Savickas, M. L. (2000, April). Relations between theory, research, and innovative practice. Keynote address at the 25th Anniversary Conference for the National Institute for Careers Education and Counselling. Leicester, England.

PART I
Critically Examine Traditional Model for Research and Its Diffusion

Before I begin my remarks, I do want to state my assumptions about career theory and research. First, theory plays an important role in a rapidly changing environment wherein practitioners are looking for help to unravel complexity, give meaning to experience, make ordered comparisons, and provide reference points for learning (cf. Gustavsen, 1996). Second, I believe that a continuing flow of research on vocational behavior is need to improve the substantive bases for the practice of career intervention.

Having said this, I must also say that I recognize that many **practitioners do not value research. As Killeen and Watts indicated, practitioners' attitude toward research is at best "ambivalent." They go on, "The more remote from practice it is considered to be, the more likely it is that this scrutiny will be experienced as a threat rather than stimulus."**

"There is a consensus that counsellors and psychotherapists are largely indifferent to, or suspicious about, research findings" (Williams & Irving, 1999, p. 367)

I believe practitioners have good reasons for their ambivalence about theory and research.

Fitzgerald and Betz (1994, p. 103) challenged the usefulness of career theory for the practice of career counseling because of the "general lack of utility of major career theories to large segments of the population." They accounted for this shortcoming by concluding that the (a) concept of career development may not be meaningful in the lives of the majority of the population, (b) research on career theories examines the smallest segment of the population, and (c) career theories do not systematically attend to the role of structural and cultural factors in conditioning individual vocational behavior.

Margaretha Lucas (1996), the director of training at a the University of Maryland Counseling Center, wrote that "Research in our journals tends to answer many questions, but few that are asked by practitioners in their offices."

Dear Colleague:

I have been invited to prepare a 50-minute presentation on "The Relation between Theory, Research, and Innovative Practice."

The goals for the conference are (a) to encourage practitioners to conduct research and to pay more attention to relevant research and (b) to encourage professional researchers to communicate their findings to practitioners and to address implications for practice.

The specific goal for my presentation is "to look critically at the conventional research and diffusion model and at possible alternative models." An exploration of the relative roles of quantitative and qualitative research would also be helpful."

The next page presents the topical outline for my presentation. I hope that it fits my assigned topic. The subsequent pages are my working notes for each point on the outline. Obviously I have not completed preparing my presentation but it will be taken from these notes, and include less not more than is included in the notes.

I hope this is helpful to you anticipating what I will be saying.

Cordially,
Mark Savickas

The Relationship between Theory, Research, and Innovative Practice
Mark L. Savickas

INTRODUCE TOPIC

Explain how a the 1998 NICEC Consultation prompted this conference and this presentation

PART I: CRITICALLY EXAMINE PROBLEMS IN THE TRADITIONAL MODEL OF CAREER INTERVENTION RESEARCH AND ITS DIFFUSIONS

Counsellors and researchers:

1. display different personality types
2. pursue different career goals
3. assume different philosophical stances
4. live in different language communities
5. experience different pre-service and in-service training
6. do not communicate with each other

PART II: ALTERNATIVE MODELS FOR CAREER INTERVENTION RESEARCH, RESEARCH DIFFUSION, and PROFESSIONAL PREPARATION

RESEARCH MODELS

1. Scientist-Practitioner
2. Practitioner-Scientist
3. Local Clinical Scientist
4. Clinical Triad
5. Co-Generative Learning
6. Practice Research Networks
7. Outreach Scholarship

DIFFUSION MODELS

1. Research Consumption
2. Research Utilization
3. Empirically-Based Practice

PROFESSIONAL PREPARATION MODELS

1. Interdisciplinary
2. Transdisciplinary
3. Interprofessional

PART III: A PROPOSAL

1. Career Counseling Theory and Research
2. International Roundtable for Career Intervention
3. Barriers and Facilitators
4. Pragmatic Epistemology

So what are the problems with the tradition research and diffusion model?

1. Counsellors and researchers represent different personality types.

Because we are all career experts, let us use one of our own theories to explain what might be going on. From the perspective of Holland's theory of vocational personality types,

counselors and researchers display different personality types.Robert L.Thorndike (1955), Edward L.'s son, constructed a 119-item *Activity Preference Blank* for psychologists, to study the kinds of activities they like. He found a bimodal distribution in interests, with one group preferring "helping people" (working with them in face-to-face situaitons) or "working in industry" (including community service activities) and the other group preferring "experimenting" (planning, conducting, analyzing and reporting research studies) or "scholarship" (reading, writing, editing, and teaching).

Anne Roe, a noted career theorist, in collaboration with Siegelman (1964) constructed a *Person Interest Inventory* to assess these two dimensions. 17 items measure curiosity about people and 17 items measure relating to people. I call them social versus sociable.

Sample items:

Learn more about the problems of social conformity.
Listen to a radio panel discuss juvenile delinquency.
Read about psychoanalysis

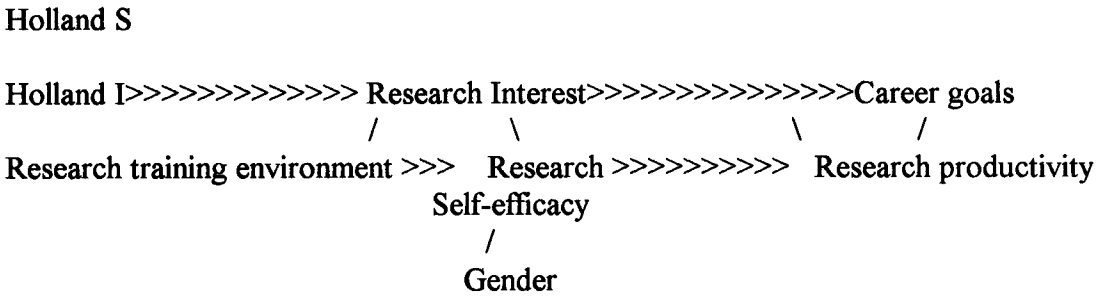
Interview people who are applying for a job.
Discuss personal matters with a friend.
Help people improve their personalities.

More recently, studies of this nature have used measures of Holland's personality types. For example Holland and Holland (1977) reported the following RIASEC codes for a grop of 113 career counselors.

44% SEA
23% ASE
13% ESA
14% ISE
5% Realistic
0% Conventional

Results of a recent study by Savickas, Spokane, and Taber (in press) showed the same pattern for career counselors. Using the Self Directed Search, counselors were SEA. In comparison, on the same inventory, career theorists and researchers were IAS .

Kahn and Scott (1997) used the RIASEC typology to study interest in research among counselors. They reported that Investigative type correlated .48 to interest in doing research and the Social type correlated -.08. The other two predictors of research interest were about of equal weight to I: research training environment during graduate school and research self-efficacy (performance accomplishments, role modeling). Their full model was as follows:



Nancy Betz, in commenting on this study, made a simple proposal: recruit IS and SI students. However, she went on, there are more IRs and IAs; and, do we keep out ESs and SEs types.

2. Pursue different career goals

It is not surprising, given that they differ so much in personality, that researchers and counselors **pursue different career goals.** Scientific research and professional practice differ in important ways and provide different careers (Peterson, 1991). One could almost claim that counsellors and researchers **constitute two independent professions** (Williams & Irving, 1999).

Career counselors in the USA evolved out of political and social reform movement at the turn of the century. Settlement houses like Breadwinners College in Boston provided a real-world base for practical tests of truth.

The systematic introduction of experimental science into the American university, created a field of vocational psychology. Parson's vocational counseling bureau moved to Harvard University where it became the student counseling center. Following the university model of full-time employment, vocational psychologists soon stopped practicing to concentrate on their research.

Throughout the 20th century, vocational psychologists continued to be located in universities which are conservative institutions geared to defend traditional knowledge. Universities are slow to respond to innovative ideas and shifts in thinking. Universities structure themselves into disciplinary-based departments that advocate for the advancement of their discipline. These departments reward faculty for disciplinary specialization, empiricism, and meeting strict standards of proof. In fact, more prestige goes to those who produce decontextualized knowledge. Parenthetically, I wish to note that in the university hierarchy vocational psychology has few numbers and less prestige because it is viewed as too applied. There is great concern in the USA about the future of the field of vocational psychology.

But, back to the main point, vocational psychologists who work in academia are independent scholars who are disengaged from communities and, similar to other scientists, they developed their discipline in sociocultural isolation. The university system of knowledge production focuses on academic rigor not practical application (McCroskey, J., & Einbinder, 1998). For may people, the phrase "It's academic" means it is impractical or worthless.

Disjunction between vocational psychology and career intervention occurs because science focuses on explanation and practice focuses on understanding. Research is reductionistic.

The academic community disintegrates the world. There is a constant break-up of the whole to identify the parts. The anomaly: in experience of fragments the whole and the value of the whole can be lost. Scientists can lose sight of the meaning food when they study the biochemistry of nutrition a the cellular level. Sociocognitive theory of careers classic positivist approach to confidence.

Oceanic sciences are integrative and try to reassimilate the parts.

This type of knowledge doubled from 1950 to 1990. Will double again between 1990 and 2010. There are 40,000 specialty journals that publish fragmented knowledge, fragmented along disciplinary lines. The disciplinarians are the editorial boards of journals who validate knowledge.

In comparison to scientists who break it apart, practitioners put it all together. They focus on listening to the client and understanding the whole, in context. Sometimes, research provides them with a useful perspective from which to view the whole, most times it does not. Therefore, career counsellors cannot have a science-based profession. Career theory and research is not synonymous with career intervention. Vocational science is only one of many systems for gaining insight into career problems. It offers one vantage point for comprehending the client.

Researchers forget this, and argue for science-based practice. One of the problems is the total disregard science has for past systems of understanding. It often dismisses past practices. Yet past practices include spirituality (vision quests, and retreats), family members (Roe), interpersonal relations (Myers-Brigggs), and feelings (Kidd). Nonscientific practices, honed by trial and error, led to traditions in contemporary career intervention. Research as a scientific process, which emphasizes explanation and prediction, enhances this tradition but it does not and cannot replace it.

This difference in attention to whole versus part is reflected in philosophical stance.

3. Counsellors and researchers articulate different philosophical stances toward knowledge production.

Practitioners original interest in science stemmed from the belief that science served th goal of betterment of society, an argument advanced by leading scholars such as Auguste Comte, John Stuart Mill, and Karl Marx. Unfortunately, the evolution of modern social science ultimately produced a rift between **"fact-based science and value-based service"** (Bailey & Eastman, 1996)
The goals of service versus science lead to different philosophical stances.

Stricker and Trierweiler (1995) argue that the goal of a scientist is knowledge for its own sake, with the highest value being academic freedom. In comparison, the practitioner is interested in knowledge for what it can accomplish, with the highest value being public service.

Now, researchers think nomothetically and practitioners think idiographically,
ethos of discovery versus ethos of application
group research designs versus case studies

This leads to Trouble in Paradigms, with separate disciplines having same problem
Not just vocational psychology versus career counseling, it affect many problem domains.
physics versus engineering
physiology versus medicine
educational psychology versus education
anatomy versus surgery
biomedical science versus medicine
pharmacology versus pharmacy
even music theory (I) versus performance (A) and teaching (S) (cf.

David Teachout)

west and sociology

ntology versus epistmeology

Derek Layder (1998), professor of sociology at the University of Leicester, suggests that practitioners are more interested in ontology and researchers are more interested in epistemology.

Ontology is a systematic account of Existence. Use grounded theory to generate hypotheses, sensitize to concepts, and describe nature of reality. Ontologies are needed because independent agents share knowledge. As Tom Gruber and Nicola Guarino have argued, ontologies are representations of the agents' agreements about the set of concepts that underlie the information to be shared. Ontologies support inter-agent interactions. Ontologies must specify enough information about shared concepts to enable the agents to behave appropriately when they receive the designated interactions. They need to be broad enough to include all of the concepts in the set of interactions and deep enough to clearly distinguish the behaviors that should occur when the interactions are received. Ontologies are specified in terms of the interactions they must support.

Epistemology concentrates on the validity of knowledge or these ontological commitments. Epistemology is the branch of philosophy that studies knowledge. It attempts to answer the basic question: what distinguishes true (adequate) knowledge from false (inadequate) knowledge? Practically, this questions translates into issues of scientific methodology: how can one develop theories or models that are better than competing theories? The epistemology that fits counsellors' ontological commitments is the romantic philosophy that the truth is subjective and resides within the client, not the positivist epistemic stance that truth is objective (Williams & Irving, 1999).

Wittgenstein seemed to be alluding to researchers epistemologies versus counsellors' ontologies when he succinctly explained what he called the "The confusion and barrenness of psychology"-- "For in psychology there are experimental methods and conceptual confusion... The existence of the experimental method makes us think we have the means of solving the problem which troubles us; though the problem and method pass one another by. (Wittgenstein, 1953, p. 232).

4. Counsellors and researchers live in different language communities

Ludwig Wittgenstein (1953) also wrote about language *communities* who had trouble translating statements from one language to another even when discussing the same problem such as career indecision. Career counsellors talk of client STORIES in terms of goals, defining moments, and choice points whereas vocational psychologists talk about client SCORES in terms of diagnoses and prediction. Maybe this is why we see so much written about TRANSLATING research into

practice. Scientific validity should lead to counseling usefulness but it usually does not.

A fundamental difference is that research is objective and counseling is subjective. Counselors talk of plans, goals, purposes, interests, values. This involves teleological causes for behavior. Research uses determinate accounts of human action using efficient causes of action meaning push and thrust, flow. (Howard, 1986). George Howard poses a provocative question in this regard, "How many empirical articles can you name that deal with clients as telic agents?" Howard maintains that we need a human science to address these issues.

As an example, consider how researchers treat interests-- as diagnosticians and prognosticators. Strong's inventory may not even have been measuring interests. To me Strong measures congeniality with co-workers in an occupation rather than interests as an indicator of capacity to learn to like a type of work. Using several inventories on the same youth yields confusing results, many youth have no high scores. Functional psychology deals with to be interested. Strong fit people into occupations, counsellors fit work into peoples' lives. Kitson talked about the counselors role as developing interests-- the counselors job is to create interest. Super talked about defeating probabilities and four different ways of assessing interests– inventoried, tested, expressed, manifested. Using several inventories on the same youth yields confusing results, many youth have no high scores. Functional psychology deals with to be interested. Many counsellors prefer projective rather than objective assessments-- including genograms, card sorts, vocational apperception test, future autobiographies, and other qualititative methods for understanding a client.

This disjunction has led to science wars between quantitatively-oriented researchers and qualitatively-oriented practitioners.

ualitative research is more amenable to complexities of practice problems (Simionato, 1991).
In some schools, they have had to move qualitative and quantitative methodology faculty to different parts of the building.

Personally, I subscribe to Edwards and Cronbach's (1952) classic experimental design for research in psychotherapy that programmatically and systematically uses both quantitative and qualitative research methods. Super's Career Pattern Study is an example of this approach to knowledge production.

Positivism is A methodology, not the methodology.

Socialized differentially to live and speak in their respective cultures, they base their work on different training

Gap between knowledge production generated by systematic inquiry and its eventual use by practitioners is attributed to orientations of both, character of professional education (critical reading), and nature of scientific inquiry. (Staller & Stuart, 1998)

It is unfortunate that training of counsellors is usally assigned to one academic discipline.

Academic departments too often neglect training for practice. They argue that practitioners must "think scientifically" so they train students in theory-driven verification research within a positivist philosophy of science (e.g., Barak, 1998 calls these thinking capabilities that are second order effects of learning research methods-- critical thinking, bias, doubting evidence, etc). Peterson (1991) argued that this "offers the illusion of training in rigorous thought but not the genuinely useful training in strategies of inquiry that effective practice demands." This is not good because science begins and ends in a systematic body of knowledge whereas practice begins and ends with the client. The practitioner does not choose the issues to examine, the client does. "At best, practice runs ahead of research. Each case in unique. The pattern of conditions the client presents has never occurred in exactly this form before" (Peterson, 1991, p. 426). It is not enough to determine if the difference is statistically significant, it has to matter to the client. What practitioners need is "the analytical skills, more philosophical than scientific, that are required to identify useful conceptions and sound practices" (Peterson, 1991, p. 428). They can then choose a guiding conception for their practice and gather those substantive facts that are decisively important.

Living in different worlds and talking different languages, they do not communicate with each other

Is it any wonder that counselors proclaim art and eschew research? Counselors values individual knowledge and experience over academic textbook knowledge (Williams & Irving, 1999). Practitioners do not read research articles, because of the wide-spread anti-science bias against research among counsellors (Williams & Irving, 1999).

Beutler, Williams, Wakefield, and Entwistle (1995) surveyed 500 researchers (academicians) and 500 practitioners about research consumption. Researchers seemed ot read one article per week and practitioners seemed to read one article per month. The practitioners, however, usually read reports published in journal sections such as "Getting Down to Cases, " "In the Field," and "Around the Campus." The results also showed that clinicians are more interested in science than scientists are interested in knowledge from clinical practice. Researchers do not value clinical case reports but practitioners value their scientific writings and incorporate them into their practice.

Researchers exacerbate problem by not even communicating with each other
Personalisation of theory

.

Williams and Irving (1999) gave the following example of "personalisation of theory":

"Many years ago, one of us was introduced to a senior professor of psychology at an ancient European university. His first words were: 'Hello, I am a Piagetian'. This appeared bizarre, for it seemed that the statement was not made to indicate a research interest in cognitive processes in children, bu to state a conclusion– to be putting the cart before the horse. His attitude seemed to bo have an affinity with a statement of religious belief–where all the answers are known before a question is asked, and where principles, not evidence , determine solutions." p. 370.
I think this is because researchers are trying to be famous. Have their theory.
Personal investment in theories causes problem is divergence of theories If you agree with jung you must disagree with Freud. Same with Holland and Super. I think this allows practitioners to say researchers cannot even agree among themselves. People want to be famous not solve problems Try to change Holland theory to RIASEC model is difficult.
In basic science focus is on problem and fame goes to one who solves it first.

Old model was one theory covered it all, emerging idea is that theories are maps for limited terrains, evolving in microtheories

What has happened to highlight the two cultures of counseling, broadened the divide and start a cultural war? End of the industrial age.

Can we construct a science-based practice. Or should we?

Peterson (Peterson, 1991) asserts that a science-based profession can be formed int two ways. "Practice can be restricted to fit the science, or the science can be developed to fit the practice" (Peterson, 1991, p. 428). The first way got us where we are today. The latter is how we should now proceed. Practitioners and researchers must work toward their separate goals in cooperative and complementary ways. It is absurd to expect the same people to do both, a romantic fantasy that every client is a research subject and every practitioner is a scientist. Peterson (p. 429) uses the metaphor of a string quartet. When the viola and cello join the violins, the violins do not stop playing. If the cellist hears the viola going flat, a gentle comment is in order. But the best thing all of them can do is to tune their own instruments. What models do we have for this collaboration? The traditional research and diffusion model in USA is the scientist-practitioner model.

PART II
Dicussion of Possible Alternative Models for Research and Its Diffusion

1. Scientist-Practitioner model

Some scholars recommend that we strengthen the hyphen in the scientist-practitioner model (Beutler, Williams, Wakefield, & Entwistle, 1995; Howard, 1986). Specific recommendations on how to do this include the following:

A.. Researchers must link better to other researchers
-theory schools drive wedges between scientists and put off practitioners
-conflict brings new ideas but they should collaborate to aid practice

B. Researchers must initiate and maintain relationships with practitioners
-practitioners are doing more to bridge the chasm than are researchers
-researchers need to be active in NCDA and IAEVG by attending should attending their conferences, reading their journals, writing case reports, and taking continuing education on practice topics

C. Researchers must reconsider the role of science for practitioners
-practice is the source of discovery, research is the source of confirmation
science explains what practitioners have already discovered
-researchers should observe and study master therapists

D. Researchers should make their findings relevant to practitioners
-do case analyses of how practitioners use research in practice
research does not remotely resemble what takes place in counseling
research reports written for other researchers, not clinicians as customers or audience .
Place scales in articles (Goldfried, Borkovec, Clarkin, Johns, & Parry 1999, p. 1392)

E. Develop vehicles for translating research into practice
-Do we need new journals or just need researchers to read CDQ?
-Journal of Clinical Psychology has new section called "In Session"
-"In the Field," Getting Down to Cases," and "Around the Campus"

2. Practitioner-Scientist model

Margaretha Lucas (1996) calls for the Practitioner-scientist model and suggests and describes how to build a supportive environment including an atmosphere of collegial trust and involvement

She calls for production of practice knowledge. Applied research contributes to the

refinement and advancement of therapeutic interventions, sharpens clinical skills, enriches morale. Staff development, and fulfills ethical obligation to evaluate our interventions (Pfrifer, Burd & Wright 1992, p. 143).

Apply practice to theory by systematically collecting case studies linked to major career theories and then use the cases to develop counseling models or mini-theories that specify "treatment protocols for frequently encountered career problems in specific populations." This practice knowledge harkens back to Williamson and Bordin's (1941, p. 8) famous question, "What counseling techniques (and conditions) will produce what types of results with what types of students?"

"Additive designs" mean treatment as usual plus add some novel intervention (Goldfried, Borkovec, Clarkin, Johns, and Parry (1999, p. 1392).)

3. Local Clinical Scientist model

Stricker and Trierweiler (1995) concluded that the scientist-practitioner model aspires to a synergistic blending of two models but they are antagonistic. Instead, they proposed the local clinical scientist as an alternative to the scientist-practitioner of the Boulder model. **They argue that the main weakness in the scientist-practitioner model is that practitioners must always go beyond firm and available scientific knowledge. Science always offers a partial solution to the client's problems.**

Rather than seeing research and practice as antithetical, they view it as a continuum from local to general. Scientists on a public quest for generalized knowledge while practitioners pursue a private quest for specific application. Local knowledge refers to understanding what is specific to a particular group in their unique context. A local observation may not be generalizable. It may or may not involve a particular application of a general principle.

Key skill both need is observation:

all scientific work rests on observational skill.

Objective observation (observation from the outside)
subjective observation (empathic observation or intuition)
participant observation (understanding reciprocal effects of the observer and the observed)
self-observation (self-examination)

4. Clinical Triad model

Addis and Hatigs (2000) take the local clinical scientist model in another direction, toward what they call the "clinical triad." **They agree that knowledge production and utilization are always locally situated, with clinical triad of practitioners, administrators, and researchers attempting to each achieve their own goals within contextual restraints. Asks question of what do people do with information and this can be only answered in context. Whether different players find any knowledge product compelling depends on what they value, where they stand, and where they want to go. (Addis & Hatigs, 2000)**

Research practice linkage has been predominantly hierarchical and unidirectional. An alternative model is equality among researchers, practitioners, and administrators, all of whom use knowledge. In the clinical triad model, the growth of knowledge is not hierarchical, rather it is constructed as an iterative and reciprocal process involving all members of the clinical triad.

They recommend that we somehow synthesize research activities into daily clinical and programmatic responsibilities to ensure that research is both relevant and complements the service mission of the agency. They realize that the best we can hope for is a core group but support them with organizational incentives, programmatic accommodations, top down support, inter-agency collaboration, and create and environment that encourages research, development, and innovation.

5. Cogenerative learning model

Action research takes it puzzles and problems from the perceptions of practitioners. Inside practitioners and outside researchers collaborate on co-creating "local theory" consisting of context-bound knowledge (Elden & Levin, 1991). From this perspective participatory action research involves the clients as co-learners as well. Clients are both subjects and co-researchers.(Elden & Levin, 1991)

Action research means using scientific methods to solve practical problems in a way that contributes to theory and practice (Elden & Levin, 1991). Neither the scientist nor the practitioner takes the initiative in formulating the research. Instead, insider and outsider frameworks are the point of departure for collaboratively building a third framework of local theory. A new local theory is a framework generated by cogenerative dialogue. It should be action relevant theory that addressed practical problems that were important enough to have been studied. The local theory need not remain local. In addition to solving community problems, it could lead to new or improved scientific theory and research. Generalizations tend to summarize thematic patterns derived from inquiry in one setting, scientific research confirms the validity of their transfer to other settings (Elden & Levin, 1991)

6. Practice Research Networks

Practice Research Networks consist of groups of practitioners who have agreed to implement research protocals and to collect data. Have the advantage of analyzing common career counseling problems and interventions in the settings in which they are commonly practiced. The networks also provide a fertile environment for emerging areas of interest, including the fostering of outcomes research and the development of clinical practice guidelines. The research issues must be practical, fitting time and resources of practitioners. Moreover, the identification of compelling research issues is critical to sustaining the interest of practitioners, who must struggle with the necessities of their practice and clients.

Could exploit the capacity for information systems to collect, analyze, and effectively utilize data. A national information infrastructure could support a full spectrum of clinical research and fosters future clinical innovation.

Pennsylvania's state division of the American Psychological Association set up an academic/clinician research network. They found great enthusiasm when starting but difficulty keeping clinicians interested. They recommend frequent network workshops that give CE credit for free. Also, if possible, financial incentives.

UK is developing"practice-research networks" funded by the Mental Health Foundation according to Glenys Parry. This type of network could study "consensus guideline" (80 people what to do about indecision) around clinical questions (not more efficacy research) sorted by followers of Holland, Super. Consensus on what is good and bad practive, gather data on what counselors do, clearly describe it. Guidelines remove the worst practice (Goldfried, Borkovec, Clarkin, Johns, and Parry (1999, p. 1392).)

The American Counseling Association formed a Research and Knowledge Committee with the goal of making sure that counselors have access to information that will improve their practice. Focus on data-based research about presenting problems of clients, the specific strategies that counselors can use to help those clients, and the actual effectiveness of those strategies.

This Committee, in turn, set up a **Practice Research Network Task Force** (Counseling Today, March 2000) co-chaired by Loretta Bradley and Thomas Sexton. They have developed a *National Counselor Questionnaire* that asks 55 questions about training, experience, continuing education, specialty, work setting, interventions they use, and types of clients. Mailed in December 1999 to a random sample of 1,200 counselors. Seek to describe counselors, their practice settings, and their client populations. Want to develop a composite picture of counselors, the clients they serve, and the problems they bring to counseling. In this first stage they seek to learn about the profession.

In stage two, a group selected from the first sample will be studied in terms of their practice patterns and outcome data from the clients themselves. The second group will complete more detailed information about selected clients and report client progress over a brief period of

time. At the conclusion of the second year, clients will complete an "Outcome Questionnaire."

The long-term goal is to allow counselors to log onto a website, find out which interventions worked with similar type clients to the one they are working with. They will also use the outcome data to advocate policy issues. For info contact the staff liaison, Howard Smith at PRN@counseling.org

Unfortunately, counselors were not the impetus. It was Substance Abuse and Mental Health Services Administration who gave grants to find out three things: to what extent was substance abuse a problem with the practitioners clients, what do clinicians do about it, and how well prepared are clinicians to handle substance abuse issues. Four grants to APA. Social workers, ACA, and marriage and family therapists.

7. Outreach scholarship

Outreach scholarship model calls for a change in cultural role of universities.

Today in American, however, the historical association between the scholarship of our universities and the problems of our nation has weakened. (Lerner, Ostrom, & Freel, 1995, P. 495) Need to ask our universities to increasingly provide knowledge that is relevant to needs of the communities in which they are embedded. Relevance should be defined and evaluated from the vantage point of the communities and that of the universities.

Promote positive individual development through the incorporation of participartory evaluation into program design. (Lerner, Ostrom, & Freel, 1995).

Inside the academy there is debated about whether outreach scholarship should be promoted and rewarded or is it a distraction from basic research. Must find ways to merge interests of faculty in pursuing cutting-edge , fundable, publishable and rewardable research with the needs and demands of the constituencies served by the university.(Lerner, Ostrom, & Freel, 1995

Community-based knowledge
Values and meaning system of stakeholders.
Community must define the key issues about which it wants university expertise.
University members are not experts about development in context
May be ungrounded in practical realities of community life

The next three models concentrate on research dissemination rather than knowledge production.

Research consumption model

Create informed consumers of research by teaching information mastery not research methods

Teach counselors in training and continuing education to be critical readers of research reports. Do this instead of teaching research methods. Show counselors how to extract useful knowledge from research reports.

Simionato, (1991), however, argued that we purvey a watered down scientist-practitioner model when we agree practitioners are not going to do research but they should read it. He distinguishes between research consumption (reading it, attending conferences) and research utilization (changing practice in some way).

He asked practitioners what influences change in their practice:
past experience with clients (43%),
discussion with colleagues (27%)
workshops/seminars (6%),
how-to books and articles (12%),
intuition (9%),
theory articles and books (7.5%),
research articles (4.1 %)
conferences (2.5%)

Research Utilization Model

Research as a scientific process, which emphasizes explanation and prediction presents the challenge of integrating research into practice. This is called research utilization (Omery & Williams, 1999, p. 50).

Research utilization models focus on advancing practice by moving from "task-oriented to science-based practice." RU models are change models that include some unfreezing, change, and refreezing. RU is typically prompted by a triggering event such as a client problem, a clinician's interest, available body of research, or an organization's needs. The change process involves two functions: research evaluation and environmental readiness. First, critically evaluate the literature available on a topic and then identify the change agents, evaluate available resources (financial, time, expertise), and assess readiness of practiioners.

Steps:
topic identification
literature search and critique
presentation and discussion of review
decision to proceed with RU project

implementation
documentation
evaluation (Omery & Williams, 1999)

Strategies: workshops, role modeling, policy and protocol development, information sharing (e.g. bulletin boards) Provide library, computers with internet access, on-site researcher

RU more prescribed task than Evidence-Bassed Practice. RU begins with body of research or identification of clinical problem, then proceeds to critique of scientific findings and application into practice, and ends with evaluation through measurement of outcomes. RU uses only scientific findings and integrates the change process into its tasks (Omery & Williams, 1999).

Recommendations: value RU, collaborate with practice leaders across practice settings, integrate research findings through practice committees and counsel, institutionalize RU (integrate it into strategic plan, develop a committee), make sure RU addresses clinical and organizational priorities and commit specific resources of expertise, money and time; commit for the long haul. (Omery & Williams, 1999)

Empirical practice movement

In contrast to RU, EBP is careful and practical use of current best-evidence to guide practice decisions. Usually adds consensus and expert opinion to evaluation of meta-analyses to produce clinical practice guidelines that direct the clinician. Evaluation of the guidelines in practice is not included (Omery & Williams, 1999).

Began in the 60s with three goals (Reid, 1994):
1. advance use of research as means of facilitating assessment and intervention
2. Promote use of interventions whose effectiveness has been demonstrated by empirical research, especially with support from meta-analyses.

Look at our meta-analyses in vocational psychology.

Concentration is on best practice guidelines.

Best Practice Protocols include research-based treatment plan, including evaluation instruments, handouts, weekly homework assignments, and strategies for delivering key information. Like Osipow's CDS started out.

Clinical management guidelines have been developed in medicine to standardize patient care and produce cost-effective care. To make physicians comply, some hospitals use clinical resource managers to improve compliance.

Manualized care fosters development of practice research networks.

Next three models concentrate on universities and training as a solution

Interdisciplinary training

Interdisciplinary means of, relating to, or involving two or more academic disciplines that are usually considered distinct. This means basing professional preparation in career counseling in multiple disciplines.

Universities control professional preparation of career counselors, and they assign it to single disciplines. In the USA career counseling is assigned to counselor education and vocational psychology is assigned to counseling psychology.

Post-industrial society challenges this organization. Critics aim to change the goal to generating and sharing relevant knowledge, change from discipline focused to problem focused research (school to work transition). From this perspective, professional preparation in career counseling should be informed, not just by vocational psychology, but by occupational sociology, social psychology, industrial/organizational psychology, cultural anthropology, economics, vocational education, demography, theology, and the humanities. The idea is to integrated multiple academic disciplines to prepare counselors for their divers professional activities.

For example, at one university in the USA, the counselor educatlion department now uses and interdisciplinary combination of psychology and sociology to prepare their counselors. These counselors learn models form sociology that most career counselors never hear about. For example, they study the status attainment model. There is rich research in sociology about social networks and status attainment. This literature concludes that social resources exert an important and significant effect on attained occupational status, beyond that accounted for by personal resources. These counselors are learning how to measure a client's social resources and how they interact with personal resources. Then they practice helping clients use their social in developing a career.

Think of 20 occupations list all people you know in that occupation this is measure of your social capitol (human capitol = education, experiences). Executives often are rich in social capitol, in fact social capitol counts more than human capitol in getting these jobs. Social jobs, rather than Realistic, jobs are filled with people who have more social capitol. Occupants of jobs on the edge of the firm (e.g., sales, public relations, managers at remote sights) have higher social capitol than others. We know that when social capitol is high, status attainment will be high regardless of human capitol level, when social capitol is low, human capitol exerts a strong effect on status attainment (Lin, 1999). What are career guidance implications of this knowledge from sociology?

We could also take advantage of scholarship from cultural anthropology which is "not an experimental science in search of law, but an interpretive one in search of meaning" (Geertz, 1973, p. 5). As such, anthropology has straddled the divide between the social sciences and the humanities (Thomas, 1997, p. 333). Focus on field work and make ethnography central and produce localized knowledge. Takes a stance that seeks to incorporate an indigenous point of

view into analytic or theoretical discourse defined as social science. Zeitgeist of the times is affirmation of practice and particulars of context and circumstance, valued for themselves not as instances of some general rule. We do need to be careful that we do not reactively overstate the particular, as preceding generations overemphasized the general (Thomas, p. 342). Forget hierarchy of description and analysis, data and theory; view engagement with the particular as legitimate in itself, not just as a basis for higher effort of abstract theorizing, lift theory from the level of the abstract to the concrete (Thomas, p. 342).

Transdisciplinary training

While interdisciplinary means career counseling training conducted by collaborative professionals who remain situated in their own disciplines, transdisciplinary means ignoring disciplines and taking knowledge from wherever it is available. The focus is on the problem, for example the school-to-work transition, not the different disciplines view of the problem. One approach to this is "problem-based learning."

Transdisciplinary research and training facilitates a new generation of conceptually integrative research projects and training. It's focus is on the problem (work, tobacco, the body, media), not disciplines. This means to study careers in ways that will integrate research and theory from all disciplines. The exploitation of these opportunities will require new models of research organization, synthesis, collaboration, and training. Several organizations have emerged to advocate what are called transdisciplinary studies or integrative studies. Oceanic science

Interprofessional Training

Interprofessional training "based on the premise that human service professions are interdependent with respect to service outcomes each seeks to achieve." (McCroskyey & Einbinder, 1998, p. 9).

Interprofessional training is model that argues for the integration, as equal partners, of the professions that relate to a certain problem. Integrative scholarship could be interdisciplinary, transdisciplinary, or anti-disciplinary. The idea is to train together all professions with an interest in a particular area. Think of three places for career services at KSU and my convergence model. Regarding career, we have professions such as academic advisors, school counselors, career educators, vocational educations, college counselors, placement specialists, rehabilitation counselors, employment counselors, and employee assistance counselors. Each group has its own separate training, professional organizations, journal, and conferences.

Interprofessional training means, they are trained together.
How should we organize knowledge and set priorities and organize service.
What are the key concepts that inform interprofessionals?
What are key concepts that inform IT practice?
- -what do clients want
- -why do not they not seek service
- -improve access trhough IT

-outcome research

Focus on team building by bringing together career services professionals with different perspectives, experiences, and expectations. Could begin with interorganizational conferences that examine professional stereotypes and myths that establish boundxaries. Pre- and continuing education should focus on interdisciplanry teamwork.

-add experiences in interprofessional to basic curriculum
-add case conferences
-provide leadership training in IT
–start pilot projects evaluate with participant journals
-understand policy as context for practice

III. A Proposal

I propose we form a clinical science of career counseling to augment our basic science of career development and adjustment.

Clinical theory and research should concentrate on the process and outcomes of career intervention. It should produce practice knowledge valuable for understanding career counseling content and process. For example, we should know as much about test interpretation as we know about test reliability and validity (Tinsley & Chu, 1999).

Case study research
there are teaching and learning models for building practitce knowledge through intensive case studies and practitioner self-evaluation. This reflective models allows the systematization of case study and use of multiple research methodologies. (Millstein, 1993)

Clinical qualitative research
Clinical qualitative research as recommended by Gale, Chernail, Watson, Wright, and Bell (1996) could study use of language by counselors, linguistic patterns, use hermeneutics, conversational analysis. This research goes for clinical significance not statistical significance.

Communication research
If nothing else, then study communication of research!!!
Communication of research is as important as research itself.(Addis & Hatigs, 2000)

Therefore research about how knowledge products are communicated among the parties is legitimate area of research.

Clinical expertise We need research on career services expertise. We know from research in sociology and psychology that experienced practitioners do not use theory or use it minimally. They quickly prioritize relevant factors and identify constraints and resources. In developing a theory of career counseling we need to identify artistic elements, do research interviews around vignettes and see how they deal with them.

Best Practice Guidelines

Other important topics for clinical research include:

field surveys, research needs assessment survey of practitioners and administrators
studies of case management
development of new technologies
assessment of outcomes
epidemiologic studies (NCDA Gallup polls)
career services research (like health service research)
interventions including clinical trials
prevention as in career education and STW transition
cost-effectiveness
research on help seeking

We need programmatic research, rooted in practice activities, that follows Edwards and Cronbach's four stages, beginning and ending with practice.

One shot research not cumulative

It should be problem-based, and transdisciplinary

Next step

To make these things happen, we need shared responsibility in creating a clinical research community?

Establish an International Roundtable on Career Counseling charged with creating a clinical research community by developing and coordinating strategies to enhance practitioner understanding of, support for, and participation in clinical research with special efforts to reach out to populations under-represented in clinical research. Second charge is to develop a comprehensive, dynamic research agenda that focuses attention on the needs, priorities, and future progress of clinical research.

Roundtable must be representative, credible, visible, responsive, and capable of establishing an accountable process. So it must be constituted by a broadly representative group. Membership up to 25 chosen for their professional and policy-making perspective as well as scientific and practice credentials.

Roundtable should meet up to four times per year with two of the meetings held in conjunction with Roundtable workshops.

Roundtable should:

agree on a definition of clinical research, inclusive and comprehensive

articulate and advocate the value clinical research

disseminate its findings

work to restore communication between practitioners and researchers

propose formal studies to National Academies

convene periodic workshops to resolve short-term and long-term problems affecting clinical research.

Publish reports that highlight high quality clinical research findings.

Use ERIC's International Career Development Library as a FridayNewsletter

Offer workshops for counselors on qualitative research methods.

Create networks of clinical investigators

emphasize incorporation of research findings in clinical practice

Promote a dialogue between cc and vp

develop strategies to enhance understanding of clinical research

improve training in clinical research

force NCDA and VOC Society to collaborate

mentor junior faculty in clinical research

establish juried award for outstanding clinical research

establish automated large population databases for clinical research.

Disseminate methods and best practices for research strategies

identify and publicize centers of excellence that link clinical research

improve training curriculum

practice-based research networks

publish "best practice protocols"

establish a system of continuing education at national conventions

involve occupational sociology, developmental psychology, vocational education, etc.

What are facilitators and barriers to practitioner participation?

Facilitators:
Best predictor of scholarly productivity are resources and incentives available in the work setting (Pfriffer, Burd, & Wright, 1992).

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attitudes of practitioners toward research
critical thinking ability of practitioners
professional preparation (more education better, especially if in research methods)
higher levels of education overall
increased administrative support
improved comprehension of research reports

Barriers:
clinical managers against
insufficient time to implement new ideas
not enough time to read the research
research not readily available
inadequate facilities for implementing recommendations
lack of competent colleagues to discuss issues with, (Omery & Williams, 1999)

Resolving epistemic wars between researchers is important.

We must get beyond the positivist-postmodern debate engulfing much of the social sciences and move to whatever is going to the "post" modern epistemology. Instead of bickering over whose psychological paradigms will provide the best general theory of human behavior, argues Daniel B. Fishman, psychologists "need to focus our energy and attention on substantive issues, such as addressing the major psychosocial problems of our times."

With the recovered interest in pragmatism, maybe the new epistemology will be neo-pragmatism. William James and John Dewey insisted that pragmatic philosophy finds meaning in its struggle to deal with emergent social problems.

In The Case for Pragmatic Psychology, Fishman demonstrates how pragmatism returns psychology to a focus on contextualized knowledge about particular individuals, groups, organizations, and communities in specific situations, sensitive to the complexities and ambiguities of the real world. He argues for a pragmatic reinvention of psychology based on databases of rigorous, solution-focused case studies.

Pragmatism as a philosophy stresses the relation of theory to praxis, looks at the outcomes of direct action as a starting point for reflection. Experience is ongoing inter act*on of organism and environment, both subject and object are constituted in the process. Four aspects of Dewey's experience are particularly relevant here: 1. overcoming Cartesian dualism, and hieraarchy ; 2. incorporating the perspectival nature of experience, 3. developing standards of judgment based on concrete experience, and 4. recognizing the role of feelings. Dewey against dualities such as theory-practice, thinking versus doing, subjective-object. For Dewey reality is function of perspective, lived experience and what is available to experience (Seigfried, 1996).*

According to pragmatic epistemology, knowledge consists of models that attempt to represent the environment in such a way as to maximally simplify problem-solving. It is assumed that no model can ever hope to capture all relevant information, and even if such a complete model would exist, it would be too complicated to use in any practical way. Therefore we must accept the parallel existence of different models, even though they may seem contradictory. The model which is to be chosen depends on the problems that are to be solved. The basic criterion is that the model should produce correct (or approximate) predictions (which may be tested) or problem-solutions, and be as simple as possible. The pragmatic epistemology does not give a clear answer to the question where knowledge or models come from. There is an implicit assumption that models are built from parts of other models and empirical data on the basis of trial-and-error complemented with some heuristics or intuition.

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