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Practice Wisdom Knowledge Versus Empirical Science Knowledge: Guiding Historical Social Work Direct Practice

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Abstract

For social workers who are interested in research associated with validating methodology for the amelioration of human problems, or the mastery of intervention models, used in direct practice; definitive consensus, on guidelines, remains elusive. Much has been written in recent years about the necessity of the profession to be guided by either empirical research, which has validated specific interventions, or by the theory, heuristic rules, and the decision-making schema of experienced practitioners. The debate is not simply limited to clinical practice issues, or factions defending or refuting, a particular theoretical stance. On one hand, social research has in recent years, invalidated some long held practice models, and has modified our understanding of core social problems. Yet, social research is an often difficult and arduous pursuit, which may require some time to make thorough evaluation, as compared to the immediacy of emerging social concerns. This transmission of scholarly research findings takes time and considerable effort to disseminate and gain understanding and acceptance within the practice community even when well received. On the other hand, practitioners serve as the wellspring of observations, which are often translated into models or theory, and frequently become the subject matter of empirical research. However, few in the practice community are encouraged or committed, to systematically review research findings so as to modify practice approaches, which have not been well validated by recent research findings.

Keywords

Social work, practice wisdom, empirical science, evidence based practice

Social work may be a profession divided in numerous ways. One of these is the division in practice of being guided by practice wisdom or the methodology and findings of empirical science.

Unlike other disciplines such as medicine or law, the profession is not guided by one model for practice. For example, the medical profession is guided primarily by the disease model of intervention. This model is based in large part on accumulated research in the natural sciences. In comparison, the legal profession is guided by an historical accumulation of adversarial practices and published case law outcomes.

Currently, social work is an emerging profession. It is often divided by basic questions and competing models, each contributing to both authentic and false dichotomies. How much education or training should

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our professional leaders have? Should we be advocates for the oppressed? Should we become social engineers or apologists for past interventions great or small which did not include an outgroup? Should we become direct practitioners with skills derived from the unconfirmed theories of popular leaders, or research oriented service providers? Should we perhaps simply become fundraiser agents for the most current popular social concern? Should we scapegoat portions of the current or historical power structure to engender further division of the social fabric so as to create a need for continual social work mediation programs? These divisions are but a few which confuse and strain the resources and effectiveness of a profession. This paper will be limited to a review and comparison of one of these dichotomies, which has been the subject of published debate.

PRACTICE WISDOM KNOWLEDGE OR EMPIRICAL SCIENCE KNOWLEDGE

Given the nature of human reasoning and the associated fallibilities of reasoning (Gilovich 1991), professionals in various disciplines seek methods to make professional practice more predictable and consistent in achieving outcomes. These fallibilities include the tendency for human beings to see either what they expect to see, or at times what they are motivated to see. Social workers share these fallibilities with other social and natural scientists. Practitioners may fall into the habit of formulating a preferred diagnosis or problem formation or offer interventions, which have been heavily invested in by the particular service provider. Most professionals have had the experience of encountering clients and other professionals who put forward questionable beliefs or erroneously perceive patterns in limited or random data. Even the popular literature nearly daily increases our awareness of the sheer numbers of questionable health practices (Gilovich 1991) and the legal battles occurring when someone complains of having been harmed by an untested intervention despite having given informed consent (Loftus and Ketcham 1996). Social workers and other professionals have accepted recommendations of popular writers without critical analysis of the presentation of problems and their proposed solutions. Some cases have made national headlines when the interventions have caused harm to multiple generations of family members, even those not participating in the service (Loftus and Ketcham 1996).

During recent years, the social work profession has seen both professional and popular publication of research findings which have been contradictory to popular practice models (Sharpley 1987). Yet social workers continue to train and offer theory based services, which have been deficient in validation.

Research is emerging indicating that memory processes are constructed differently than what some clinical professionals' theoretical base suggests. The concept that traumatic memories are repressed and stored in pristine fashion until it is safe to recover, is contradicted by scientific research findings. Methods commonly used to recover these memories such as hypnosis or suggestible states, peer group pressure, and forced journaling may actually contribute to the formation of false memories. Current practices used by large numbers of professionals may be resulting in profound emotional and legal consequences involving more than the associated professionals and their clients in the process (Loftus and Ketcham 1996). At times, reputable proponents will mistakenly cite research and report supportive findings of a preferred intervention. Then the citations are reviewed by another scholar and found to report less than supportive findings (Thyer 1997). Determining which interventions are likely to yield positive and validated results, regardless of theoretical considerations, is becoming a necessity of accountable practice for both practice wisdom and empirically based social work practitioners.

The professional integrity and viability of social work and related involved professions may well be at stake. Consider the ramifications of professionals being repeatedly found to be engaging in unsound or untested interventions even where the interventions are advocated by plausible authority figures within the practice field. Let us proceed to review and consider the relative strengths of empirical science and practice wisdom methodologies proposing to guide the profession.

SCIENCE DEFINED

One source defines science as "our attempt to understand the reproducible and predictable aspects of nature" (Rosen 1991). A more general definition is stated simply as "scientists are engaged in exploring how the world works" (Giere 1991). *The Social Work Dictionary* (Barker 1987) defines the term "scientific method" as:

> A set of rigorous procedures used in social and physical research to obtain facts. The procedures include defining the problem, operationally stating in advance the method for measuring the problem, defining in advance the criteria to be used to reject hypotheses, using measuring instruments that have validity and reliability, observing and measuring all the cases or a representative sample of those cases, presenting for public scrutiny the findings and the methods used in accumulating them in such detail as to permit replication, and limiting any conclusions to those elements that are supported by the findings.

Thus defined, the concept of science operates to some degree independent of theoretical constructs. The outcomes obtained may not require theoretical explanation, nor are they dependent upon expectations based on historical interpretations. Results are free to conform to, or differ from, the expected results as specified by the research authority. Outcomes that are replicated, can infer differing levels of causality, and lead to reliable predictability of specified intervention without need to justify a particular theoretical bias.

PRACTICE WISDOM DEFINED

Practice wisdom then is defined as "a personal and value driven system of knowledge that emerges out of the transaction between the phenomenological experience of the client situation and the use of scientific information" (Klein and Bloom 1995). *The Social Work Dictionary* (Barker 1987) defines "practice wisdom" as:

> A term often used by social workers to describe the accumulation of information, assumptions, ideologies, and judgements that have seemed practically useful in fulfilling the expectations of the job. Practice wisdom is often equated with "common sense" and may or may not be validated when subjected to empirical or systematic analysis.

Thus defined, practice permits an accumulation of observations and experiential analysis. Collective experiences are jointly coded and classified to form a "best fit" response based on the collective practice wisdom available in a particular setting without comparisons to other settings. Responses become dependent upon the bias and memory strengths of available field based experts. Interventions become largely based on interpretations of theoretical constructs. Predictability, equated with expectation, is tied to how closely the interpretation is thought to be to the theoretical construct. The theoretical construct, however, may have no demonstrated history of reproducibility of outcomes.

OBJECTIVITY IN SCIENCE

Objectivity in science is not a foregone conclusion as an account of the development of the double helix model of the DNA molecule by Watson and Crick. Watson published a personal version of the behind the scenes conflicts and personal weaknesses of those engaged in aspects of the research several years after the published discovery. In so doing, he exposed an unofficial image of science (Giere 1991). The

unofficial account related the usual human inconsistencies, bias, and political maneuverings. The human condition was compensated for by the exacting nature of the scientific model to advance knowledge, even though this condition existed in separate from scientific observations.

There are a number of conventions in scientific inquiry, which seek to achieve objectivity. Science is concerned with the concepts of prediction, or the ability to make causal inference (Rubin and Babbie 1997). In addition to observations reported in the practice fields, social scientists seek to demonstrate relationships between variables (Kerlinger 1979). Conjectural statements are formulated so as to constitute a test question with a predictive component. Scrupulous attention is then focused on methodology, which would best control various potential threats to experimental internal validity (Rubin and Babbie 1997). Selected variables, assumed as causal, are manipulated to observe their effect on other variables. Further techniques are utilized to control for additional variables which could have unintended influence.

Outcomes are measured at useful points in the test procedure to determine the effect of variables under study. This empirical approach can demonstrate the effect or lack of effect of various practice interventions independent of practice theory. At times, the practice theory is validated; at other instances, the theory does not produce expected or reliable results (Judd, Smith, and Kidder 1991).

Objectivity is achieved by limiting the human biasing effects of reporting an outcome and can be confirmed through repetitive study by independent investigators.

OBJECTIVITY IN PRACTICE WISDOM

Achievement of objectivity derived from practice wisdom has relied on multiple intellectual strategies such as seeking insight or interpretation of presenting problems by rote and practice over several years in supervisory training (Knapp and VandeCreek 1997). Much of the training effort is devoted to discovery of the innate human bias and values, which the trainee is assumed to have a limited awareness of. The problem is recognized as pervasive to the extent that some practice models suggest lifelong practice supervision arrangements (Knapp and VandeCreek 1997).

Practice wisdom is further developed through extensive labeling and classification schemes for sorting various human problems. Some of the labeling concepts are derived by political negotiation and agreement of criteria, based largely on published case theory or perceived models with limited test analysis. The predictable result of being inconsistent in achievement of prediction has been well documented in both clinical and legal literature (Breiland and Lemmon 1985; Dawes 1994).

Experiential practice methods emphasize refinement of observational techniques to gain complete behavioral and historical information as well as contributing social factor information (Tripodi 1994). However, few agencies or practice groups can agree on one, or even a limited series of data collection and evaluation techniques. These techniques collectively would result in prediction of results. They could then be replicated to confirm the reliability of the intervention.

Education towards practice wisdom in many practice-based programs requires knowledge or mastery of multiple theories as reported, or observed, by a series of popular published practice leaders. The education requirement is then reinforced by a second wave of publications, which cite the work of the popular theorist without subjecting the concepts to a rigorous process. The result is that portions of the theoretical constructs are eventually called into question (Sharpley 1987). Should a portion of the theoretical constructs have been actually effective, it is at risk of being abandoned along with the now

unpopular theoretical construct.

Some practitioners do seek to comply with standards of care, which are often set by a political entity, committee, or a contracted third party reimbursement provider. These proponents have consulted the aggregate of anecdotal case literature to develop standards. Often, these standards address cost containment issues for services or are based on the agreement of practitioners engaged in the political process. Currently, however, among peers in the psychology profession, there is increasing debate concerning the need to offer empirically validated interventions in the managed care environment (Sanderson 1997).

Among the more effective interventions associated with social work, practices have been efforts towards advocacy and environmental change for individuals, groups, and portions of the population. However, with competition for resources comes the need to assure causal inference and some predictability of the effect of resource utilization. Objectivity in resource allocation remains an ongoing need, which is difficult to achieve unless bias in the distribution process can be minimized.

TESTING MODEL AND THEORY IN SCIENCE

Interventions or theoretical assumptions and constructs can be empirically examined and evaluated for their use. This is based on measurable outcomes without reliance on a preconceived model or theory. Examples exist in the literature whereby this approach has periodically overturned assumptions about long held models and theories (Rosen 1991). Much of the success of the scientific approach has been due to systematic efforts to control variables to determine causal inference, effect size, and measured outcome. Of course, models and theories, as well as previous empirical findings, serve to shape the questions and constructs for scientific testing.

Social empirical science models base assumptions about human behavior and the nature of change on review of successfully validated hypothesis, which demonstrated some degree of predictability and repetition on effect. Models are proposed as a part of the need to explain the hypothesis being examined. The model often represents the level of scientific understanding available based on the aggregate of research findings. The model proposed is actually tested in the proposed research. If the model is invalidated, this is reported in the research findings.

Science tends to test by evaluation of hypotheses of the aspects of component models that link together to form a theory. Approaching the level of accepting a complete set of theoretical assumptions is cautiously done, only after thoroughly testing the smaller component parts which might suggest an eventual theoretical basis (Giere 1988). These models are often found after testing to have commonality to other models, which are grounded in "related real systems". Per earlier definitions of science then, science concerns itself with aspects of the natural or social "real world" which is testable and measurable. Tested hypotheses build towards models. Models build towards theories, which explain the accumulation of findings of all tested hypotheses and validated models.

TESTING MODEL AND THEORY WITH PRACTICE WISDOM

Confirmation of the model or theory is sought through interview or observational technique. Observations are recorded and professional case reviews and consultations are sought with more experienced practitioners. Those practitioners serve as mentors, or in some cases, authorities on the theory or model utilized (Knapp and VandeCreek 1997). Interpretations of the observations are interpreted, based on experience, and compared by the observer,

through a deductive reasoning process, with the theoretical model. However, in mental health and health practices, some studies have revealed that clinical predictions of experts do not compete in reliability to the predictions of statistical actuarial tables which do not rely on experience (Dawes 1994). The practice wisdom model utilizes reliance on texts written by an authority or proponent of the theory. However, texts are often not consistent with one another, and are often vague (Giere 1988). The effectiveness of the treatment approach when compared does not depend on the authority figure or on theoretical premise. Effective intervention strategies can more reliably be determined by choice of research validated theoretical model as part of the wisdom of practice. Interventions and modalities can be compared and sorted based on the best-validated fit for a specified concern. An integrated model of intervention can then be administered. Attempts to meet accountability standards in mental health are increasingly preferring selection of effective treatments that maximize the effectiveness of the clinician, as defined by insurers (Seligman 1990).

Practice wisdom models about human behavior and the nature of change are partly derived from the historical and cultural setting of the practice, and the agreed experiential understandings of field authorities. They are tested or evaluated by comparison of understandings with other referenced theoreticians.

Additionally, client's and worker's characteristics are often compared against intervention outcome, as an alternative to controlled comparisons of effect of intervention methodologies.

In some instances, the practitioner seeks direct training from the theoretician or modeler. The practitioner develops, along with peers, a classification scheme to fit treatment to the theoretical approach guidelines. A case record is maintained to record the practitioner's observations of progress towards the resolution of the problem.

SCIENTIFIC ROLE IN KNOWLEDGE DEVELOPMENT FOR SOCIAL WORK PRACTICE

Empirical science serves as both an exploratory knowledge base tool and to confirm effectiveness of practice traditions. Theory and modeling often lead to new concepts in intervention. Empirical science offers the ability to advance which portions of these interventions and knowledge are effective and likely to endure and prove useful, under which circumstances, and to what extent. This is accomplished in part by systematic review of what has been validated previously and using the vantage point to act as informed decision maker to select constructs to evaluate for further outcome or confirmation of prediction (Giere 1988). Without empirical science, theories might go without examination of their predictive value. Ineffective, damaging, and resource wasting interventions might go unchallenged indefinitely. Effective models would remain elusive.

PRACTICE WISDOM ROLE IN KNOWLEDGE DEVELOPMENT FOR SOCIAL WORK PRACTICE

Practice wisdom plays an important role in knowledge development. However, the question remains as to whether practice wisdom should serve as the guiding influence for the profession. The practitioner does act as an observer of various social and human problems. These observations consist of information useful in problem recognition. Various interventions are recorded over time, which begin to document the most common component interventions (Tripodi 1994).

However, consider the Dr. Semmelweis case in which a physician observed a higher mortality rate among women having children delivered by physicians who had previously been working with cadavers without washing their hands before delivery. He required hand washing and observed the decline of

morality rate. Then tradition won out over observation. He was eventually discharged, and physicians returned to previous practices while the mortality rate climbed again (Dawes 1994). Other professionals advanced theories for consideration after this event which included findings on sepses which altered medical practice since this time.

In the same way, in the social sciences, observations and theory proposals begin to advance into the awareness of those social scientists who may wish to examine and test the theoretical assumptions and serve to advance the predictability and efficacy of practice. Practice wisdom does serve to advance the knowledge base of the profession. Without these observations, case recordings, and conceptual attempts to understand complex issues, researchers and various social scientists may go on unaware of critical issues in need of some examination or further research.

The practitioner's willingness to apply various interventions over time often provides a database for review, and exploration of questions of causal inference (Tripodi 1994). Should these interventions be delivered with respect to various professional guidelines related to ethics, then legal risks are minimized (Breiland and Lemmon 1985). However, legal risks remain in addition to concern about intervention effectiveness.

CONCLUSIONS

The gap between social work practitioners and social work researchers may be narrowed. Practitioners are likely motivated to offer effective interventions, which will reduce controversial or legal risks. Researchers are likely motivated to inform their colleagues concerning which interventions have been validated. Direct practice social workers often are not proficiently trained in methods to effectively evaluate their intervention efforts aside from directive guidelines from authorities in the economic sector of healthcare, and outside of the social work profession. Researchers in social work are often unable to compete effectively with commercial interests from other sources to gain access to practitioners so that research findings, and specific validated social work methodologies, are readily incorporated into social work practice.

At present, there is no safeguard to prevent some plausible authority figure from publishing unsubstantiated guidelines. This takes advantage of the less grounded interpretations of social workers in practice settings. However, the social worker who is not guided by empirically validated guidelines may find little mercy from those claiming that practice wisdom did not conform to empirically validated standards of care.

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