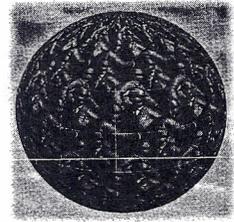


Social Work

Stephen M. Marson

University of North Carolina, Pembroke, North Carolina, USA



Glossary

action system A social entity (micro, mezzo, or macro unit) that participates in an effort of planned systematic change for a client system.

change agent system A social worker or other social entity that spearheads a planned change for a client system.

client system A social entity (micro, mezzo, or macro unit) that establishes a contract for a positive change with a change agent. Client system is often abbreviated with the term "client."

Council on Social Work Education (CSWE) The organization held responsible by the Council for Higher Education Accreditation for establishing and maintaining educational standards for professional degrees in social work.

formative measures Usually a qualitative-based measurement or observation that attends to the process of a change.

operationalization A process by which a social worker or researcher moves from the abstract (concepts) to the concrete (variables).

single system design Based on statistical concepts found in control charts, it is the systematic measurement of change over time that usually includes a statistical conclusion regarding the effects of an intervention.

social worker A person who has successfully completed a baccalaureate or master's degree from an academic program accredited by the Council on Social Work Education.

summative measures Usually a quantitative-based measurement that attends to the outcome of a change.

target system A social entity (micro, mezzo, or macro unit) that is the focus of a change by a change agent and other social systems.

total institution An organization that mandates rigorous interaction patterns among its participants. Total institutions are particularly effective at maintaining accurate records that can be used for measuring baselines. The term was coined in Erving Goffman's *Asylums*.

Social work has a rich history upon which social measurement is an important foundation. Although the general public often perceives social work as the delivery of services to individuals, it is much more than that. Graduates of Bachelor of Social Work (BSW) programs and most Master in Social Work (MSW) programs receive instruction in providing a wide range of services to highly diverse client systems. The term client system is used to stress the notion that clients can be individuals, social groups, or organizations. Social measurement is a critical dimension of all social work practice, regardless of the sizes of client systems (micro, mezzo, or macro). In studying social measurement in the history of social work, it can be seen that the emphasis 100 years ago was placed on all types of client system problems. In the last three decades, micro and/or clinical practice dominate the literature of social work measurement. This recent trend does not suggest that social measurement fails to be a critical issue in macro practice; it merely indicates that less is written in the area. Most importantly, recent trends and future projects hint that social workers will see more social measurement literature with an emphasis on macro practice.

Introduction

Since the beginning of social work in the 19th century, assessing change with client systems has been an integral aspect of professional practice. Two dimensions of measurement are at the heart of assessing social problems. First is process. Here, social workers must gain insight into the steps involved to resolve a social problem. The measurement of a social problem can be addressed within

the client system, change agent, or target system. Currently and historically, process has been the most problematic issue to address in terms of measurement protocols. More creativity among social work practitioners and academicians is required within this arena.

Second is the issue of outcome. Unlike process, outcomes are easily conceptualized in terms of quantity. Thus, measurement of outcome is less problematic than the more "qualitative" process. The tools for demonstrating effective outcome measurements are available and learnable by social workers. This information comes to social work from psychometrists and their literature of tests and measures. In essence, social workers apply psychological principles of reliability and validity to the measurement of change within social problems.

History (Measurement Themes)

When first envisioning social work, one does not immediately think of social measurement; rather, one is most likely to picture the dissemination of welfare checks or removal of children from an unsafe environment. More recently, the delivery of psychotherapy as part of an agency service or in private practice may be envisioned. However, none of these visions captures the historical foundation of social work. The birth of professional social work practice can be found in social research and social measurement.

Three phases or themes in the historical development of the profession's linkage to social measurement exist. In the first theme, the measurement of social problems was the hallmark of social work activities. In the late 19th and early 20th centuries, pioneer practitioners could not conceive of their budding profession without the systematic measurement of social problems at its heart; this was a unifying theme. Second, as academic institutions became the focus for the education of the social worker, the departmentalization of knowledge arose. Splitting or dividing a curriculum into educational components or sequences has always been thought to make the educational experience more palatable for students and more manageable for faculty. Thus, the importance of social measurement and research was conceptually disconnected to the delivery of social services to needy clients. Third, the final phase includes the realization that the conceptual disconnection between social work practice and social measurement is a fatal flaw in the education of social work professionals. This is the current stage in which the profession finds itself. Today, professionals are beginning to realize that social work must reestablish itself to promote the idea that social measurement and social work practice must go hand-in-hand. Thus, social workers are beginning to realize that we must return to the original vision espoused in the later part of the 19th century.

Each of these three themes is briefly discussed in this article.

Unified Theme (Amos Warner and Mary Richmond)

To understand the historical relationship between measurement and the emergence of professional social work practice, the contents and contributions of the first social work text books, three in particular, must be reviewed. The first social work textbook was Amos Warner's *American Charities*, published in 1894. Warner received his Ph.D. in economics from Johns Hopkins University. His background led him to create a classification system for establishing priorities for the delivery of social services based on statistical measurements. Thus, this first widely used textbook adopted by the first social workers was empirically based on and emerged from the systematic measurement and analysis of social problems.

The second widely used textbook was Mary Richmond's 1898 *Friendly Visiting Among the Poor*. Compared to *American Charities*, Richmond's book is considered to have had less of a social science influence. Richmond questioned the reasons for frequent failures found in social work intervention. Her effort was to systematically review failures on a case-by-case basis and draw conclusions to improve the delivery of social work services.

This effort led to Richmond's landmark social work textbook of 1917, *Social Diagnosis*. Within the pages of *Social Diagnosis*, Richmond shifted her priorities and took a strong stand on the use of social science inquiry to identify and resolve social problems. Specifically, she advocated the systematic measurement of social problems. She warned her readers of the problems of social measurement (e.g., illiteracy of clients, cultural differences that produce different meanings for the same item on a measurement scale). However, she unambiguously contended that social measurement is a critical tool for the social work practitioner. To emphasize this point, she included a wide range of measurement protocols that could be employed by the social worker for the identification and resolution of social problems, including general family issues, the immigrant family, widows with children, neglected children, unmarried mothers, blind persons, homeless men, persons with intellectual limitations, and persons with a mental illness.

Disunified Theme (Academic versus Practitioners)

Although Richmond can be seen as a pivotal figure in emphasizing social measurement for social work practitioners, she is also a pivotal figure in a movement to disengage from measurement as an integral aspect of

social work practice. With the publication of *What Is Social Case Work?*⁹ in 1922, Richmond neglected to note the importance of measurement, but rather placed emphasis on casework as a method of practice. Why do we see this major shift in Richmond's approach?

The answer to this question may lie in the unspoken prestige that existed in the academic community at that time. For example, during the first meeting of the American Sociological Society in 1905, a discussion on whether to prohibit membership to "practical sociologists" (social workers) can be found in the minutes. In the minutes of the second meeting, there is a continuing discussion of liabilities and merits of allowing social workers to join. Eventually, social workers were permitted to join, but they took a subordinate role in the society. At this point in social work history, lines of division between academic and practicing social workers began to form.

Lurie continued this theme in the *Social Work Year Book*, published in 1929. Research completed by social work practitioners was criticized for merely focusing on specific needs of the agency. In addition, the quality of the information generated by the representative agency was based on its prestige within the community rather than "measurement methods, process and results" (p. 418). Lurie also contended that some of the worst studies ever published came from practitioners rather than academicians, stating that such studies were "statistically dubious and showed an amazing ignorance of logic and of the scientific method" (p. 418). These strong words unintentionally led to a rift between the academic community and the community of practicing social workers.

The issue becomes more apparent as one examines the type of research being published by academicians. The research questions relate to social problems, but do not capture the essence of what was needed by practitioners. The central problem, of course, was an issue first introduced by Richmond—measurement of social problems. Academicians were selecting research questions that included elements in which measurement protocol achieved social scientific standards. Practitioners wanted research in areas in which concepts were difficult, if not impossible, to measure. For example, Lurie cited a wide range of research contributions produced by academicians that were thought to be important to practicing social workers. All of these cited studies offered a degree of theoretical value, but offered little to no use for the typical social worker, who asked the question, "What should I do with this client [system]?"

Unified Theme (Integration of Academic and Applied)

Issues of social measurement appear to be at the heart of the schism between practice and scholarship. However,

three significant pieces of writing began to change the direction of both social work practice and social work scholarship. The first is a landmark textbook entitled *Social Work Practice: Model and Method*, written by Pincus and Minahan in 1973, which introduced a major paradigm shift in conceptualizing social work practice. Not since the publication of Richmond's *Social Diagnosis* has a text had such a dramatic effect on the practice of social work. In addition, Pincus and Minahan gained international attention and influenced the conceptualization of service delivery in both clinical psychology and psychiatry. In terms of measurement, the central focus of this textbook was outcome. The authors noted a distinction between client system process and client system outcome. In addition, they suggested that the system process is not measurable. Thus, the authors asked social workers to concede that some of the central ideas of measurement and evaluation introduced by the founders of the profession were misdirected.

Although Pincus and Minahan's observations do not seem dramatic by today's standards, their framework rejuvenated intellectual excitement within social work circles. In terms of measurement, these authors gave the profession a coherent direction to follow. Following this lead, *Evaluating Practice: Guidelines for the Accountable Professional*, by Bloom and Fischer, was published in 1982. These authors began to systematically apply concepts introduced by Pincus and Minahan. By employing single system designs, they produced a tight focus on the systematic measurement of outcomes in social services. Single system designs gave practitioners what they needed. First, these designs enabled practitioners to systematically assess outcomes, resulting in a common standard of successful outcomes. Such a standard never existed in the history of social work. Second, subjective impressions of successful outcomes were stripped away from the social worker and/or supervisor. In the past, the successful change of a target system was primarily based on perception of the change agent. With single system designs, successful outcomes were based on rejecting a null hypothesis. The scientific dimension of social work practice was no longer merely lip service. Change agents were given a tool to apply the scientific method to social work practice.

There are several serious drawbacks, however, in the employment of single system designs. First, measurement tools are necessary for the employment of single system designs. Although counting problematic behaviors is an appropriate approach for measuring, counting certainly cannot be considered the only option available for practitioners; rather, more sophisticated methods are required. Social scientific standards related to reliability and validity must be met. These standards are necessary not only for proper identification of a social problem, but also as a basis for ethical intervention. Social work

practitioners do not have the time, energy, or resources to develop a measurement that complies with social scientific standards. This problem can be seen within Richmond's *Social Diagnosis*; she was aware that her proposed measurements lacked scientific rigor.

To address this problem, in 1987 *Measures for Clinical Practice: A Sourcebook* was published. The authors, Corcoran and Fischer, searched the literature for instruments that demonstrated practical and research applications. They studied and reported on the calibration issues for each instrument that included scoring, sampling, reliability and validity. They offered enough information for the change agent to answer the question "Should I use this measurement for my client?" To support this critical practice question, most social work research textbooks include sufficient instruction for BSW and MSW graduates in the area of reliability and validity analysis. Although there are numerous monographs that achieve the same goal as the work of Corcoran and Fischer, their work included instruments that both are directly relevant to social work practice and research and have a great deal of practical application. Social workers have demonstrated such strong support that the book is in its third edition; it now offers approximately 342 instruments for clinical practice.

In terms of measurement, the introduction of single system designs for social work practice has two major drawbacks. First, the most worthy single system designs require a baseline measure. In the real world of social work practice, baselines may be either unethical or not possible. For a victim of severe depression, the change agent would be irresponsible to institute a baseline measurement. Clearly, such a strategy would be a foundation for a malpractice lawsuit. Second, real measurement (this excludes *ex post facto* or reconstructive measures) is rarely available for agencies that operate on an out-patient basis. On the other hand, these designs and associated measurements are clearly appropriate and most effective in total institutions, such as schools, nursing homes, prisons, and hospitals.

Regarding the state of the art of measurement in social work, the profession today seems to be facing a measurement problem nearly identical to the one faced at the beginning of the 20th century. In addition, one important conclusion from measurement in social work history can be drawn. The profession has made little to no contribution to the social measurement knowledge base. Essentially, social work researchers/academics and change agents have been adopting measurement ideas (mostly from psychology) and applying these concepts to social work research and practice. However, in projecting from the past and examining current trends, it appears that social work is on the threshold of making a significant contribution to the social measurement knowledge base. Perhaps this is the beginning of another paradigm shift.

Current Standards of Practice and Scholarship

Currently, there are two trends related to measurement in the professional education of social workers. These trends focus on research methods and the educational outcomes for BSW and MSW graduates as articulated by the Council on Social Work Education. On the BSW level, the central focus is twofold. First, BSW social workers are trained to be consumers of research. BSW graduates are expected to use research findings of others to advance their skills as a change agent. Thus, students are introduced to social science research vocabulary and concepts such as reliability and validity. Second, they are expected to employ social science methods to the evaluation of practice. Evaluation is measurement. On the MSW level, we also see a twofold focus. First, MSWs are trained to be research producers and are considered leaders of the profession. Second, like the BSW students, they are expected to apply social science knowledge to practice evaluation. If research professors are earnest in their efforts, the profession will witness huge cohorts of budding professionals developing strategies for the measurement of social problems.

Operationalization

In teaching research methods with the focus described above, professors stress the concept of operationalization. In practice situations, social workers rarely intellectualize on the concrete or variable level. However, funding sources and record audits are demanding measurable outcomes. In nursing homes, failure to comply with this standard can lead to a penalty (fine). Thus, measurement of social problems is a critical issue, and social work professors attempt to address this issue by using models similar to Fig. 1. Here, students are taught the relationship between theory and research, concepts and propositions, and variables and hypotheses, and how to move from abstract thought processes to concrete measurable social problems. Without the discipline of thought processes, social workers cannot demonstrate that client systems are improving.

However, a critical problem remains. The focus of the social work research curriculum assumes that social problems must be quantified to be measured. In the real

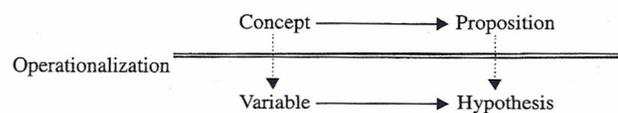


Figure 1 Central problem of measurement for social work practice.

world of social work practice, this assumption is seriously flawed. Two strategies from the academic side of social work attempt to address the issue. In the first, DePoy and Gitlin in 1998 introduced a non-traditional relationship between quantitative and qualitative research methods. They stated that the difference is not discrete, as most other authors suggest, and took the position that there is an interactive property. These authors made an obvious point that is often disregarded by most social work researchers: The nature of the research question guides the method of measurement. Taken to its extreme, one can assume that the various research strategies outlined in their book will have an impact on conceptualizing measurement of client system processes. As stated earlier, the measurement of process was conceived as out of the realm of possibility. Social workers need a new comprehensive framework.

In 1991, Alter and Evans provided such a framework, as shown in Fig. 2. This figure illustrates a common perspective shared with DePoy and Gitlin. Alter and Evans discarded the notion that outcome is the only measurable entity; rather, the change agent can measure introspectively in the realm of process and outcome (Fig. 2, right column). In addition, the change agent can measure client and target system change in terms of both process and outcome (Fig. 2, left column).

Alter and Evans advocated two different approaches to achieve their goal. First, they endorsed the position of DePoy and Gitlin. Here, they suggested that the issue of the systemic analysis of qualitative information should be revisited. Both DePoy and Gitlin and Alter and Evans stressed that social workers have not spent adequate time addressing the importance of qualitative analysis. However, Alter and Evans provided a slightly different twist when they contended that qualitative and quantitative data are not discrete entities; rather, they fall on a continuum. Second, they made systematic efforts to quantify qualitative information, advocating the use of

target problem scaling and goal attainment scaling as methods of measuring process. Both of these methods have the unique characteristic of placing a numerical value on qualitative data (usually ordinal, but sometimes nominal) in an effort to measure change over time. The great strength of Alter and Evens and DePoy and Gitlin is that their work has strong implications for measurement for all social work practice—not just clinical and/or micro practice.

Current Trends in Measurement

Three patterns of measurement strategies are commonly employed among practicing social workers and social work academicians: consultation, construction, and counting.

Consultation

Thousands of instruments are available and published today. The developers of such instruments have calibrated them to reach respectable levels of reliability and validity. Social workers are trained to identify when an instrument is usable for social work practice. Most importantly, many of these instruments can be found in books and on the Internet with a minimal investment of time, effort, and cost. If traditional social work citations fail, the *Mental Measurements Yearbook* can be explored. It is rare for a social worker to employ a concept that has not been operationalized.

Construction

Although it is unlikely that a social work practitioner or researcher cannot locate an instrument that is needed, that event is a distinct possibility. In addition, an instrument may be available, but the level of reliability and validity may be unacceptable. Reliability and validity of instruments become a critical issue for judges during a hearing. In such a case, the social worker must design an instrument. Instrument construction is an academic enterprise. Under normal circumstances, it takes well over a year for an instrument to reach a threshold of reasonable level of reliability and validity. Construction of new instruments is not recommended for full-time practitioners, but in some cases, no other alternative will be available.

Counting (Monitoring Designs)

For decades, social workers have been counting observations over time. Summaries of the reliability and validity of this strategy can be found in the behavior modification literature. Counting or monitoring is completed by the change agent (includes agency staff), the client system, or a combination of both. Although counting is normally an exercise to assess an outcome, if creative, a change agent

| | | Central focus of measurement | |
|------------------------|-----------|---|--|
| | | Client system or target system | Change agent system |
| Measurement strategies | Formative | Observations that monitor process or activities of client or target systems (usually qualitative) | Observations that monitor the actions/performance of the social worker (usually qualitative) |
| | Summative | A measurement of the outcome of intervention (usually quantitative) | A measurement of the level of success achieved by the social worker (usually quantitative) |

Figure 2 Measurement options in social work practice. Adapted from Alters and Evens (1990), p. 29.

can employ monitoring to address issues of process. Following is a case illustration:

A nursing home patient was referred to a social worker because of a severe and life-threatening weight drop for which medical staff could not identify a cause. The social worker completed a psychosocial assessment that included the geriatric depression scale. There was no indication of depression or terminal drop. First, as illustrated in Fig. 3, the social worker examined the pattern of weight loss over time. From the data, it is clear that significant weight loss occurred between March 3 and April 4. To assess eating patterns, Fig. 4 was constructed. Several graphs were developed prior to Fig. 4. The earlier versions were difficult to read because of the huge amount of data. In Fig. 4, the mean percentage of food consumed per day is presented (an example of data reduction). From Fig. 4, it can be seen that March 22 and March 31 are the last dates on which acceptable levels of food were consumed.

Examining every event that occurred within the time frame (March 22–31) eliminated a psychosocial cause for the weight loss. Every note in the patient's chart was examined. Finally, the staff discovered that the patient received a new prescription to reduce blood pressure. *The Physician's Desk Reference* stated that the drug worked as an appetite suppressant for some patients. The critical weight loss problem was resolved by simply changing medications. No one realized that the medication was the cause of the life-threatening problem until food intake and weight were measured over time.

This example illustrates that in some cases, the measurement of client process is a fruitful endeavor. However, many of the rules for graph making were violated. In Fig. 3, for example, the x axis does not include equal intervals of time. A student would have received

a poor grade on such a graph. However, in the non-academic world, data is not clean. Despite the problematic data housed in the graph, the measurement was helpful in solving a real problem.

Measuring Social Work Competence Nationally

Currently all 50 states, Puerto Rico, the District of Columbia, and Canada regulate the professional practice of social work. Most of these political entities employ the use of an instrument to ensure that these professional social workers attain a minimum level of competency. Since 1983, the Association of Social Work Boards (ASWB) has been developing and maintaining respectable levels of validity and reliability of such an instrument. ASWB has four social work examinations that test BSW graduates, MSW graduates, and MSWs with two years of post-graduate experience, both generalist and clinical. For each exam, ASWB employs a national job analysis to determine relevant skills and knowledge of currently practicing social workers. From the job analysis, a blue-print for items is developed. Items are formulated in the proportion and frequency as indicated by the blueprint. From there, each item undergoes five to eight stages in which content validity is assessed. The minimum standard for establishing a respectable level of content validity costs the agency approximately \$900 per item. With a test bank that includes several thousand items, attaining respectable levels of reliability and validity (for any measurement) is not only an intellectual enterprise, it is also a costly one. ASWB does the most thorough job of addressing measurement issues of reliability and validity for the practice of social work.

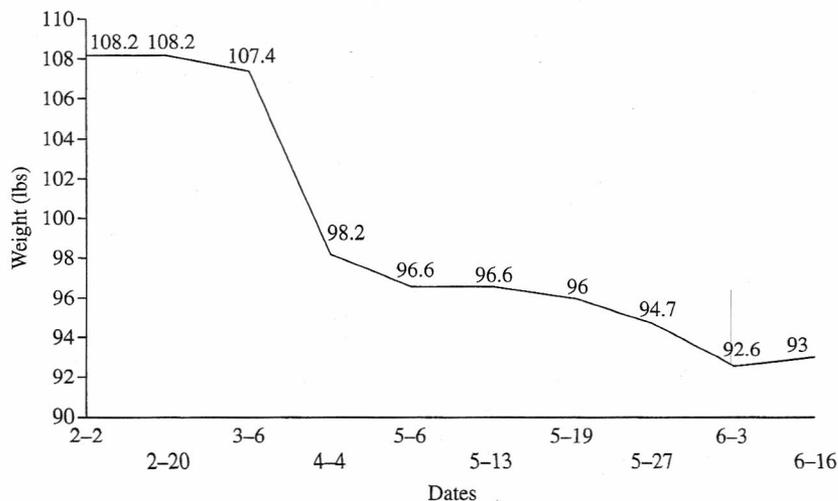


Figure 3 Weight change.

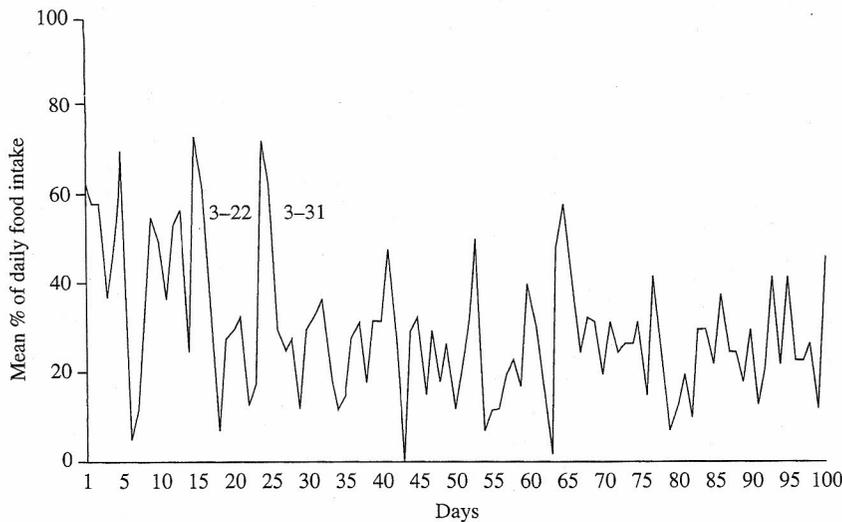


Figure 4 Food intake.

Other Issues

Issues of reliability and validity will always emerge in social work practice. For example, there is a surprisingly skewed distribution among 50 surveys addressing client satisfaction. It would be expected that the distribution of satisfaction among social service clients would be normally distributed. Among these 50 studies, the mean percentage of satisfaction is 78%. Essentially, this means that all 50 social service agencies are doing an excellent job. While this outcome is certainly possible, it is highly improbable. To most observers, such a finding is highly unlikely and probably is a result of the wording of the items. This, of course, is an issue of face validity. It should be acknowledged that the stakeholders are constructing the measures.

To address this and other issues related to measurement, the profession is moving to examine measurement in a more systematic manner. Two strategies are currently employed. First, the Council on Social Work Education is requiring BSW and MSW accredited programs to focus on the evaluation of practice. Such a program objective traverses the social work curriculum and facilitates resolving the problem noted earlier in our discussion of history of measurement in social work. With each succeeding cohort of graduates, greater insight into measurement problems will be solved.

Second, education is not enough. Professors and practitioners must have a forum to systematically address issues related to measurement. In this respect, social workers lag behind other academic disciplines and professions. During the fall of 2000, the inaugural issue of *The Journal of Social Work Research and Evaluation* was published. This journal focuses on issues of measurement and instrument development related to the delivery

of social work services. The editors emphasize the importance of accepting manuscripts that include both quantitative and qualitative themes. If the journal remains true to its mission, there will be advances in the quality of measurement and in turn, the quality of service delivery.

Future of Measurement in Social Work

The best manner in which to assess the future of measurement in social work is to look at the profession's history. Several themes in this history are apparent. The first theme emerges from the work of Richmond. At the end of the 19th century and the beginning of the 20th, Richmond was well aware of the importance of accurate measurement in the effective delivery of social services to the indigent. Initially, she did not departmentalize measurement skills until the academic community demonstrated the lack of scientific rigor found in the measurements developed by practitioners. Although tension between the academic and practice arms of the profession still exists, the advent of inexpensive personal computers is diminishing its effects. However, unlike in the past, quantitative analysis of measurement may not be the central issue in social work.

The problem of social work measurement rests in the systematic examination of process. This includes client system process and change agent process. Over the past 100 years, very little work has been accomplished in this critical aspect of social work measurement. In fact, process only began to receive serious consideration during the 1990s. At this point, there is a consensus among researchers. Qualitative analysis is a legitimate approach for scientific

inquiry. The profession will move forward with increased interest and energy measuring social processes by employing qualitative methodologies. One critical area of analysis is the social history. The study of the social worker's social history is a desperately neglected area of study. The value of the qualitative measurement must receive greater scrutiny among practitioners and academics.

In terms of quantitative methods, social work will continue on its current path. Academicians will pursue social work concepts and operationalize them for use in practice, and practitioners may do the same. The Council on Social Work Education must continue its standards in the area of evaluation of practice. Social work scholars must provide a venue for the discussion and dissemination of measurement research.

See Also the Following Articles

Measurement Theory • Research Ethics Committees in the Social Sciences

Further Reading

Alter, C., and Wayne, E. (1990). *Evaluating Your Practice*. Springer, New York.

- Corcoran, K. (1995). Psychometrics. In *The Encyclopedia of Social Work* (R. Edwards, ed.), Vol. III, pp. 1942–1947. National Association of Social Workers, Washington, D.C.
- Corcoran, K., and Fischer, J. (2000). *Measures for Clinical Practice. Volume 1: Couples, Families and Children*. Free Press, New York.
- Corcoran, K., and Fischer, J. (2000). *Measures for Clinical Practice. Volume 2: Adults*. Free Press, New York.
- Cortina, J. M. (1993). What is coefficient Alpha? An examination of theory and applications. *J. Appl. Psychol.* **78**, 98–104.
- Fischer, J., Bloom, M., and Orme, J. G. (2002). *Evaluation Practice*. Allyn and Bacon, Boston, MA.
- Kyburg, H. E. (1984). *Theory and Measurement*. Cambridge University Press, London, UK.
- Plake, B. S., Impara, J. C., and Spies, R. A. (2003). *Mental Measurements Yearbook*. 15th Ed. Buros Institute of Mental Measurements, Lincoln, NE.
- Sajatovic, M., and Ramirez, L. F. (2001). *Rating Scales in Mental Health*. Lexi-Comp Inc, Hudson, OH.
- Tripodi, T. (2000). The contemporary challenge in evaluating social services: An international perspective. *J. Soc. Work Res. Eval.* **1**, 5–16.