate implications of the findings for clinical practice. The statement of your findings must be consistent with the results as reported and should be no more than three to four sentences.

3. Meta-Analysis Research & Systematic Reviews

- Meta-analysis (e.g. review and analysis of ACL clinical trials)
- Systematic Review (e.g. review of all clinical trials of the ACL without analysis)

Context	Write a sentence or two summarizing the rationale for the study, providing a reason for the study question and/or uniqueness of study. Finish by stating the precise objective(s) or question(s) addressed in the abstract, including hypotheses if applicable
Methods	Please describe succinctly the methods of the study performed (you do not need to include any additional sub-headings). Tis section should identify method of selecting papers included in the study (including search databases, timeframe, key words, limits, where appropriate) and how those studies were evaluated for quality of design. Describe which variables were extracted and how those data were obtained.
Results	Provide a succinct representation of the findings of the review that support the primary objective(s) of the study. Point estimates and measures of dispersion should be included with associated statistical results where appropriate.
Conclusions	Summarize or emphasize the new and important findings of the study and relate implications of the findings for future research and/or for clinical practice and offer an indication as to the strength of the evidence provided. The statement of your findings must be consistent with the results as reported.

4. Qualitative Research

- Research using qualitative techniques (e.g. interviews or direct observation, etc)

Context	Write a sentence or two summarizing the rationale for the study, providing a reason for the study question and/or uniqueness of study. Finish by stating the precise objective(s) or question(s) addressed in the abstract, including hypotheses if applicable
Methods	Please describe succinctly the methods of the study performed (you do not need to include any additional sub-headings). This section should clearly identify the study design (case study, phenomenology, grounded theory, etc) and describe the environment in which the study was conducted to allow reviewers to understand transferability of the findings. Describe the target population and selection procedures and important aspects to describe the final subject pool. Sampling methods (theoretical sampling , criterion sampling) should be described and justify the number of participants (data saturation, etc). Describe methods of data collection, management and analysis. Where appropriate describe agreement and verification for data collection and analyses as well as any verification strategies.
Results	A short descriptive account of the case or the interpretation of the findings should be provided. This should include identifying and briefly explaining the emergent categories of themes.
Conclusions	Summarize or emphasize the new and important findings of the study and relate implications of the findings for future research and/or for clinical practice. The statement of your findings must be consistent with the results as reported and should be no more than five sentences.

Clinical Case Study Abstracts

- Report of a Single Patient Case (e.g. snake bites football player)

Format For Clinical Case Study Abstracts

NOTE: All clinical case report abstracts submitted to Free Communications must have permission of the patient prior to submission.

CASE Study abstract guidelines update

As of August 2017 the CASE (Contributing to the Available Sources of Evidence) study guidelines have been revised to be more inclusive of both evidence-based and practice-based evidence. Drawing from recent publications,[1-4] there are now four types of CASE study abstracts. Levels 1-3 are submitted in one format and Level 4 is submitted in a different format.

Table. Comparison of types of CASE report/study based on terminology and research design

Traditional Terminology	New Terminology*	Abstract Format (see guidelines on following pages)
Case Study	Level 1 Validation CASE Study	Level 1-3 Clinical CASE Study Abstract Guidelines
Case Study	Level 2 Exploration CASE Study/Series	Level 1-3 Clinical CASE Study Abstract Guidelines
Case Study	Level 3 Exploration CASE Study/Series	Level 1-3 Clinical CASE Study Abstract Guidelines
Case Report	Level 4 Rare Events CASE Study	Level 4 Clinical CASE Study Abstract Guidelines

*The level of the clinical case should be indicated in the abstract body and/or title to facilitate the review process.

Authors are encouraged to review the following references to determine the Level of case study they are submitting:

1. McKeon JMM, King MA, McKeon PO. Clinical Contributions to the Available Sources of Evidence (CASE) Reports: Executive Summary. *J Athl Train*. 2016;51(7):581.
2. McKeon JMM, McKeon PO. Evidence-based practice or practice-based evidence: what's in a name? *Int J Athl Ther Train*. 2016;21(1):1-3.
3. McKeon JMM, McKeon PO. New year, a new set of guidelines for making clinical contributions to the available sources of evidence. *Int J Athl Ther Train*. 2016;21(1):1-3.
4. McKeon JMM, McKeon PO. Building a case for case studies. *Int J Athl Ther Train*. 2015;20(5):1-5.

5. Level 1-3 Clinical CASE Study Abstract Guidelines

Background: Provide an overview of the condition of interest using available evidence, where appropriate. Indicate the level of the clinical CASE Study. For a Level 1 validation CASE study, the authors should provide a clear description of the previously reported comparison study and highlight the most important findings. For Level 2 & 3 exploration case studies/series, introduce the alternate, unique, or irregular presentation of the case examined compared to the available evidence.

Patient: Present the clinical case(s), including primary patient characteristics (age, sex, sport if appropriate, sport or activity, and years of experience) and diagnosis. For a case series, describe the underlying target population with measures of means and variance and important aspects of the subject pool. Pertinent aspects of the medical history should be included. Describe their complaints, MOI, initial clinical examination, diagnostic imaging, lab tests, and their commonality (examples: characteristic, injury, postural/gait abnormality, pathology, MOI). Describe the process that led to the diagnosis of the condition.

Intervention or Treatment: Describe the management of the case, interventions used, the timeline for progression to final resolution in the case, and the specific time points when treatment was provided. Relevant and unique details should be included. For level 2 or 3 case studies/series, compare and contrast the interventions used with the typical presentation of the condition as described in the literature.

Outcomes or other Comparisons: Describe the primary outcomes or results of the case. For Level 1 CASE studies, compare and contrast the outcome from the current case to the outcome of the previously reported comparison study. Compare / contrast the outcomes used in the Level 2 or Level 3 Exploration CASE Studies / CASE Series with the typical presentation of the condition as previously described. For Case Series, report whether all patients responded similarly to each other. For this, it is important to ensure that similar outcome measures were used.

Conclusions: Interpret the findings of the study. For Level 1 CASE studies, discuss the current case in the context with the previously reported comparison study including the similarities and differences in the patient and outcomes. Discuss challenges associated with implementing the intervention from the comparison study “in real life” and provide recommendations for continued use of the assessment or intervention. For Level 2 & 3 case studies/series, discuss the challenges associated with the case due to the atypical presentation and provide recommendations for clinical practice.

Clinical Bottom Line: Provide an overall statement of the most important clinical points that can be gleaned from the current CASE study.

Word count: 600

6. Level 4 Clinical CASE Study Abstract Guidelines

Background: Include the individual's age, sex, sport or activity, pertinent aspects of their medical history, a brief history of their complaint and physical findings from the athletic trainer's examination.

Differential Diagnosis: Include all possible diagnoses suspected based on the history, mechanism of injury, and the initial clinical examination prior to physician evaluation and subsequent diagnostic imaging and laboratory tests.

Treatment: Include the physician's evaluation and state the results of diagnostic imaging and laboratory results if performed. The final diagnosis of the injury or condition and subsequent treatment and clinical course followed should be clearly detailed. Relevant and unique details should be included, as well as the final outcome of the case.

Uniqueness: Briefly describe the uniqueness of this case such as its mechanism, incidence rate, evaluate findings, rehabilitation, or predisposing factors.

Conclusions: Include a concise summary of the case as reported and highlight the case's importance to the athletic training profession and provide the reader with a clinical learning opportunity.

Word Count: Limited to 600 words including headings.

Acceptable Abbreviations

ACL	Anterior Cruciate Ligament
ADL	Activities of Daily Living
AROM	Active Range of Motion
BESS	Balance Error Scoring System
BOC	Board of Certification
CAATE	Commission on Accreditation of Athletic Training Education
CAI	Chronic Ankle Instability
CNS	Central Nervous System
CT	Computed Tomography
DVT	Deep Vein Thrombosis
EMG	Electromyography
FMS	Functional Movement Screen
HRQL	Health Related Quality of Life
LCL	Lateral Collateral Ligament
LESS	Landing Error Scoring System
MCL	Medial Collateral Ligament
MRI	Magnetic Resonance Imaging
NWB	Non-Weight Bearing
PCL	Posterior Cruciate Ligament
PFP	Patellofemoral Pain
ROM	Range of Motion
RROM	Resistive Range of Motion
SEBT	Star Excursion Scoring System

COMMON REASONS FOR REJECTION OF ORIGINAL RESEARCH ABSTRACTS

- Fatal flaw in design or methods
- Significance/importance of research not established
- Information requested within structured heading is not provided
- The abstract is of a pilot study or preliminary data
- Poor overall clarity of writing with spelling errors and grammatical errors
- Unclear specific aim(s) or objective(s)
- Data does not match/support specific aim and/or conclusion
- Lack of operational definitions of primary independent and dependent variables
- Necessary definitions are excluded: of groups (e.g., training vs. non), conditions (e.g., fatigue, DOMS), variables (e.g., TTS, EMG onset, etc.)
- Missing relevant demographic data describing the subjects, including number of subjects
- Methods used do not address specific aim or objectives
- No data in the results section
- No information on survey development process and available psychometric data
- Validity and/or reliability of instrument not established
- Poor or no description of sampling methods
- No description of statistical tests used
- Inappropriate use of statistics
- No presentation of measures of dispersion (variance, standard deviation, confidence intervals, etc.) associated with results
- No specific identification of the dependent variable(s) measured: e.g., what EMG, kinematics, kinetic variables exactly (values/labels would be very beneficial)
- No description of how dependent variable(s) were measured: e.g., scapula ROM, how they trained, how they loaded the extremity, etc.
- Results don't include statistical results (where appropriate) including specific p-values or direction of differences (ie which group was better, worse; higher or lower)
- Inaccurate conclusion or clinical relevance of data
- Inaccurate depiction of the degree of generalizability of the data
- Research not unique, novel or impactful to the practice of athletic training

COMMON REASONS FOR REJECTION OF CLINICAL CASE REPORT ABSTRACTS

- Information requested within structured heading is not provided
- Poor overall clarity of writing
- Case report not unique
- Case report mismanaged within accepted standard of care
- Incomplete conclusion to the case report, a final outcome is not provided
- Role of ATC not clearly identified in the case report
- Differential diagnosis is incomplete or incorrect format
- No final diagnosis is provided in the case
- No indication patient gave consent to report this case
- Injury progression is chronologically confusing