

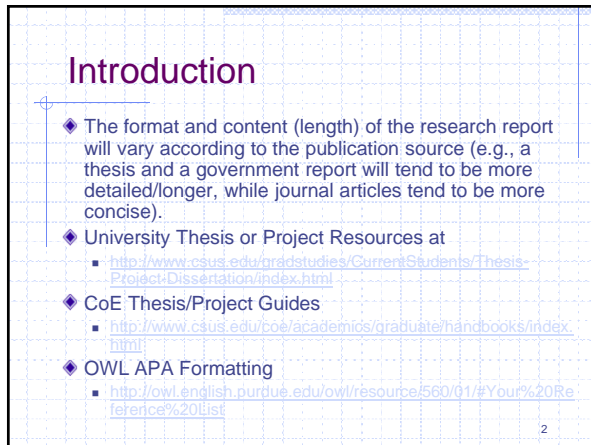


 SACRAMENTO STATE
Leadership begins here.

Writing the Research Report

Stephen E. Brock, Ph.D., NCSP
California State University, Sacramento

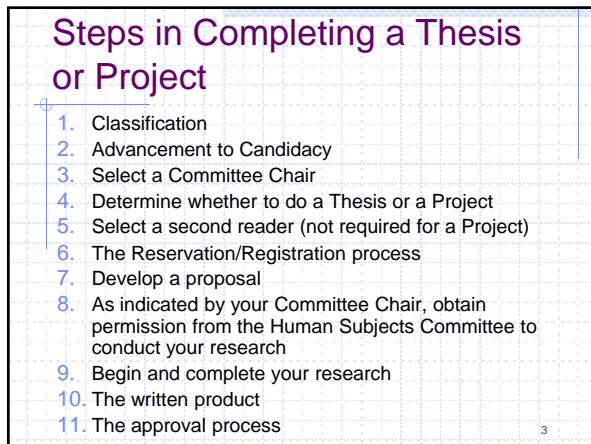
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Introduction

- ◆ The format and content (length) of the research report will vary according to the publication source (e.g., a thesis and a government report will tend to be more detailed/longer, while journal articles tend to be more concise).
- ◆ University Thesis or Project Resources at
 - <http://www.csus.edu/gradstudies/CurrentStudents/Thesis-Project-Dissertation/index.html>
- ◆ CoE Thesis/Project Guides
 - <http://www.csus.edu/coe/academics/graduate/handbooks/index.html>
- ◆ OWL APA Formatting
 - <http://owl.english.purdue.edu/owl/resource/560/01/#Your%20Reference%20List>

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Steps in Completing a Thesis or Project

1. Classification
2. Advancement to Candidacy
3. Select a Committee Chair
4. Determine whether to do a Thesis or a Project
5. Select a second reader (not required for a Project)
6. The Reservation/Registration process
7. Develop a proposal
8. As indicated by your Committee Chair, obtain permission from the Human Subjects Committee to conduct your research
9. Begin and complete your research
10. The written product
11. The approval process

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Select a Committee Chair

- ◆ Start this process early in case your first choice is unable to work with you at this time.
- ◆ Your committee chair will help guide the development of your research question or project idea, assist you as you write your project or thesis proposal, supervise the implementation of your work, and approve the final draft of the written thesis or project.
- ◆ It is your responsibility to stay in contact with your committee chair, keep up with deadlines, and follow through with your commitments.
- ◆ Your chair will provide you with feedback on your writing and the organization of your product, **but it is not the role of the committee chair to copy-edit your product for you.** If a draft is filled with spelling, grammar, and/or style errors you can expect that your committee chair will return it without substantive comments.
- ◆ Regardless of how confident you are in your written product, you will want to give yourself ample time to turn in drafts of each section of your product, get feedback, and revise.

4

A Project or a Thesis?

- ◆ In consultation with your committee chair, determine whether the topic you are interested in would best fit a thesis or a project.
 - **Thesis.** A Thesis is the written product of a systematic study of a significant problem. It clearly identifies the problem; states the major assumptions; explains the significance of the undertaking; sets forth the sources for, and methods of gathering information; analyzes the data; and offers a conclusion or recommendation. The product must evidence originality, critical and independent thinking, appropriate organization and format, clarity of purpose, and accurate and thorough documentation (CSUS Catalog).
 - **Project.** A Project is a significant undertaking appropriate to the fine and applied arts or to professional fields. It must evidence originality and independent thinking, appropriate form and organization, and a rationale. It must be described and summarized in a written abstract that includes the project's significance, objectives, methodology, and a conclusion or recommendation (most recent CSUS Catalog).

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Select a Second Reader

- ◆ If you have decided to do a thesis, with the help of your committee chair, select a second faculty member to be the second reader.
 - If you have decided to do a project you will not need a second reader.
- ◆ The role of the reader is to provide a second opinion on the written product of your thesis.
- ◆ This faculty member will read and provide input after your committee chair has given you input.

6

Reservation/Registration Process

- ◆ You must complete a Reservation Form for each semester of registration by the stated deadlines indicated.
- ◆ It is very important to discuss with your committee chair expectations on the length of time it will take complete your thesis/project.
 - If you know that you can finish your thesis/project in one semester you would register for the total number of thesis/project units required. Most students will need a minimum of two semesters to complete their thesis/project.
- ◆ **Continuous Enrollment**
 - Although the CSUS Office of Graduate Studies has paperwork to pay "continuous enrollment" fees [<http://www.csus.edu/gradstudies/CurrentStudents/index.html>], this is not automatic in the EDS department. You will need to get approval from your committee chair. Most of our faculty who chair projects/theses will require that you reregister, paying the University's registration fees each semester until completion.

Develop a Proposal

- ◆ Before beginning the Thesis or Project you are expected to complete a proposal that clearly specifies what your culminating activity will involve.
- ◆ Sometimes your committee chair will want to see this document before he or she agrees to supervise your work. They may also require you to read and sign a *Thesis/Project Agreement*.

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Human Subjects

- ◆ If your work will involve the participation of human subjects, you must obtain approval from the Human Subjects Committee **before** you begin your study (before you collect any data and/or being to work with human subjects as a part of a thesis or project).
- ◆ You **must** get approval prior to beginning your work. As stated above, the human subjects committee will require both the introduction and the methods sections as part of the approval process.

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Start Your Research!

- ◆ It is important to plan enough time to complete your proposal, and get approval from human subjects if necessary, before beginning your work in the field.
- ◆ Once your research study or project has been organized, the literature review complete, and your methods prepared, you will have a much easier time completing the actual work you have designed to do.
- ◆ While collecting your data or working on your project, keep in touch with your committee chair on a regular basis to evaluate progress, discuss your concerns, and make any changes as necessary. Don't expect the sponsor to contact you. You will need to take the initiative. Do not wait until it is too late --- this may cause a delay in the completion of your thesis or project, or the need to start over.

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The Written Product

- ◆ Your project or thesis must follow the formatting of the *Publication Manual of the American Psychological Association* (most recent edition) and the CSUS thesis/project format requirements.
- ◆ APA Style Home Page: <http://www.apastyle.org/>
- ◆ There are only two things that differ between the CSUS thesis/project format requirements and the APA Guidelines. In these cases you should comply with the CSUS requirements.
 1. APA: use running headers, CSUS: do not use running headers
 2. APA: appendices are labeled on first page of actual item, CSUS: use appendix title page
 3. APA: references follow end of the last chapter, CSUS: references follow the Appendices

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The Written Product: Thesis

- ◆ Blank Page
- ◆ Title Page
- ◆ Copyright (optional)
- ◆ Approval Pages (original plus one copy)
- ◆ Format Approval Page (original plus one copy)
- ◆ Abstract (original plus one copy)
- ◆ Preface, Dedication and or Acknowledgement Page (optional).
- ◆ Table of Contents with page references
- ◆ List of Tables
- ◆ List of Figures
- ◆ Chapter 1-The Problem/The Issue
- ◆ Chapter 2-Review of the Literature
- ◆ Chapter 3-Methods/Methodology
- ◆ Chapter 4-Findings/Outcomes/Results (different for a Project)
- ◆ Chapter 5-Conclusion, Summary & Recommendations
- ◆ Appendices
- ◆ References
- ◆ Blank Page (required)

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Paper

- ◆ The thesis or project submitted for deposit in the University Library must be printed on white 20 lb. (50% or 100% cotton); 24 lb. (100% cotton); or laser paper with matte finish.
- ◆ The paper size is normally 8.5 x 11. Erasable paper is not permitted. One blank sheet for both the front and back of the thesis or project must be included.
- ◆ The thesis or project may be produced on laser paper and photocopied onto the appropriate paper. However, the copy must be clear, sharp, and black on white (no gray). Photocopied signatures are acceptable.

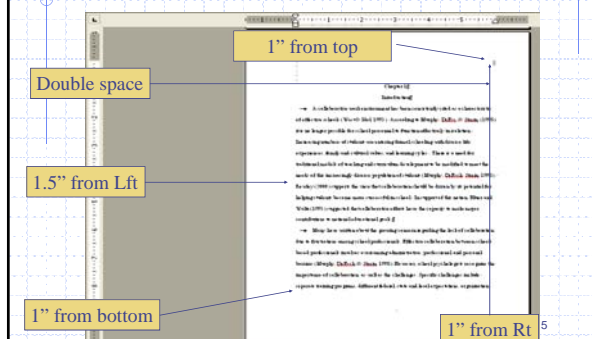
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Erasures and Corrections

- ◆ Theses/projects will not be accepted in which erasures have been made or opaque correction fluid used.
- ◆ Make whatever corrections are necessary; then reproduce the page(s) on the required paper.
- ◆ Once the project/thesis has been microfilmed, bound and shelved in the library, no further corrections may be made.

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Thesis/Project Margins



Margins

- ◆ All text must be printed on single -sided paper.
- ◆ Text must be double spaced, except for quoted passages (of 40 words or more), which may be indented and single spaced for emphasis.
- ◆ Bottom and right margins: One inch from edge of paper.
- ◆ Top and Left margin: One and one-half inch from edge of paper.
 - This measurement is especially critical because of the binding. (Arabic page numbers are one inch from the top).
- ◆ Text should begin one and one-half inch from the top of the paper.

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Page numbers

- ◆ The preliminary pages preceding Chapter 1 carry consecutive lower case Roman numerals, centered at the lower margin of the page, starting with the approval page which is numbered "ii".
 - The Title Page is unnumbered, but carries the implied number "i".
- ◆ The first page of the text carries the Arabic number "1" and pages thereafter carry consecutive Arabic numbers, including the materials in the Appendices and the Bibliography.
- ◆ The Arabic numbers are positioned in the upper right-hand corner; down one inch from the top and one inch in from the right edge of the paper. Double space to the first line of text.

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Thesis Title Page

SCHOOL PSYCHOLOGIST PERCEPTIONS OF COLLABORATION AMONG
EDUCATIONAL PROFESSIONALS

Kimberly Ann Schramm
B.S., California State University, Hayward, 1995

THESIS

Submitted in partial satisfaction
of the requirements for the Degree of

MASTER OF SCIENCE
In
Counseling, School Psychology Option

At
CALIFORNIA STATE UNIVERSITY, SACRAMENTO

SPRING
2003

APA Title Page

Individual Differences 1

Running head: INDIVIDUAL DIFFERENCES IN BIMODAL PROCESSES

Individual Differences in
Bimodal Processing and Text Recall

James R. Smith
University of West Florida

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Approval Page

SCHOOL PSYCHOLOGIST PERCEPTIONS OF COLLABORATION AMONG
EDUCATIONAL PROFESSIONALS

A Thesis
By

Kimberly Ann Schramm

Approved By: _____, Committee Chair
Stephen E. Brock, Ph.D.

_____, Second Reader
Kristine Strong, Ph.D.

Date: _____

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Components of the Research Report

- ◆ Abstract
- ◆ Introduction
- ◆ (Review of the Literature)
- ◆ Method
- ◆ Results (Analysis of Data)
- ◆ Discussion (Findings and Implications)
- ◆ Appendices
- ◆ References (Bibliography)

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Abstract

- ◆ Not a part of a proposal
- ◆ The very last section written
- ◆ A brief summary
 - Accurate, self contained, concise, and specific
 - ◆ Approximately 100 words
 - ◆ Ways to conserve include using digits for all numbers, using abbreviations (explain if necessary)
- ◆ Used by other researchers to determine relevance.

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Abstract, Components of

- ◆ Problem under investigation (one sentence)
- ◆ Participants and their relevant characteristics
- ◆ Method design and measures
- ◆ Finding(s) and level(s) of significance
- ◆ Conclusions

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Abstract, An Example

Digit Naming Speed Performance Among Children With Attention-Deficit/Hyperactivity Disorder

Stephen E. Brock and Catherine Christo
California State University, Sacramento

This study compared the *Digit Naming Speed Test* (DNS) performance of 20 children with Attention-deficit/Hyperactivity Disorder (ADHD) to 20 carefully matched peers without ADHD. Matching variables included age, grade, gender, and word reading ability. Sample construction included procedures that allowed for the identification and removal from the sample those children with reading disabilities (RD) and those children with ADHD who had predominantly hyperactive symptoms. Despite similar word identification and word attack test scores, contrary to previous research, and contrary to the researcher's expectations, children with ADHD were significantly slower at naming numbers than were children without ADHD. Explanations for these findings, theoretical and practical implications, and limitations and future study are discussed.

Key Words: ADHD, digit naming

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Chapter 1: Introduction

- ◆ Not labeled in a journal article, but labeled in a thesis/project.
- ◆ Addresses the following:
 - Placement of the research within a specific field/literature.
 - ◆ e.g., the academic achievement of children with ADHD
 - ◆ What were your search terms? These words should be used here.
 - Why has the study been conducted?
 - What the research will add to the literature (what gaps will it fill in).
 - What the research expected to find (hypotheses).
 - ◆ Helps to identify possible bias
 - ◆ Very general if the hypothesis is non-directional.

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Introduction

reading disabilities (RD). Among children with ADHD who do not have RD, naming speed deficits are not observed. Of particular interest in the current research were the digit naming performance results. On this task participants were required to name digits presented on a card as rapidly as possible. The chief concern for most of RD-Alphas. Results suggested that children with ADHD symptoms who did not have RD did not have significantly slower digit naming speed when compared to children without these symptoms. While the mean time for the ADHD group was 27.13 seconds (SD = 9.31) the mean time for children without ADHD symptoms was 24.20 seconds (SD = 5.61). The difference between these two means was not significant.

In another similar study, Ackerman and Dickman (1992) compared the naming speed abilities of three groups of children: children with "borderline" (i.e., participants with a 17-point discrepancy between IQ and Wide Range Assessment of Reading scores), slow learner borderline (i.e., poor readers who had less than a 17-point difference between IQ and reading), and ADHD only (i.e., average or better readers with average IQ). Results indicated that the ADHD group was significantly faster than the dyslexia group on verbal naming of digits, but did not differ from the control ("slow learner") group.

Similarly, Chapman, Gray, Griffin, and Hynd (2001) also studied naming speed differences among children with ADHD, children with RD and no ADHD, and normal controls. In this study, naming speed for four different types of stimuli (i.e., colors, numbers, letters, and objects) was compared across these groups. Several Chapman et al. found that children with ADHD only differed from a control group on naming of colors and objects but did not differ from the control group in naming of letters and numbers. Children with RD differed from the control group on all naming speed measures and was slower than the ADHD group on naming of letters and numbers. The ADHD group did not differ from the RD group on speed of naming colors and objects. The authors argue that the deficit in color and object naming speed for children with ADHD, and without RD, may be due to attentional issues caused by the nature of the task rather than as a result of a naming deficit per se. That is, color naming is an easy task that holds little attraction for children with ADHD. Further, these children did not differ from controls on a naming task using alternate stimuli of numbers and letters. The authors conclude that the slower naming speed for colors may, therefore, reflect a performance deficit rather than a processing deficit.

Finally, Farnick, Mattarrese, and Frijoles (2001) tested children with ADHD to differ significantly from a group of children without ADHD or RD in speed of naming colors. Though they also differed from this group on naming speed for letters, the difference was eliminated when general language ability and phonological processing were controlled. The difference between children with ADHD and non-impaired children on speed of naming colors remained when general language ability was controlled. Tannock et al. (2001) also examined the naming speed of children with ADHD and RD. These children differed from the ADHD only group and a control group on all naming speed measures. These findings led the authors to speculate that the naming speed deficits of the ADHD-only group represented difficulties with "effortful, semantic processing" (p. 242) whereas the deficits in letter naming, as well as color naming, of the ADHD with RD group reflected more global difficulties in processing of all types of verbal information.

The Current Research

The current research was initiated from the perspective that naming speed deficits are linked to reading disabilities. From prior research, it was assumed that these deficits are specific to children with ADHD and RD, and are not observed among children with ADHD who do not have RD. In addition, it was believed that ADHD and RD are distinct clinical entities. While ADHD and RD frequently co-

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Chapter 2: Review of the Literature

- ◆ Presence will vary depending upon publication
 - Not typically found in a journal article (background knowledge is assumed)
 - Required for a thesis (background knowledge is not assumed)
- ◆ Goes into detail regarding the studies placement within a specific literature.
- ◆ Provides essential background knowledge.
- ◆ Should describe search terms/method.
- ◆ Starts broad and becomes more narrowly focused on the study's topic.

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Chapter 3: Method

- ◆ What was done in sufficient detail for others to replicate.
- ◆ Detailed description of how the study was conducted.
- ◆ Subsections
 - Participants
 - ◆ Who
 - ◆ How many
 - ◆ Selection criteria/method.

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Chapter 3: Method (continued)

- ◆ Subsections (continued)
 - Materials or Measures
 - ◆ The “things” used in the study.
 - ◆ Described in sufficient detail to allow for replication.
 - ◆ Specialized material will call of substantial discussion.
 - Standardized material will not require such detail.
 - ◆ Report reliability and validity data as indicated.

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Chapter 3: Method (continued)

- ◆ Subsections (continued)
 - Design & Procedure
 - ◆ Sequential description of each step in the research process.
 - ◆ Exactly how did the study proceed.
 - ◆ What was the experimental design.
 - ◆ How was the IV manipulated
 - ◆ Instructions given (exact quotes needed if they were a part of the experimental manipulation)
 - ◆ Some detail can be omitted+ by giving the reader an address to obtain information.

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Method

Citation:

Brock, S. E., Rothbart, M. K., & Derryberry, D. (1986). Heart-rate deceleration and smiling in 3-month-old infants. *Infant Behavior and Development, 9*, 403-414.

METHOD

Subjects

The present research is one segment of a longitudinal study of 62 infants conducted at the University of Oregon. Subjects for the sample were recruited via letters sent to families listed in the birth announcements section of Eugene/Springfield area newspapers. Infants' affective and motor responses to a series of controlled tactile, visual and/or auditory stimuli were observed and videotape recorded in a laboratory setting.

The laboratory procedures at 3 months involved 18 episodes over a period of 25 min. The last of the procedures was 30 s of social stimulation. This procedure was selected as being an especially effective elicitor of smiling. Of the 62 infants, 47 experienced the social stimulation procedure a second time, 1 week after the first occasion. Analysis of smiles occurring on these two occasions allowed for within- as well as across-subject analysis. Only those infants who smiled and satisfied smile and heart-rate criteria described below were included in the present sample, and only one smile for a given child, on a given day, was used for the analysis. A total of 41 infants met smile and heart-rate criteria on at least one trial. For 15 of the 41 infants, the procedure elicited smiles meeting these criteria on both days.

Apparatus

Gray enclosure: Throughout the procedures used, infants were seated in an infant seat placed within a three-sided gray enclosure. With the mother at the

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Method

child's side, the infant sat behind a table and directly in front of a 30-cm x 30-cm curtain-covered window. On the other side of this window, approximately 3 feet (.91m) away from the infant's face, sat the experimenter.

Video equipment: Facial expressions and heart-rate patterns were filmed by two Panasonic portable video cameras. They were recorded on black and white Memorex video tape via a Panasonic portable video recorder.

Heart-rate equipment: Heart rate was recorded on a Beckman-type RS Dynograph with cardiometer coupler for beat-to-beat readouts. Heart rate was displayed on the upper right-hand corner of the video tapes. This allowed for precise synchronization of facial expressions and preceding heart-rate decelerations.

Procedure

Two experimenters conducted each laboratory session. Experimenter 1 was stationed behind a one-way mirror operating the videotaping and heart-rate equipment and also instructed experimenter 2 as to when to present the stimulus for each episode. All sessions began with a video-taped diaper change in which the mother was asked to interact with the child as she usually did. Heart-rate electrodes were then attached, and infants were placed in an infant seat within the three-sided gray enclosure. The mother watched her infant on a video monitor to her right; this allowed her to provide security for the infant by her presence without becoming actively involved in the presentation of stimuli.

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Method

Social Stimulation

The social-stimulation procedure begins when the experimenter removes the curtain from the window, which has, until now, kept her out of the infant's direct view. She then presents her face and repeats in an animated fashion the following:

Hi (infant's name). Thanks very much for coming in today. You were a very nice baby, yes, you were. Thanks very much. We are all done showing toys. We hope you had a nice time—we will see you again before too long. I'll look forward to seeing you again. You're a nice baby, aren't you? Yes, you are! You can take Mom home, now. Thanks very much for coming in. Bye-bye. Bye-bye (waves).

The combination of context and procedure creates a novel stimulus for the infant and, for most children, it elicited at least one smile. If it did so, and further elicited a heart-rate pattern meeting the following criteria, it was included in the sample and coded.

Smile Criteria. Whether or not a given facial behavior was a smile has been determined by criteria similar to those of Oster (1978). These criteria are as

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Method

1. There must be movement of the zygomaticus major, which draws the mouths' corners up into a smile. This is the basic defining characteristic of smiling. Any asymmetric smiles occurring were not coded. Unless an infant smiled in the course of an episode, heart-rate criteria described below were not applied, and the subject was deleted from the analysis.
2. The facial behavior must appear for at least 1 s. (This rule allowed us to clearly discriminate smiles from more ambiguous facial grimaces common at this age.)
3. The infant must not be smiling before beginning of the social stimulation procedure. Such smiles were elicited by something other than social stimulation and inclusion of them would reduce uniformity of treatment.
4. The smile must be clearly visible. If, for example, the infant has his or her hands in front of the mouth while smiling, there is a greater chance of coding it incorrectly.

Heart-Rate Criteria. There were two heart-rate requirements:

1. Heart rate must be 170 beats per minute (BPM) or below upon entry into the procedure. A heart rate above 170 BPM was considered to reflect a potentially confounding infant-distress state.
2. A heart-rate deceleration must occur within the social-stimulation period prior to the smile. Without a deceleration, the heart-rate pattern was not considered to reflect an orienting reaction. There was a total of six smiles (or 8% of all smiles observed) which failed to meet this criterion. That is, 92% of smiles were preceded by a heart-rate deceleration.

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Method

Coding Procedures. Given that a smile met the above criteria, it was coded for smile size and smile duration. Smiles were coded for intensity before magnitude of heart-rate deceleration was assessed. Thus, although the second measure (heart rate) was not totally blind with respect to the first, its measurement is unlikely to have been affected by observer bias. Heart rate was coded via cardiometer. This apparatus measures the length of time between two successive ventricular firings and converts this to the rate.

In coding the patterns yielded by the heart rate, the last deceleration (heart-rate decrease) immediately preceding the smile was coded for magnitude of deceleration, duration of deceleration, and slope of deceleration. Magnitude represents the beat per minute (BPM) drop for a given heart-rate deceleration. For example, if an infant's heart rate was 150 BPM at the beginning of a deceleration and 140 at the end, the magnitude of the deceleration was -10 BPM. Duration of deceleration represents the amount of time during which

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Method

the deceleration took place. It was coded to .01 s, by a digital clock which was displayed in the upper-left-hand corner of the videotapes.

Slope of deceleration was determined by dividing magnitude of deceleration by duration of deceleration. Smile duration was coded by the same digital clock used to code duration of heart-rate deceleration. If a smile faded and then returned within .5 s, it was coded as one continuous smile. Smile size was determined by a code included in Appendix A based on observation and previous research (Brannigan & Humphries, 1972; Emde, Campos, Reich, & Gaensbauer, 1978; Washburn, 1929). The code makes use of three smile sizes: small, medium, and large. The peak magnitude of a given smile as represented by this code was recorded for each smile.

Reliability

Because of the objective nature of the heart-rate measures and smile duration, a test of reliability was not felt to be necessary. The smile-size code, however, was a subjective one. Therefore, interrater reliability data were collected for independent ratings for 21 smiles, with 85% complete agreement.

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Method

METHOD

Participants

Initial ADHD group selection procedures. ADHD group participants were drawn from an urban university child psychiatry clinic and a suburban regionally located school district. From review of available psychiatric, psychological, and educational records, 43 children were identified as possibly being appropriate for inclusion in the ADHD sample.

Participant selection was based first upon documentation of an ADHD diagnosis. Although these diagnoses were made independent of the current research, attempts were made to confirm the clinical severity of this sample's ADHD symptomatology by collecting pre-existing behavior rating scale data (when available).

Additional participant selection criteria included an intermediate grade educational placement and evidence of at least average word identification reading ability. All children who had been placed in a special education program due to reading difficulties were excluded. Finally, to address research suggesting attentional and hyperactive/impulsive symptoms load on separate factors (Healey et al., 1993; Lahey et al., 1988), and the concern that these factors may represent separate disorders (Barkley, 1993), attempts were made to exclude from the study's sample children who had primarily hyperactive/impulsive symptoms. Specifically, when *Diagnostic and Statistical Manual of Mental Disorder (DSM-IV)* (American Psychiatric Association, 1994) criteria were used to make the ADHD diagnosis (as was the case for all participants obtained from the child psychiatric clinic), children who were Predominantly Hyperactive/Impulsive Type were excluded. In those instances where *DSM-IV* (American Psychiatric Association, 1994) criteria had not been used psychiatric, psychological, and educational record review confirmed the presence of symptoms of inattention.

The parents of 27 of the 43 selected children responded positively to the letter mailed to them soliciting participation. In an attempt to eliminate the potential confounding influence of the medications prescribed to control ADHD symptoms, it was requested that all ADHD group participants discontinue any medication they were taking to help manage their ADHD symptoms during the 24

Method

Secondary ADHD group selection procedures. To ensure adequate word reading abilities and to help match ADHD and comparison group participants, the first measure administered was the *Woodcock-Johnson Tests of Achievement* (WJ; Woodcock & Mather, 1989) Letter-Word Identification subtest. Using age norms, scores on this subtest had to be in the Average range or higher (standard scores of 90 and above). Using these criteria three children with ADHD were excluded. An additional three children whose subtest scores could not be matched with a comparison participant were also excluded. To verify the absence of RD (as it was defined in prior research), the *Peabody Picture Vocabulary*

For detailed PPVT-R, Dunn & Dunn, 1981) was administered. This test was used in combination with Letter-Word Identification subtest scores in a fashion similar to that employed by Halperin, Cantanero, Klein, and Reid (1984). All but one participant had PPVT standard scores no more than 14 points higher than their Letter-Word Identification standard scores. One child in the sample had a PPVT standard score 19 points higher than his Letter-Word Identification standard score and was thus excluded from the sample.

Of the remaining 20 children, 13 were obtained from the child psychiatric clinic. The remaining ADHD group children were from the regional school district and were diagnosed by practitioners in private practice ($n = 4$), psychiatric in private practice ($n = 1$), or a community mental health agency ($n = 2$).

Rating scale results were available for most of the ADHD group's 20 participants. T-scores obtained from parent ratings on both the Child Behavior Checklist (Achenbach, 1991) Attention Problems scale ($M = 71.44, SD = 9.98$) and the Conners' Rating Scale (Conners, 1991) Hyperactivity Index ($M = 77.44, SD = 13.77$) fall within the clinically significant range of scores (T-scores above 70 are considered significant). Only 5 scores of the 20 participants with ADHD (25%) conformed with the request to discontinue ADHD medication at the time of testing.

To document the degree to which participants demonstrated predominantly inattentive symptoms, DSM-IV ADHD symptom checklists developed by the first author were examined. This Checklist identified the 16 DSM-IV symptoms of ADHD on a 0 to 3 scale, with higher scores reflecting greater symptom severity. Checklists were available for 14 of the 20 ADHD group participants and suggested that the attempt to exclude children with predominantly hyperactive/impulsive symptoms was successful. Children in this sample had mean hyperactive ($M = 22.21, SD = 4.14$) than hyperactive/impulsive ($M = 15.33, SD = 2.21$) symptoms. The difference between these means was significant ($t = 3.11, df = 1, p = .005$).

Finally, the WJ Word Attack subtest (Woodcock & Mather, 1989) was also administered. The Word Attack subtest tests the ability to read nonsense words. It was administered to ensure that partici-

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Method

Comparison group selection procedures. Twelve intermediate grade teachers were asked to identify general education students whom they considered to be average and above oral readers, with "normal" attention abilities. From teacher nominations, 156 children were identified as potential participants. The parents of 52 of the 156 selected children (33%) agreed to have their children participate in the study.

ADHD-Comparison group matching. All 52 Comparison children were administered the Letter-Word Identification subtest. They were then matched with an ADHD group peer. Participant matches for grade and gender are self-explanatory. There was one instance where a participant with ADHD had a higher grade placement than his Comparison group peer. On the Letter-Word Identification subtest, Comparison group participants and an ADHD group peer were considered to match if their scores were no more than \pm seven standard score points (less than one-half standard deviation) apart. Matches for age were made when a pair of participants had birth dates within six months. Using these criteria, 20 of the 52 children (39%) were matched with an ADHD group peer and were administered the remaining tests of the research protocol.

Variables correlated with digit naming speed were evaluated for the Comparison group as they had been for the ADHD group. This evaluation included administration of the *PPVT* (Form M; Dunn & Dunn, 1981), and the *WJ* (Woodcock & Mather, 1989) Word Attack subtest.

Participant selection summary. Review of psychiatric, psychological, and educational records, and teacher nomination identified 199 children as potential participants. Of this number, 79 (40%)

Method

Measure

To assess digit naming speed the *Digit Naming Speed Test* (DNS) was administered. Developed by Spring and Capps (1974), this test required children to read the names of 50 randomly ordered digits (excluding the two-syllable digits 0 and 7) as quickly and accurately as possible. Using different 50 digit sequences, participants read these numbers twice. Digits were typed in a single row in the center of cards measuring 4 X 8.5 inches. The single row of digits was divided into 10 five-digit groups separated by a single space. Separate cards were used for each trial. Specific directions given to each participant are available from the first author.

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Chapter 4: Results

(Data Analysis in the Proposal)

- ◆ What statistical procedures were used
- ◆ A direct factual description of what was found with regard to the hypothesis
- ◆ Technical (assumes statistical sophistication)
- ◆ Must include enough detail to allow the reader to render a judgment regarding the findings (including their significance).

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Addressing the Null Hypothesis

- ◆ Before reporting specific results, researchers should routinely state the particular alpha level selected.
 - "An alpha level of .05 was used for all statistical tests."
- ◆ Researchers also need to include a statement regarding the probability that results are significant.
 - "With an alpha level of .05, the effect of age was statistically significant $F(1,123) = 7.27, p = .008$.
 - "The effect of age was not significant $F(1,123) = 3.27, p = .08$.
- ◆ Do not normally make a specific statement regarding the null hypothesis being accepted or rejected. It is assumed to be rejected if you identify the obtained statistic as exceeding the selected alpha level.

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Using Tables to Report Results

Table 2.
Screening and Digit Naming Speed Test Results

Measure	ADHD Group*		Comparison Group*	
	M	SD	M	SD
PPVT	107.55	13.50	107.15	11.88
Discrepancy	-0.35	11.15	1.30	12.74
Word Attack	104.60	12.13	108.20	12.94
DNS	27.58"	9.39"	22.54"	2.87"

Note. *n = 20. PPVT = mean PPVT standard score. Discrepancy = mean difference score obtained when PPVT standard scores were subtracted from WJ Letter-Word Identification age norm standard scores. Word Attack = mean WJ Word Attack subtest age norm standard score. DNS = mean DNS time.

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Chapter 5: Discussion

- ◆ Non-technical description of findings.
- ◆ Answers the research questions and addresses the hypothesis (was the null hypothesis supported or rejected).
- ◆ What are the conclusions, interpretations, and the theoretical implications?
 - Why were the results obtained?
 - What has the research contributed?
- ◆ Speculation is OK (as long as it is identified as such).
- ◆ Limitations of the study.
- ◆ Future research.

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References

- ◆ Impossible to memorize
- ◆ Always refer to the manual
- ◆ CSUS resource
 - <https://csus.libguides.com/APA-Style-Guide>

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References: Examples

◆ Journal Article

Brock, S. E., Nickerson, A. B., Reeves, M. A., Savage, T. A., & Woitaszewski, S. A. (2011). Development, evaluation, and future directions of the PREPaRE School Crisis Prevention and Intervention Training Curriculum. *Journal of School Violence* 10, 34-52. doi:10.1080/15388220.2010.519268

Saad, C., Brock, S. E., Ballard, Q., Yocum, L. C., Yates, C. B., & Wu, A. (2011). Using the PREPaRE model of school crisis prevention and intervention to respond to sudden and unexpected death. *Greif Matters*, 14, 12-17. Retrieved from http://www.grief.org.au/resources/grief_matters

◆ Authored Book

Brock, S. E., Jimerson, S. R., & Hansen, R. L. (2009). *Identifying, assessing, and treating attention-deficit/hyperactivity disorder at school*. New York, NY: Springer. doi:10.1007/978-1-4419-0501-7 Retrieved from <http://www.springerlink.com/content/978-1-4419-0501-7>

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References: Examples

◆ Edited Book

Brock, S. E., & Jimerson, S. R. (Eds.). (2012). *Best practices in school crisis prevention and intervention* (2nd ed.). Bethesda, MD: National Association of School Psychologists.

◆ Book Chapter

Flitsch, E., Magnesi, J., & Brock, S. E. (2012). Social media and crisis intervention. In S. E. Brock & S. R. Jimerson (Eds.) *Best practices in school crisis prevention and intervention* (2nd ed.; pp. 287-304). Bethesda, MD: National Association of School Psychologists.

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Differences Between a Proposal and the Final Report

- ◆ Proposals are written in the future tense.
- ◆ Proposal do not have an abstract
- ◆ A proposal's introduction is often shorter than that found in the final report
- ◆ Method proposals are very similar to that found in the final report. Only the tense is different
- ◆ A proposals Data Analysis section takes the place of Results
- ◆ Proposals do not have a discussion

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The Publication Process

- ◆ General preparation: Follow APA style
- ◆ Specific preparation: Review the journal's guidelines for authors
- ◆ Initial submission: Include a cover letter
- ◆ The author's responses and revisions: Response to reviewer comments.
- ◆ Final publication: A long process.

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The Publication Process

- ◆ An example of what editors, authors, and reviewers use for one journal
 - Editorial Manager
 - <http://casp.edmgr.com/>

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April 29, 1996

Dr. C. Keith Conners, Editor
Journal of Attention Disorders
c/o Multi-Health Systems Inc.
908 Niagara Falls Blvd.
North Tonawanda, NY 14120-2060

Dear Dr. Conners,

Attached find four (4) copies of a manuscript titled "Reading Comprehension Abilities of Children with Attention-Deficit/Hyperactivity Disorder." I am asking that you consider this manuscript for possible publication in the *Journal of Attention Disorders*.

In this paper Dr. Kerner and I examine the affect of ADHD on the reading comprehension abilities of children who have this disorder. To my knowledge, there is no other published research that has examined this relationship. Given this observation, we believe that this manuscript will make a valuable contribution to the ADHD literature.

The text itself is 6,187 words long, the abstract is 122 words long, and there are four tables. This research was sanctioned by both University and local school district human subject committees.

Please feel free to contact me if you have any questions. I look forward to hearing from you soon.

Sincerely,



Stephen E. Brock, Ph.D.
Nationally Certified School Psychologist
Licensed Educational Psychologist

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Thank you!

- ◆ Any final portfolio submissions due May 14, 2019, at 4:00pm
 - Submissions may be brought to my office (Brighton Hall 225) or emailed to me by 4pm
- ◆ Have a great summer!

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