



NOVA SOUTHEASTERN UNIVERSITY
 Enrollment Processing Services (EPS)
 Attn: Fischler School of Education and Human Services
 3301 College Avenue
 P.O. Box 299000
 Fort Lauderdale, FL 33329-9905 • (954) 262-8500
 800-986-3223, ext. 8500 (U.S. and Canada)
 Fax (954) 262-3601 • www.fgse.nova.edu/slp

OFFICE USE ONLY

Center-AE Cluster-SLM FT LAUFLMC Major- E837 E836 Degree- DSL DOA AP-RF AC-GST AA- AT-GR____ Semester Start_____

INITIAL/DATE: AP FEE PD: _____	CHK# _____
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GRADUATE ADMISSIONS APPLICATION

Programs in Speech-Language and Communication Disorders

Doctoral Degree Application

Academic Goal: SLPD. _____

This application must be accompanied by a \$50 nonrefundable fee.

PLEASE PRINT OR TYPE

S.S.# _____ / _____ / _____ Gender Male Female Date of birth _____ / _____ / _____
Mo. Day Year

Last name First name M.I. Maiden name

Legal/permanent address Street and number Apartment

City State ZIP (_____) Home phone (_____) Business phone

Current mailing address and phone number, if different from above

City State ZIP (_____) Home phone (_____) Business phone

Email address: _____ Fax number: _____
 (_____) _____

EMERGENCY CONTACT:

Name Street and number Apartment

City State ZIP (_____) Home phone (_____) Business phone

APPLICATIONS WILL NOT BE PROCESSED UNTIL ALL DOCUMENTS ARE RECEIVED.
(Official transcripts, three letters of recommendation, and supplemental application)

Please list all colleges and universities attended. Official transcripts from all institutions are required.

Send them to: NOVA SOUTHEASTERN UNIVERSITY - Enrollment Processing Services (EPS)
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 Fort Lauderdale, FL 33329-9905

Complete Name of College	State	Start Date (Mo./Yr.)	End Date (Mo./Yr.)	Major Field	Degree Awarded (B.S./M.S.)	GPA

Please complete information on back.

Do you intend to request transfer of any graduate-level credits toward your degree? Yes No If yes, list course number, title, institution, and dates:

CITIZENSHIP STATUS:

- U.S. citizen
- Nonresident alien
- Resident alien

INTERNATIONAL STUDENTS:

Do you require an I-20? Yes No
If you have a visa, indicate status code _____
Country of citizenship _____
Native language _____

Resident alien students are required to submit a copy of their alien registration card. For more information, contact the International Student Office, (954) 262-7240.

ETHNIC ORIGIN DATA (The provision of this information is voluntary and we request it for reporting purposes only. This information will not be used in any discriminatory manner.):

Check one of the following:

- White (not of Hispanic origin)
- African American (not of Hispanic origin)
- Native American or Alaskan Native
- Hispanic origin
- Asian or Pacific Islander

FIRST LANGUAGES SPOKEN: _____

PREFERRED LANGUAGE: _____

FLUENT LANGUAGES: _____

APPLICANT STATUS AT TIME OF APPLICATION:

First time attending Nova Southeastern University? Yes No
If no, list program in which you were enrolled _____
Dates of attendance _____

TEACHING CERTIFICATION:

State _____
Areas of certification _____/_____/_____

FINANCIAL AID:

Have you applied for financial aid? Yes No
Have you filed a Free Application for Federal Student Aid (FAFSA)? Yes No
If yes, when was the FAFSA sent to Iowa? Date _____

Have you ever been convicted of a criminal offense, been found guilty, or entered a plea of guilty or nolo contendere (no contest), regardless of adjudication? If the answer is yes, please explain.

The disclosure obligation is a continuing one. All applicants must report to the Fischler Graduate School of Education and Human Services any such event that occurs after filing their application. The admissions committee and the Fischler Graduate School of Education and Human Services will consider new information submitted and, in appropriate circumstances, may change the status of applicant or student.

Permission is hereby given to make any necessary inquiries. I voluntarily and knowingly authorize any former school, government agency, employer, person, firm, corporation, its officers, employees and agents, or any other person or entity making a written or oral request for such information.

I declare that the above information, to the best of my knowledge, is accurate and complete. I agree to abide by all rules and regulations of Nova Southeastern University. Furthermore, I also understand that any false information provided on this application could result in dismissal from the institution.

Signature of Applicant Date

I declare that the above information is complete and accurate to the best of my knowledge. I agree to abide by all rules and regulations of Nova Southeastern University. I give Nova Southeastern University permission to publish and use any photos in which I appear. These photos may be taken during class, clinic, or other university activities.

Signature of Applicant Date

This form must be accompanied by the appropriate supplemental forms. Send all required information to:
Nova Southeastern University - Enrollment Processing Services (EPS)
Attn: Fischler Graduate School of Education and Human Services
3301 College Avenue, P.O. Box 299000, Fort Lauderdale, FL 33329-9905

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award bachelor's, master's, educational specialist, and doctoral degrees.



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RECOMMENDATION FORM

Programs in Speech-Language and Communication Disorders

Doctoral Studies

The below named individual has applied for entrance into a professional doctoral studies program at Nova Southeastern University.

Please complete this portion of the recommendation form *before* giving it to your source of reference.
 Pursuant to the Family Education Rights and Privacy Act (Buckley Amendment) enacted on December 31, 1974,
 I DO I DO NOT waive the right to inspect and review this completed recommendation.

_____ Signature

Applicant's name (print)

_____ City _____ State _____ ZIP

Street address Apartment

_____ Date

S.S. #

Employer (or institution/organization) _____

Consider this applicant in relationship to the following dimensions.
 Please indicate your rating by checking (✓) the appropriate box using the following scale and **return this form directly to us.**
 Thank you.

5=Extremely competent	4=Very competent	3=Competent
2=Less than competent	1=Much less competent	0=No basis for judgment

	5	4	3	2	1	0
CONTROL - Establishes procedures to monitor and/or regulate processes, tasks, or activities. Takes action to monitor the results of delegated assignments or projects.						
PLANNING AND ORGANIZING - Establishes a course of action for self to accomplish a specific goal; plans appropriate allocation of time and resources.						
DECISIVENESS/JUDGMENT - Readily makes decisions, renders judgments, takes action, or makes commitments. Develops alternative courses of action for self and makes decisions that are based on logical assumptions and that reflect information.						
SENSITIVITY - Acts in a manner that indicates a consideration for the feelings and needs of others.						
LEADERSHIP - Utilizes appropriate interpersonal styles and methods in guiding clients, families, and/or peers toward tasks' accomplishment.						
INITIATIVE - Actively attempts to influence events to achieve goals; self-starting rather than passive acceptance. Takes action to achieve goals; originates action.						
ANALYSIS - Relates and compares data from different sources, identifying issues, securing relevant information, and identifying relationships.						
TOLERANCE FOR STRESS - Demonstrates stability of performance under pressure and/or opposition to ideas; maintains high level of performance under pressure due to time deadlines, difficult working environment, schedule disruptions, too many responsibilities.						
TECHNICAL/PROFESSIONAL PROFICIENCY - Demonstrates a level of performance in technical/professional area. Translates complex concepts to appropriate level, applies policies appropriately, and maintains records appropriately.						
ADAPTABILITY/COOPERATION - Maintains effectiveness in varying learning or working environments during changes to tasks, responsibilities, or relationships.						
IMPACT/COMMUNICATION - Creates a good first impression, commanding attention and respect, showing an air of confidence; uses appropriate oral and body language.						
WRITTEN COMMUNICATION - Demonstrates well-written documentation of client records, and/or other professional correspondence or documentation.						
INTERPERSONAL SKILLS - Demonstrates effective and appropriate interpersonal skills with others, including peers, clients, and family members.						



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SUPPLEMENT TO APPLICATION FOR DOCTORAL STUDIES

Programs in Speech-Language and Communication Disorders

Name _____ S.S.# _____

DEGREE PATH _____ SLP.D. _____

Please type and limit the answers to the space provided.

PROFESSIONAL INFORMATION

1. Current position (job title) _____
2. Work setting: Hospital _____ Skilled nursing facility _____ Private practice _____ Physician's office _____
School _____ Rehabilitation setting _____ University _____ Other _____

3. Area of clinical expertise:

4. In which clinical area(s) would you like additional preparation and/or experience?

5. List supervisory and/or teaching experience:

6. Why do you want to pursue doctoral studies? What are your professional goals?

NARRATIVE SECTION

Please answer the questions below as fully as possible in narrative form. Each response must be a minimum of 400 and a maximum of 500 words, and must be typewritten on separate sheets of paper. Answers to these questions will be assessed for content, organization, and critical-thinking and writing skills, and will be taken as an indication of your potential to perform successfully in this program. Submit all three responses with the Supplement to Application for Doctoral Studies cover sheet.

1. The attached article, "Treatment Efficacy Research: A Path to Quality Assurance," by Lesley B. Olswang, presents the notion that treatment efficacy studies are crucial to the growth and success of our professions. Apply the ideas discussed to your own work setting.
2. People in leadership positions must assume the role of change agent. Reflect on your own work setting. Describe a situation that needs improvement and discuss what you visualize yourself doing to effect positive change.
3. The fields of communication sciences and disorders are undergoing rapid change. From the perspective of your area of specialization, discuss current trends and their implication for the future of services to clients and families. Substantiate your responses with references to current literature. Please include citations.

ACKNOWLEDGMENT OF PROGRAM REQUIREMENTS:

I understand that the broad requirements for the program include passing each of the study and specialty areas, successfully performing and reporting on a professional research project, and attending Summer Institutes.

I declare that the above information, to the best of my knowledge, is complete and accurate. I hereby testify that the composition and writing on this application are entirely my own. I agree to abide by all rules and regulations of Nova Southeastern University.

Name (please print) _____ S.S.# _____

Signature _____ Date _____

Mail the completed supplemental application and your narrative responses to:

Nova Southeastern University
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Fort Lauderdale, FL 33329-9905

Treatment Efficacy Research: A Path to Quality Assurance

Lesley B. Olswang

Lesley B. Olswang is an associate professor in the department of speech and hearing sciences, Seattle, Washington.

Research in the discipline of communication sciences and disorders, like many other disciplines, traditionally has embarked along two avenues: basic and applied. Because the boundaries separating these research endeavors are not always clear, definitions acknowledging differences between the two are offered. *Basic research* is described as scientific research “directed toward the development of knowledge per se,” versus *applied research*, which is “undertaken to solve some problem of immediate social or economic consequences” (Ventry & Schiavetti,

Clinical research has been motivated in part by issues of accountability.

1986). Applied research can be conducted for the purpose of better understanding the nature of communication disorders (i.e., exploring differences between normal and disordered populations), or for better understanding the clinical processes of assessment and treatment associated with communication disorders. Because this latter type of applied research (hereafter called “clinical research”) focuses directly on investigating some aspect of the clinical process, the outcomes of such studies can also increase our knowledge concerning the nature of communication disorders and, as with basic research, can contribute to our understanding of scientific theories. Of particular significance in this paper is the focus in clinical research on treatment outcomes, that is, research documenting how well treatment works. This research has also been termed *treatment efficacy research* and/or *patient-outcomes research* and is gaining wide recognition in all health-related professions (Ludtke, 1989). The discussion that follows will explore the meaning of treatment efficacy and the need for increased efforts in this type of clinical research.

Clinical research has been motivated in part by issues of accountability. Practitioners are asked to document the efficacy of their treatments, proving that what they do makes a difference in their clients’ communicative functioning. Clinicians in school settings, health care settings, and private practice are asked to evaluate the efficacy of their services, to demonstrate that their efforts are worthwhile.

Efficacy is a term that encompasses several aspects of accountability: effectiveness, efficiency, and effects (Kendall & Norton-Ford, 1982). *Treatment effectiveness* refers to issues of validity, specifically addressing whether a particular treatment works or not. Treatment effectiveness studies investigate a particular treatment, documenting that the Treatment and not some other external cause is responsible for the behavior change, in other words, threats to validity (Ventry & Schiavetti, 1986). *Treatment efficiency* addresses the relative effectiveness of two or more treatments within a given time frame. Specifically, treatment efficiency research asks if one treatment works better than another, for example, whether goals are accomplished more completely using one treatment, or one treatment is more cost-effective than another. Finally *treatment effects* refers to issues of multiple behavior change as a result of treatment. Studies of treatment effects explore the phenomenon of change in communication, asking in what ways the treatment alters behavior, specifically examining which aspects of treatment differentially influence which behaviors. This aspect of efficacy focuses on generalization, exploring ways in which behaviors change in relationship to each other as an outcome of treatment. As should be apparent, treatment efficacy is a complex concept, and not simply one reflecting the documentation of client change pre- and post-treatment using standardized tests.

The more we can learn about treatment efficacy (i.e., the effectiveness, efficiency, and effects of our treatments), the more we will know about the phenomenon of communication disorders, and in turn, the more accountable we will become in our service delivery. Treatment efficacy, in some ways, mirrors our discipline’s knowledge base (i.e., our scientific foundation), and our competence in applying this knowledge to clinical decision-making in the profession.

As Minifie (1989) has noted, “The profession of speech-language pathology and audiology is the application of knowledge from the discipline in the diagnosis and amelioration of communication disorders.”

Clearly a major focus of ASHA and its membership is on the profession. According to the 1989 Omnibus Survey, 91.8% of ASHA members provide clinical service; 74.6% define this as their primary professional activity (Shewan, 1989).

The dedication of the profession to clinical activities would suggest that efficacy research should be a high priority. Is this the case? In 1989, at the American Speech-Language-Hearing Foundation-sponsored Conference on Treatment Efficacy, Leija McReynolds reported data reflecting a sample of our profession’s efforts in this regard. McReynolds tabulated the percentage of articles published in the *Journal of Speech and Hearing Disorders* and the *Journal of Speech and Hearing Research* that were studies evaluating treatments within the context of controlled experimental designs. The data from each journal were analyzed in blocks of 5 years and are presented in Table 1. The difference between the two journals in numbers of publications could reflect how the content of each journal is viewed. Researchers may believe that applied studies are more appropriate for *JSHD*, and thus do not submit such work to *JSHR*. The result may be that even though treatment efficacy research is on the rise, the positive trend is only apparent in *JSHD*.

Given the efforts in clinical research, where is the profession in terms of its knowledge base concerning the efficacious delivery of treatment? As a profession that is committed to the delivery of high-quality treatment for communicatively impaired individuals, what do we know to be true about our treatment outcomes? Illustrative of the state of the art of intervention research is the aggregate of studies regarding developmental language disorders. The following discussion examining a decade of child language intervention provides an exemplar of our knowledge base in intervention.

As part of a 1987 Report to the U.S. Congress on Learning Disabilities, treatment efficacy research with specific language-impaired children was reviewed. The results of this review indicated that language intervention research has focused primarily

on three areas: examining whether a particular procedure is effective in teaching a new behavior and the extent to which the procedure has generalizable effects, determining what behaviors change under what conditions, and exploring which aspects of the normal language acquisition process seem to apply to impaired children in their language learning during treatment. Effectiveness and efficiency questions have predominated, with a more recent interest in effects. In general, we know that intervention can be effective in increasing impaired children's rate of language acquisition; however, the data are inconsistent regarding the extent to which particular procedures are more or less effective with particular children. Individual variations in skills and language learning styles across children may account for these inconsistencies, and further research is definitely needed in this area. Although the knowledge base regarding the benefits of intervention with language-impaired children has grown during the last decade, several areas continue to be in need of research. They include determining whether clinicians are capable of teaching compensatory learning strategies (e.g., tools for improving attending and discriminating), underlying concepts (e.g., the cognitive and social concepts underlying the use of requesting), and/or linguistic rules (e.g., which lexical verbs take objects).

Clinical research has contributed greatly to the advancement of clinical practice, and yet many aspects of how treatment alters the language acquisition process remain unknown. Unfortunately, research data have provided clinicians with few proven principles on which to rely in making critical clinical decisions. Similar conclusions probably could be reached regarding the knowledge base in other communications disorders, suggesting the need for more treatment efficacy research across the profession. Indeed, this state of the art is no doubt apparent in other health-related professions.

To be accountable in our service delivery and to both assess and assure quality of care, a greater emphasis needs to be placed on clinical research. The profession needs a broader and more scientific base for making valid clinical decisions. The need for data demonstrating the efficacy of our treatments means that research efforts must be increased. As clearly reflected in the report by the ASHA Task Force on Research (*Asha*, 1989), support for clinical research needs to become a priority for the discipline and the profession.

Efficacy research can come from at least two sources: clinical researchers in laboratory settings and practitioners in clinical settings. Although clinical researchers in laboratory setting have the opportunity for experimental control that practitioners may not, this does not mean that the practitioner

Table 1

Percentage of experimental treatment efficacy studies published in JSHD and JSHR between 1960 and 1988.

5-Year Blocks	JSHD	JSHR
1960-1964	8	4
1965-1969	1	11
1970-1974	4	13
1975-1979	15	14
1980-1984	12	9
1985-1988	20	6

(McReynolds, 1989)

cannot conduct valid, reliable research. The practitioner needs to recognize the limitations placed on his/her efforts. All clients cannot be considered research subjects, but select cases may be of particular interest to investigation. Practitioners need to take advantage of their encounters with unique clients, sit-

We can no longer make our decisions based primarily on assumptions and good clinical judgment.

uations, and so forth. Practitioners must recognize their ability and responsibility to contribute to the discipline. Asking practitioners to conduct research may be considered burdensome, but the need for increased knowledge may necessitate this request. Research conducted by practitioners may be more readily served by methodologies utilizing single subject experimental designs and case studies (Crystal, 1987; Kazdin, 1981; McReynolds & Kearns, 1983), which allow for research to be blended with ongoing clinical activities. Practitioner can make important contributions to the research pool; the challenge lies in making this an achievable endeavor (McReynolds, 1989).

Clinical research can be driven by either theory and/or consumer need. Theory-driven clinical research may be more likely conducted in a laboratory setting. A theoretical question is generated and studies are designed to address the hypotheses. Theory-driven research is often pro-

grammatic in design, where a series of studies are conducted, each study leading systematically to another. The set of studies contributes to answering the theoretical question. (See for example Connell, 1986, 1987). Theory-driven clinical research contributes to our understanding of normal and impaired communication and is essential for advancing the discipline. Consumer-driven research is more directly related to documenting the effectiveness of a popular treatment. Issues of accountability typically prompt consumer-driven research; therefore, this research often originates in clinical settings. The focus of consumer-driven research is on clinical application, and is not necessarily designed for the purpose of addressing a theoretical question regarding the knowledge base of speech, language, or hearing. The motivation behind the creation of an investigation is what discriminates theory and consumer-driven research. Both are critical sources of data for enhancing the profession's accountability.

Whether research originates in the laboratory or the clinical setting, is theory- or consumer-driven, the emphasis needs to be on valid, reliable data that contribute to the discipline's knowledge base. The profession is in need of a richer scientific foundation supporting clinical decision-making. We need more data to help clinicians decide who and what to treat, which therapeutic approach to employ, and when a client has made maximum gains. To be accountable to clients and their families, school systems, third-party payors, and so forth, clinicians must have greater confidence in their service delivery. Accountable service delivery and quality assurance in the profession require advancement of our scholarly knowledge concerning the treatment of communication disorders.

The need for data demonstrating the efficacy of our treatments means that research efforts must be increased.

We can no longer make our decisions based primarily on assumptions and good clinical judgment. A goal for the future needs to be an increase in treatment efficacy research and an increase in the training of individuals skilled in conducting this research. The

growth and success of the discipline and the profession depend on it.

References

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