

ORIGINAL RESEARCH

Development and psychometric analysis of a strengths perspective-based instrument on clinical instruction in nursing

Al D. Biag *

Graduate School of Nursing, Holy Angel University, Angeles City, Philippines

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Abstract

Strengths perspective in social work can be translated into nursing. There are, however, few references of the perspective in the nursing literature. Thus the purpose of this study was to add to the evidence of strengths perspectives as applied in nursing. Specifically it aimed to develop and test the psychometric properties of an instrument designed to measure strengths perspective in clinical instruction. A methodological design guided the study. A purposive of 376 clinical instructors from select colleges of nursing in Central Luzon region in the Philippines accomplished the 39-item 5-level Likert scale. Construct validation revealed a three-factor (fostering reciprocity, initiating applicability, and identifying development areas) solution that accounted 39.43% of the variance. The index of internal consistency was .941. The results of factor analysis and Cronbach's alpha demonstrated adequate evidence of validity and reliability. The final 34-item instrument, Clinical Instructor's Strengths Perspective Inventory, can be used as a scale representing self-reported application of the concept in clinical instruction.

Key Words: Instrument, Strengths perspective, Clinical instruction

1 Introduction

Clinical instruction has long been recognized as a significant and essential component of professional education in health services. It is an important facet of practical knowledge development for professionals in various health disciplines.^[1-7]

In nursing, the importance of clinical teaching in educational preparation of nurses has been long acknowledged also. Classic reference to clinical experience as the heart of professional nursing education has been into existence as early as the 1940s^[8] although others believe that it may be traced back to Nightingale's era. Despite this long history of clinical component in nursing education, the structure and function of clinical experience, nevertheless, have

undergone significant changes.

The focus of clinical learning has shifted from doing to knowing and understanding. Concomitantly the nature of clinical teaching has changed also. Clinical instruction becomes a major responsibility of many nursing faculty. Clinical instructors play an important role in enabling students acquire knowledge, skills, and attitudes necessary for the professional practice of nursing.^[9] With this, their task expands too beyond that of supervising students on the ward to include teaching of the fundamentals of nursing practice as well as recognizing and supporting students in their learning of nursing in the clinical setting.

Clinical instructor-student relationship is therefore a critical factor of the clinical learning experience as clinical instruc-

*Correspondence: Al D. Biag; Email: abiag@hau.edu.ph; Address: Graduate School of Nursing, Holy Angel University, Angeles City, Philippines.

tors provide students with a model for professional behavior.^[10] Since much of the learning that occurs in nursing is derived from practice it is therefore important to concentrate efforts and resources on supporting clinical instructors who facilitate this process.^[11] This process requires clinical instruction experience to be positive for all parties involved and facilitative of student learning and growth.^[12] The mutual task of clinical instructors is to help students to meet both their personal and their institution's learning objectives.^[13]

A strengths-based model of clinical instructor-student interaction is then needed to soften the rigid teacher-student dichotomy and to create an environment of reciprocal learning.^[12] The strengths-based model nevertheless has been mentioned only rarely in the nursing literature unlike in social work where it is a prominent perspective. Specifically only seven references in the nursing literature pertained to strengths perspective. Four peer-reviewed articles described nursing approaches to working with families,^[14] training of oncology camp volunteers,^[15] student nurse preparation to provide home care for children with disabilities,^[16] and the use of strengths-based approach with nursing students.^[12] One dissertation focused on factors that support and detract from nursing assistant job longevity;^[17] one master's thesis that reviewed the relevance and application of the perspective to mental health nursing;^[18] and one textbook that included a two-page section on strengths perspective.^[19]

The dearth in the literature highlights the need for greater dissemination of the strengths-based approach within nursing considering that the discipline's process of training and tenets are closely aligned with those of social work. One possible way for dissemination is through assessment of clinical instructors' teaching perspective with semblance of the strengths perspective. Instruments for measuring their affective aspects of clinical teaching could be useful tools for introducing the perspective in their practice. Currently no such instruments exist to measure how well clinical instructors employ strengths perspective in teaching. Consequently the purpose of this study is to generate validation data for the research instrument – the Clinical Instructor's Strengths Perspective Inventory – that will be designed to measure strengths perspective in clinical instruction.

1.1 Literature review

The strengths perspective is based on the assumptions that all human beings are capable of change^[20] and that learning occurs through reflection on change, regardless of whether that change was effective or not.^[21,22] Empowerment is a key component of the strengths perspective and the approach focuses on the identification and use of an individual's strengths and resources to solve problems and effect change.^[21,23,24] One's individual characteristics, capabilities, and behaviors are unique; hence, becoming aware of an individual's strengths may require careful observation,

listening, and understanding. The emphasis of the strengths perspective in practice is placed on discovering, affirming, and improving the capabilities, interests, knowledge, resources, goals, and objectives of individuals.^[20] This framework assumes that the addition of strengths increases the likelihood that individuals will realize the goals they have set for themselves.^[20,24]

The strengths perspective has been used in social practice and taught in social work education for the past two decades.^[12] During this period strengths perspective techniques have been implemented effectively in several arenas of social work practice.^[25–27] The use of strengths perspective has also been evaluated on the practitioner level, including its qualities, challenges, and cautions.^[21,28]

The assumptions underlying the strengths perspective are grounded in the belief that professionals must respect and use others' ways of viewing themselves in the process of helping them make changes.^[29] Thus, clinical instructors must acknowledge and value students' beliefs, prior experiences, and concerns to help students shape successful outcomes, both for their relationships with clients, as well as for their personal growth as nurses. More than a classroom-based education tool, strengths perspective can prove beneficial to effectively communicate values and beliefs in clinical practice.^[12] The approach allows clinical instructors to appreciate the values, ideas, and skills of students in the supervisory relationship. Ultimately, the strengths perspective is well-suited for nursing clinical instructors as it reminds them of long-standing values.^[27]

There has been a gradual shift in supervision techniques when working with students to expand and use concepts such as empowerment, strengths, and self-determination.^[13] It is important that clinical instructors not assume they know the upper limits of a student's capacity to grow.^[30] Such a perspective may inhibit students' skill and knowledge development, as well as strain the teaching-learning relationship. Instead a strengths perspective is used to empower students in situations where they may feel incompetent or powerless.^[30]

The strengths perspective is a collaboration and partnership between a supervisor and a supervisee.^[25] Clinical instructors and students can work together to identify the latter's strengths and resources to move together toward skill development and problem solving. As Cadell and colleagues noted, teaching practice using a strengths perspective requires facilitating a process of discovery, critical reflection, and undoing previously learned deficit-based approaches.^[30] It requires a shift in perspective from a supervisor-directed to a supervisee-directed collaboration^[28] and reliance on the expert knowledge of the clinical instructor to exploration of the student's skills, knowledge, and resources.^[23] This creates a supervisory relationship that is based on shared ideas and uses the experiences of

both individuals to problem solve.^[23]

The majority of social workers have some exposure during their education to the strengths-based approach of working with clients. However, there is no documentation that this approach has not moved beyond the discipline. Because the strengths-based approach also is closely aligned with the values of nursing, putting this theory into practice is a fluid process. Cederbaum & Klusaritz advocated embracing the approach as a practical technique for providing students with the confidence, skills, and practice knowledge to be successful in their future nursing practice and promoted the use of the model as a tool for continued growth of clinical instructors.^[12]

1.2 Research tasks

The aims of this research were to develop a research instrument for measuring clinical instructor's use of strengths perspectives and to establish its construct validity and internal consistency reliability.

2 Method

2.1 Research design

A methodological research design was used in this study. This design was employed to produce a psychometrically sound instrument to measure strengths perspective among clinical instructors.

2.2 Instrument development

Cederbaum and Klusaritz articulated the tenets of the strengths perspectives and the techniques for implementation should they be used in clinical instruction.^[12] Thirty-nine items were developed directly from these tenets and were content validated by Cederbaum. A five-level Likert-type scale (strongly disagree, disagree, neutral, agree, strongly agree) was used to indicate the extent to which the clinical instructor observes each item. The 39 items can be summed into a total score that represents the overall self-reported use of the strengths perspective in clinical instruction.

2.3 Sample and setting

Three hundred seventy-six (376) clinical instructors were purposefully selected to participate in this study. Inclusion criteria for the participants included current assignment to the clinical setting and willingness to participate. A minimum sample size of 175 was needed, as there should be at least five times as many participants as items or at least 200 respondents, whichever is greater.^[31]

The sample of clinical instructors came from 11 colleges of nursing in Pampanga, Bulacan, Bataan, Nueva Ecija, and Tarlac provinces in Central Luzon region in the Philippines. Faculty members from seven university-setting colleges of

nursing and four college-based departments of nursing participated in this study.

2.4 Data collection procedure

Eligible participants were recruited in-person by the researcher with the assistance of the college deans and/or department/program chairpersons. Data collection at all sites was conducted according to established research protocol and following activities: gaining entrée; explaining purpose and rationale for study to potential participants; reviewing with and distributing written instructions to participants; and administering the instrument.

2.5 Data analysis

Exploratory factor analysis was used to disentangle complex interrelationships among items and identifies items that go together as unified concepts constituting strengths perspective. Factors were extracted using principal axis factoring and were estimated using the standard eigenvalue in excess of 1. Factor analysis provided for the evidence of validity.

The evidence of reliability on the one hand was established by calculating the coefficient alpha (i.e. Cronbach's α). The alpha provided an estimate of the proportion of variance in the instrument scores that is attributable to the true score.

3 Results

3.1 Factor analysis

The 39-item Clinical Instructor's Strengths Perspective Inventory (CISPI) were factor analyzed with a sample of 376 nurse educators to see if the measure scale was unidimensional through exploratory factor analysis. Factor analysis allowed for the identification of the subscales and the construction of the independent factors of the measured items by examining correlations and redundancy across the items. Table 1 describes these items and their corresponding factor loadings.

Preliminary analysis indicated high factorability – Bartlett's test was significant at $p < .001$ and sampling adequacy was good (Kaiser-Meyer-Olkin test = 0.951). Principal axis factoring with varimax rotation using a minimum eigenvalue of 1.0 as the extraction criterion for factors was examined for total variance. Examination of variance revealed that the three-factor solution explained 39.43% of the variance. Factor loadings were fairly high ranging from .422 to .701.

The first factor which accounted for 33% of the variance, had 16 items with loadings above the cutoff of 0.40. This factor appears to capture the clinical instructors' empowering and collaborative provision of assistance to students and mutuality during clinical instruction. The item, "I encourage a climate of mutual respect", is the clear-cut marker variable for Factor 1 (Fostering Reciprocity) because of its high loading (.701).

Table 1: CISPI items and their corresponding factor loadings

| CISPI Items | Loadings |
|--|----------|
| I. Fostering Reciprocity | |
| I encourage a climate of mutual respect. | .701 |
| I direct students to additional information that may enrich their work. | .627 |
| I help students identify their fears, frustrations, and other emotions that may inhibit their active engagement in the clinical practice learning process. | .618 |
| I consider my students' performance of clinical tasks part of their professional training. | .606 |
| I provide a listening ear to my students' stories. | .599 |
| I assist students consider alternatives and reflect on their own performance. | .577 |
| I acknowledge students' contributions in the development of a report or presentation. | .553 |
| I help students organize their thoughts. | .542 |
| I provide students opportunity to do patient teaching or in-group reporting using the concepts they learned in the setting. | .534 |
| I encourage students to share their readings from the literature that may be useful to health care service. | .525 |
| I give students positive reinforcement. | .508 |
| I can create a learning experience prompted by a student's question. | .500 |
| I consider students' existing strengths and skills in identifying areas for learning and growth. | .486 |
| I utilize students' individual experiences as means of making them understand the uniqueness among clients. | .453 |
| I deliver feedback about negative performance in a way that motivates students. | .449 |
| I consider my students responsible members of the health care setting team. | .422 |
| II. Initiating Applicability | |
| I discuss with students how the skills learned in the clinical setting might be applied with different client population. | .613 |
| I use a learning contract to structure and guide learning in the clinical setting. | .543 |
| I correct mistakes without belittling the students. | .506 |
| I communicate expectations of student achievement in the clinical setting. | .505 |
| I point out students' strengths and weaknesses with tact. | .505 |
| I discuss how new skill acquisition has increased students' ability to perform the skill. | .499 |
| I encourage my students to participate in community networking and service events. | .490 |
| I act as a referee to smooth out a conflicting relationship between staff and students. | .477 |
| I provide a balance between support and challenge to students. | .473 |
| I modify the learning contract as appropriate to reflect skill acquisition and areas for growth. | .466 |
| I identify clients for whom the students can work together with the staff. | .419 |
| I maintain a mutual identification of learning barriers by the students. | .416 |
| III. Identifying Development Areas | |
| I try to align students' belief systems with my own. | .639 |
| I comment on what I perceive the student to be rather than on what the student did. | -.580 |
| I let students decide for themselves on how to act on the information about their performance. | .573 |
| I remind a student about a shortcoming that cannot be changed or over which the student has no control. | .503 |
| I let students take the lead in determining much of the direction of the post conference sessions. | .487 |
| I provide broad readings in the field where they can choose from. | .409 |

The second factor (4.71% of the variance) had 12 items with loadings above 0.40. The theme of this factor involves the principles of self-determination, reflection on change, and membership as exhibited during clinical instruction. The marker variable for this factor is about discussing possible application to other settings and has a loading of .613; hence, it is called Initiating Applicability.

Six items had high loadings on the third factor. Although this factor accounted for only 1.72 of the variance, it was relatively well-defined with a clear-cut variable that had a loading of .639. This factor captures a dimension of re-generation, and has been named Identifying Development Areas.

From the original 39-item CISPI, the final analysis yielded

34 items as the five items did not have factor loadings of at least .40.

3.2 Reliability analysis

Reliability statistics for internal consistency of the 39-item CISPI was estimated using a two-way mixed effects model in which people effects were random and measure effects were fixed. Scale homogeneity of the CISPI was measured using Cronbach's α intraclass correlation coefficient. The estimated Cronbach's α for the entire scale was .941.

4 Discussion

The CISPI demonstrates adequate evidence of validity (factor analysis) and reliability (Cronbach's α) in this sample. The internal consistency reliability of CISPI items and scores was adequate at <0.95 , although some of the items may be redundant. The factor analysis however, seems to contradict this high reliability. The items were not a unidimensional latent variable or scale. This is consistent with several instrument development studies which have demonstrated very high Cronbach's α even when the set of items assesses several distinct latent variables.^[32] Furthermore, the three-factor solution indicates that the 34 items could be split into three subscales, with each subscale contributing characteristic information.

The CISPI has both educational relevance and research applications. The CISPI can be used to assess the clinical instruction within the framework of strengths perspective.

The items represent an evidence-based attempt to translate and extend a social work theory into nursing. It can also be used in research that is focused on improving the quality of instruction in nursing education.

Limitation and recommendation

Sampling is one major limitation of this study. Nurse educators are conveniently selected from schools of nursing in Central Luzon. The schools may not be representative of all schools of nursing in the Philippines. It is recommended, therefore, that further validation of the instrument be done using larger random sample. Another limitation is its being a self-report of clinical instructors' practice of strengths perspective. A student version could be developed and validated to complement this instructor version of CISPI.

5 Conclusions

The psychometric testing supports that the CISPI is a valid (factor analysis) and reliable (internally consistent) instrument that can be used as a total score or three-factor scale representing self-reported application of strengths perspective in clinical instruction. The instrument can be used in research to determine quality outcomes in nursing education.

Conflicts of Interest Disclosure

The author declares that there is no conflict of interest statement.

References

- [1] Copolillo, A.E., Peterson, E.W., Helfrich, C.A. Combining roles as an academic instructor and a clinical practitioner in occupational therapy: Benefits, challenges, and strategies for success. *Occupational Therapy in Health Care*. 2001; 15: 127-143. PMID:23944341 http://dx.doi.org/10.1080/J003v15n01_13
- [2] Boggis, C., Ryan, B. Student evaluation of clinical education as a tool for management of undergraduate medical education. *Clinician in Management*. 2002; 11: 89-96.
- [3] Robbins, M.R. Training family medicine residents for assessment and advocacy of older adults. *Journal of the American Osteopathic Association*. 2002; 102: 623-636
- [4] Robertson, A., Gibbons, P., Carter, A. Student and patient perspectives on the interaction between supervisors, students, and patients during the clinical teaching experience at a University out-patient clinic: A descriptive pilot study. *Journal of Osteopathic Medicine*. 2002; 5: 8-15. [http://dx.doi.org/10.1016/S1443-8461\(02\)80029-6](http://dx.doi.org/10.1016/S1443-8461(02)80029-6)
- [5] Giles, S., Wetherbee, E., Johnson, S. Qualifications and credentials of clinical instructors supervising physical therapy students. *Journal of Physical Therapy Education*. 2003; 17: 50-55.
- [6] Steiner, I.P., Yoon, P.W., Kelly, K.D., et al. Resident evaluation of clinical teachers based on teacher's certification. *Academic Emergency Medicine*. 2003; 10: 731-737. PMID:12837647 <http://dx.doi.org/10.1111/j.1553-2712.2003.tb00067.x>
- [7] Wilkinson, J. Using adult learning theory to enhance clinical teaching. *Nursing Praxis in New Zealand*. 2004; 20: 36-44.
- [8] Wong, J., Wong, S. Towards effective clinical teaching in nursing. *Journal of Advanced Nursing*. 1987; 12(4): 505-513. PMID:3655138 <http://dx.doi.org/10.1111/j.1365-2648.1987.tb01360.x>
- [9] Hsu, L. An analysis of clinical teacher behavior in a nursing practicum in Taiwan. *Journal of Clinical Nursing*. 2006; 15: 619-628. PMID:16629971 <http://dx.doi.org/10.1111/j.1365-2702.2006.01332.x>
- [10] Gaberson, K.B., Oermann, M.H. *Clinical teaching strategies in nursing* (2nd ed.). New York: Springer. 2007. PMID:17418128
- [11] Jarvis, P. *The practitioner/researcher. Developing theory from practice*. Jossey Bass: San Francisco. 1999.
- [12] Cederbaum, J., Klusaritz, H. Clinical instruction: Using the strengths-based approach with nursing students. *Journal of Nursing Education*. 2009; 48(8): 422-428. PMID:19681530 <http://dx.doi.org/10.3928/01484834-20090518-01>
- [13] Sheafor, B.W. Horejsi, C.R., Horejsi, G.A. *Techniques and guidelines for social work practice* (5th ed.). Boston: Allyn & Bacon. 2000.
- [14] Feeley, N., Gottlieb, N.N. Nursing approaches for working with family strengths and resources. *Journal of Family Nursing*. 2000; 6: 9-24. <http://dx.doi.org/10.1177/10748407000600102>
- [15] Beder, J. Training oncology camp volunteers: A developmental and strengths approach. *Cancer Practice*. 2000; 8: 129-

134. PMID:11898137 <http://dx.doi.org/10.1046/j.1523-5394.2000.83006.x>
- [16] Guillett, S. E. Preparing student nurses to provide home care for children with disabilities: A strengths-based approach. *Home Health Care Management Practice*. 2002; 15(1): 47-58. <http://dx.doi.org/10.1177/1084822302238110>
- [17] Schlichting-Ray, L. In their own words: Why nursing assistants keep their job: Factors that support and detract from nursing assistant job longevity. Unpublished doctoral dissertation, State University of New York at Buffalo. 2005.
- [18] Joyce, M.A. The strengths perspective: Relevance and application to mental health nursing and crisis resolution work. Unpublished master's thesis, Victoria University of Wellington, New Zealand. 2004.
- [19] Leddy, S.K. Integrative health promotion: Conceptual bases for nursing practice (2nd ed.). Boston: Jones and Bartlett. 2006.
- [20] Saleebey, D. The strengths perspective in social work practice (3rd ed.). Boston: Allyn & Bacon. 2002.
- [21] Saleebey, D. The strengths perspective in social work practice: Extensions and cautions. *Social Work*. 1996; 41(3): 296-305. PMID:8936085
- [22] Webber, R. Is there a difference between bungee jumping and clinical supervision? Paper presented at the Higher Education Research and Development Society of Australia Annual International Conference, Melbourne, Australia. 1999.
- [23] Cox, A.L. BSW students favor strengths/empowerment-based generalist practice. *Families in Society*. 2001; 82: 305-313. <http://dx.doi.org/10.1606/1044-3894.193>
- [24] Saleebey, D. Power in people: Strengths and hope. *Advances in Social Work*. 2000; 1: 127-136
- [25] Early, T.J., GlenMaye, L.F. Valuing families: Social work practice with families from a strengths perspective. *Social Work*. 2000; 45(2): 118-130. PMID:10710985 <http://dx.doi.org/10.1093/sw/45.2.118>
- [26] Helton, L. R., Smith, M. K. Mental health practice with children and youth: A strengths and well-being model. Binghamton, NY: Haworth Social Work Practice Press. 2004.
- [27] Staudt, M., Howard, M.O., Drake, B. The operationalization, implementation, and effectiveness of the strengths perspective: A review of empirical studies. *Journal of Social Service Research*. 2001; 27(3): 1-21. http://dx.doi.org/10.1300/J079v27n03_01
- [28] Blundo, R. Learning strengths-based practice: Challenging our personal and professional frames. *Families in Society*. 2001; 82: 296-304. <http://dx.doi.org/10.1606/1044-3894.192>
- [29] DeJong, P., Miller, S.D. How to interview for client strengths. *Social Work*. 1995; 40(6): 729-736.
- [30] Cadell, S., Fletcher, M., Makkappallil-Knowles, E., Caldwell, S., Wong, L., Bodurtha, D., et al. The use of the arts and the strengths perspective: The example of a course assignment. *Social Work Education*. 2005; 24: 137-146. <http://dx.doi.org/10.1080/0261547052000325026>
- [31] Delaney, C. The spirituality scale, development and psychometric testing of a holistic instrument to assess the human spiritual dimension. *Journal of Holistic Nursing*. 2005; 23(2): 145-167. PMID:15883463 <http://dx.doi.org/10.1177/0898010105276180>
- [32] Newhouse, R.P., Himmelfarb, C.D., Liang, Y. Psychometric testing of the Smoking Cessation Counseling Scale. *Journal of Nursing Scholarship*. 2011; 43: 4405-4411. PMID:22018103 <http://dx.doi.org/10.1111/j.1547-5069.2011.01420.x>