A Sample APA Paper: The Efficacy of Psychotherapeutic Interventions with Profoundly Deceased Patients

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Many parts of this paper were unabashedly ripped off from course materials developed by Dr. John Rosenkoetter that were presented to me when I took research methods with John (we will not discuss how long ago that was). The absurdity of the content contained in the paper is entirely my fault, the underlying educational value is largely John’s. The fact that I have stolen from him is a tribute to the quality of his teaching. Thank you Dr. Rosenkoetter!
Abstract

The Abstract is a one paragraph summary of the report. Write in block style; the first line is not indented. Depending on the journal there the word limit ranges from 150 to 250 words. Describe the problem under investigation in one sentence. Describe the participants’/subjects’ pertinent characteristics (number, type, age, sex, and for animals include genus and species). Describe the experimental method, including apparatus, data collection procedures, complete test names, and dosages/administration routes of drugs. Describe the findings (significance levels), conclusions, applications, or implications. The present paper provides an overview of the writing style of the American Psychological Association. Each section of this paper presents descriptions of what should be contained within that section. Each of these sections include informative yet ludicrous examples of what is typically found in these sections based upon a fictitious study designed to test the efficacy of conducting psychotherapy with dead people in order to reduce the depression, passive behavior, and sexual dysfunction typically found among the dead.

Keywords: APA format, psychotherapy, chronic mortality, depression, sexual dysfunction
The writing style of the American Psychological Association (APA) is contained in the fifth edition of its Publication Manual (APA, 2001). Other sources (Bem, 1987; Sternberg, 1993, 1992; Strunk & White, 1979) give advice on writing style but not the specifics of APA style.

The body of a report is made up of four parts, the Introduction, the Methods, the Results, and the Discussion section. Sometimes papers include a Conclusions section, especially when multiple studies are reported.

The Introduction contains the thesis statement telling the reader what the research problem is and a description of why the problem is important, and a review of the relevant literature. For example, Menahem’s (1984) model of psychotherapy for the dead provides us with a good example of an introductory paragraph:

It is time to ‘bury the myth’ that some people are untreatable by modern psychotherapy. In recent years people with untreatable ‘narcissistic character disorders’ have suddenly become treatable. It is the contention of this author that there is one group that has been totally neglected by psychotherapists—the dead. Why have they been so ignored? Probably because fat cat therapists only want to take on articulate, motivated patients. Well, it’s time for these lazy doctors to get off their dimpled derriere and ‘break new ground.’ People who are dying to get into treatment can no longer be ignored. The author is now treating dead patients and training young therapists to do the same. (pp. 1-2)

After the introductory paragraph(s), a review of the relevant literature should be presented. The literature review should present a brief history of the field of study, including definitions of major terms and concepts and what they have been used to demonstrate or explain. The author should assume that the reader has some knowledge of the topic so a complete review
is unnecessary. In other words, be brief, but not too brief. When reporting studies, rather than describing the whole study, only present the pertinent general findings of important studies. Present the pertinent studies topically. That is, present the major topics, relevant to your topic, that have been addressed by different studies that you have read. If two or more studies report the same relationship between the variables you are interested in, then describe them together. Be sure to address any relevant differences between these studies as well. For example, with respect to psychotherapy for the dead, Bananas (1916, as cited in Menahem, 1984) reports a case study where the patient’s death “was a crucial turning point in his treatment of Frau [Ms.] Rigormortis [sic] an arrogant, vindictive patient. They reported that there were no incidents of arrogant behavior since the patient’s death” (p. 1-2). Also, several researchers have noted that doing psychotherapy with dead presents some problems not seen in living populations (Aspelmeier, 1999). The dead have been found to show higher level of depression (McKay, Garison, & Hatt, 2000), less intense affective (mood) states (Menahem, 1994; Poe et al., 2008), and more passivity (Rocky & Bullwinkle, 1970) compared with living individuals currently in therapy. Also, It has been found that dead participants are far more likely to suffer from sexual dysfunction including impotence and lack of sexual drive (McKay et al., 2001).

The conclusion of your literature review should include a critique of the current state of the literature that points out areas in the literature that you feel are being neglected. This critique should help establish the rationale for the present study. For example, if you are using a new and different manipulation, predictor, or dependent variable emphasize this in your review of the earlier work. With respect to psychotherapy and the dead, to date there have been no empirical studies have been conducted to test the efficacy of treating death using psychotherapy as compared with other types of therapy regiments. The present study will attempt to fill in this grave hole in the literature.
After reviewing the relevant literature, the author should give an introduction to the research to be presented so that the reader understands what work occurred, the specific predictions (operational hypothesis) that were tested, what results were expected and why those results were expected. In order to introduce the research, it is usually necessary to indicate how the variables were operationalized. The variables should be referred to by their correct names (e.g., independent variable [IV], dependent variable [DV], predictor variable, criterion variable, manifest/measured variables, latent variables). The design of the study should also mentioned in this section. The most common designs are correlational, experimental, quasi-experimental, longitudinal, cross-sectional, sequential, case studies, or meta-analytic. If the name of the design would not be understood by the readers, a description of the design would be appropriate. For example, a meta-analysis involves collecting reports of prior research on a specific topic and averaging the effects across these studies to determine whether or not there is sufficient evidence supporting the notion that two variables are related.

The present study employed an experimental design and assigned deceased individuals (identified by trained research assistants) to one of two experimental groups (Therapy vs. Control) representing the independent variable. The therapeutic intervention was based on a Klinian object-relations orientation (Kline, 1945) which has shown some efficacy among the dead especially among those residing in family plots (Adams, Adams, Adams, Thing, & Lerch 1972). The dependent variables included self report measures of depression and sexual dysfunction and a behavioral measure of patient passivity. Based on the finding of non-experimental case study reports, it was expected that dead individuals exposed to intense psychotherapy should show lower levels of reported depression, reported sexual dysfunction, and passive behavior, compared to dead individuals who are not exposed to intense psychotherapy.
The number of participants should be given in this subsection. This section should include basic demographic information including: gender (e.g. number or percentage of male & female participants), ethnicity (number of African Americans, Asian Pacific Islanders, Native Americans, Hispanic and/or Latinos, Caucasians, and other ethnicity), the age range, and the average age. Also, where appropriate socio-economic status (SES), disability status, sexual orientation, and relationship status (i.e. single, dating, engaged, married, separated, divorced) should be included. Further, describe where the subjects are from, how the subjects were selected, how they were assigned to groups, and any incentives given for participation (i.e. payment or class credit). If they have any important characteristics, like being depressed or ADHD, tell how that was determined. For example, in the dead psychotherapy experiment dead individuals were identified by two graduate students trained to a 99% accuracy rate in identifying dead individuals based on body temperature, respiratory rate, heart rate, rigidity, and response to pain (less intense response = greater death). Also, if any participants were excluded, be sure to explain why (e.g., subject attrition, failure to complete tasks, etc), describe the criteria for inclusion, and report the final sample size. If you are studying animals then call the section Subjects and report the genus, species, strain, name and location of supplier, number of animals, sex, age, weight, and physiological condition (APA, 2009, p. 30).

The materials section is where all the materials used in the study are described. Everything that some other investigator would need in order to replicate the study must be described in this section. Sometimes the levels of the IV are different conditions of an apparatus (e.g. high level electrical shock vs. low level electrical shock), if so be sure to give a detailed
description. Often a picture helps present complicated equipment (see Figure 1 for example). This should be labeled “Apparatus” if only mechanical or electrical equipment was used.

If paper-and-pencil tests, their computerized equivalents, or self-report questionnaires were used then this section should be labeled “Measures” (or “Assessments” if the measures are all standardized or educational instruments). Each questionnaire used should be described in detail and include the author(s) citation; the number of items, examples of items, a description of what participants are asked to do, a description what scores/scales are generated, a description of how scores/scales were computed from the questionnaire, and a description of what the scores/scales indicate (higher scores indicate greater ??). For established measures, it is best to include information on the reliability and validity of the measures. Any past or current test retest information establish for the target population should be included. For summative scores/scales the past and current internal reliability of the measure should be included (i.e., Cronbach’s Alpha). Any known indicators of validity (e.g. content validity, construct validity, etc.). The measures section is also an appropriate place to report the descriptive data for the measure: mean, standard deviation, and range for all participants (if measure is ordinal, interval or ratio), and frequency of categories (if categorical data is used). This data can also be reported in the results section.

In the present study, a measure of depression was obtained using revised version of the Beck’s Depression Inventory (BDI-2, Beck, Steer, & Brown, 1996). This 21 item measure asks participants to select statements that are descriptive of how they have been feeling for the past week, including that day. Responses are coded on a scale of 0-4 for level of depressiveness, such that higher scores represent greater depressiveness. The scores are averaged across the 21 items, $M = 2.35, SD = 1.55$, range = 4.93. Cronbach’s alpha (an estimate of internal consistency) was .81 for the present study. Adequate levels of test-retest reliability (.90 across 3 months) and
internal consistency (.99) of the BDI-2 have been established for a sample of 100 deceased individuals named Kenny McCormick resting in South Park County, CO (McKay et al., 2001). The validity of the use of this measure with deceased populations is unknown.

A measure of sexual knowledge was obtained using an author constructed questionnaire titled the Sexual Hygiene Anxiety and Gripe For Educational and Academic Research (SHAGFEAR). This 12 item measure (see Appendix) asks participants to rate the descriptiveness of a series of statements on a numerical rating scale of 1 (not at all like me) to 7 (very much like me). Ratings are averaged across all 12 items. Mean for the total sample was 3.00, $SD = 2.12$, and range = 6.99. Cronbach’s alpha was .99. Participants scoring greater than 2.44 were classified as having significant sexual dysfunction. Thirty-Three percent of the sample were classified as having significant sexual dysfunction.

**Procedure**

The Procedure subsection includes a complete description of what happened. The usual style is to describe what happened to a typical subject, in chronological order, from beginning to end. The procedure usually describes the design of the research as well. Regardless of how well variables were described in the Introduction section, they must be operationally defined in the Method section. If the levels of the IV are different treatments given to different groups, their operational definitions would probably fit best in the Procedure section. Back to the therapy for the dead example, all procedures in this study were approved by the Institutional Review Board of Radford University. After completing assent forms, completed with assistance of trained medium Allison Dubois, the dead participants were randomly assigned to either a therapy or no-therapy group with equal numbers (50 participants) in each. Participants in the therapy group were exposed to four one-hour sessions with a licensed clinical psychologist using a Klinian (Kline, 1945) object-relations approach to psychotherapy. Participants in the no-therapy
condition took part in four one-hour sessions where they talked to an experimenter about current television programs they had watched. After completion of the four sessions, participants were then given the BDI, the sexual dysfunction measure, and the measure of passivity.

The procedures section should also operationally define the DV and a detailed description of how changes in the DV will be observed and recorded should be given. Again with reference to dead therapy, the dependent variables were measures of depression, mood, passivity, and sexual dysfunction. Measures of participants level of depression and sexual dysfunction were obtained from questionnaires (which are described in the materials section). Participant passivity was assessed using a procedure where a large ferocious tiger (food deprived for a period of three days) is released into the experiment room with the participant (see Figure 1 for diagram of testing room). All participants were naive to the fact that the tiger was tethered such that it could not get closer than 35 cm. from the participant. The distance (D) that participants placed between themselves and the tiger was recorded in meters with a maximum distance possible of 30 m (limited by the length of the experiment room). A passivity (P) score was calculated by subtracting each participants D score from the total distance possible (P = 30 - D). Thus, a greater score indicated that participants put less distance between them and the food deprived tiger indicating higher levels of passivity. The mean P score was 29.5, with SD = 2.12, and a range of 6.36.

Data Analysis Plan

A data analysis plan is not always a necessary component of research papers. But if you are writing a research proposal or reporting a study that uses complicated analyses, then a data analysis plan should be a part of your methods section. The purpose of this section to provide your readers with a roadmap to the analyses you conducted. It should describe the order and type of analyses that were conducted, and for complex designs explain how to interpret the
information they provide. For example, in the present study data analyses were conducted in two phases. First, a series of univariate analyses were conducted which compared the main variables of interest with demographic variables to identify potential covariates to be included in the main analyses. Second, in the main analyses t-tests were used to compare the average depression and passivity scores of participants in the therapy and no-therapy conditions. Also, a chi-square test of independence compared the rates of sexual dysfunction for the therapy and no-therapy conditions.

**Results**

The Results section contains all of the results, but no conclusions. The order of presentation of results is usually descriptive statistics, followed by demographic analyses, and then finally inferential statistics. The results should also be presented in the order that they are found when you calculate them, for example, an $F$ score before a post hoc test result.

**Descriptive Data**

In the present report we have placed all of our descriptive data in the methods section with the measures. If they are not reported in the methods section, then descriptive data must be reported here. These results could be reported in a single table or as text if there is only a small amount of data to report.

**Demographic Variables**

It is often important to establish that your demographic variables (e.g., age, gender, ethnicity, SES, relationship status, IQ, etc) are not confounded with your IVs; they are not contributing to the differences we see in the DV’s. So a series of tests must be run and the results reported here. For example, preliminary analyses compared demographic variables (age, gender, ethnicity, and IQ) with the main variables of interest (treatment group, depression, passivity, and sexual dysfunction). A significant negative correlation was found between participants age at
death and self reports of sexual dysfunction, \( r(98) = -.44, p < .001 \). As age of participant at death increased, reported levels of sexual dysfunction tended to decrease. Also, a significant association was found between ethnicity and depression, \( F(5, 94) = 2.55, p = .033, \eta^2 = .12 \) (see Table 1 for means and standard deviations). Post hoc analyses revealed that African-American participants reported lower levels of depression compared to Caucasian and Native American participants. All remaining Analyses were non-significant.

**Main Analyses**

This subsection can be more specifically titled (e.g. “*Associations between Treatment Conditions, Depression, Passivity, and Sexual Dysfunction*”) if you have several hypotheses that you are testing and want to present them in different sections. When you report results you should restate the hypothesized relationship(s) between the variables of interest, tell what statistics (parameters) were used to test this hypothesis, report the results of the test(s), and then explain what the results mean by talking about people and their behavior. For example: It was hypothesized that dead individuals in the therapy group would have lower depression scores and lower passivity scores compared to participants in the no-therapy group. A series of *t*-tests were computed to test this prediction. Consistent with the present study’s hypotheses, the therapy group had significantly lower depression scores than the no-therapy group, \( t(98) = 2.49, p < .014, d = .50 \), with means (SD) of 37.67 (3.56) and 36.03 (2.99), respectively. However, the difference in passivity scores for the treatment and no-treatment groups were not significant, \( t(98) = 1.04, p = .30, d = .21, ns \), with means (SD) of 29.81 (2.23) and 29.39 (2.01), respectively.

Further, it was hypothesized that the psychotherapy group would have fewer individuals classified as having significant sexual dysfunction, compared to the no-therapy group. A Chi-Square (Pearson’s test of independence) analysis revealed that participants who did not receive therapy were over-represented among those classified as having significant sexual dysfunction,
and participants who received therapy were under-represented among those classified as having significant sexual dysfunction, \( \chi^2 (1, N = 100) = 3.85, p = .049, \Phi = .20 \). See Table 2 for the cross-tabulation matrix.

When you have very similar types of tests for different variables it may be easier and more concise to report the statistics in a table (see Table 3). In such a case, you still need to describe the relationship between the variables of interest in the text, but you do not need to include the numbers in the text. Again, when you describe results it is easiest for the reader if you talk about people and their behavior, rather than variables. For example, the results presented in Table 3 show that deceased individuals who received therapy had significantly higher depression scores than did participants who did not receive therapy. However, the passivity scores of dead participants who received therapy did not significantly differ from participants who did not receive therapy.

**Discussion**

The Discussion section contains the conclusions that can be drawn from the results. Be sure to restate the hypotheses here (though more generally than you did in the results section, e.g., discuss hypotheses with reference to individual behavior). Mention whether the prediction(s) was(were) supported. Mention whether these results are similar to the results that were found in the literature that was cited in the introduction, and if not, try to explain why. For predictions that were not supported try to suggest reasons why this may have occurred. Also, be sure to address the limitations of the present study by focusing on Internal Validity, External Validity (generalizability to population and ecological validity), and Measurement Validity (e.g. what can not be concluded with from your results). Discuss how your results inform the psychological community with respect to the issue at hand. Include ideas for future research and, possibly, how this research affects the nature of the universe as we know it.
For example, the present study predicted that psychotherapy would reduce depression, reduce passivity, and reduce sexual dysfunction in dead individuals. For the most part these hypotheses were supported in that dead individuals who were exposed to psychotherapy reported less depression and fewer incidents of sexual dysfunction. However, therapy did not seem to affect passivity behavior exhibited by dead participants. This later finding suggests that passivity may be a chronic and pervasive characteristic of biological origin unique to the dead. Such a hypothesis is supported by the overall lack of variance found in our measure of passivity. Although, it must be conceded that our measure of passivity could be insufficient as a measurement tool. Future research should focus on attempts to develop a more effective measure of passivity for the dead. At the least, a multi-method approach is called for.

Though the internal validity and the experimental realism of the present study seems strong, it should be noted that the present study is limited, in that the sample consisted of a convenience sample and had limited generalizability to the deceased population as a whole (external validity). Also, the study suffers from several limitations regarding measurement validity. The measure of depression has not been validated with dead samples. Also, the author constructed measure of sexual dysfunction, though seemingly face valid, still awaits construct validation.

The results of this study in general support the notion that death is a mental illness that can, with some success, be treated with modern psychoanalytic tools. This is only the beginning. The author is of the opinion that all of the tools available to mental health professionals should be directed at treating the dead. For example medications have been found to positively effect the behavior of dead individuals (Templeman, 1986). Thus our focus should not be limited to psychotherapeutc techniques, but could potentially include psychopharmacological agents, cognitive therapies, or even behavior modification techniques in treating these difficult
populations.

Aspelmeier, J. E. (1999). *Information that report writers will never forget when they use the style of the American Psychological Association: A quick guide.* (Available from Author, Radford University Department of Psychology, Box 6046, Radford, VA 24142)


Footnotes

1. A reviewer or a teacher would likely want to see more detail than is provided by this description of the therapeutic intervention. However, this is just a sample paper and I know next to nothing about object relations theory... so there.

2. Univariate analyses typically involve two variables: one independent variable and one dependent variable. They can be contrasted with multivariate analyses where multiple independent variables and/or multiple dependent variables are included in the analysis. Examples of univariate analyses include: *t*-tests, one-way ANOVA, chi-square goodness of fit test, and chi-square test of independence.

3. Covariates are variables that are included in an analysis so that their influence be removed. It allows you to see how two or more variables are related when the influence of the covariate is controlled.
Table 1

**Means and Standard Deviations for Self-Reports of Depression Separate by Ethnicity**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Cauc.</th>
<th>AI</th>
<th>AA</th>
<th>APIA</th>
<th>HL</th>
<th>Other</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18.22&lt;sub&gt;b&lt;/sub&gt;</td>
<td>17.93&lt;sub&gt;b&lt;/sub&gt;</td>
<td>10.51&lt;sub&gt;a&lt;/sub&gt;</td>
<td>14.33&lt;sub&gt;a&lt;/sub&gt;</td>
<td>13.99&lt;sub&gt;a&lt;/sub&gt;</td>
<td>14.88&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.55&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(3.00)</td>
<td>(2.99)</td>
<td>(3.23)</td>
<td>(3.10)</td>
<td>(3.50)</td>
<td>(3.22)</td>
<td></td>
</tr>
</tbody>
</table>

Note. * = p < .05, ** = p < .01, *** = p < .001. df = (5, 94). Standard deviations appear in parentheses below means. Means within rows with differing subscripts are significantly different at least at the p < .05 level, using Fisher’s LSD post hoc test. Cauc. = Caucasian/European American, AI = American Indian, AA = African American, APIA = Asian Pacific Islander American, HL = Hispanic/Latino American.
Table 2

Cross-tabulation of Therapy vs. No-Therapy Groups and Sexual Dysfunction vs. No-Sexual Dysfunction Classifications

<table>
<thead>
<tr>
<th>Group</th>
<th>Therapy</th>
<th>No Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Dysfunction</td>
<td>10% (-2.62)</td>
<td>40% (3.95)</td>
</tr>
<tr>
<td>No Sexual Dysfunction</td>
<td>40% (3.95)</td>
<td>10% (-2.62)</td>
</tr>
</tbody>
</table>

*Note. Adjusted standardized residual frequencies appear in parentheses below observed percentages.*
Table 3

*Mean Depression Score, Mood Score, and Passivity Scores for the Treatment and No-Treatment Groups*

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Treatment Condition</th>
<th></th>
<th></th>
<th>t</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Therapy</td>
<td>No-Therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>37.67 (3.56)</td>
<td>36.03 (2.99)</td>
<td>2.49***</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Passivity</td>
<td>29.81 (2.23)</td>
<td>29.39 (2.01)</td>
<td>1.04</td>
<td>.21</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* * = p < .05, ** = p < .01, *** = p < .001. df = 98 for all analyses. Standard deviations appear in parentheses below means.
Figure 1. This figure shows an example of an apparatus that would be best describe through a visual rather than written medium. This figure provides a graphical representation of the experiment room used to obtain a measure of passivity.

The figure caption should appear on the same page as the figure (APA, 2009, pp. 158-160).
Appendix

Sexual Hygiene Attitudes and Gripes for Educational and Academic Research

1. I rarely desire sexual intercourse.
2. I rarely practice autoeroticism (masturbation).
3. When I want to have sexual intercourse, I am afraid that I will not be able to achieve orgasm.
4. When I want to have sexual intercourse, I am usually unable to become physically aroused.
5. My partner usually wants to have sex more often than I do.
6. People who put cottage cheese in their pants make me nervous.
7. When I think of George Bush Jr. my toes itch.
8. I often wake up from dreams where I am standing on top of a giant jello mold with thousands of clones of Jessie Helms dressed in rabbit suits, screaming and throwing pickled herring at me.
9. I own more than one Back Street Boys album.
10. The thought of my parents having sex makes me think of Barney the Purple Dinosaur.
11. I often sleep at night and/or the early morning for more than one hour at a time.
12. I believe that sex is an unnatural act imposed upon us by a race of mole people who live in the belly of the earth and are awaiting the moment when everyone on earth is having sex simultaneously so they can release their evil army of genetically mutated sea monkeys to steal all the caps to ink pens, causing them to dry out and preventing the human species from ever being able to take a memo again.