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Writing fellows in an undergraduate psychology course

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Writing Fellows in an Undergraduate Psychology Course

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An Honors Program Project Presented to

the Faculty of the Undergraduate

College of Health and Behavioral Studies

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_____

by Caroline Olivia Prendergast

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Accepted by the faculty of the Department of Psychology, James Madison University, in partial fulfillment of the requirements for the Honors Program.

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PUBLIC PRESENTATION
This work is accepted for presentation, in part or in full, at the Annual Department of Psychology Student Symposium on April 20, 2015.

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Acknowledgements

Abstract

This study seeks to examine the uses of embedded writing tutoring (specifically, a Writing Fellow) in an undergraduate psychology course in order to better understand the impacts of such programs on students' writing process, written products, and attitudes toward writing. A Writing Fellow attended lab meetings and held office hours in one section of a research methods course. The other two sections of the course served as treatment-as-usual control groups. Throughout the semester, students reported their writing process and attitudes toward writing. Student writing was evaluated using an APA-style scoring instrument. Students in the experimental and control conditions were not found to differ on writing scores, process reports, or attitudes toward writing. However, insight was gained into student use of and attitudes toward supplemental instruction opportunities. Further research is needed to better understand the complex relationship between embedded writing tutors and the professors and students with whom they interact.

Introduction

Although writing is an integral part of higher education, the 2011 National Assessment of Educational Progress found 73% of twelfth grade students in the United States performed at or below the basic level (defined as partial mastery of requisite skills) on standardized writing tasks (2011). Unfortunately, poor writing often persists throughout the undergraduate years and does not necessarily improve by the time students enter graduate programs (Ondresuk, 2012). A recent study conducted by the American Association of Colleges and Universities indicated that 89% of employers surveyed believed that colleges should place more emphasis on written and oral communication abilities than they are currently (2010). As critiques of student writing encompass a range of settings within both education and the workplace, it is important to examine approaches to writing instruction that may increase student writing ability.

Though writing skills are critical to the education process and in need of improvement among most college students, it is often difficult to isolate the myriad factors that may contribute to improved skills (or lack of improvement). Writing instruction is embedded in classroom education, often beginning in preschool. Parental involvement, teacher scaffolding, and peer involvement in early writing tasks have all been examined in relation to later acquisition of formal literacy, indicating that multiple factors appear to influence the ways in which young children become effective writers (Boscolo, 2008).

As children and young adults progress through their educational processes, the feedback they receive regarding their writing is a key component of effective learning. The importance of generating effective written feedback is evident in research on writing instruction at the secondary and university levels (e.g. Hillocks, 2008). College students value written feedback on their writing, particularly when the feedback is timely, contextualized within assessment criteria,

and message-centered (Weaver, 2006). Sperling and Freedman (1987) found that focused comments containing in-class referents were more likely to lead to successful student revisions. However, many students are never formally taught how to interpret feedback and report confusion about incorporating it into future revisions (Weaver, 2006). Despite this lack of preparation, Weaver (2006) found students feel that feedback is useful and necessary for improving both writing and content understanding.

As technology continues to proliferate throughout the college experience, many instructors have sought to utilize paperless methods of writing instruction and feedback. McCabe, Doerflinger, and Fox (2011) studied student perceptions of receiving writing "e-feedback" through the highlighting and track changes functions in Microsoft Word (as opposed to traditional marking on paper). After a semester-long course using e-feedback, students responded that the Microsoft Word method was more convenient and resulted in better feedback than traditional paper-based methods. Increased convenience of e-feedback may allow instructors to provide feedback more quickly and thoroughly to their students; however, the study only included measures of student and teacher perceptions of feedback and comparison of e-feedback to written feedback relied on student experiences rather than an experimental manipulation (i.e., all students receive e-feedback). Further, the authors did not include measures of feedback quality, time spent generating comments, or student gains in writing as a result of feedback.

Professors often wish to provide feedback, but the time and effort required to do so— particularly in conjunction with growing class sizes—is taxing (Kellogg & Raulerson, 2007). Effective writing tasks should be designed to match the expectations and rigor of coursework, particularly within higher-level classes (Soysa, Dunn, Dottolo, Burns-Glover, & Gurung, 2013). The necessity of matching assignments to large-scale student goals may exacerbate difficulties

faced by instructors seeking to provide effective feedback to students. Though it has been shown that students appreciate written feedback many instructors still face barriers to assigning and evaluating student writing, including a lack of training in providing effective feedback, a dearth of data regarding the efficacy of the feedback for improving student work, and many others. Such barriers may lead to a partial or complete lack of feedback on written assignments.

In effort to aid faculty in meeting goals related to assigning and evaluating student writing as well as aiding students in writing and responding to feedback on their work, some universities have implemented supplemental instruction programs devoted to writing support. Within the humanities, supplemental instruction programs have been used in introductory-level composition classes to reduce the burden upon primary instructors by offering students additional sources of one-on-one assistance and feedback (Hafer, 2001). Such programs involve undergraduates as tutors or mentors, thereby providing students with peer-based writing assistance. Because of the relative difference in authority between students and peer supplemental instructors (compared to that between students and primary instructors), some students may favor assistance from the supplemental instructor rather than the professor (Henry, Bruland, & Sano-Franchini, 2011). Other students may prefer to work with both a peer instructor and a professor or other primary instructor. By offering multiple opportunities for out-of-class assistance (for example, primary instructor office hours and supplemental instructor study groups), the varied needs of students are more likely to be satisfied.

Other available campus resources, such as campus writing centers, may also be used to supplement classroom instruction. Writing centers—sources of supplemental instruction typically staffed by students and faculty members—have evolved since their introduction to the university structure in the early 20$^{\text{th}}$ century. Early writing centers focused on "fixing" remedial

writing issues, though many now focus on writing process and "higher order" patterns (e.g. organization and argument) across multiple levels of writing sophistication (Haswell, 2008). Some writing centers have integrated with other disciplines by directly sponsoring fellowship programs in which writing tutors are embedded into particular courses. These fellowships vary across campuses in their specific features, and fellows may hold individual student conferences, lead writing workshops, deliver lessons on writing and research strategies, or collaborate with primary instructors on assignment design. Writing fellows typically do not provide feedback in the form of grade assignments as writing centers in general frequently seek non-evaluative partnerships with students; however, writing fellows can be a valuable source of qualitative feedback.

Overall, research on supplemental instruction and writing centers is typically contextualized within English and writing courses. Writing centers are typically staffed and directed by faculty and students with backgrounds in the humanities who are accustomed to qualitative framing rather than empirical research. Therefore, research on writing centers and their impact still largely focuses on establishing descriptions of physical centers and theories of writing center roles within higher education, with only one fifth of the current research body composed of "hard research" (Haswell, 2008). Because effective written communication is necessary in nearly all fields of study, it is essential to examine the place of supplemental writing instruction in other disciplines as well as English and writing courses. Importantly, it is also critical to study supplemental instruction resources from an experimental perspective so that we might better understand what their impact on learning is and how it might be improved.

The current study seeks to expand previous research on the impact of supplemental instruction on writing performance by studying an introductory psychological research methods

course (instead of a writing or English course). By studying student process, product, and attitude regarding multiple writing tasks across two levels (an experimental condition and a treatment-as-usual control condition) of supplemental instruction, we will examine whether such instruction techniques can be successfully implemented outside of the humanities and whether supplemental instruction can lead to differential student outcomes. Students exposed to an embedded writing tutor within the course are predicted to receive higher scores on APA-style writing tasks and report lower levels of writer's block (according to a modified version of Boice's Blocking Questionnaire) than students who are not exposed to the writing fellow. Additionally, students in the experimental condition are expected to allocate more time to planning and revising their writing than students in the control condition. The results of this research could serve an important role in improving written communication skills among students in scientific disciplines.

Method

Participants

Participants included students enrolled in three sections of an Introduction to Research Methodology course in the Spring 2014 semester. Of students who provided demographic information, 9 were male and 32 were female, 36 identified as Caucasian, 1 as African American, 2 as Asian, and two as Hispanic. The mean reported GPA was 3.283 (*SD* = .297) on a 4.0 scale. Two students reported diagnoses of ADHD, 2 reported diagnoses of depression, and 3 reported diagnoses of anxiety disorders.

Materials

Demographics Questionnaire. A web-based self-report survey was used to gather basic demographic information about participants including gender, ethnicity, academic standing, and GPA.

Blocking Questionnaire. A web-based self-report survey was used to collect information concerning writing tasks. The measure was adapted from Boice's Blocking Questionnaire (BBQ) to apply to writing typical in a college setting (1990). The survey includes questions about various writing inhibitions including work apprehension, procrastination, writing apprehension, dysphoria, impatience, perfectionism, concern with rules. The measure also included a checklist of cognitive behaviors, a checklist of overt signs of blocking, and a survey of social skills in writing. No reliability or validity data exist for this measure.

Supplemental Instruction Questionnaire. A web-based self-report survey was used to gather information about previous participant experiences with various supplemental instruction programs (such as tutoring and professor office hours). Participants were asked to report how

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frequently they have used such programs and resources in the past. Additionally, they were asked to rate each experience on perceived helpfulness and convenience.

Writing Log. The researchers developed a log through which students were able to report various components of the timing of their writing process. Students were asked to record the proportion of time spent pre-writing, drafting, and revising each major writing assignment throughout the semester. Additionally, they were asked to report the number of days across which their writing was distributed and the approximate amount of time they spent writing.

Writing Samples and Rubric. Student writing was evaluated four times throughout the semester (one time for each major section of an APA-style research paper). Each writing sample was evaluated using a modified version of the APA Style Report Scoring Instrument (SRSI), which includes specific criteria for content, formatting, and expression in each of the four sections (Greenberg, 2012; see Appendix A). No reliability or validity data exist for the modified version of this measure. Each writing sample was scored by the course graduate assistant (GA) and teaching assistants (TAs). If any discrepancies in grading arose, the GA and the TAs convened to agree upon an appropriate score with input from the instructor.

Procedure

Approximately one week before classes began, students enrolled in Psychological Research Methods course received an email through their university email addresses including a link to a web-based survey containing several questionnaires (i.e., Demographics, Blocking Questionnaire, and the Supplemental Instruction Questionnaire). The Blocking Questionnaire was re-administered halfway through the semester and at the end of the semester.

One section was assigned to include a dedicated Writing Fellow (WF). Throughout the semester, the WF condition experienced several short lectures delivered by the WF on writing

topics including transitions, concision, organization, APA style, and revision. The WF was present in all lab meetings of this section (but not the meetings of the other condition) to assist students with in-class writing tasks. Additionally, the students in this condition received emails encouraging them to attend the fellow's office hours during the two weeks immediately preceding due dates for major writing tasks. The writing fellow recorded the frequency of visits for each student for each task. If the students chose to attend, the fellow worked primarily on the students' writing skills (as opposed to the content of the writing). The students in the control condition (NWF) were informed of the resources offered at the University Writing Center at the beginning of the semester.

Throughout the semester, students were assigned tasks requiring them to write components of an APA-style research paper. Students submitted drafts of each major section of the paper (introduction, methods, results, and discussion), which were then graded by a Graduate Assistant (GA) and undergraduate teaching assistants (TAs). Though students also turned in a final paper containing revised versions of all four drafts, this paper was not used in primary data analysis because the final draft had been edited liberally following feedback on each section draft. Finally, the students were asked to maintain a log listing the dates and lengths of time they worked on each draft.

Results

Twenty-four students responded to the supplemental instruction questionnaire. Of these students, 10 reported using professor or TA office hours 1-2 times in the previous semester, 11 reported attending 3-5 times, and 2 reported attending 6-10 times. One student reported that he or she did not typically attend office hours. When asked what prevented them from attending professor or TA office hours, the most frequently cited reason was "Office hours are not offered during my free times," followed by "I have too many competing obligations" (see Table 1). One student reported being unaware of the existence of the University Writing Center, 20 reported awareness of the Center though they had not used its services in the last semester, and 3 reported using the services 1-2 times in the previous semester. When asked what prevented them from using on-campus tutoring resources, the most frequently cited reason was "I do not know when the on-campus tutoring resources are open," followed by "Tutoring is not offered during my free times" (see Table 2).

Before analyzing writing draft scores, participants in the two conditions were matched according to reported cumulative GPA, which was found to be a significant predictor of draft scores. The matching process was implemented due to the differences in sample size between the experimental condition (which consisted of one lab section) and the control condition (which consisted of two lab sections). The average GPA of the 12 students in the control group ($M =$ 3.2868, $SD = .3167$) was similar to that of the 12 students in the experimental group ($M =$ 3.2792, $SD = .2915$). The control group contained 4 males and 8 females, whereas the experimental group contained 1 male and 11 females. A repeated-measures analysis of covariance revealed no significant interaction between exposure to the WF and draft subscores of writing content, $F(3, 57) = 1.004$, $p = .219$, partial $\eta^2 = .074$, observed power =

.380, expression, $F(3, 60) = 2.014$, $p = .122$, partial $\eta^2 = .091$, observed power = .492, or

formatting, $F(3, 60) = 2.091$, $p = .111$, partial $\eta^2 = .095$, observed power = .509.

A repeated measures analysis of variance conducted on all existing data from the three lab sections revealed a significant interaction between exposure to the WF and three subscores of BBQ: procrastination, Wilks' lambda = .636, $F(2, 14) = 3.999$ $p = .042$, partial $\eta^2 = .364$, observed power = .616 impatience, Wilks' lambda = .619, $F(2, 14) = 4.301$, $p = .035$, partial $\eta^2 = .381$, observed power = .649, and the Checklist of Cognitive Behaviors (CCB), Wilks' lambda = .624, $F(2, 14) = 4.225$, $p = .037$, partial $\eta^2 = .376$, observed power = .641. Interactions between the remaining subscores of the questionnaire and exposure to the WF were not found to be significant (see Table 3).

Post-hoc analyses of the significant interaction between procrastination and exposure to the WF revealed that between Time 1 and Time 2, the control group's mean reported level of procrastination (rated on a scale from 0 = never procrastinating to 10) decreased from 2.49 (SD = 1.64) to 2.02 (SD = 1.68) while the mean level of procrastination in the experimental group increased from 2.25 (SD = 1.44) to 3.15 (SD = 1.29; see Figure 1). Analyses of the significant interaction between impatience scores and WF exposure also indicated that between the first and second measure, the control group's mean reported level of impatience decreased from 3.41 (SD = 1.66) to 2.97 (SD = 1.23) while the impatience levels of the experimental group increased from 2.88 (SD = 1.38) to 3.79 (SD = 1.74; see Figure 2). Similarly, analyses of the significant interaction between CCB scores and exposure to the WF revealed that between Time 1 and Time 2, the control group's mean CCB scores decreased from 3.38 (SD = 1.02) to 2.80 (SD = 1.16) while that of the experimental group increased from 2.76 (SD = 1.51) to 3.44 (SD = 1.70; see Figure 3).

In order to investigate the relation between time allocation during the writing process and scores on the SRSI for each of the four drafts, correlation coefficients were computed between time reports (proportion of time spent on prewriting activities, writing, and revision activities) and SRSI subscores (overall section scores, organization of ideas, clarity, and mechanics and voice) for all existing data between the three lab sections. The proportion of time spent on prewriting activities (which involved reading, research, and prewriting) during the introduction draft was positively correlated with clarity scores, $R = .451$, $R^2 = .203$, $p = .031$. The proportion of time spent on writing activities during the introduction draft was negatively correlated with organization of ideas, $R = -.574$, $R^2 = .329$, $p = .004$. The proportion of time spent on prewriting activities during the results draft was positively correlated with scores on the section overall ($R = .520$, $R^2 = .270$, $p = .022$) as well as mechanics and voice scores ($R = .583$, $R^2 = .340$, $p = .009$). The proportion of time spent on writing activities during the results draft was negatively correlated with both overall scores on the draft ($R = -.496$, $R^2 = .246$, $p = .031$) and mechanics and voice scores ($R = -.694$, $R^2 = .481$, $p = .001$). Significant correlations were not found between any of the Time 1, Time 2, or Time 3 measures nor SRSI subscores for the method or discussion sections.

Discussion

The present study sought to examine the effects of writing center-based interventions through the use of an embedded writing tutoring program (the Writing Fellowship). Over the course of one semester, one section of an Introduction to Research Methods course was exposed to the Writing Fellow (WF) condition, which consisted of in-class writing assistance and instruction as well as office hour support. The remaining two sections of the course served as treatment-as-usual control groups. Exposure to the WF condition was hypothesized to reduce behaviors, cognitions, and attitudes related to writers block (as measured by an adapted version of Robert Boice's Blocking Questionnaire), increase scores on drafts of APA-style writing assignments, and alter the allocation of time spent on different parts of the writing process (prewriting, writing, and revision).

Contrary to hypotheses, exposure to the WF condition increased three of the subscales of the Blocking Questionnaire: procrastination, impatience, and the Checklist of Cognitive Behaviors. For each of these subscales, control group participants reported lower levels of blocking when assessed at mid-semester than at the beginning of the semester while the experimental group participants reported higher levels at mid-semester than at the beginning of the semester. It is important to note that mean blocking scores were relatively low across both groups restricting range of variability; each subscale has a minimum score of 0 (representing, for example, never displaying procrastination patterns) and a maximum score of 10. Mean scores tended to fall between 2 and 3, indicating very low self-reported levels of blocking. However, it is unclear why procrastination, impatience, and CCB scores increased between the beginning of the semester and the middle of the semester for students exposed to the WF but dropped for students in the control group. It is possible that students in the WF condition were more aware of

their writing processes and were more likely to notice their tendencies toward various forms of blocking than students in the control condition. Similar results have been found in other studies of writing awareness as well as in research on mindfulness training; increasing mindfulness—particularly of negative emotions—may cause these reactions to become more clearly articulated, thereby leading to responses that appear to reflect more negative emotions (Boden, Irons, Feldner, Bujarski, & Bonn-Miller, 2014). Future studies might examine the ways in which awareness of the writing process changes self-reported habits of blocking during the writing process.

Examination of the ways students reported allocating their time to prewriting, writing, and revision activities during writing—regardless of WF exposure—indicated that spending more time on the prewriting and revising stages of the writing process were associated with higher draft scores, increased clarity, and better control over written mechanics and voice. Conversely, spending more time on writing activities was associated with lower draft scores and decreased organization. It is possible that stronger writers work more recursively with their writing, spending time to plan and revise their work. It is also possible that spending more time on prewriting and revising leads to better writing. Experimental studies are necessary to determine whether a causal relation exists between time allocation and better writing. This preliminary information, however, suggests that there is some relation between more recursive writing patterns—those that involve prewriting and revising rather than linear, single-draft patterns—and higher quality writing.

Though the results did not support the hypotheses of increased APA-style draft scores or reduced scores on the Blocking Questionnaire after exposure to the WF, important information was gathered regarding students' use of writing time and supplemental resources. Because

students were not required to respond to the self-report surveys (including the demographics survey, the supplemental instruction questionnaire, the Blocking Questionnaire, and the writing logs), response rates were low for most measures. It is possible that this--in addition to the already small class sizes included in the sample--contributed to the lack of impact of the WF condition. Future research on embedded tutoring programs might use larger class sizes and incentivize responses to surveys, perhaps by offering small amounts of credit.

Interestingly, students appeared to use the out-of-class resources offered by the writing fellow differently than they used the out-of-class resources offered by the course TAs and GA. Though this variable was not formally measured, unofficial reports of office hour attendance from the course TAs and GA indicate students were more likely to attend the office hours of the writing fellow than those of the other supplemental instructors. Because these patterns of use were not under investigation, it is unclear why students spent more time in the WF office hours; future studies should examine students' motivation toward attending out-of-class meetings with supplemental instructors. However, it is important to note that students engaged in writing tasks with the writing fellow outside of the classroom rather frequently. Offering multiple avenues for out-of-class support on writing tasks is crucial, considering that one of the reasons students most frequently cite as preventing use of tutoring resources is lack of availability during the students' free times.

The supplemental instruction questionnaire provides some insight into the reasons why students choose not to seek out supplemental instruction when it is offered. However, participants who completed the supplemental instruction questionnaire were not given the option to report that they did not feel they needed help outside of the classroom. It is likely that some students feel they do not need help beyond that offered in class and through course materials.

The responses provided appear to most clearly reflect students' lack of time to devote to such resources. Many students also cited interpersonal barriers such as being uncomfortable meeting one-on-one with a tutor or instructor. Though some students may be more comfortable asking questions outside of a typical classroom setting, the privacy of an individual meeting seems to deter other students. Interestingly, this barrier was reported at almost the exact same rate for both instructors and tutoring resources. This is surprising because tutoring centers, frequently staffed with students, seek to provide peer-level support in order to create a more comfortable learning environment. Further research on supplemental instruction and tutoring centers should examine these interpersonal barriers and seek to find ways to reduce anxiety for students who might desire assistance but are uncomfortable with one-on-one sessions.

Though the current study offers useful information regarding supplemental instruction, a number of limitations must be considered. For example, because participants were not required to complete the supplemental instruction questionnaire, the writing log, or the BBQ, we had low response rates that resulted in entirely different samples at each time of collection. Future studies may benefit from offering students credit for responding. In addition, the BBQ measure has not been validated for research purposes and is intended as a self-diagnostic tool for professors; thus, it is unclear whether results from this measure accurately reflect what undergraduate students actually experience while approaching writing tasks.

Table 1.

Factor	Frequency (%)
"Office hours are not offered during my free times."	18 (75)
"I have too many competing obligations."	10 (41.7)
"I am not comfortable meeting one-on-one with my instructor."	6 (25)
"I do not expect attending office hours will be helpful."	6 (25)
"I find other resources to be more convenient."	3 (12.5)
"I find other resources to be more helpful."	2 (8.3)
"I do not know when my professor/TA holds office hours."	2 (8.3)

Note. This table lists the reasons most frequently cited by students for not utilizing professor or TA office hours.

Table 2.

Factor	Frequency
"I do not know when the on-campus tutoring resources are open."	13 (54.2)
"Tutoring is not offered during my free times."	6 (25)
"I am not comfortable meeting with a tutor."	5 (20.8)
"I do not expect tutoring will be helpful."	5 (20.8)
"I was not aware that on-campus tutoring resources existed."	4 (16.7)
"Tutoring is not offered for the subjects with which I typically need assistance."	2 (8.3)
"I find other resources to be more helpful."	2 (8.3)
"I find other resources to be more convenient."	2 (8.3)

Note. This table lists the reasons most frequently cited by students for not utilizing

professor or TA office hours.

Table 3.

Subscore	F	p	Partial η^2	Observed power
Work apprehension	1.467	.247	.089	.289
Procrastination	4.430	.021*	.228	.718
Writing apprehension	.323	.726	.021	.097
Dysphoria	1.158	.328	.072	.235
Impatience	5.301	.011*	.261	.798
Perfectionism (sphericity not assumed)	.220	.721	.014	.076
Rules (sphericity not assumed)	3.0922	.080	.171	.459
Checklist of Overt Signs of Blocking	.984	.386	.062	.205
Checklist of Cognitive Behaviors	6.080	.006*	.288	.852
Survey of Social Skills in Writing	.937	.403	.059	.197

Note. Of the ten sub-measures of the Boice Blocking Questionnaire (BBQ), a repeated measures analysis of variance found the differences in procrastination, impatience, and the Checklist of Cognitive Behaviors (CCB) across the three times to be statistically significant ($p < 0.05$).
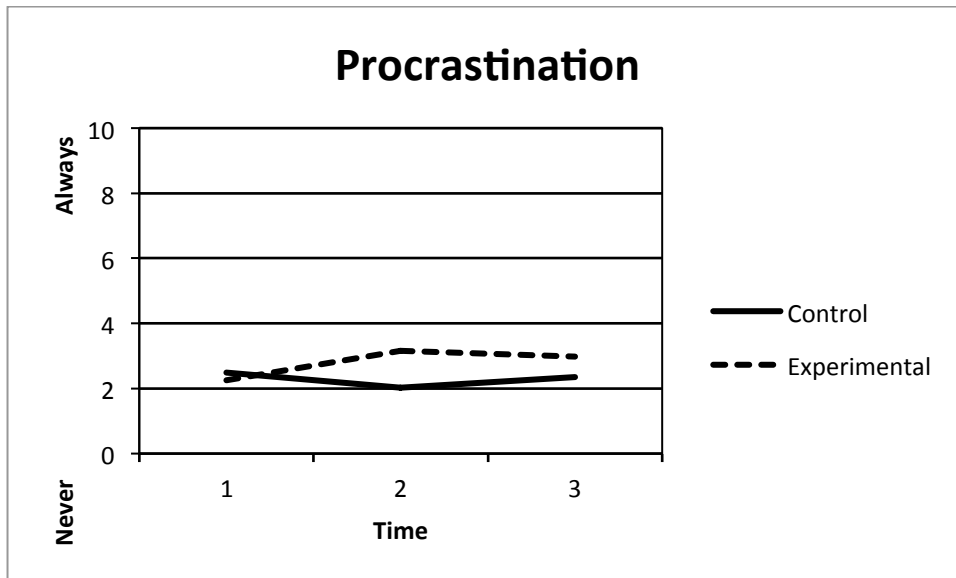
Figure 1. This figure illustrates the changes in self-reported levels of procrastination across

three time periods during the semester. A repeated measures ANOVA revealed a significant

interaction between group (control or experimental) and procrastination scores; while scores rose

between Time 1 and Time 2 for the experimental group, score fell between Time 1 and Time 2

for the control group.
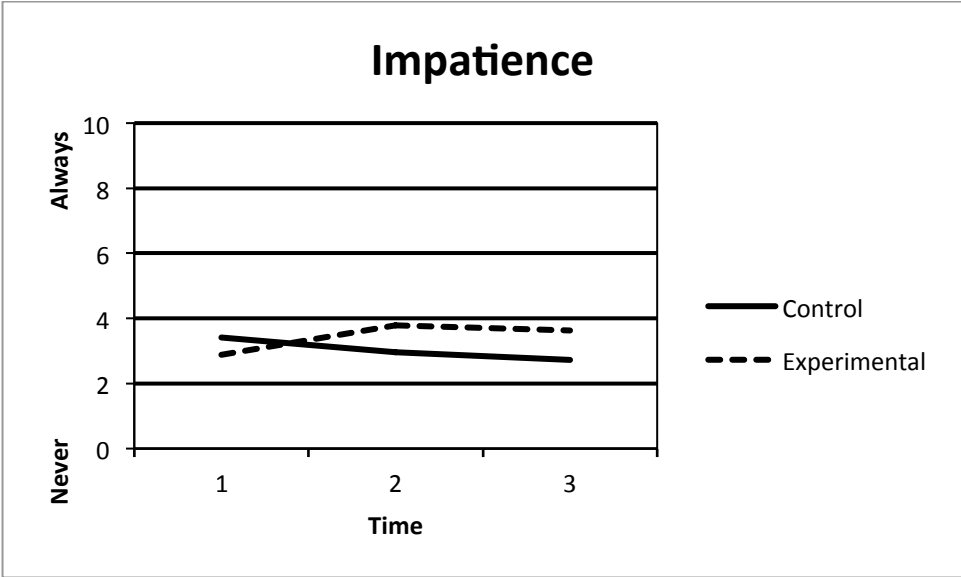
Figure 2. This figure illustrates the changes in self-reported levels of impatience across three

time periods during the semester. A repeated measures ANOVA revealed a significant

interaction between group (control or experimental) and impatience scores; while scores rose

between Time 1 and Time 2 for the experimental group, score fell between Time 1 and Time 2

for the control group.
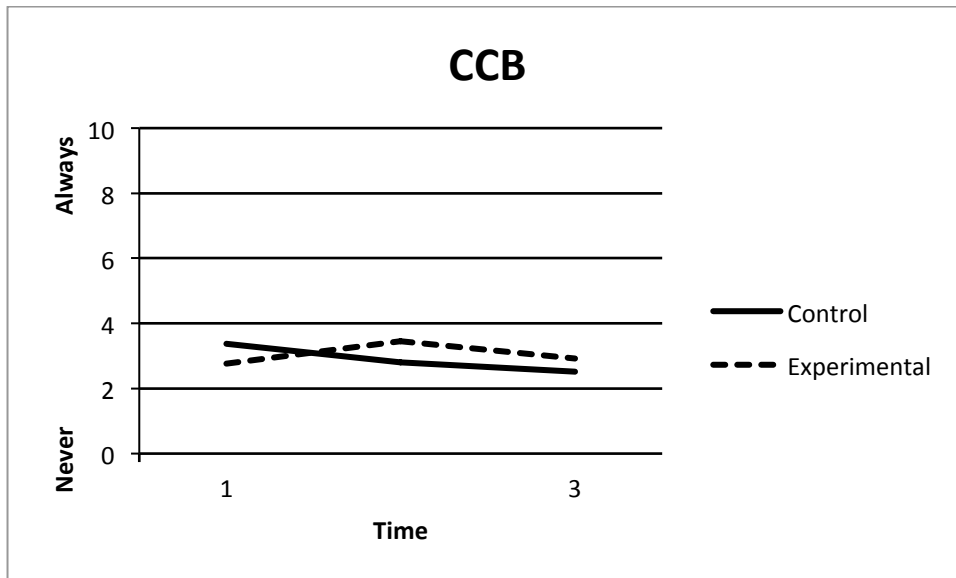
Figure 3. This figure illustrates the changes in self-reported levels of the Checklist of Cognitive Behaviors (CCB) across three time periods during the semester. A repeated measures ANOVA revealed a significant interaction between group (control or experimental) and CCB scores; while scores rose between Time 1 and Time 2 for the experimental group, score fell between Time 1 and Time 2 for the control group.

Appendix A

Drafts were graded throughout the semester using a modified version of the APA Style Report Scoring Instrument (SRSI; Greenberg, 2012). Over the course of two semesters, this instrument was modified and used on a trial basis in a psychological research methods course. Revisions to the rubric were made to increase consistency of scoring components between sections, increase the flexibility of scoring options, clarify scoring criteria and align weighting of scoring criteria to the values of the course instructors. The final version of the rubric was then used by the graduate assistant (GA) of the course to create scores and subscores for each written assignment completed by students in the course throughout the semester.

Weights of each component of the modified SRSI were determined through discussions between the writing fellow (WF), GA, teaching assistants, and the course instructor. Multiple mock papers were scored by this group, which included teaching assistants who had not been trained in applying the modified SRSI to paper grading. Revisions to the instrument were considered satisfactory when scores determined by the raters on a given paper did not differ from each other by more than five percentage points.

REVISED APA-STYLE REPORT SCORING INSTRUMENT
Based on the Achievement of 80 Specific Learning Outcomes Within
3 Essential Categories

OUTCOME ACHIEVEMENT
RATING Absent/Not at All Completely

0	1	2	3	4	5

I.   TITLE PAGE

A.   Content ----------------------------------- **[pt. total: ____/out of 20 → percentage: ____%] x 50% =** [_____]
   1. <u>Title</u> → accurate, informative, specific, self-contained, concise………………………………..... _____

   2. <u>Author(s)</u> → names(s) and affiliations(s)…………………………………………………………… _____

   3. <u>Running head</u> → shortened version of title (if applicable) that specifies key variables under study… _____

   4. <u>Manuscript page number</u> → page number in top right corner …………………………………….. _____

B.   Formatting -------------------------------- **[pt. total: ____/out of 30→ percentage: ____%] x 50% =** [_____]
   1. <u>All other page numbers</u> → upper right corner………………………………………………….. _____

   2. <u>Running head</u> → lower-case h, followed by colon; words in all caps; 50-character limit…….……… _____

   3. <u>Title</u> → centered, double-spaced; in title case.………………………………………………… _____

   4. <u>Author's name</u> → first name, last name; centered; two lines below title.…………………………… _____

   5. <u>Author affiliation</u> → centered; two lines below author name.………………………………………… _____

   6. <u>Title/Author/Affiliation Placement</u> → immediately above horizontal midline of page …………….… _____

C.   Expression (not applicable) -- **=** [N/A]

Title Page Subscore = [_____] **x 5% =** [_____]

II. ABSTRACT

A. Content -------------------------------------- **[pt. total: ____ /out of 20 → percentage: ____%] x 50% =** [_____]

   1. <u>Purpose</u> → accurate, brief statement of study's purpose……………………………………………………….. _____

   2. <u>Method</u> → accurate, brief, statement of method;
        includes number of participants and main sample characteristics………………………….. _____

   3. <u>Findings</u> → accurate, brief statement of main findings…………………………………………………… _____
   4. <u>Exclusion</u> → the information included in this section is neither excessive nor better suited for
        another section………………………………………………………………………………………… _____

B. **Formatting** ----------------------------------- **[pt. total: ____ /out of 15 → percentage: ____%] x 20% =** [_____]
   1. <u>Paragraph format</u> → block format (no indent); double-spaced……………,,,,,,,,,,,,………………………….. _____

   2. <u>Numbers</u> → expressed as numerals (except at start of sentence)…………………………………… _____

   3. <u>Length</u> → no more than 200 words……………………………………………………………………..…. _____

C. Expression ----------------------------------- **[pt. total: ____ /out of 15 → percentage: ____%] x 30% =** [_____]
   1. <u>Organization of Ideas</u> → ideas/thoughts flow logically;
        paragraphs have a topic sentence and supporting details……………..…… _____

   2. <u>Mechanics/Voice</u> → rules of grammar and punctuation are followed
        words are spelled correctly
        no slang or informal phrases (e.g., ended-up);
        no connection with the reader (e.g., "you"), etc);…………..………………..……... _____

   3. <u>Clarity and Readability</u> → language is clear and not ambiguous…………………………………… _____

Abstract Subscore = [_____] **x 10% =** [_____]

III.   INTRODUCTION

A. Content ------------------------------------- **[pt. total: ____/out of 25 → percentage: ____%] x 50% =** ⬚

1. <u>General Orientation</u> → introduction of topic/definition of variables being studied……………………… _____

2. <u>Empirical Context</u> → well-researched, focused, literature review using primary source information
enough logical evidence is provided………………………………………………….. _____

3 <u>Purpose</u> → accurate and clear statement of the study's purpose……………………………………….. _____

4. <u>Hypothesis</u> → accurate statement of hypothesis(es) being tested, with obvious rationale…………… _____
5. <u>Exclusion</u> → The information included in this section is neither excessive nor better suited for
another section………………………………………………………………………………… _____

B. **Formatting**   --------------------------------- **[pt. total: ____/out of 10 → percentage: ____%] x 20% =** ⬚

1. <u>Section Title</u> → consists of study title, written in title case…………………………………………..….. _____

2. <u>Citations</u> → proper APA citation format …………………………………………………………...….. _____

C. Expression ------------------------------------- **[pt. total: ____/out of 15 → percentage: ____%] x 30% =** ⬚

<u>1. Organization of Ideas</u> → ideas/thoughts flow logically from paragraph to paragraph
paragraphs have a topic sentence and supporting details
information is organized from general to specific……………………..……… _____

2. <u>Mechanics/Voice</u>→ rules of grammar and punctuation are followed
words are spelled correctly
no slang or informal phrases (e.g., ended-up);
no connection with the reader (e.g., "you"), etc);………….…………………..... _____

3. <u>Clarity and Readability</u> → language is clear and not ambiguous………………………………………._____

Introduction Subscore = ⬚ **x 20% =** ⬚

IV. METHOD SECTION

A. Content -------------------------------------- **[pt. total: _____ /out of 20 → percentage: _____%] x 50% =** ┌─────┐
                                                                                                    └─────┘

   1. <u>Participants</u> → number; how recruited; relevant characteristics (e.g., age, gender, etc.)…….…..…… _____

   2. <u>Apparatus/Materials</u> → description of equipment and/or materials used to carry
             out the study [if paper-and-pencil test: describes the
             types of items on the test and the rating scales used;
             gives representative examples; and cites source, if published instrument…..... _____

   3. <u>Procedure</u> → accurate, detailed description of how the study was conducted
          notes use of informed consent
          states that participants were debriefed……………………………………………… _____
   4. <u>Exclusion</u> → The information included in this section is neither excessive nor better suited for
          another section…………………………………………………………………………… _____

B. Formatting ------------------------------------- **[pt. total: _____ /out of 15 → percentage: _____%] x 20% =** ┌─────┐
                                                                                                     └─────┘

   1. <u>Three Subsections</u> → (Participants, Materials or Apparatus, Procedure)………..……………….. _____

   2. <u>Subsection Titles</u> → left justified, bold….…..…………………………………….……….. _____

   3. <u>Section Title</u> → centered, bold….…..………………………………………………….. _____

C. Expression ------------------------------------- **[pt. total: _____ /out of 15 → percentage: _____%] x 30% =** ┌─────┐
                                                                                                     └─────┘

   1. <u>Organization of Ideas</u> → ideas/thoughts flow logically from paragraph to
             paragraph; paragraphs have a topic sentence and supporting details..……... _____

   2. <u>Mechanics/Voice</u> → rules of grammar and punctuation are followed
             words are spelled correctly
             no slang or informal phrases (e.g., ended-up);
             no connection with the reader (e.g., "you"), etc);………….………………….... _____

   3. <u>Clarity and Readability</u> → language is clear and not ambiguous………………………………….…._____

Method Subscore = ┌─────┐ **x 20% =** ┌─────┐
                      └─────┘   └─────┘

V. RESULTS SECTION

A. Content ----------------------------------- **[pt. total: ____/out of 25 → percentage: ____%] x 50% =** [____]

   1. <u>Findings</u> → accurate, precise, clear, qualitative (in words) statement of findings…………………………... _____

   2. <u>Data: Descriptive Statistics</u> → accurate report of descriptive measures
                  (e.g., means and standard deviations, ,
                  percentages etc.) that support the stated findings………………………… _____

   3. <u>Data: Inferential Statistics</u> → accurate report of inferential measures that support
            the stated statistical significance of the findings
            (includes type of test, obtained value, df, & probability…………………… _____

   4. <u>Tables and Figures</u> → appropriate use of tables and figures as aids to communicating findings……….. _____

   5. <u>Exclusion</u> → The information included in this section is neither excessive nor better suited for
          another section………………………………………………………………………………… _____

B. Formatting ---------------------------------- **[pt. total: ____/out of 25→ percentage: ____%] x 20% =** [____]

   1. <u>Statistical Symbols</u> → (*M*, *SD*, *p*, *z*, *t*, *r*, etc.) in italics, equations include spaces………………………… _____

   2. <u>Inferential Test Results</u> → reported appropriately (value of test statistic, df, probability)………………….. _____

   3. <u>Tables</u> → formatted as per APA guidelines (e.g., no vertical lines)………………………………………… _____

   4. <u>Figures</u> → if graph, appropriately represents data; axes clearly labeled; caption…….,,,,……………….... _____

   5. <u>Section Title</u> → centered, bold………………….……………………………………………………….. _____

C. Expression ----------------------------------- **[pt. total: ____/out of 15 → percentage: ___%] x 30% =** [____]

   1. <u>Organization of Ideas</u> → ideas/thoughts flow logically from paragraph to
          paragraph; paragraphs have a topic sentence and supporting details.………… _____

   2. <u>Mechanics/Voice</u> → rules of grammar and punctuation are followed
             words are spelled correctly
             no slang or informal phrases (e.g., ended-up);
             no connection with the reader (e.g., "you"), etc);………………………….... _____

   3. <u>Clarity and Readability</u> → language is clear and not ambiguous……………………………….……… _____

Results Subscore = [____] **x 20% =** [_____]

VI. DISCUSSION SECTION

A. Content -- **[pt. total: _____/out of 30→ percentage: _____%] x 50% =** `_____`

1. <u>Recap</u> → accurate, non-numerical recap of main findings as they relate to purpose of study…………... _____

2. <u>Empirical Context</u> → integration of findings within the context of existing knowledge on the topic...…… _____

3. <u>Implications</u> → consideration of the possible impact of the findings,
   especially with regard to a current issue, theory, or "real-world" problem……….………... _____

4. <u>Limitations</u> → consideration of the study's methodological limitations, and of
   the likelihood that the findings will generalize to other contexts and populations…………. _____

5. <u>Future Research</u> → consideration of the next <u>logical</u> step for future research on the topic ….………... _____

6. <u>Exclusion</u> → The information included in this section is neither excessive nor better suited for
   another section……………………………………………………………………………._____

B. Formatting --------------------------------- **[pt. total: _____/out of 10 → percentage: _____%] x 20% =** `_____`

1. <u>Section Title</u> → centered, bold…………………..……………………………………………….. _____

2. <u>Citations</u> → proper APA (name, date) citation format …………………………....…………………... _____

C. Expression -- **[pt. total: _____/out of 15 → percentage: _____%] x 30% =** `_____`

1. <u>Organization of Ideas</u> → ideas/thoughts flow logically from paragraph to
   paragraph; paragraphs have a topic sentence and supporting details……..…… _____

2. <u>Mechanics/Voice</u>→ rules of grammar and punctuation are followed
   words are spelled correctly
   no slang or informal phrases (e.g., ended-up);
   no connection with the reader (e.g., "you"), etc);………….……..…………... _____

3. <u>Clarity and Readability</u> → language is clear and not ambiguous………………………….………____

Discussion Subscore = `_____` **x 20% =** `_____`

VII. **REFERENCES SECTION**

   A. Content --- **[pt. total: _____ /out of 10 → percentage: ___%] x 40% =** ⌐ ¬
                                                                                                                         L _ ┘

      1. <u>Inclusive sourcing</u> → includes source information for all work cited…………………………………… _____

      2. <u>Exclusive sourcing</u> → does NOT include source information for any work *not* cited……………………… _____

   B. **Formatting** ------------------------------------- **[pt. total: _____/out of 55 → percentage: _____%] x 40% =** ⌐ ¬
                                                                                                                         L _ ┘

      1. <u>Section Title</u> → centered…………....…………………………………………………………………….. _____

      2. <u>Hanging Indent</u> → each reference is formatted with a hanging indent……………………………………... _____

      3. <u>Alphabetized</u> → list is alphabetized by last name of first author……………………………………….…... _____

      4. <u>Author name(s)</u> → last name, first initial (period), middle initial (period)……………………..………... _____

      5. <u>Ampersand</u> → between last and second-to-last author's name (if multiple authors)………………..…... _____

      6. <u>Year of Publication</u> → in parentheses; followed by a period…………………………………………... _____

      7. <u>Title of Article</u> → in sentence case; followed by a period.……………………………………….…... _____

      8. <u>Journal Name</u> → italicized; in title case; followed by a comma……………….…………………………... _____

      9. <u>Volume Number</u> → in italics; followed by a comma if no issue number…………………………………... _____

     10. <u>Issue Number</u> → in parentheses; not italicized; followed by a comma………….……………………... _____

     11. <u>Page Numbers</u> → inclusive, separated by a dash; followed by a period……………….……………... _____

Other Formatting-- **[pt. total: ___/out of 15 → percentage: _____%] x 20% =** ⌐ ¬
                                                                                                            L _ ┘

     11. <u>Section/Page Order</u> → Title Page, Abstract, Introduction, Method, Results.
                     Discussion, References, Tables, Figure Caption Page, Figures……………..……… _____

     12. <u>Page Breaks</u> → Abstract (page 2), Introduction (page 3), References, Figure Caption Page……….….. _____

     13. <u>Manuscript Spacing/Alignment</u> → continuously double-spaced, aligned right……..…………………... _____

   C. **Expression** (not applicable) --- **=** ⌐ **N/A** ¬

                                       <u>References Subscore</u> = ⌐ ¬ **x 5% =** ⌐ ¬

                                                                                     Final Score = ⌐ ¬

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