Social Work Research and the Quest for Effective Practice

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Introduction

Thank you, Dean Tripodi and Dr. Bronson, for the invitation to speak today. I am honored to be with you at this Tenth National Symposium on Doctoral Research in Social Work. I have chosen to focus my remarks on what I perceive as a paramount issue of concern to the profession and its future--the extent to which social work's research base is capable of guiding practice. This longstanding concern has prompted several efforts to increase a practice focus in research. These efforts include:

the founding in the 1970's of the first two journals dedicated to publishing research--Social Work Research & Abstracts, and Journal of Social Service Research--and about 20 years later, a journal dedicated to research on practice (Research on Social Work Practice);

the founding of this conference on doctoral research in 1982;

the recent publication (September, 1997) of a special issue on psychosocial intervention research in the journal Social Work Research;

the establishment of The Society for Social Work and Research and Institute for the Advancement of Social Work Research which, three years ago, initiated this conference;

and the convening in September, 1996, of a symposium on psychosocial intervention research co-sponsored by the Institute for the Advancement of Social Work Research and the Office of Behavioral and Social Sciences Research at the National Institutes of Health (NIH)

Those notable accomplishments notwithstanding, concern persists that social work research still does not adequately meet the needs of practitioners. The extent to which such concerns are warranted is my focus today. My remarks on this topic draw heavily on and reflect my twenty years of collaboration with Aaron Rosen of the George Warren Brown School of Social Work. I will make frequent references to our prior published work on this issue. And I will present findings from a current project that Aaron and I conducted with Marlys Staudt, a graduate of our doctoral program and new Assistant Professor at the College of Social Work, University of Tennessee in Knoxville (Rosen, Proctor, and Staudt, 1998). As her dissertation advisor, I'm proud to note that Marlys is a presenter at this conference. Our project is particularly germane to this conference on doctoral research. We addressed the extent to which published research in social work can, in fact, guide social work practice.

To do so, we conducted a review of current, U.S. publications in social work, assessing their potential to guide practice. Then, going beyond that project, I will address the extent to which we as a profession are ready to formulate practice guidelines, the focus of another paper Aaron and I are writing and I will offer my suggestions for research directions to prepare us for that readiness.

Three primary assumptions guided our analysis. First, we assume that social work practice must adhere to and be guided by effectiveness criteria. That is, interventions should be selected and employed based on their empirically demonstrated effectiveness. The premise that intervention should be based on relevant and valid knowledge is at the core of professional practice.

Second, we view several types of knowledge to be necessary to the profession. I will identify and distinguish these types in a moment. But of these, the knowledge type of primary importance is that which can guide intervention.

Third, we assume that publications are the major vehicle for accumulating and disseminating professional knowledge. Do not err in assuming that I believe that practitioners actively read research nor that I believe publications to be the best possible route to influencing practice. I am simply saying that published articles are a primary route.

Purposes of Professional Knowledge

To set the stage for our analysis of published research, I want to distinguish between three types of knowledge needed in our profession, or functions for which knowledge is used by practitioners. We base our analysis on distinctions that Rosen (1978; 1996) has previously conceptualized. Three knowledge types are: descriptive, explanatory, and control. Descriptive knowledge guides practitioners in classifying phenomena they encounter into meaningful conceptual categories. It is used often by practitioners for decisions of whether, and to what extent, a particular manifestation or event should be of concern, that is, considered as a problem. Descriptive knowledge includes information on the characteristics, indicators, or incidence of phenomena of professional concern (e.g., poverty, child abuse, maladaptive behavior, mental disorders, and community violence). Descriptive knowledge informs policy decisions about what services are needed by which client groups, as well as aids practitioners in assessing and classifying clients into professionally meaningful categories.

Explanatory knowledge is that which provides insights into and understanding of the phenomena of concern—their dynamics, factors influencing their variability, and their consequences. Fundamentally, it focuses in relationships between phenomena. Explanatory knowledge alerts practitioners to factors that likely contribute to the development and persistence of the phenomenon of concern and, most importantly, provides practitioners with the basis for predicting the type and extent of undesirable consequences likely associated with it. Understandings of such dynamics guide practitioners' decisions about whether intervention is indicated, and toward which outcomes.

The third purpose for which knowledge is used in practice is to enhance practitioners' ability to influence or control a phenomenon of concern; that is, changing it (ameliorative function) or maintaining its desired course (preventive function). Knowledge fulfils its control functions when it is capable of guiding practitioners in the selection and implementation of interventions that successfully attain the desired outcomes.

Now, all three types of knowledge are relevant to practice and need to be empirically based. To fully discharge their responsibility with regard to any practice event (case, client), practitioners must rely on knowledge that had been tested and validated in relation to the function that it serves—descriptive, explanatory, or control. Descriptive and explanatory knowledge are required for the practice tasks of assessing, explaining, or anticipating the course of naturally occurring events; that is, providing explanations of antecedent factors, and/or predicting the naturally occurring consequences of the phenomenon of concern. Performing these practice tasks involves passive predictions, the practitioner's role is a passive one in relation to the occurrence of the predicted event (Rosen, 1993).

But control or influence knowledge serves a central purpose in social work. Indeed, the professions may be distinguished by their reliance upon such knowledge. In fact, a critical junction in knowledge needs occurs when, based on assessment (or a passive prediction), a practitioner decides that intervention toward some outcome is indicated. At that point a practitioner must rely on control-capable knowledge which can guide efforts to influence events. The practitioners' mode of operation changes from passive to active. The practitioner no longer merely predicts the consequence of a naturally occurring process, but rather makes predictions that, if they act in a certain manner (intervene), they will alter the very course of events. Hopefully, a desired outcome will occur. In order to bring a practice event to a successful conclusion, practitioners must have and use valid knowledge capable of guiding both passive and active predictions. (I view passive predictions as necessary but not sufficient to fulfill the professional role).

Unfortunately, this distinction between passive and active prediction tasks in practice and their different knowledge requirements are often overlooked. Failing to make such distinctions may also be coupled with the assumption (often implicit) that ability to explain a phenomenon (passive prediction) is sufficient for being able to control it. In turn, this is likely to result in a disproportionate emphasis by social work practitioners on assessment and by social work researchers on studies whose aims are limited to the production of descriptive and explanatory knowledge.

Such research emphases are perhaps further sustained by social work's early roots in and its unwitting adherence to the knowledge purposes and priorities of the social sciences, as part of its necessary utilization of social science's substantive and methodological contributions. An appreciable part of the descriptive and explanatory knowledge that is essential for practice has been produced through research efforts in the social sciences, where description and explanation are the ultimate knowledge objectives.

In contrast, production of control knowledge to inform interventions, to guide our efforts to change events, is the domain and responsibility of the professions. And social work researchers must remember that this is true for us. Expressing a similar view, a report of the Task Force on Social Work Research (1991) observed, "There is a substantial body of social, behavioral, and biological research on many of the underlying causes of the human problems social workers address. But there are many gaps in our knowledge about 'what works'—that is, about the most effective... means of helping..." (page 4).

I am also reminded of remarks of the former Director, Missouri Department of Mental Health, Dr. Keith Schaeffer. At the opening of our SWRDC in December, 1993, Dr. Schaeffer remarked that he was tired of going to the state legislature equipped only to report what the department was doing. He expressed the hope that our Center, and that social work researchers nationwide, would conduct studies which could enable him to report also HOW the department was doing, in terms of meeting the needs of persons with mental disorder. Indeed, his frustration was over being limited to description or explanation. He longed for an ability to influence, to report that his agency was effective in changing the course of events. And he hoped social work researchers would help develop the necessary knowledge.

What are the Requirements of Research to Guide Practice?

Two decades ago, in presenting our conception of research on the effectiveness of practice, we outlined the basic features of such research necessary for the derivation of knowledge capable of guiding practitioners' efforts to influence or control events (Rosen & Proctor, 1978).

Those features are:

> Knowledge regarding . . . treatment should enable practitioners to select and employ consistently an interventive approach that is relevant for a client and his/her presenting problem and situation, and which has been found to be effective for the desired outcome. . . . To meet these requirements, concepts and variables must be clearly defined and linked to empirical referents. (Rosen & Proctor, 1978, pp. 25-26).

> Statements of interventive knowledge must also contain explicit predictions of the relationship between the interventive inputs and the desired outcomes. (Rosen & Proctor, 1978, p. 26).

Of the several criteria identified here that need to be met for interventive studies to guide practice, we selected two basic factors for use in classifying current research on intervention: first is the intervention being studied (the independent variable, treatment) defined in a manner that is sufficiently specific, that is, can it be implemented with integrity (Yeaton & Sechrest, 1981), and hence, is it replicable in subsequent studies and in practice? And second, are the outcomes against which the effectiveness of the interventions is assessed measured with sufficient specificity to allow reliable replication? We focus on these factors because they represent the minimal requirements of research whose products can guide practice.

Thus the issues guiding our analysis of published social work research were:

1. The relative emphases in social work research on generating descriptive, explanatory, and control-capable knowledge.

2. The potential of control-oriented studies to actually guide professional practice. This issue was addressed from the following perspectives:

    a) Whether the interventions studied were specified in sufficient detail to enable their implementation with integrity in practice, and their reliable replication in other studies.
    b) The extent to which outcome measurements were specified to enable reliable replication.

Table 1

	DEFINITION	EXAMPLES	USE
DESCRIPTIVE	Guides the classification of phenomena into meaningful conceptual categories.	Rates of poverty, prevalence of child abuse, manifestations of depression, episodes of violence; features of social support among older women.	Guides professional assessment, classification, quantification, thereby informing policy decisions about what services are needed by which client groups, as well as aids practitioners in assessing and classifying problems or events into professionally meaningful categories.
EXPLANATORY	Guides understanding of phenomena—their interrelationships, factors influencing their variability, and their consequences.	The relationship between depression and functioning; factors associated with hospital readmission; recurrence of violence.	Helps explain behavior or events; alerts practitioners to factors associated with problem persistence; guides prediction of consequences of an event or behavior; helps identify correlates of an event; guides decisions about whether intervention is indicated; help "triage" seriousness of problems and outcome for pursuit.
INFLUENCE ("CONTROL")	Identifies means of influencing events or behavior; the direction of influence can be maintenance (prevention) or change (intervention—increasing, decreasing).	Studies of prevention, demonstrations of effects of intervention.	Informs practitioners and policy makers about means to control or influence events of concern; that is, changing it (ameliorative function) or maintaining its desired course (preventative function). Knowledge fulfills its control functions when it is capable of guiding practitioners in the selection and implementation of intervention that successfully attain the desired outcomes.

Method

Sample and Procedure

Although we did not set out to conduct an exhaustive review of social work publications, we selected our journals and a sample publication period to reasonably represent the primary current thrusts in social work research. Accordingly, we restricted our sample time frame to the most recent published work—between January of 1993 and July of 1997. We selected the journal sample by the following criteria: a) published in the United States expressly for or by social workers; b) high likelihood that the preponderance of articles are aimed at some aspect of social work practice (thus excluding a journal like Journal of Education for Social Work); c) journals likely to contains empirical studies of social work practice (in terms of their publications record).

We acknowledge that these criteria may have excluded some highly relevant content, such as research published by social workers in non-social work journals, or in social work journals not selected, or research published only in books, or research yet unpublished. But we believe that our journal sample represents the social work publications most likely to contain intervention. It is consistent also with our assumption that social work research will be reflected in the profession's journals.

Table 2 lists the journals included in our sample, as well as compares them to the journals sampled in other recent reviews of research in social work.

Table 2

Social Work Journal Included in Current Study, and Their Inclusion in Other Reviews

		Inclusion in Other Studies					
Journals in Current Study		Glisson 1995	Fraser et al. 1991*	Tolman & Molidor 1994	Gorey 1996	Tripodi 1984	Lindsey & Kirk 1992
Administration in Social Work			X				X
Child & Adolescent Social Work Journal			X				X
Child Wefare				X	X	X	X
Families in Society			X	X		X	X
Health in Social Work			X	X	X		X
Journal of Gerontological Social Work			X				X
Journal of Social Service Research		X		X	X	X	
Research on Social Work Practice					X		
Social Service Review		X		X	X	X	X
Social Work		X		X	X	X	X
Social Work with Groups			X	X			X
Social Work Research		X		X	X	X	X
Social Work in Education			X	X	X		
Journals in Sample	13	5	10	9	13	6	19
Journals in Common		4	8	9	7	6	10

Note: *For Fraser et al. (1991), we considered only the journals which Fraser added to the original Glisson (1995) sample.

Table 2 indicates an appreciable overlap between our journal sample and those of prior reviews. All journals included in the prior studies which met our selection criteria were included in our sample. Some studies conducted by others were restricted to social work publications or to social worker authors, while others also included journals and authors from allied fields (cf. Fraser, Taylor, Jackson, & O'Jack, 1991; Gorey, 1996; Klein & Bloom, 1994; Glisson, 1995; Lindsey & Kirk, 1992; Tolman & Molidor, 1994; Tripodi, 1984). We excluded from the set of articles for classification editorials, book reviews, letters to the editor, brief notes, exchanges between authors, practice notes, and commentaries.

Classification of articles

Research versus non-research

We classified as research articles that contained the usual components in research reports, such as study questions, a systematic methodology and data gathering procedures, and report of findings. If some of these components were missing, yet the author referred to the article as a report of a research study and presented original findings, the article was classified as research. Reports on single system studies were included as research articles, as were replicable, systematically conducted meta-analyses of prior research reports. Not considered as research articles were non-systematic reviews or syntheses of the literature, narrative-only case studies, and articles dealing with research methodology only, without a substantive focus. Following this classification, all non-research articles were excluded from further analysis.

How much research did we find?

The study's sample of the 13 journals yielded a total of 1,849 publications, of which 863 (47%) met our criteria for research articles. The percentages of research articles in the journals ranged from a low of 14 to a high of 73. In six of the 13 journals more than 50% of the articles were research. (Because our intent is to portray the status of social work research in the field as a whole, we do not identify specific journals in relation to the findings.)

We found that articles reporting research comprised less than half (47%) of the total articles published in the journals. This proportion of research publications is slightly less than that reported by 95 Glisson (1995) and by Fraser et al. (1991) for articles published between 1985 and 1988, but is appreciably higher than the proportion reported by Tripodi (1984) for earlier periods. It appears from our findings that the proportion of empirical studies published in social work has not markedly increased over the past decade, or since the analysis of research conducted for the Task Force on Social Work Research.

What type of knowledge did this research yield?

Classification of research articles by knowledge purpose

The research articles were classified by whether they addressed descriptive, explanatory, or control purposes. The following definitions guided this classification.
Descriptive: Studies assessing the central tendencies and distribution characteristics of single variables, either with respect to one, or comparisons between two or more samples. Also included in this category were studies aimed at conceptualization (often qualitative in methodology) or description of variables. Substantively, descriptive studies addressed such issues as the functioning, mental health, or social support networks of population sub-groups, described characteristics of practice settings, and social policies.
Explanatory: Articles reporting studies that investigated interrelationships (whether causal or not) between two or more variables were classified as explanatory. Hypotheses driven investigations of differences between groups were classified as explanatory, as well as multivariate explorations. These criteria were used irrespective of the authors' characterization of the design of the study. Explanatory studies investigated such issues as factors associated with patients' compliance with treatment regimens, antecedents and consequences of personal or social problems, and factors associated with hospital readmission.
Control: Articles were classified as control studies if they investigated the effects, or tested the effectiveness of an intervention. These included studies of helping approaches, treatment procedures, policy changes, or organizational implementation of service mandates or procedures. To be classified in this category the interventions had to aim at outcomes of, or related to, clients. Thus, studies assessing curriculum changes or training procedures for social workers were excluded. Studies assessing client directed educational programs (e.g., psycho-education, parenting, skills training) were included in this category.

If an article addressed both descriptive and explanatory knowledge, it was classified as explanatory. Articles containing control knowledge were so classified, irrespective of whether or not they contained knowledge for other purposes.

Table 3

Numbers, percentages, and ranges of research articles, by knowledge domain

Knowledge Domain	Number	%	Range of articles, in percentage, classified in each domain, across the 13 journals sampled
Descriptive	314	36	20-70
Explanatory	423	49	20-72
Control	126	15	2-49
Total	863	100	

Table 3 presents the distribution of research articles according to their knowledge purpose. As the table indicates, articles reporting research directed toward explanation were most numerous, constituting almost half of the total research articles. Articles contributing to descriptive knowledge were second, with 36 percent of the total; and articles oriented toward control knowledge constituted 15 percent of the total research articles published. The ranges reported in Table 3 reflect the considerable variability between journals in relative emphasis on publication of descriptive, explanatory, and control oriented research articles. The percentage of descriptive articles across the 13 journals ranged from a low of 20%, to a high of 70%; of explanatory articles from 20% to 72%; and consistent with their overall low rate, control oriented articles ranged from a low 2% to a high of 49%.

Overall, fewer than 7% of all published articles addressed the central issue facing the profession—the development of effective interventions. Put in somewhat different terms, a reader of social work research will find fewer than one in six addressing research. Thus a reader of social work journals in general must scan, on the average, 14 articles to find one article reporting research on intervention. Given our findings, should we be surprised at findings reported by others that practitioners only minimally read research literature and do not express an appreciation of the value of research to their practice (cf, Kirk, Osmalov, & Fisher, 1976; Kirk & Rosenblatt, 1981; Rosenblatt, 1968)?

How well were the interventions specified and defined?

The remainder of the analyses address the intervention studies only. We next examined these studies to determine how well the interventions were specified. Specifically, we classified these articles by whether the descriptions or definitions of the independent variable, the intervention, were specific enough to permit reliable replication of the study. Thus, articles were classified as "replicable" or "nonreplicable" according to the specificity of the interventions tested. The following operational definitions guided this classification.

Replicable: Studies were classified as replicable when the intervention investigated was described in sufficient detail to enable its implementation with integrity by a practitioner that was not involved in the study. Specifically we defined as replicable interventions for which the investigators detailed operational definitions or described precise practitioner activities. When the published report did not itself contain detailed, sufficiently specific description of the intervention, but referred to an available or a previously published specific description or a treatment manual, it was also classified as replicable. Studies using audio or video intervention guides were also considered replicable.

Nonreplicable: All control-aimed studies which did not meet our criteria for replicable interventions were classified as nonreplicable. This included interventions described in no further detail than a label (for example, "discharge planning," "systems approach," "cognitive behavioral," or "family preservation"), without providing any reference to specific, replicable definition for such terms. Our focus on the specificity with which interventions were described reflects our basic decision that unless the interventions can be reenacted in subsequent studies and in practice with minimal error (relatively high integrity), the study's potential contribution to a cumulative body of professional knowledge has been seriously compromised, irrespective of its other design merits.

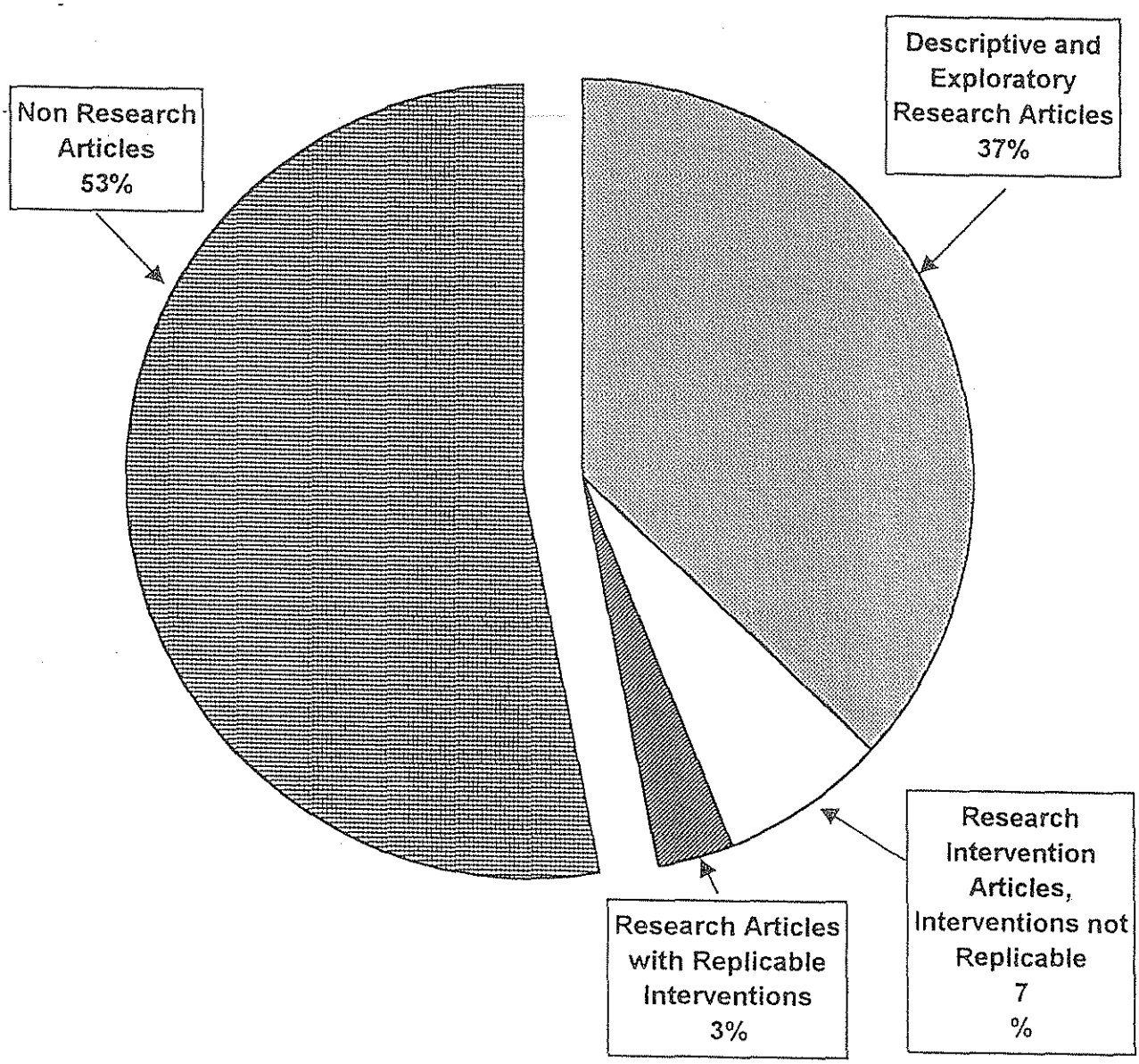
What did we find with regard to the replicability of interventions?

How many of the intervention or control studies contained interventions which met our definition? Replicable interventions were used in 53 of the 126 control-aimed studies (42%), 73 studies (58%) did not contain replicable interventions. These 126 studies contained a total of 147 interventions which were investigated in relation to outcomes in the 126 studies. Of the 147 interventions, 65 (44%) met our criteria of replicability; whereas 82 interventions (56%) did not. Thus about four in ten articles contained interventions which met our definition of replicable, and fewer than half of all the interventions reported in those studies met our definition.

When we enlarge the denominator from "intervention studies" to all published articles in social work, we find that only 3% of all published articles (53 of 1849 articles) in our sample had the potential to inform a practitioner searching the literature for empirically based guidance about interventions, defined in a manner to enable the practitioner to enact the intervention.

Figure 1

Percentages of Social Work Articles by Type and Replicablity of Intervention (Total Articles n=1849)



With what level of specificity were the outcomes defined?

The specificity of outcome measurement was used as an indicator of replicability of the outcome measures. Determination of outcome specificity was based on the measurement procedure (irrespective of the reported reliability of the measure, if in fact such was reported). Outcome measures were classified into High, Medium, or Low specificity.
High specificity: All standardized tests; measurements based on archival records of events and data of very specific nature (e.g., drug use test results, glucose levels, recidivism rate).
Medium Specificity: Non-standardized rating scales developed for the study, whether used by clients, workers, or researchers (e.g. goal attainment, satisfaction, improvement); definition-guided observations (e.g. client behavior record).
Low specificity: Unguided observations, content analyses, or self-reports.

Classification of outcomes

Outcomes were classified in terms of two dimensions—their role as intermediate or ultimate outcomes in a particular study, and the specificity of their measurement. Role of outcomes. Each of the outcomes assessed in relation to an intervention was classified according to its role in that study. Thus, more than one outcome, and in either role (intermediate and/or ultimate) can be classified in one study. The following definitions and decision rules guided this classification.

Ultimate outcomes: Ultimate outcomes were defined as those treatment objectives relating to client problems and constituting the reasons for treatment to be initiated, and whose attainment renders treatment a success (Rosen & Proctor, 1978).

Intermediate outcomes: Intermediate outcomes are those that are pursued in treatment because they are posited as necessary or facilitative preconditions for the attainment of other outcomes (Rosen & Proctor, 1978).

Decision Rules: If an investigator indicated an outcome as intermediate or ultimate, it was so classified. Clinical (e.g., self-esteem, level of stress) and policy outcomes (e.g., a board reaching a decision) were classified as ultimate; whereas treatment process-related outcomes such as client satisfaction and attendance at treatment sessions were classified as intermediate outcomes. However, the context and the purpose of treatment were also considered in the classification of outcomes. For example, if compliance with a drug regimen was assessed as an outcome in a study evaluating the effectiveness of case management in reducing rehospitalization rates, than compliance was classified as an intermediate outcome and incidence of rehospitalization as an ultimate outcome. If in that study, however, compliance was

the only outcome assessed in relation to case management, then compliance was classified in the role of an ultimate outcome.

Outcome specificity: The 126 studies investigated the effectiveness of interventions in relation to 232 ultimate outcomes and 68 intermediate outcomes. Table 4 presents the distribution of ultimate and intermediate outcomes in relation to their specificity of measurement.

Table 4

Ultimate and intermediate outcomes by specificity of measurement

Measurement Specificity	Outcomes		
	Intermediate	Ultimate	Total
High	22	150	172
Medium	38	73	111
Low	8	9	17
Total	68		

As Table 4 indicates, better than half of all outcomes (57%) were measured with high specificity, over a third (37%) with medium specificity, and relatively few outcomes (6%) were measured with low specificity. Chi square analysis of the relationship of specificity to outcome type shows that ultimate outcomes, as compared to intermediate outcomes, are significantly more likely to be well specified (Chi square = 23.99, 2 df, $p < .001$).

Discussion

What can we conclude about social work research? First, our findings indicate that the proportion of empirical studies published in social work has not markedly increased over the past decade. Second, only a small proportion of studies aims to evaluate the effects of interventions. Others share our concern over the relative scarcity of intervention research in social work. McMahon, Reisch, & Patti (1991) state that "As never before, social work needs better, more demonstrably effective intervention technologies to use with client populations that present increasingly chronic and difficult problems. Professional practitioners simply require more usable information about what works with whom, under what circumstances" (p. 5). Schilling (1997) recently observed that social work journals contain no shortage of articles on approaches to helping in social work, but these are not systematic inquiries designed to test interventions. The Task Force on Social Work Research (1991) concluded that practitioners' needs for information about the comparative effectiveness of alternative interventions under specific conditions were simply unmet by social work researchers. And Ell (1996) expressed both surprise and concern that "there have been few controlled studies of social work interventions" (p. 585). Our journal analysis seem to confirm these concerns and underscore the seriousness of the profession's void in intervention research.

A third concern arising from our findings was the failure of most studies focused on interventions to specify and define the intervention in sufficient detail that other investigators can build upon it or practitioners could implement the intervention. This finding indicates that we have some serious problems with regard to the rigor and quality of our research. Just studying an intervention is not sufficient. We need to recognize that how we construct and conduct our studies has a tremendous bearing on their usefulness--to both practitioners and to other researchers.

If you assume, as do I, that developing a knowledge base to guide intervention is a primary responsibility of a profession, where do we go from here? First, it is apparent that we need to continue to emphasize the value of research for social work. The establishment of the Institute for the Advancement of Social Work Research, of the Society for Social Work and Research, and the convening of this meeting focused specifically on social work research all constitute important steps toward this end.

But increasing the quantity of research produced in social work is not a sufficient remedy. Beyond the issue of quantity, we need to target priorities for the conduct of

research. We need to establish a research agenda for social work--perhaps several agendas. And intervention studies must be high in priority on such an agenda.

Why is this so difficult for our profession? I want to suggest two reasons that are especially germane to your point of development as social work scholars. One challenge is socialization. Many of us have been socialized into the research role in the orientation and tradition of the social sciences. I am a staunch advocate of undergraduate social science training, as excellent preparation for social work education at the master's level. And I am firm in my belief that study in other disciplines is critical at the doctoral level. I hope each of you had opportunity to take in your doctoral program substantive (not just methodological) courses in other disciplines. I hope your thinking was challenged by having to work with faculty from other disciplines on your dissertation committees, painful as that may have been at the time! And I hope that as you join the ranks of social work faculty, you will have, or if necessary make for yourselves, the opportunity to work with faculty from other departments as you forge research teams.

But we should be wary lest we assume that the purposes of research are the same in the social sciences and in the professions. A wholehearted adoption of the assumptions from social science may lead us to adopt, indiscriminately, the almost exclusive emphasis of the social sciences on research for descriptive and explanatory purposes, as sufficient for research in social work (Rosen, 1996). Two of the most widely used texts of research methodology (cf., Kerlinger, 1986 and Rubin & Babbie, 1993) present the ultimate aim of science as building theory capable of explaining and predicting natural phenomena (Kerlinger); Rubin and Babbie, present the primary purposes of social work research as exploration, description, and explanation, without explicit reference to control purposes. Do we assume that ability to explain a phenomenon is tantamount to ability to influence and change it? Perhaps we need to be reminded of the practice tasks that our knowledge aims to inform not only *what* providers and clients are doing, but *how* they are doing. If the purposes of knowledge were more clearly related to its functions in practice then the importance, relevancy, and uniqueness of intervention research might be more apparent.

We should also acknowledge the very challenging nature of intervention research itself. I would suggest that there are so few studies testing the effectiveness of interventions because such studies are very hard to conduct and take a long time. And, while today we laud your achievements in completing doctoral education, I know that many of you are already worried about another milestone—the next hurdle—achieving tenure! Achieving tenure when the clock is so short, the expectations are so high, and your plates are so full.

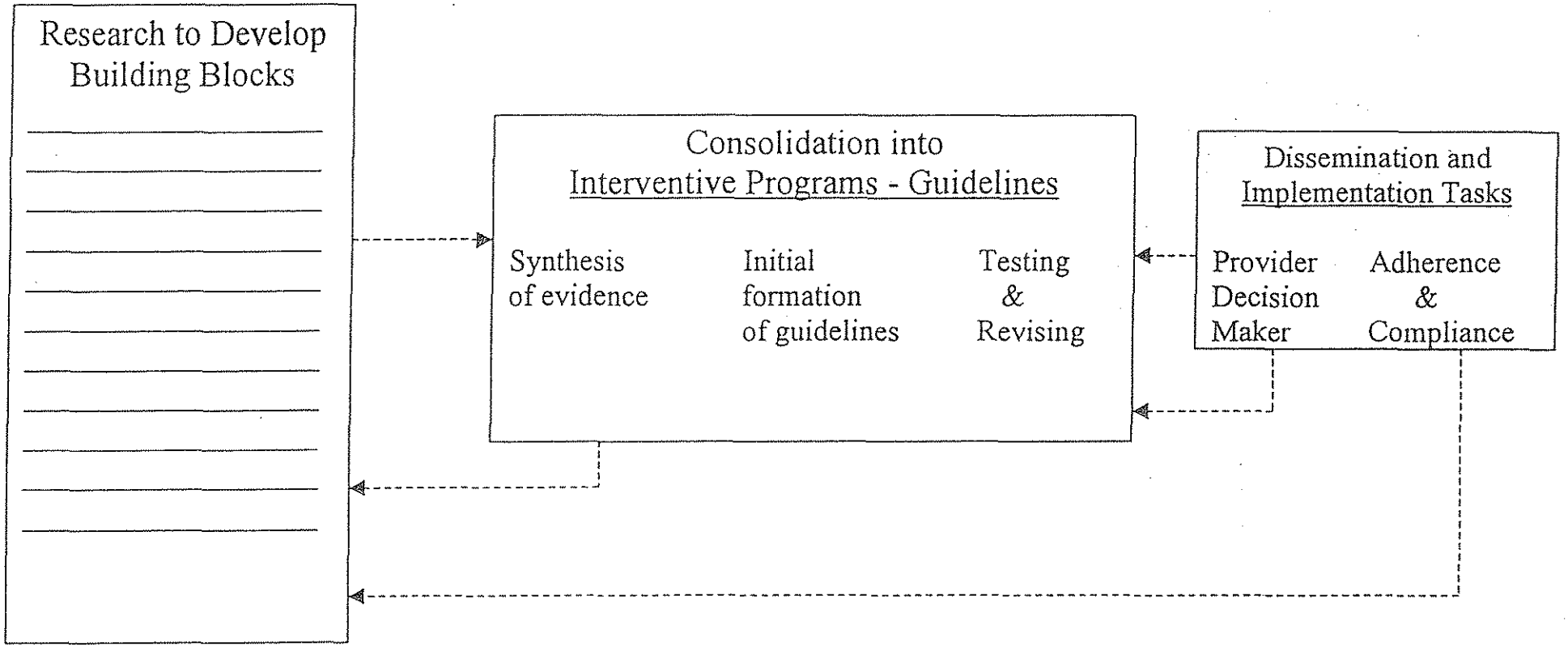
How can you learn to teach, establish yourselves as good citizens through committee service, learn and make connections with a practice community in a new city, all while launching and delivering products from a research agenda? It is a challenge. And I perceive tenure as becoming harder to get, all over the country.

I propose that an important task, for each of you individually and for the profession as a whole, is the formulation of a research agenda. That is, rather than focus on studies, piecemeal, rather than tackling the most feasible, easily completed study (however quickly that might lead to publications), I challenge you to conceive a long-range plan focused on where you want your research to lead. And I hope for most of you, and for the profession, that agenda will lead to studies which are relevant to and which can inform practice.

Now for the profession, many voices are suggesting that research should lead to practice guidelines for social work. As with primary medical care and psychiatry, practice guidelines have been proposed for social work as a means to insure that interventive knowledge is appropriately developed, identified, packaged, and transmitted to practitioners in the field. I propose that an important research agenda for social work is that of developing a knowledge base sufficient to yield practice guidelines. The many benefits of practice guidelines have been enumerated elsewhere. By way of summary, I will note that the mere attempt to develop practice guidelines itself is an important stimulus with a number of benefits in and of itself. A concerted effort to develop practice guidelines would help clearly reveal gaps in our professional knowledge, thereby revealing some priorities in a social work research agenda. Moreover, these efforts would help coalesce the practice and research arms of the profession around a unified purpose. Yet the findings of our analysis of published research suggest that social work, in 1998, would face a major challenge in formulating practice guidelines. Our knowledge base would seem to leave us quite unprepared to propose, test, and disseminate practice guidelines.

Developing a knowledge base capable of guiding social work interventions requires sustained effort on three fronts. Figure 2 outlines a preliminary framework of the stages in guideline development. This framework draws heavily on earlier models proposed to stimulate and guide social work research, including Thomas' and Rothman's writings about research and development (R & D) in social work.

Figure 2
Stages in Guidelines Development



The first stage of guideline development may be characterized as research aimed at creating and refining the basic building blocks for intervention. Several specific types of research are involved, as reflected in Figure 3. A preliminary task in this stage is developing a clearer understanding of the substance of the social work practice agenda. Studies are needed that would reveal the major problems presented to social workers in various settings and practice arenas. More importantly, and corresponding to these problems, we need to identify the desired outcomes that are pursued in social work. In other words, what is social work intervention attempting to achieve? Thus, as a first step in developing practice guidelines, the profession needs to map and classify major outcomes that constitute the targets of our intervention. While we have (or make use of other profession's) diagnostic classification schemes, our profession lacks a needed classification of objectives, goals, or outcomes whose pursuit may help characterize social work's practice endeavors.

Figure 3

Developing the building blocks of knowledge to guide practice:
Issues for study

- IDENTIFICATION OF COMMONLY PURSUED OUTCOMES
- REPERTOIRE OF POTENTIAL INTERVENTIONS FOR PURSUIT OF THOSE OUTCOMES
- CLEAR, RELIABLE, AND REPLICABLE SPECIFICATION OF INTERVENTIONS
- EFFECTIVENESS OF INTERVENTIONS IN RELATION TO OUTCOMES
- CRITERIA FOR USE: DOSE, TIMING, DURATION
- UNDERSTANDING THE DIFFERENTIAL APPLICABILITY AND NECESSARY MODIFICATION OF INTERVENTIONS IN RESPONSE TO

  DIAGNOSTIC/PROBLEM CONSIDERATIONS
  CLIENT CHARACTERISTICS (SEVERITY, CULTURE, GENDER, AGE, ETC.)

Guidelines for social work may then be targeted toward desired outcomes and not just the remediation of a problem or disease. This may be a primary way in which guidelines for social work might differ from those in psychiatry and medicine. Consistent with medicine's disease model, the desired outcomes for treating a person with illness are typically removal or remediation of the illness itself. But this may not be sufficient or appropriate for social work, where outcomes differ from or go beyond removing presenting conditions (problems, disorders). For example, social workers may be more concerned with enhancing functioning than with reducing psychiatric symptomatology. Obviously this is the sort of issues and decisions that necessitate considerable thought, deliberation, and consensus among social work scholars and practitioners. I hope that future sessions of research conferences may provide such opportunity for exchange.

Also a part of the "building blocks" phase, once outcomes are identified, we need to delineate a repertoire of potential interventions for use in pursuit of desired outcomes. Those interventions then must be clearly and reliably specified (in replicable terms) and their effectiveness tested in relation to the desired outcomes. Criteria for using interventions, in terms of dose, timing, and duration, must be developed. The efficacy and effectiveness of these interventions must be tested in relation to the outcomes pursued. And finally, of particular importance to social work, studies must address the differential applicability and necessary modification of interventions in response to client culture, gender, age, and race.

I acknowledge that in part of this "building blocks" stage of knowledge development --specifically that which aims for a clear understanding of the presenting problems and desired outcomes in social work—involves more descriptive research. And I recognized that throughout this talk, I have been calling for less descriptive and more intervention research. But this descriptive research is, nonetheless, focused ultimately on guiding practice and therefore is an important part of our research agenda. And, I believe, such studies are both attainable for young investigators and relevant to the prize we're headed toward—knowledge, which can inform practice.

I would add just a few comments about the other two stages in guideline development. After the building blocks are developed (obviously a challenging research agenda in itself), we would require a process of knowledge synthesis and consolidation. This requires wrestling with the issue, how do we put a component pieces of knowledge together to yield intervention programs or guidelines? Here, the writings of Thomas and Rothman are particularly germane, as is the experience of other professional groups. Thus a variety of methods--consensus statements, accruing "best practices", studying and consolidating empirical findings, theory formulations, and R&D process--are available to guide the process of consolidating knowledge into guidelines for practice.

The third challenge in guideline development is that of disseminating the accrued knowledge so that it can be reliably implemented in practice. As other professions have

learned, considerable training is required if providers are to provide guideline-congruent practice. Among the component challenges are informing practitioners of the guidelines, providing decision-supports so that they will select guideline-congruent treatment, and strive to enlarge their repertoire of clinical skills. Now, I am afraid that my portrayal of the complex stages in guideline development will have a very counterproductive effect--that of discouraging the initiation of the very research I've called for. I acknowledge that the road ahead is so challenging. Who would want to begin? Well, I hope and trust that several of us, and especially you, who represent the future of social work research, want to. And rather than deter this important and sorely needed research, I hope my remarks will stimulate thinking and dialogue. I hope these comments will point us in the directions I believe are needed to move social work knowledge forward. I want us to channel, perhaps when necessary re-channel, our research energy in the direction needed in order to ensure that we have an base of knowledge which can support guideline formulation, implementation, and evaluation.

Finally, I would suggest that in addition to these priorities about <u>what</u> we should study, we need to care about, worry about, and do something about how we conduct studies, specifically the rigor with which we conduct our studies. Of particular concern for the development of a cumulative body of knowledge and for ensuring the usefulness of our findings is <u>specifying the interventions and outcomes</u>. We need to ensure that they are specified clearly enough so as to enable their valid replication in research, and their application in practice.

Social work has made marked progress with respect to developing our infrastructure for research. You are joining social work faculties at a time when support and resources for faculty research is higher than ever before. Social work is more articulate in voicing its commitment to research, we have forged new alliances about research, and you will have opportunity (as many of us have longed, for years) to attend meetings specifically designed for social work research. Yet with respect to tangible products, we have a long way to go. I believe our progress can be enhanced by establishing, for the profession and within specific substantive areas, of a research agenda, an agenda constructed as a quest for knowledge to guide practice. And I challenge each of you to conceive and launch such an agenda for yourselves. Good luck. You will shape the profession's knowledge base.

References

Ell, K. (1996). Social work and health care practice and policy: A Psychosocial research agenda. Social Work, 41 (6), 583-592.

Fleiss, J.L. (1973). Statistical Methods for Rates and Proportions. New York: Wiley.

Fraser, M., Taylor, M. E., Jackson, R. & O'Jack, J. (1991). Social work and science: Many ways of knowing? Social Work Research & Abstracts, 27 (4), 5-15.

Glisson, C. (1995). The state of art of social work research: Implications for mental health. Research on Social Work Practice, 5 (2), 205-222.

Gorey, K.M. (1996). Effectiveness of social work intervention research: Internal versus external evaluators. Social Work Research, 20 (2), 119-128.

Greenwood, E. (1957). Social work research—a decade of reappraisal. Social Service Review, 31, 311-321.

Kadushin, A. (1959). The Knowledge base of social work. In A. J. Kahn (Ed.), Issues in American Social Work (pp. 39-79). New York: Columbia University Press.

Kane, R.A. (1982). Lessons for social work from the medical model: A viewpoint for practice. Social Work, 27, 315-321.

Kerlinger, F.L. (1986). Foundations of Behavioral Research (3rd ed.). New York: Harcourt, Brace, Janowitch Publishers.

Lindsey, D., & Kirk, S. A. (1992). The role of social work journals in the development of a knowledge base for the profession. Social Service Review, 66 (2), 295-310.

McMahon, M.O., Reisch, M., & Patti, R.J. (1991). Scholarship in Social Work: Integration of Research, Teaching, & Service. Washington, DC: National Association of Deans and Directors of Schools of Social Work.

Nelsen, J. (1984). Intermediate treatment goals as variables in single-case research. Social Work Research & Abstracts, 20, 3-10.

Rosen, A. (1978). Issues in educating for the knowledge-building research doctorate. Social Service Review, 52, 437-448.

Rosen, A. (1993). Systematic planned practice. Social Service Review, 67, 84-100.

Rosen, A. (1996). The scientific practitioner revisited: some obstacles and prerequisites for fuller implementation in practice. Social Work Research, 20 (2), 105-111.

Rosen, A., & Proctor, E.K. (1978). Specifying the treatment process: The basis for effectiveness research. Journal of Social Service Research, 2, 25-43.

Rosen A., & Proctor, E.K. (1981). Distinctions between treatment outcomes and their implications for treatment evaluation. Journal of Consulting and Clinical Psychology, 49, 418-425.

Rosen, A., Proctor, E.K., & Livne, S. (1985). Planning and direct practice. Social Service Review, 59, 161-167.

Rosen, Aaron, Proctor, Enola K., and Staudt, Marlys (1998). Social Work Research and the Quest for Effective Practice. Unpublished manuscript.

Rubin, A., & Babbie, E.(1993). Research Methods For Social Work (2nd ed.). Pacific Grove, CA: Brooks/Cole Publishing Co.

Schilling, R.F. (1997). Developing intervention research programs in social work. Social Work Research, 21 (3), 173-180.

Task Force on Social Work Research (1991). Building Social Work Knowledge for Effective Services and Policies: A Plan for Research Development. Washington D.C.: NASW

Tolman, R. M., & Molidor, C. E. (1994). A decade of social group work research: Trends in methodology, theory, and program development. Research on Social Work Practice, 4 (2), 142-159.

Tripodi, T. (1984). Trends in research publication: A study of social work journals from 1956 to 1980. Social Work, 29 (July-August), 353-359.

Yeaton, W.H., & Sechrest, L. (1981). Critical dimensions in the choice and maintenance of successful treatments: Trends, integrity, and effectiveness. Journal of Consulting and Clinical Psychology, 49 (2), 156-167.