The Job Self-Efficacy and Job Involvement of Clinical Nursing Teachers

Hui-Ling Yang • Yu-Hsiu Kao* • Yi-Ching Huang**

ABSTRACT: This paper explored the present status of self-efficacy and job involvement of clinical nursing teachers and investigated the predictive power of teachers' personal background variables on such, as well as the relationship between self-efficacy and job involvement. A total of 419 participants in the survey sample were chosen among clinical nursing teachers at 19 public and private institutes of technology and junior colleges in Taiwan in 2004. The self-developed structural questionnaire was categorized into three sections, including personal background data, job self-efficacy related to the clinical teaching inventory and job involvement related to clinical teaching inventory. Of the total 419 questionnaires distributed for this cross-sectional survey, 266 valid copies were registered, at a recovery rate of 63%. Findings indicated that both the job self-efficacy and job involvement of clinical nursing teachers are at a medium to high level and that significant differences exist in job self-efficacy and job involvement based on differences in age, marital status, teaching seniority, teacher qualifications, and job satisfaction. Second, samples have significantly different performance in self-efficacy due to differences in education level attained and the medical institution to which nursing teachers had been assigned. Self-efficacy and job involvement are significantly positively correlated. These results can serve as a reference for the cultivation of nursing teachers and reform of clinical nursing education in the future.

Key Words: clinical nursing teachers, self-efficacy, job involvement.

Introduction

Clinical instruction is the most important part of nursing education. It is an important process by which student nurses practice, verify and clarify what they have learned in the classroom; perceive and internalize nursing ethics concepts; and learn to apply nursing techniques accurately (Chang, 1994). Clinical nursing teachers play a leading role in clinical instruction and, in practice, go beyond encouraging students to experience success or failure in their work to trigger the formation in students of self-concepts and professional nursing perceptions (Morgan & Knox, 1987). Facing changes in the medical system, the continual adjustment of curricula and teaching methods in nursing education, and the emphasis on internship cooperation to enhance nursing education standards and clinical care quality, the role of nursing teachers has changed from that of a traditional instructor into that of a promoter of practical clinical knowledge and skills. In addition to personality traits, interpersonal communication skills, professional knowledge and competence, and teaching skills, the self-efficacy of clinical teachers is a basic requirement to maintaining the quality of clinical instruction (Nugent, Bradshaw, & Kito, 1999).

Self-efficacy is a self-perception of teachers and considered a power that affects student learning. The strength of self-efficacy often affects teachers' thinking patterns, behavior choices, level of commitment, and achievements. It is an important indicator of effective teaching and the intervening variable of teacher teaching performance and student learning performance (Cakiroglu, Cakiroglu, &
The level at which teachers are involved in their jobs also influences teaching quality, affecting the job value and teaching efficiency of teachers, organizational efficiency, student learning achievements, and teaching effectiveness (Hsu, 1997). Teachers who are more involved in their jobs tend to identify with the teaching goals of the school more spontaneously and so participate in teaching more eagerly. By contrast, teachers with lower job involvement tend to become indifferent toward their work, fatigue more easily, and be less willing to identify with the teaching goals of the school and participate in teaching (Hsieh, 1998). Therefore, we can improve the self-efficacy, job identification and teaching quality of teachers by enhancing teacher job involvement.

Among previous studies of clinical nursing teachers, only the exploration by Dou, Chang, Hu, and Liao (1998) of clinical instruction teacher abilities and Tang’s (1993) evaluation of clinical nursing teacher performance are related to the nature of this study. Neither, however, explored the aspect of nursing teachers’ self-efficacy. Regarding foreign research on nursing teachers, the study of Nugent et al. (1999) on the self-efficacy of new nursing teachers’ self-efficacy holds the most relevance to this study. However, as subjects used were not practicing clinical teachers, research into this area is still lacking. Relevant empirical studies into job involvement done overseas, which look at nursing teacher’s job satisfaction, include those of Gormley (2003), Mansen (1993), Moody (1996), and Snarr and Krochalk (1996).

Domestically, apart from elementary and junior high school teachers, research subjects include nursing staff and corporate employees. There is still a dearth of research that focuses on nursing teachers as the subject. The lack of such is what inspired this researcher’s interest in further exploration. From the above, it can be seen that researchers all explored concepts of self-efficacy and job involvement separately, rather than studying both concepts side by side. Some studies, such as those on teachers’ self-efficacy and job involvement (Chou, 1999) and teacher’s job involvement and teaching efficacy (Cai, 2001), did not show a close linkage between self-efficacy and job involvement. This led to the researcher deciding to explore both concepts together, so that the results from this study can be compared with other related studies and constructive recommendations made.

This paper explored the current situation of clinical nursing teacher job self-efficacy and job involvement and investigated the predictive nature of teachers’ personal background variables on such, as well as the relationship between self-efficacy and job involvement in order to (1) propose practical recommendations as a reference for the cultivation of nursing teachers and reform of clinical nursing education in the future and (2) make substantive contributions to clinical nursing education.

**Literature Review**

White (1959) was the first to introduce the concept of “efficacy”. He proposed that efficacy is the motivation for action. A person takes action on something because he believes that he is capable of changing the environment and that he has the ability to interact with the environment successfully. Bandura began to construct self-efficacy concepts systematically in 1977. According to Bandura (1977), self-efficacy refers the individual’s perception and judgment of competence to complete tasks in a given situation. It relates to the individual’s judgment of his skills to complete such tasks; i.e., the individual’s belief in what he can accomplish. The strength of self-efficacy depends on an individual’s motivation level, capacity to engage with challenges, effort, perseverance against obstacles, thoughts affecting personal behavior, emotional response, and views on success and failure. These concepts of self-efficacy are widely applied, although an accurate measurement remains an important issue yet to be adequately addressed (Bandura, 1997).

In fact, self-efficacy can be measured in terms of magnitude, strength and generality, the definitions of which are as follows: (1) magnitude — valid belief is derived from the perception of an individual’s execution capacity. Invalid belief derives from the failure in expecting the success of an individual. Therefore, the magnitude of self-efficacy is different for different people; (2) strength — the ability to maintain confidence when facing obstacles; and (3) generality — the functional domain of self-efficacy measurement, some measurements focus on expecting a certain efficacy in a particular functional domain, while others are on developing a more general perception of self-efficacy. In health behavior studies, self-efficacy, in particular health behavior, is the most common. Therefore, the dimension of efficacy of different people varies according to different health behaviors (O’Leary, 1985). Since Bandura (1977) proposed the self-efficacy theory, it has
since received strong recognition from researchers and been widely applied to different fields. The “self-efficacy of teachers” is the application of the self-efficacy theory in teaching.

The self-efficacy of teachers has several different traits. (1) It is a complex and multidimensional concept that varies as circumstances change. Teacher’s responses may differ in different situations. (2) It is the subjective self-evaluation of capacity, mainly coming from the self-evaluation of teaching capacity instead of an evaluation made by others. The evaluation often covers expected results of teaching and the perception of teaching efficiency. (3) It is a rational effect. Teachers may evaluate themselves before, in the middle of, or after teaching, depending on their rational judgment. (4) It is a source of motivation. Highly efficacious teachers are confident in their teaching capacity and thus teach spontaneously. By contrast, teachers with low efficacy levels easily feel frustrated and thus teach rather passively. Therefore, a teacher’s teaching performance is affected by the strength of self-efficacy, which is the source of motivation. (5) It is traceable. While the self-efficacy of teachers varies as the situation changes, it is needed to measure the self-efficacy and the situation at the same time (Chou, 1999).

Since the 1970’s the development of teachers’ self-efficacy measurements has continued overseas. Berman and McLaughlin (1977) divided self-efficacy into two dimensions: personal teaching self-efficacy and teaching self-efficacy. A new measurement was developed in 1990 with Tollerud’s (1990) study of university level teachers’ self-efficacy dividing teacher self-efficacy dimensions into course preparation, teaching behavior, teaching material application, evaluation and testing, and professional competence. In their study of nursing teachers’ self-efficacy, Nugent et al. (1999) divided self-efficacy dimensions into teaching readiness efficacy, teaching behavior efficacy, professional competence efficacy and teaching evaluation efficacy. On the other hand, Tschannen-Moran and Hoy (1998) emphasized that teacher self-efficacy has an environmental aspect, with teachers in different environments not producing the same kind of self-efficacy. This means that the measurement of teacher self-efficacy must first establish the scope of teaching through analysis of teaching responsibility in order to capture the core concept of self-efficacy. Most domestic measurements were developed using Bandura’s (1977) theory as the basis, with Wang (1997) also dividing the nature of teacher self-efficacy into the two dimensions of “personal teaching self-efficacy” and “general teaching self-efficacy”. Hsu’s (1996) study of vocational and junior college teachers studied the topic by categorizing teacher efficacy into (1) general teaching efficacy, (2) personal teaching efficacy, and (3) personal professional efficacy belief. It can be seen from the above that researchers have differing views on self-efficacy, although they all acknowledge that teacher self-efficacy has an environmental aspect reflected in the fact that teachers in different environments will not produce the same self-efficacy. This study therefore draws on the study dimensions of the Self-Efficacy Toward Teaching Inventory (SETTI) developed by Tollerud (1990) as well as the studies conducted by researchers into the clinical teaching behavior that clinical nursing teachers should possess (Chang, 1994; Lee, Cholowski, & Williams, 2002; Tang, 1993). These are then sorted and organized to define self-efficacy content dimensions. This study’s dimensions were divided into five aspects: (1) Teaching readiness self-efficacy, (2) Teaching behavior self-efficacy, (3) Teaching evaluation self-efficacy, (4) Professional competence self-efficacy, and (5) Student background factor efficacy. These were then compiled after being validated for content validity and reliability.

Studies relating to the influence of the self-efficacy of teachers discovered that there are many factors that affect the self-efficacy of teachers. Lin (2001) pointed out that self-efficacy of teachers differs significantly due to qualifications, teaching seniority, school location and the number of students in class. Chou (1999) also indicated that the qualifications and marital status of teachers affect their self-efficacy. Nugent et al. (1999) and Woolfolk & Spero (2005) proposed that age, qualifications and teaching experience affect the strength of self-efficacy. Additionally, Sun (1999) pointed out that influences from the student’s family and social environment, and the capacity and learning performance of students also affect the self-efficacy of teachers. Edwards (1996) discovered that the self-efficacy of teachers is significantly affected by the following variables: gender, age, teaching seniority, level of education received, and teaching experience.

Lodahl and Kejner (1965) were the first to propose the concept of job involvement. They believed that job involvement refers to the psychological identification of an
individual with their work or the importance of work in that individual’s self-image. Rabinowitz and Hall (1977) defined job involvement from three points of view: (1) it is a personal trait, (2) it is a personal response to the influence from an organization or situation, and (3) it is the result of interactions between personal traits and the environment, and job involvement is treated as a dynamic concept. It is correlated to job satisfaction, work performance, discharge and rate of unexcused absences, and sense of achievement. Reitz and Jewell (1979) defined job involvement as the importance of work in an individual’s daily life. This also affects his work performance and behavior.

Job involvement has different significances in education. Teachers with a greater level of job involvement often identify with the teaching goals of the school more spontaneously and participate in teaching more eagerly (Hsieh, 1998). The greater their job involvement, the greater their teaching efficiency tends to be (Hsu, 1997). In a teacher evaluation, McLaughlin and Pfeifer (1986) discovered that the spontaneous involvement of teachers can help implement teacher evaluation and promote organizational development.

As for the measurement of job involvement, the earliest attempt was the “Job Involvement Inventory” developed by Lodahl and Kejner (1965), a measure which has since been used by many researchers. The “Job Involvement Inventory” developed by Kanungo (1982) classifies job involvement into the three dimensions of work concentration, work evaluation and work identification. This inventory has also been used by many researchers. Domestic measurements were developed using these two frameworks. Cai (2001) for example divided job involvement into the five dimensions of work concentration, work evaluation, work identification, work participation and fun from work. Alternatively, Chung (2003) divided job involvement into the dimensions of fun from work, work evaluation, work identification and work concentration. In this study, domestic and overseas inventory dimensions were referenced to provide the four dimensions of “fun in work”, “work evaluation”, “work identification”, and “work concentration”. These were also compiled after being validated for content validity and reliability.

Job involvement differs significantly based on age, service duration, position and duty, marital status, level of education, and location of school (Hsu, 1995). Lack of work experience and high work stress will discourage work involvement (Chuang, 2002). According to Tang (2000), job involvement varies and differs significantly for different types of work. Gormley (2003) pointed out that the job satisfaction and involvement of teachers is significantly different due to self-determination in work, leader expectations, organizational atmosphere, role conflicts, role uncertainty, and leader behavior and attitudes.

**Methods**

**Samples**

A total of 419 samples were chosen from among full-time clinical nursing teachers at three public and sixteen private institutes of technology and junior colleges in Taiwan in 2004 for this cross-sectional survey. After obtaining the approval of these colleges and the consent of participants, a total of 419 self-developed structural questionnaires were distributed through the mail to participants during February 14- March 31 in 2005. A total of 287 surveys were returned, of which 21 had unacceptable numbers of missing values, which yielded 266 usable surveys (63 percent).

**Instrument**

The questionnaire included sections on personal background data, job self-efficacy toward clinical teaching inventory and job involvement toward clinical teaching inventory.

**Personal Background Data**

Personal background data included age, marital status, education, clinical teaching seniority, clinical nursing work seniority, teacher qualifications, school of current employment, medical institution of current employment, academic program taught, subject/course taught, average number of students per class, status of continuing education attainment, perceived level of work stress, and job satisfaction.

**Job Self-Efficacy Toward Clinical Teaching Inventory**

The inventory, self-developed by the first author, referenced the Self-Efficacy Toward Teaching Inventory (SETTI) of Tollerud (1990) and the teaching traits of clinical teachers. It contained 31 items falling into the five dimensions of teaching readiness efficacy, teaching behavior efficacy, teaching evaluation efficacy, professional competence efficacy, and student background factor efficacy. Typical examples from each respective dimension are: “I can plan the agenda for clinical courses in a highly organized manner”, “I can intensify the learning motivations of students by
using different teaching strategies”, “I will evaluate students through different evaluation methods”, “I have adequate professional knowledge and clinical competence”, and “I believe I can improve the performance of below-average students”. A 5-point Likert scale was applied to score results, ranging from “have no confidence at all” to “have full confidence”. The scale point of each item corresponds to 1 point, i.e. from 1 through 5, with the higher the score, the greater the respondent’s self-efficacy.

**Job Involvement Toward Clinical Teaching Inventory**

The inventory, also self-developed by the first author, referenced the job involvement inventories of Kanungo (1982), Cai (2001), and Chung (2003). Eighteen items were categorized into the four dimensions of fun from work, work identification, work evaluation, and work concentration. Typical examples from each respective dimension include “To me, the greatest source of fun in my life comes from teaching”, “I am proud to be a clinical teacher”, “I feel a strong sense of achievement from my present job”, and “I like to spend most of my time on my job”. The 5-point Likert scale was applied to score results, which ranged from “totally agree” to “totally disagree”. The scale point of each item corresponded to 1 point, i.e. from 1 through 5, and the higher the score, the greater the respondent’s job involvement.

**Instrument Validity and Reliability**

**Content validity**

Three nursing professionals and 3 clinical nursing teachers were invited to express their opinions on the questionnaire and score the instrument in terms of its “importance”, “suitability”, and “clarity of expression”. Modification and deletion of contents were made according to the experts’ opinions. The assessment was conducted using the Content Validity Index (CVI) (Waltz & Bausell, 1981). Each item used a four point scale, 1 = not relevant, 2 = can’t assess its relevance unless question revised, 3 = relevant, but needs some adjustment, 4 = very relevant and concise (Burns & Grove, 2001; Polit & Hungler, 1999). Revisions or deletions were made based on experts’ feedback. Questions with CVI values greater than or equal to .80 were retained, while those below .80 were removed. The average CVI values of job self-efficacy toward clinical teaching inventory and job involvement toward clinical teaching inventory were .95 and .92, respectively.

**Reliability**

A pilot test was conducted on 15 individuals recruited from a junior college. These samples were excluded from the official survey conducted afterward. Contents of the questionnaire were modified according to the results and problems found in the pilot test for internal consistency. The Cronbach’s $\alpha$ values of items were: .93 in the “job self-efficacy” inventory, .70 in the “teaching readiness efficacy” sub-inventory, .93 in the “teaching behavior efficacy” sub-inventory, .81 in the “teaching evaluation efficacy” sub-inventory, .75 in the “professional competence efficacy” sub-inventory, .87 in the “students background factor efficacy” sub-inventory, .90 in the job involvement inventory, .82 in the “fun from work” sub-inventory, .88 in the “work identification” sub-inventory, .82 in the “work evaluation” sub-inventory, and .60 in the “work concentration” sub-inventory.

**Data Collection and Analysis**

The questionnaire was produced following validity and reliability verification. After obtaining approval from the surveyed colleges and research subjects, the questionnaire was distributed to research subjects through the mail. Participants returned questionnaires by post after completion. The coding and translation of questionnaires was conducted immediately after researchers received completed questionnaires. One-way ANOVA, correlations, and stepwise regression were applied to data analysis.

**Results**

**Description of Personal Background Factors**

The age distribution of participants was between 26 and 56 years of age, with a mean of 34.6 years. Most (59.0%; 157 people) were married. Most (64.3%; 171 people) had undergraduate level education, followed by masters’ degrees (34.6%; 92 people). A slight majority of participants (53%; 141 people) taught at colleges of technology, while 47% (125 people) taught at junior colleges. Those with less than five years of clinical teaching experience were in the majority, at 65% (173 people) of all participants, followed by those with 5–9 years’ experience (16.2%; 43 people). Their average length of service in clinical nursing was 6.2 years. The majority of teaching qualifications were official employees at 51.1%, with those working under contract describing 48.9% of participants. Thirty-nine people (14.7%) were in the process of studying
for a higher degree, while those not currently studying for a higher degree made up 85.3% of the surveyed group.

As for the academic program taught by research subjects, five-year junior colleges were the most numerous at 67.3% (178 people), followed by two-year junior colleges at 18.6% (50 people), four-year technical colleges at 8.2% (22 people), and two-year technical colleges at 4.8% (13 people). The average number of students taught per class concentrated (73.6%; 196 people) in the 9–10 student range. For medical facility assignments, regional hospitals were the most numerous at 47% (125 people), followed by medical centers at 29.7% (79 people). Principal courses taught were gynecology and pediatrics at 29.2% (77 people) followed by clinical medicine at 20.3% (54 people). Most (70.7%; 188 people) defined their work-related stress level in the “mid-range”. Half of participants (50%; 133 people) rated themselves “satisfied” with their job, while the second largest group (24.4%; 65 people) registered “no opinion”.

The Present Status of Job Self-Efficacy and Job Involvement

According to this study, participant mean overall job self-efficacy was 4.21, a score falling between 4 and 5 on the 5-point Likert Scale, with a confidence level of between 75–100%. On the whole, the job self-efficacy confidence of clinical teachers fell into the medium to high level. Scores along different dimensions, in descending order, were: teaching readiness self-efficacy, teaching evaluation self-efficacy, professional competence self-efficacy, teaching behavior self-efficacy, and student background factor efficacy. The teaching readiness self-efficacy and the student background factor efficacy rank at the top and the last in scores respectively (Table 1).

As for the scoring on the questions from the Job Self-Efficacy Inventory, the teaching evaluation self-efficacy dimension’s “Can clearly explain content and standard of assessment” as well as “Can use different assessment methods to judge assess students” registered the highest overall scores. Questions that scored the lowest included the teaching behavior self-efficacy dimension’s “Can use teaching strategies to improve student learning motivation” and the student background factor efficacy dimension’s “No matter how the family environment affects a student’s learning, I believe I can overcome this factor” and “I have the ability to change social and environmental influences on a student”.

The mean of the overall job involvement of samples is 3.92, falling between the Neither Agree Nor Disagree and Agree in the 5-point Likert Scale. Scores along differing dimensions, in descending order, are: work evaluation, work concentration, fun in work, and work identification. Work evaluation and work identification rank at the top and the last in scores respectively (Table 2).

For Job Involvement Inventory question scores, the work evaluation dimension’s “When my teaching is acknowledged by other people I am very happy” scored the highest, followed by the fun in work dimension’s “When stu-

Table 1.
Distribution of Participant Self-Efficacy Variables (N = 266)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching readiness self-efficacy</td>
<td>2.50</td>
<td>5.00</td>
<td>4.42</td>
<td>0.51</td>
</tr>
<tr>
<td>Teaching evaluation self-efficacy</td>
<td>2.75</td>
<td>5.00</td>
<td>4.38</td>
<td>0.43</td>
</tr>
<tr>
<td>Professional competence self-efficacy</td>
<td>2.33</td>
<td>5.00</td>
<td>4.37</td>
<td>0.49</td>
</tr>
<tr>
<td>Teaching behavior self-efficacy</td>
<td>2.56</td>
<td>5.00</td>
<td>4.28</td>
<td>0.44</td>
</tr>
<tr>
<td>Student background factor efficacy</td>
<td>1.25</td>
<td>5.00</td>
<td>3.35</td>
<td>0.72</td>
</tr>
<tr>
<td>Overall job self-efficacy</td>
<td></td>
<td></td>
<td>4.21</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Table 2.
Distribution of Participant Job Involvement Variables (N = 266)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work evaluation</td>
<td>2.6</td>
<td>5.00</td>
<td>4.12</td>
<td>0.52</td>
</tr>
<tr>
<td>Work concentration</td>
<td>1.6</td>
<td>5.00</td>
<td>3.91</td>
<td>0.68</td>
</tr>
<tr>
<td>Fun in work</td>
<td>2.0</td>
<td>5.00</td>
<td>3.87</td>
<td>0.64</td>
</tr>
<tr>
<td>Work identification</td>
<td>1.8</td>
<td>5.00</td>
<td>3.79</td>
<td>0.59</td>
</tr>
<tr>
<td>Overall job involvement</td>
<td></td>
<td></td>
<td>3.92</td>
<td>0.51</td>
</tr>
</tbody>
</table>
dents show progress in their learning I feel happy”. The item
that scored the lowest was the fun in work dimension’s, “the
greatest source of fun in my life comes from teaching”, fol-
lowed by the work identification dimension’s “I actively pro-
vide recommendations for teaching reform to the school”.

Influence of Personal Background Variables
on Overall Job Self-Efficacy
Results indicate that participants’ job self-efficacy sig-
nificantly differs based on differences in age \( (F = 8.08; p < .001) \), marital status \( (F = 5.96; p < .01) \), level of education \( (F = 4.88; p < .05) \), clinical teaching seniority \( (F = 3.47; p < .05) \), teaching qualification \( (F = 5.34; p < .01) \), medical institu-
tion at which currently employed \( (F = 3.11; p < .05) \), and
current job satisfaction \( (F = 4.55; p < .01) \). No signifi-
cant difference was observed in the following variables: level of education received, school at which currently teaching, clinical work seniority, status of continuing education, aca-
demic program instructed, average number of students per class, medical institution at which currently employed, sub-
jects instructed, and perceived work stress. Results of the
Scheffe’s test conducted on variables that showed sig-
nificant differences indicate that the job self-
efficacy of clinical nursing teachers in the age groups 36–45 and 46–56 is greater than that of those in the age group 26–35; the job self-efficacy of unmarried teachers is greater than that of married teachers; the job self-efficacy of teachers holding a master’s or higher degree is greater than those holding a diploma or bachelor’s degree; the job self-efficacy of teachers with a clinical teaching seniority of 15 years or more is greater than that of those having a clinical teaching seniority less than 5 years; the job self-efficacy of teachers with tenure is greater than those working on contracts; the job self-efficacy of teachers working in units other than dis-

Influences of Personal Background Variables
on Overall Job Involvement
Results indicate that the job involvement of samples
differs significantly due to differences in age \( (F = 6.02; p < .01) \), marital status \( (F = 6.92; p < .01) \), teaching seniority \( (F = 3.83; p < .05) \), teaching qualification \( (F = 4.32; p < .01) \), and
current job satisfaction \( (F = 19.97; p < .001) \). No signifi-
cant difference is observed in the following variables: level of education received, school at which currently teaching, clinical work seniority, status of continuing education, aca-
demic program instructed, average number of students per class, medical institution at which currently employed, sub-
jects instructed, and perceived work stress. Results of the
Scheffe’s test conducted on variables that showed sig-
nificant differences indicate the job involvement of clinical
nursing teachers in the age groups 36–45 and 46–56 to be
higher than that of those in the age group 26–35; the job
involvement of unmarried teachers is higher than that of
the married teachers; the job involvement of teachers with
a clinical teaching seniority of 15 years or more is greater
than that of those with a clinical teaching seniority less than 5 years; the job involvement of teachers with tenure is higher than that of contract teachers; and the job involvement of teachers who are satisfied and very satisfied with their current job is greater than those who are unsatisfied with their current job.

Correlations Between Job Self-Efficacy and
Job Involvement
As shown in Table 3, all dimensions related to job self-efficacy, including “teaching readiness self-efficacy”, “teaching behavior self-efficacy”, “teaching evaluation

Table 3.
Correlations Between Participants’ Job Self-Efficacy and Job Involvement (N = 266)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Teaching readiness self-efficacy</th>
<th>Teaching behavior self-efficacy</th>
<th>Teaching evaluation self-efficacy</th>
<th>Professional competence self-efficacy</th>
<th>Student background factor self-efficacy</th>
<th>Overall job self-efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fun in work</td>
<td>.296**</td>
<td>.328**</td>
<td>.200**</td>
<td>.295**</td>
<td>.317**</td>
<td>.360**</td>
</tr>
<tr>
<td>Work identification</td>
<td>.318**</td>
<td>.358**</td>
<td>.240**</td>
<td>.304**</td>
<td>.257**</td>
<td>.365**</td>
</tr>
<tr>
<td>Work evaluation</td>
<td>.297**</td>
<td>.329**</td>
<td>.236**</td>
<td>.244**</td>
<td>.160**</td>
<td>.329**</td>
</tr>
<tr>
<td>Work concentration</td>
<td>.300**</td>
<td>.359**</td>
<td>.233**</td>
<td>.266**</td>
<td>.314**</td>
<td>.363**</td>
</tr>
<tr>
<td>Overall job involvement</td>
<td>.356**</td>
<td>.403**</td>
<td>.266**</td>
<td>.329**</td>
<td>.308**</td>
<td>.417**</td>
</tr>
</tbody>
</table>

**p < .01.
self-efficacy”, “professional competence self-efficacy”, and “student background factor efficacy” as well as all dimensions related to job involvement, including “fun in work”, “work identification”, “work evaluation”, and “work concentration”, show significant positive correlation to one another ($p < .01$). This suggests that the greater the self-efficacy in “teaching readiness”, “teaching behavior”, “teaching evaluation”, “professional competence”, and “student background factor”, the higher the level of “fun in work”, “work identification”, “work evaluation”, and “work concentration”; and vice versa.

**Regression Analysis of Personal Background Variables and Job Involvement as Related to Job Self-Efficacy**

Results of the regression analysis using overall job self-efficacy as the dependent variable and personal background variables and job involvement as independent variables indicate that the regression coefficients for job involvement ($β = 0.417; p < .001$), level of education received ($β = 0.162; p < .01$), and age ($β = 0.140; p < .05$) are statistically significant. These three variables account for 20.9% of changes in job self-efficacy, with job involvement, level of education received, and age accounting for 17.4%, 2.6%, and 1.9% of this change, respectively. According to these results, the higher the job involvement, the higher the level of job self-efficacy; the higher the level of education received, the greater the job self-efficacy; and the older the teacher age, the greater the job self-efficacy (Table 5).

**Discussion**

As shown in the results, the overall job self-efficacy of clinical nursing teachers is at a medium to high level, which is similar to the results of studies on the self-efficacy of nursing teachers conducted by Nugent et al. (1999) and

### Table 4.
**Regression Analysis of Factors Affecting Overall Job Involvement (N = 266)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>$R^2$ change</th>
<th>Standardized regression coefficient ($β$)</th>
<th>$t$-value</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>0.219</td>
<td>0.219</td>
<td>0.468</td>
<td>8.608</td>
<td>.000***</td>
</tr>
<tr>
<td>Job self-efficacy</td>
<td>0.324</td>
<td>0.104</td>
<td>0.331</td>
<td>6.374</td>
<td>.000***</td>
</tr>
<tr>
<td>Status of continuing education</td>
<td>0.340</td>
<td>0.016</td>
<td>0.127</td>
<td>2.512</td>
<td>.013*</td>
</tr>
</tbody>
</table>

* $p < .05$. ** $p < .01$. *** $p < .001$.

### Table 5.
**Regression Analysis of Factors Affecting Overall Job Self-Efficacy (N = 266)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>$R^2$ change</th>
<th>Standardized regression coefficient ($β$)</th>
<th>$t$-value</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job involvement</td>
<td>0.174</td>
<td>0.174</td>
<td>0.417</td>
<td>7.452</td>
<td>.000***</td>
</tr>
<tr>
<td>Level of education received</td>
<td>0.194</td>
<td>0.026</td>
<td>0.162</td>
<td>2.924</td>
<td>.004**</td>
</tr>
<tr>
<td>Age</td>
<td>0.209</td>
<td>0.019</td>
<td>0.140</td>
<td>2.499</td>
<td>.013*</td>
</tr>
</tbody>
</table>

* $p < .05$. ** $p < .01$. *** $p < .001$. **
Questions that scored the lowest in the Job Self-Efficacy Inventory included the teaching behavior self-efficacy dimension’s “Can use teaching strategies to improve student learning motivation”; the student background factor efficacy’s “No matter how the family environment affects a student’s learning I believe I can overcome this factor”; and “I have the ability to change social and environmental influences on a student”. The possible reason for the low scores in these categories may be due to a lack of education-related curricula in nursing teacher training leading to poorer teaching skills and student counseling efficacy. It is therefore recommended that the school regularly schedule student counseling and teaching strategy-related training courses to reinforce the ability of teachers to counsel students, improve teaching skills, and thus increase the teacher’s work self-efficacy as well as encourage teachers to study education related courses.

In job involvement, study results indicate that the overall job-involvement of participants is at a medium to high level and that the work evaluation score is the highest. This is identical to the results of studies by Chung (2003) and Cai (2001) on “job involvement” amongst teachers. That is to say, the work evaluation of teachers is generally higher, and teachers generally approve of their work performance.

As for Job Involvement Inventory question scores, the items that scored the lowest were fun in work, “the greatest source of fun in my life comes from teaching”, followed by the work identification dimension’s “I actively provide recommendations for teaching reform to the school”. From the above, it can be seen that a majority clinical nursing teachers spend most of their time teaching outside of the school and have limited opportunities to go back to school. This means that involvement in school teaching reform movements is correspondingly low. It is therefore recommended that schools expand channels and opportunities for participation. Examples include creating online website portals through which opinions can be exchanged, allowing teachers to provide information and recommendations proactively to schools as well as enabling teachers to participate more in school discussions and major policy decisions. Clinical nursing teachers’ identification and sense of participation in the school will be improved, making them feel like an important part of the school and thus increasing their involvement in their work. Another suggestion is to use a variety of communication channels to understand the clinical nursing teachers’ work requirements, difficulties encountered during teaching as well as their work expectations. Changes can then be pursued targeted toward improving job satisfaction, which will increase job involvement and efficacy.

As for the influence of personal background on job self-efficacy and job involvement, study results indicate that the job self-efficacy differs significantly according to age, marital status, level of education received, clinical teaching seniority, teacher qualification, medical institution at which currently employed, and job satisfaction. These results are identical to those of Chen (2000), Chou (1999), Edwards (1996), Hsu (1996), and Nugent et al. (1999). Job involvement varies significantly due to age differences, marital status, teaching seniority, teacher qualification, and job satisfaction. These results are identical to those of Chuang (2002) and Chou (1999). According to this study, both the job self-efficacy and job involvement of senior clinical nursing teachers are higher than those of teachers with lesser teaching experience. Therefore, it is recommended that growth groups or workshops for clinical nursing teachers can be formed or organized to promote mutual communication and an exclusive website can be set up to organize exchange and sharing activities on a regular basis to let senior teachers share their experience with and provide inquiry service and assistance to junior teachers, or to allow teachers share their teaching experience and provide teaching content, methods and skills over the website.
to improve teachers’ teaching readiness, confidence and self-efficacy. Secondly, results of this study indicate that the higher the job satisfaction of teachers, the higher their job involvement. Therefore, it is recommended that schools and institutions should understand more about the job needs of teachers and introduce various incentive policies to commend well-performing teachers publicly at appropriate times in order to recognize their value and improve overall teacher performance in a manner that will improve their job satisfaction and stimulate job involvement.

The medical institutions at which teachers work also affect teacher job self-efficacy. The job self-efficacy of teachers working at medical centers is greater than that of those who work in regional or district hospitals. This may result from the structure, organization, teaching and research atmosphere and internship cooperation with schools or from the role and position of clinical nursing teachers in the hospital. Therefore, it is recommended that schools and medical institutions hold discussion meetings to understand the teaching goals and objectives of schools and the expectations of medical institutions in order to draw up teaching plans and teaching goals that create a better teaching and learning environment and enhance student learning quality.

This study shows that officially employed teachers’ self-efficacy and job involvement are all higher than those of contract teachers. This may be because employed teachers identify more with their job and feel more secure. This study discovered that approximately half of all clinical nursing teachers currently in service were hired under contract. This impacts teacher efficacy and level of job involvement, which in turn affects teaching quality. It is therefore recommended that schools pay attention to this issue by building clear evaluation and promotion schemes or providing other means of encouragement for outstanding clinical teachers. These will recognize teachers’ performance and thus inspire their efficacy and job involvement. For the academic program, the study indicates that teachers’ self-efficacy and job involvement do not show significant differences between types of academic programs. This may be due to the fact the teaching environment for clinical nursing teachers is within medical institutions, which is a very challenging teaching environment. This means that no matter what type of program the students belong to, clinical nursing teachers must always perform at their best. Therefore, no significant differences were detected in this study.

In studies relating to job self-efficacy and job involvement, results of this study indicate that the overall job self-efficacy and variables in job self-efficacy, and overall job involvement and variables in job involvement are significantly correlated with one another, and they are mutually affected. This indicates that self job-efficacy and job involvement are highly correlated with each other; a result that is identical to those reached by Chou (1999) and Cai (2001). That is to say, teachers with higher job self-efficacy will have higher job involvement, and teachers with higher job involvement will have greater job self-efficacy.

In terms of predictive power, factors affecting job self-efficacy and job involvement are complex. In this study, only job involvement, level of education received and age were found to have statistically significant predictive power on job self-efficacy, interpreting 20.9% of job self-efficacy variances. In terms of predictive power with regard to job involvement, job satisfaction, job self-efficacy, and status of continuing education together were able to interpret 34% of variances in job involvement. This result suggests that other important variables will also affect job self-efficacy and job involvement, such as organization leader efficacy (Mansen, 1993), organizational atmosphere (Gormley, 2003; Luthans, Zhu, & Avolio, 2006), salary (Moody, 1996), opportunities for continuing education and promotion (Snarr & Krochalk, 1996), and duration of teaching (Nugent et al., 1999) etc. These variables can be included in future studies for further investigation.

Conclusion

The findings in this study that job self-efficacy differs significantly in terms of difference in age, marital status, level of education received, clinical teaching seniority, teacher qualification, medical institution at which currently employed, and current job satisfaction. Job involvement differs significantly in terms of difference in age, marital status, teaching seniority, teacher qualification, and current job satisfaction. A second finding indicates that the greater the self-efficacy in “teaching readiness”, “teaching behavior”, “teaching evaluation”, “professional competence”, and “student background factor”, the higher the level of “fun in work”, “work identification”, “work evaluation”, and “work concentration”, and the vice versa.

Thirdly, job satisfaction, job self-efficacy, and status of continuing education account for 34% of changes in job involvement, with job satisfaction, job self-efficacy and status of continuing education accounting for 21.9%, 10.4%,
and 1.6% of changes, respectively. Job involvement, level of education received, and age account for 20.9% of changes in job self-efficacy, with job involvement, level of education received and age accounting for 17.4%, 2.6%, and 1.9% of changes, respectively.

Acknowledgment

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References


臨床護理實習指導教師工作自我效能與工作投入之研究

楊惠玲 高毓秀* 黃奕清**

摘 要：本研究旨在了解臨床實習指導教師工作自我效能及工作投入之現況，並探討臨床實習指導教師個人背景變項對工作自我效能及工作投入兩者之預測能力，以及工作自我效能與工作投入兩者之間的關係。以受聘於九十三學年度台灣地區公私立技術學院及專科學校護理科系所有臨床實習指導教師為研究對象，以自編式結構問卷，進行橫斷式的調查，問卷包含三個部分：個人背景資料、臨床實習指導教師工作自我效能量表、臨床實習指導教師工作投入量表，母群體共計19校技專校院，人數共計419人，問卷共發出419份，有效樣本為266份，有效回收率為63%。結果顯示，臨床實習指導教師工作自我效能及工作投入程度呈現中上程度；工作自我效能與工作投入皆會因年齡、婚姻狀況、教學工作年資、教師資格、對工作滿意程度不同而達顯著差異，而另外自我效能會因教育程度及派駐的醫療院所之不同而達顯著差異，教師的工作自我效能與工作投入程度兩者之間達顯著的正相關，研究結果可做為未來護理教師師資培育及臨床護理教育改革之參考。

關鍵詞：臨床護理實習指導教師、自我效能、工作投入。

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