Formatting documents in APA style (6th Edition) with the apa6 LATEX class*

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Abstract

The *Publication Manual* of the American Psychological Association is widely used in the social sciences. The most recent update, in 2009, altered the formatting guidelines and therefore rendered existing formatting solutions inadequate. The **apa6** class is an update of older code from the **apa** class, which is no longer being maintained. New features have also been added, such as suppressing references to one's own work to facilitate masked reviews of manuscripts by independent reviewers.

1 Background

Most journals in the social sciences require manuscripts to be formatted in compliance with the American Psychological Association's *Publication Manual*, which is updated periodically. The 6th Edition, released in 2009, substantially changed the guidelines for formatting manuscripts; these modifications rendered existing formatting solutions (e.g., the apa IATEX class) inadequate for venues in which 6th Edition guidelines are being enforced. The apa6 class solves this problem, and provides some new functionality not offered by the apa class.

2 Disclaimer

Great care has been taken to ensure the closest possible match between APA requirements and the output of this class. However, it is the sole responsibility of the user to ensure compliance with specific journal submission requirements!

^{*}This file describes version 1.02, last revised 2011/12/01.

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3 Usage

3.1 Class Options

When loading apa6 with $\commentclass[\langle options \rangle]$ {apa6}, the following options are available.

Document mode: Three choices are available.

jou	• jou (default): Formats the document with an appearance resembling a
	printed APA journal (e.g., Journal of Educational Psychology. The text
	is typeset in two-sided, two-column format.

- man: Formats the document in close (if not complete) compliance with the requirements for submission to an APA journal (e.g., title page, double-spacing, etc.).
- doc: Formats the document as a typical LATEX document (one-sided, singlecolumn, etc.)

Other class options:

- babel: In all modes, loads babel; the desired language(s) are listed as options immediately following babel; the last language listed is the main one.
- 10pt 10pt: Typesets the document in 10-point font.
- 11pt 11pt Typesets the document in 11-point font.
- 12pt 12pt Typesets the document in 12-point font.
- floatsintext: In man mode, integrates floats (tables and figures) within the body of the text instead of postponing them until after the reference list.
 - biblatex: Loads the biblatex package; see Section 6.5.1 for details.
 - **apacite apacite**: Loads the **apacite** package; see Section 6.5.2 for details.
 - **natbib natbib**: See Section 6.5.3 for details.

mask

- mask: Masks references that are marked as the author's own (for masked peer review); see Section 6.1 for details.
- longtable
 longtable: If you *must* use long tables (exceeding one page in length), try this option (but it may not work in all contexts). Do *not* load longtable yourself because of precedence requirements with the endfloat package. Copy the file APAendfloat.cfg from the "config" folder of your apa installation to the working folder of your document (not in your texmf tree), and rename it to endfloat.cfg so that endfloat will recognize it. The supplied APAendfloat.cfg file will also be necessary in conjunction with rotating package (and its \sideways command) to produce rotated tables.

notxfonts	• notxfonts: In jou mode, prevents txfonts from loading, in case pslatex or times is preferable for some reason.
notimes	• notimes: In jou mode, cancels loading txfonts or pslatex or times and uses Computer Modern instead.
notab	• notab: In jou mode, cancels the automatic stretching of tabular environments to the width of their enclosing float.
helv	• helv: In man mode, uses Helvetica font instead of Computer Modern.
nosf	• nosf: In man mode, neutralizes the \helvetica command.
tt	• tt: In man mode, uses typewriter-like font.
draftfirst	• draftfirst: In all modes, places the word "DRAFT" as a watermark across the first page.
draftall	• draftall: In all modes, places the word "DRAFT" as a watermark across all pages.

Class options not handled by apa6 (e.g., draft) will be passed on to the article class.

3.2**Document Preamble**

The following commands are available within the document preamble (i.e., the part of the file preceding \begin{document}).

- \title{\(document-title\)}: The title of the document \title
- \shorttitle
- \shorttitle{*short-title*}: A shortened version of the title (for page headers)
- \author{*(author(s)*}: Author name(s) \author

For authors across multiple affiliations, follow these formats, noting that authors must be matched in sequence with their affiliations in the *\affiliation* command (hence multiple authors inside some braces represent multiple authors from the same institution):

```
\twoauthors{First Author(s)}{Second Author(s)}
\threeauthors{John and Jim}{Mary and Sue}{Nick}
\fourauthors{Helen}{Dick}{Tracy and Larry}{James Bond}
fiveauthors{...}{...}{...}{...}{...}
```

- \leftheader{(*author-last-name(s)*)}: Author last name(s) (for even-page \leftheader headers in jou mode)
- \affiliation{(*affiliation(s)*}: Author affiliation(s) \affiliation

	<pre>For multiple affiliations, follow these formats: \twoaffiliations{Affil. of 1st Author(s)}{Affil. 2nd Author(s)} \threeaffiliations{U of A}{U of B}{U of C} \fouraffiliations{My Company}{Your Department}{Heaven}{Earth} {}{}{} {}{}</pre>
\abstract	• \abstract{\abstract-text\}: The abstract of the article
\keywords	• $\ensuremath{\scale{keywords}}$: Keywords (typeset after the abstract)
\authornote	• \authornote{\author-note\}: The Author Note, containing contact infor- mation, acknowledgements, etc.
	Optional; use if desired:
\note	• \note{(<i>note-text</i>)}: Notation of manuscript date or other information desired beneath the affiliation line
\journal	• \journal{(journal-name)}: Journal name or other note; typeset in the top left header of page 1 (jou and doc modes only)
\volume	• \volume{(journal-volume)}: Volume, number, pages; typeset in the top left header in jou and doc modes, underneath the content of \journal
∖ссорру	• \ccoppy{(copright-notice)}: Copyright notice, etc.; typeset in the top right header of page 1 (jou and doc modes only)
\copnum	• \copnum{(more-copyright-info)}: Any additional text needed; typeset in the top right header in jou and doc modes, underneath the content of \ccoppy

3.3 Maketitle

\maketitle The \maketitle command formats the document title, page headers, author list, author affiliations, Author Note (if provided), abstract according to whether jou, man, or doc mode has been specified. This command should be on the line after \begin{document}, with the first line of text immediately following the \maketitle line (no blank lines).

3.4 Heading Levels

Heading levels are automatically formatted using the following standard LATEX commands:

\section • \section{ $\langle title \rangle$ }

\subsection

• \subsection{ $\langle title \rangle$ }

 \subsubsection

• \subsubsection{ $\langle title \rangle$ }

paragraph $paragraph{{title}}$

```
\subparagraph
```

• $\subparagraph{\langle title \rangle}$

Don't bother to **\label** your sections because they cannot be **\ref**'d since APA style does not use numbered sections.

3.5 Enumeration

Several forms of enumeration are provided, as follows.

	Several forms of enumeration are provided, as follows.
<pre>\begin{seriate} \end{seriate}</pre>	<pre>Blah blah \begin{seriate} \item first item, \item second item. \end{seriate} Blah blah</pre>
	results in:
	Blah blah blah (a) first item, (b) second item. Blah blah blah
\begin{APAenumerate} \end{APAenumerate}	<pre>Blah blah \begin{APAenumerate} \item first item continue continue \item second item continue continue \end{APAenumerate} Blah blah</pre>
	results in:
	<pre>Blah blah 1. first item continue continue 2. second item continue continue Blah blah</pre>
<pre>\begin{APAitemize} \end{APAitemize}</pre>	<pre>Blah blah blah \begin{APAitemize} \item first item continue continue \item second item continue continue \end{APAitemize} Blah blah blah results in:</pre>
	icourto m.

Blah blah blah
 o first item
continue continue
 o second item
continue continue
Blah blah blah

3.6 Other Macros

\centeredcaption	• \centeredcaption{ $\langle width \rangle$ }{ $\langle caption-text \rangle$ }: Used with double-column figures to create centered captions narrower than \textwidth
<pre>\begin{figure*} \end{figure*}</pre>	• When a figure is too wide for a single column (in jou mode), use \begin{figure*} and \end{figure*} instead of the non-starred version. When using double-column figures (jou mode), it looks better if you use \centeredcaption instead of \caption, with the first parameter about equal to the width of the float (table or figure).
\fitfigure	• \fitfigure[(<i>height</i>)]{(<i>eps-filename</i>)}: Automatically fit a postscript figure; use instead of \includegraphics
\fitbitmap	• \fitbitmap[(<i>height</i>)]{(<i>eps-filename</i>)}: Same as \fitfigure but won't scale figure in \man mode for best reproduction of bitmap figures
\tabfnm	• \tabfnm{a}: Place a superscript footnote mark inside a table cell. Any series of unique identifiers can be used in place of a.
\tabfnt	• \tabfnt{a}{\footnote-text}: Within table footnotes, specify the footnote text for \tabfnm{a}
\apavector	• \apavector{ $\langle symbol \rangle$ }: Format the { $\langle symbol \rangle$ } as a vector by APA rules
	3.7 Appendices
\appendix	• \appendix: Begins the appendices portion of the document
\section	• \section{{appendix-title}}: Begins each appendix
	Because appendices are numbered (with letters!) you may establish a label

Because appendices are numbered (with letters!) you may establish a label for each appendix (e.g., \label{app:xxx}); when there is more than one appendix, use Appendix~\ref{app:xxx} within the main body of the text to refer to that appendix. (Of course, if there is only one appendix, simply refer to it as the Appendix.)

4 Known Restrictions

- There is a limit of six affiliations for authors (but an unlimited number of authors across those six affiliations).
- No support for A4 paper. However, the following workaround (from the apa documentation)may work:

```
\ifapamodeman{\setlength{\textwidth}{5.76772in}%
\setlength{\textheight}{9.19291in}}{}
```

5 Development of apa6

The base code for this class is the apa class, which in turn was based upon other sources. In order to comply with 6th Edition criteria, certain changes had to be made to update the apa code.

5.1 Section Headings

Most prominently, the formatting of section headings had to be altered. The 6th Edition specifies a more straightforward series of heading levels than previous editions did. Briefly, the top-level heading is now boldfaced and centered, upperand lower-case, no matter now many levels of heading are in the document; other heading levels have similar specifications. The **apa6** class utilizes code (with permission) from the **apa6e** class to comply with all of these specifications.

5.2 Float Placement

The placement of floats (i.e., tables and figures) within an APA-style manuscript has also changed. The 6th Edition requires that tables and figures (in that order) be placed after the references but before the appendices. This creates a bit of a conundrum as to what should happen with tables or figures that are ultimately typeset within an appendix. The choices we are left with are to place appendix floats (a) along with the floats from the main part of the manuscript, which would mean that appendix floats appear prior to the point at which they are mentioned; (b) within the appendices themselves, which is not consistent with how floats in the main part of the manuscript are handled; or (c) in a separate float section that follows the appendices, which results in two float sections. Obviously none of these choices is satisfactory, so I posed the question to APA's Style Expert. He responded that at least for APA's journals "it doesn't matter whether appendix tables are submitted with text tables or separately, as long as they are numbered correctly (e.g., Table A1, Table B1, etc.)" (J. Hume-Pratuch, personal communication, June 15, 2011). Therefore, apa6 takes the most straightforward approach and includes all appendix floats within the body of the relevant appendix. This also has the advantage of making appendices more readable.

Because the 6th Edition requires figure captions to be printed on the same page as their respective figures, there are no more Figure Captions pages.

5.3 Author Note

According to 6th Edition guidelines, Author Notes are placed on the title page of manuscripts.

6 New features

mask

In addition to providing compatibility with the 6th Edition of the *Manual*, several new features have been implemented beyond those available in the apa class.

6.1 Masked References

When manuscripts are sent out for review, they customarily must have all identifying information stripped so that reviewers do not know who the author of the manuscript is. The new mask option suppresses the output of the author's name and affiliation, the author note, and any references that are marked as being the author's own.

Unmasked Result	Masking Commands			
	apacite	natbib	biblatex	
(van Dijk, 2001)	\maskcite	\maskcitep	\maskparencite	
(Van Dijk, 2001)		\maskCitep	\maskParencite	
van Dijk, 2001	\maskciteNP	\maskcitealp	\maskcite	
Van Dijk, 2001		\maskCitealp	\maskCite	
van Dijk (2001)	\maskciteA	\maskcitet	\masktextcite	
Van Dijk (2001)		\maskCitet	\maskTextcite	
van Dijk	maskciteauthor	\maskciteauthor	\maskciteauthor	
Van Dijk		\maskCiteauthor	\maskCiteauthor	
(2001)	\maskciteyear	\maskciteyearpar		
2001	\maskciteyearNP	\maskciteyear	\maskciteyear	

Table 1: Supported masking commands

To specify a reference that is to be masked with the mask option, simply prepend mask to the desired citation command (e.g., \maskcite instead of \cite). Supported bibliography packages are biblatex, apacite, and natbib. The specific masking commands are shown in Table 1. Prenotes and postnotes for citations are supported with both biblatex and natbib; however, they are not supported with the apacite package.

To mask citations that have been prepended with mask (and the corresponding bibliography entries), the name of the bibliography package must also be passed in as an option on the \documentclass line, in addition to the mask option. For example, \documentclass[jou,biblatex,mask]{apa6}. (But as explained later, the biblatex option is the default and is therefore not required, even with the mask option.)

8

Be warned, however, that if you have previously generated .bbl, etc., files without the mask option applied, those files must be deleted before LATEX-ing with the mask option—otherwise, you will see the to-be-masked entries showing up in the bibliography.

Masked citations are replaced with the text, (2 citations removed for masked review) (in the case of two masked citations). The corresponding entries in the References section are also suppressed.

There is no need to revise the masked citations when removing the **mask** option for final production. The citations that were previously masked will not be masked in the absence of the **mask** option.

6.2 Repositioned Floats

When revising and proofreading a manuscript, it is most helpful to have the tables and figures readily available (rather than turning most of the way to the end of the manuscript to access them). The floatsintext option (specified in the \documentclass line) will integrate tables and figures approximately where they are mentioned in the text. This is available only with the man option, of course, because the other formats already have floats integrated with the text.

6.3 User-defined Font Size

10pt Users can now select from the font-size options available in standard LAT_EX

11pt (10pt, 11pt, 12pt) by including the appropriate option (e.g., 10pt) in the
12pt \documentclass line. The default font size is 10pt for jou mode, 11pt for doc mode, and 12pt for man mode.

6.4 Watermark

If desired, a "DRAFT" watermark can be placed on either the first pages or all pages of the document with the draftfirst and draftall options, respectively. The text, font size, angle, and lightness of the text can all be modified using commands explained in the draftwatermark documentation. Also loads the everypage package.

6.5 Flexible Bibliographies

The apa6 class supports three bibliography packages: biblatex, apacite, and natbib.

6.5.1 biblatex

biblatex The biblatex option directs apa6 to load the biblatex package; however, the \DeclareLanguageMapping and \addbibresource commands will need to be specified by the user within the document preamble. In the absence of bibliographic options, apa6 will mask references using biblatex commands if the mask option is specified. In other words, the only reason to use the biblatex option is to have apa6 automatically load the biblatex package.

floatsintext

6.5.2 apacite

apacite The apacite package is loaded if the apacite option is specified. This option also informs apa6 to mask references using apacite commands if the mask option is specified. The apacite package is *not* loaded by default.

6.5.3 natbib

natbib Specifying the natbib option implicitly loads apacite and directs apa6 to mask references using natbib commands if the mask option is specified. Because of how the natbib package is written, it must be loaded explicitly in the document preamble with \usepackage[sort,longnamesfirst]{natbib}.

6.6 Keywords

\keywords

Many journals (including APA journals) request authors to provide keywords for their manuscripts to facilitate electronic indexing. apa6 introduces the \keywords command. If provided, keywords will be displayed on a line beneath the abstract.

6.7 Converting to Microsoft Word®

A common requirement for manuscript submission is that the document be in Microsoft Word[®] format. LATEX provides no easy way to convert to Word in APA format. Several conversion utilities are available, but after researching and testing several of them, it seems that most of them—besides being incredibly challenging to implement—are incapable of formatting anything close to APA style. One software package clearly stands out from the group, however: Chikrii Softlab's TeX2WordTM (http://www.chikrii.com/products/tex2word/; compatible with Microsoft Windows(R) only). The distinct advantage of this software is that it is extensible, allowing customizable interpretation of IATFX commands in a user-specified file—which is exactly what I have created for apa6. The file apa6.ptex is included in the "pseudoTeX" subfolder of the apa6 installation. After installing TeX2Word (a 30-day trial period is available), find its "pseudoTeX" folder (which contains all the .ptex files automatically generated by TeX2Word), and copy apa6.ptex into that folder. To convert your apa6 LATEX document, start Microsoft Word and open your apa6 document just as you would open any other document in Word. The conversion process will run automatically and a mostlyready document will be produced. Formatting of the title page, abstract page, section headings, double-spacing, table and figure captions, boldfaced and italicized text are all handled by the converter. Instructions for finishing the conversion process will be displayed on the title page of the converted document. Mostly this involves moving floats (tables and figures) to their places toward the end of the manuscript, some table re-formatting, and editing of bibliographic informationalthough some of this is expected to improve with upcoming releases of TeX2Word. The major weakness at the moment is a lack of support for bibliographic packages. I will update the apa6.ptex file within the apa6 class on CTAN as the capabilities of TeX2Word evolve. It's well worth experimenting with the 30-day trial, and perhaps even worth finding—or borrowing—a Windows machine if you don't have one readily available (the conversion process does not require a T_EX installation to be present).

7 Dependencies

apa6 automatically loads the following packages. If these packages are not already installed, producing the first **apa6** document could take a few minutes while these packages are downloaded and installed.

- apacite: bibliography package; used only if the apacite or natbib option has been specified
- biblatex: bibliographic package; used only if the biblatex option has been specified
- \bullet booktabs: formats tables that are much more attractive than the standard LATEX tables.
- caption: formats table and figure captions
- draftwatermark: includes a "DRAFT" watermark; used only if the draftfirst or draftall options are specified (draftwatermark automatically loads every-page
- endfloat: handles placing tables and figures at the end of a manuscript; used only with the man option
- etoolbox: provides capability of intercepting the
- fancyhdr: formats page headers
- float: handles floats placed within text; used only when the man and floatsintext options are both specified biblatex package (when loaded by the user in the document preamble) in time to set the "References" heading to non-boldface; used only if no bibliographic options have been specified
- geometry: formats margins
- graphicx: allows inclusion of figures
- longtable: formats tables that exceed one page in length; loaded only if the longtable option is specified. Also loads the array package.
- substr: counts masked references; used only if the mask option is specified
- threeparttable: produces nicely formatted table notes that comply with APA style. See longsample.tex (in the "samples" subfolder of the apa6 installation; specifically, Appendix B in that document) for how to set up a table with notes.
- times: for math definitions

8 Examples

Sample documents are included with this class; look in the "samples" subfolder of your installation. The source and output for shortsample.tex are reproduced on the following pages for quick reference.

8.1 shortsample.tex

\documentclass[jou]{apa6}

\usepackage[american]{babel}

```
\usepackage{csquotes}
\usepackage[style=apa,sorting=nyt]{biblatex}
\DeclareLanguageMapping{american}{american-apa}
\addbibresource{bibliography.bib}
\usepackage[T1]{fontenc}
\usepackage{lmodern}
\title{Sample APA-Style Document Using the \textsf{apa6} Package}
\author{Brian D. Beitzel}
\affiliation{SUNY Oneonta}
\leftheader{Beitzel}
\abstract{This demonstration paper uses the \textsf{apa6} \LaTeX\
  class to format the document in compliance with the 6th Edition of
  the American Psychological Assocation's \textit{Publication Manual.}
  The references are managed using \textsf{biblatex}.}
\keywords{APA style, demonstration}
\begin{document}
\maketitle
We begin with \textcite{Shotton1989}. We can also cite this work in
parenthesis, like this: \parencite{Shotton1989}.
A three-author paper \parencite[e.g.,][]{Lassen2006} lists all
three authors for the first citation, then only the first author
on all subsequent citations \parencite{Lassen2006}.
Note the use of five heading levels throughout this demonstration
Method section.
\section{Method}
\subsection{Participants}
We had a lot of people in this study.
\subsection{Materials}
Several materials were used for this project. Some of them were
already created for prior research.
\subsubsection{Paper-and-Pencil Instrument}
We used an instrument that we found to be highly successful.
                                   13
```

```
\paragraph{Reliability}
The reliability of this instrument is extraordinary.
\paragraph{Validity}
We now discuss the validity of our instrument.
\subparagraph{Face validity} The face validity is exceptionally
strong. Everyone should be impressed.
\subparagraph{Construct validity} Also very strong.
\subsection{Design}
This section describes the study's design.
\subsection{Procedure}
The procedure was fairly straightforward, yet required
attention to detail.
\section{Results}
Table \ref{tab:ComplexTable} contains some sample data. Our
statistical prowess in analyzing these data is unmatched.
\begin{table}[htbp]
  \caption{A complex table}
  \label{tab:ComplexTable}
  \begin{tabular}{0{}lrrl0{}}
                                         \toprule
                         & \multicolumn{2}{1}{Percentage of} & Total
  Distribution type
                                                                                  \backslash \backslash
                         & \multicolumn{2}{l}{targets with} & trials per
                                                                                  \backslash \backslash
                         & \multicolumn{2}{1}{segment in}
                                                                & participant
                                                                                  \boldsymbol{1}
                                                                      cmidrule(r){2-3}
                         & Onset & Coda
                                                                 &
                                                                                  \boldsymbol{1}
                                                                      \midrule
  Categorical -- onset & 100
                                     0
                                                                & 196
                                                                                  \backslash \backslash
                                  87.
  Probabilistic
                         & 80
                                  & 20
                                                                & 200
                                                                                  \boldsymbol{1}
                         & 60 & 40
                                                                & 160
                                                                                  \boldsymbol{1}
  Categorical -- coda &
                            0 & 100
                                                                & 196
                                                                                  \boldsymbol{1}
                                                                      \bottomrule
  \end{tabular}
\end{table}
\section{Discussion}
This is a lengthy and erudite discussion. It demonstrates amazing
skill in interpreting the results for the masses.
\printbibliography
\end{document}
```

8.2 shortsample.pdf

Sample APA-Style Document Using the apa6 Package

Brian D. Beitzel SUNY Oneonta

This demonstration paper uses the apa6 $\[mathbb{L}^{A}T_{EX}$ class to format the document in compliance with the 6th Edition of the American Psychological Assocation's *Publication Manual*. The references are managed using biblatex.

Keywords: APA style, demonstration

We begin with Shotton (1989). We can also cite this work in parenthesis, like this: (Shotton, 1989).

A three-author paper (e.g., Lassen, Steele, & Sailor, 2006) lists all three authors for the first citation, then only the first author on all subsequent citations (Lassen et al., 2006).

Note the use of five heading levels throughout this demonstration Method section.

Method

Participants

We had a lot of people in this study.

Materials

Several materials were used for this project. Some of themwere already created for prior research.

Paper-and-Pencil Instrument. We used an instrument that we found to be highly successful.

Reliability. The reliability of this instrument is extraordinary.

 $\ensuremath{\textit{Validity.}}$ We now discuss the validity of our instrument.

Face validity. The face validity is exceptionally strong. Everyone should be impressed.

Construct validity. Also very strong.

Design

This section describes the study's design.

Procedure

The procedure was fairly straightforward, yet required attention to detail.

Results

Table 1 contains some sample data. Our statistical provess in analyzing these data is unmatched.

Ta	able 1	
4		a tabl

A complex table			
Distribution type	Percentage of targets with segment in		Total trials per participant
	Onset	Coda	
Categorical – onset	100	0	196
Probabilistic	80	20	200
	60	40	160
Categorical - coda	0	100	196

Discussion

This is a lengthy and erudite discussion. It demonstrates amazing skill in interpreting the results for the masses.

References

- Lassen, S. R., Steele, M. M., & Sailor, W. (2006). The relationship of school-wide positive behavior support to academic achievement in an urban middle school. *Psychology in the Schools*, 43(6), 701–712.
- Shotton, M. A. (1989). Computer addiction? A study of computer dependency. London, England: Taylor & Francis.

Change History

v1.0

General: Initial release	1	flicts along the H
v1.01 General: Minor changes in 'apa6.ptex' to accommodate the \note command Prepended config files with	1	v1.02 General: Corrected of jou More reliable font

'APA' to prevent possible conflicts along the $\mbox{ET}_{\mbox{E}} X$ path. . . . 1

General: Corrected default mode to	
jou	1
More reliable font-size selection	1