OCTOBER 2002, VOL 76, NO 4 · Finger · Pape

# **Invitational Theory and Perioperative Nursing Preceptorships**

oncern about the shortage of perioperative nurses is prevalent in today's health care environment. A variety of factors have contributed to the current shortage. These facthe growing demand for health care, which

- requires additional RNs in all areas;

- other opportunities for perioperative nurses, which may cause them to leave the profession; and
- nursing school curricula, which often do not include OR experiences. > MINIMAL EXPOSING

Hospitals across the United States are experiencing the nursing shortage in varying degrees. The average age of RNs is increasing steadily, and this average is even higher among specialized nurses, including perioperative RNs. On average, the age of perioperative nurses is one to two years older than the national average for nurses overall. Fewer novice nurses are entering the OR, and older nurses with previous experience may not consider them-

lower nursing school enrollment, which produces fewer graduating nurses; AND CONTAIN THE areas affected most by the nursing shortage the availability of fewer new graduates to replace retiring perioperative nurses; AND CONTAIN THE areas affected most by the nursing shortage are specialty, high stress areas and those requiring additional training, such as the intensive care unit, OR, and obstetrics. Though it is difficult to recruit nurses to these areas, retaining them is even harder. Adding to the problem is that educational programs for perioperative nurses can take up to six months to complete and often are followed by 12 months of further training. Perioperative nurses are unique

> because they provide technical as well as clinical skills when performing OR functions. Though they often can work in other hospital departments, nonperioperative nurses usually cannot staff the OR successfully without extensive training and orientation.

Orientation programs that. offer a positive experience influence the effectiveness of the orientation process, and studies show a direct correlation between adequate orientation and nurse retention. Effective orientation programs in which new employees feel welcome and included in orientation goal setting have been shown to reduce turnover rates from 53% to 17%.6 Perioperative nurse preceptors, therefore, must

# ABSTRACT

The role of perioperative nurses is unique in that they must be able to maintain clinical expertise in nursing practice and develop technical surgical skills. Even experienced perioperative nurses who transfer to the OR from other hospital settings or change employment to another facility require a certain amount of preceptor orientation. The current shortage of experienced perioperative nurses calls for the development of strategies to increase their number. "Inviting" OR preceptorship experiences may increase the recruitment, retention, and, subsequently, number of perioperative nurses. Nurse preceptors may be either personally or professionally "inviting" or "disinviting" when sharing knowledge and techniques with less experienced nurses. This article includes findings from a research study of perioperative nurse preceptees. The intent of the study was to identify whether the invitational operating room teaching survey could be used as a reliable tool in the OR. Survey items evaluate preceptees' attitudes toward preceptors and characteristics of effective preceptors. Cronbach's a reliability analysis revealed reliability of the tool. AORN J 76 (Oct 2002) 630-642.

SUSAN D. FINGER, RN; TESS M. PAPE, RN

be knowledgeable about recruitment and retention of new perioperative nurses.

No previous studies indicate whether positive interventions using professionally and personally inviting behaviors can affect retention and turnover among perioperative nurses. Furthermore, there is a paucity of studies involving precepting perioperative nurses, which underscores the need for research in this area.

This research study examines the usefulness of an adapted version of the invitational teaching survey (ITS). The instrument was adapted to the perioperative setting and renamed the invitational operating room teaching survey (IORTS). This article explores the relationship between invitational theory and effective precepting. Preceptor/preceptee skill acquisition may influence this relationship. The premise is that invitational theory, combined with skill level, can help in the recruitment and retention of perioperative nurses.

Perioperative nurses are personally and professionally "inviting" or "disinviting" when sharing knowledge with less experienced nurses. Invitational theory is an educational framework that can be used to examine the helping/learning relationship between preceptors and preceptees. Invitational theory is based on two theoretical viewpoints—the perceptual tradition and self-concept theory. Perceptual tradition maintains that people do what they do because they PERCEPTVAL exhibit unique behaviors based on their perceptions of the world. Self-concept theory maintains that each individual analyzes situations according to past experiences and preconceived notions.8

Invitational theory states that "students must be invited to perceive themselves as learners and that teachers are the primary force in establishing these perceptions by sending appropriate invitations to students." According to invitational theory, individuals need to be invited to discover their untapped potential concerning new experiences. Invitation is defined as "a summary of messages, verbal and nonverbal, formal and informal, that are sent to students with the intention of affirming for them that they are responsible, able, and valuable."10

Invitational theory asserts that positive intentional choice along with action may improve the human condition and increase personal growth." According to this theory, individuals are encouraged to make meaningful choices when interacting within human relationships. Invitational counseling builds on this framework because self-concept is a core piece of invitational theory.

Invitational theory was first introduced in 1978.12 The theory is based on four basic assumptions.

- People are able, valuable, and capable of selfdirection and should be treated accordingly.
- Helping is a cooperative, collaborative alliance in which process is as important as product.
- People possess relatively untapped potential in all areas of human development.
- This potential can be realized best by places, policies, and programs that are designed intentionally to invite development and by people who consistently seek to realize this potential in themselves and others, both personally and professionally.13

Invitational counseling encourages individuals to be "intentionally optimistic, respectful, and trusting of themselves and others, personally and professionally." Invitational education assumes that preceptors will display trust, respect, intentionality, and optimism toward preceptees. Trust is manifested over time by the preceptor's consistent behavior toward the preceptee, regardless of situation or circumstance.15 Respect is a required component of invitational education because of the belief that individuals are complex, unique, and valuable beings.16 Intentionality stresses a consistent pattern of behavior in which preceptors do things with defined and explained purposes. Optimism is the ability to maintain confidence and enthusiasm and view the world positively.17

## PRECEPTING

Precepting includes both personal and professional involvement. Preceptors facilitate competence and confidence in practice while decreasing the reality shock that new nurses encounter.18 A successful experience involves personal appeal, respect, and commitment to the relationship in terms of time and energy.19 Precepting involves two individuals agreeing to work together to achieve a common goal. Precepting, however, usually does not involve longterm career guidance.

Preceptors teach large amounts of content during a specified time period. Precepting is more than a one-way instructional experience because it involves personal sharing as well as professional instruction. A preceptor

teaches, counsels, inspires, serves as a role CHARACTERISTIC model, and supports the growth and development of an individual (the novice) for a fixed and limited amount of time with the specific purpose of socializing the novice into a new role.20

INVITING

DISINVITIND

A preceptor is a competent, experienced nurse who serves as a nurturer and educator for the new nurse. The preceptor, however, must remember that the preceptee has needs, desires, and expectations.

A well-planned preceptorship program could improve recruitment and staff member satisfaction and reduce staff turnover. Using preceptors also maximizes hospital resources. Precepting has been described as "the passing along of knowledge or skills from one person to another," which propels the

POLE TO

New employees need to overcome doubts and fears so that learning becomes more effective during times of stress. Preceptorship programs still are viewed as effective methods for preparing workers. The process, however, requires several stages before optimal levels of functioning can be achieved. These stages are described more fully using the novice to

expert theory. J BENEPS!!

#### **NOVICE TO EXPERT**

The novice to expert theory is well known among nurses. This theory uses a model of skill acquisition and development when describing nurses' perceptions of clinical practice at various levels of proficiency. There are five levels of expertise. Understanding these levels and the gradual increase in expertise improves the ability to select the most appropriate nurse preceptor.

Novice. This term is used to describe an individual with no previous experience or knowledge of a given situation. A novice is expected to follow rules to develop skills yet has limited or no understanding of the conceptual meaning of learned behaviors. Novice nurses are innocent, experience trust, and feel freedom to learn in a clinical situation because they do not feel responsible for managing unfamiliar situations while in the helping/learning relationship with preceptors.

Advanced beginner. This term is used to describe an individual who has experienced some situations and can perform a desired skill. Each skill is given equal importance. Novices and advanced beginners have difficulty grasping the severity of a situation because it is too new, too strange, and requires concentration to remember rules.<sup>28</sup> Novice and advanced beginner nurses need coaching to recognize clinical problems and understand situations.<sup>29</sup> Effective preceptors recognize when guidance is needed to direct novice and advanced beginner nurses through unfamiliar clinical situations.

Competent. This term is used to describe an individual who is cognizant of actions and who views actions in terms of achieving goals. Competent individuals are organized and deliberate, but they lack flexibility and speed in accomplishing goals. Competent-level nurses use emotional responses as part of their thought process. These nurses have first-hand experiences, can discuss clinical situations intelligently, and can grasp the entire picture. Nevertheless, competent-level nurses may experience disappointment, when situations vary from expectations. 31

Proficient. This term is used to describe an individual who is able to view a situation in relation to his or her experiences and previous knowledge. Proficient nurses can modify actions based on their internal worldview. Proficient nurses comprehend a clinical situation and respond appropriately. Other characteristics include the ability to reason, maintain emotional awareness, and recognize subtle changes in clinical situations. Proficient-level nurses use experience to recognize when teaching will be most beneficial. They give just the right amount of information based on a given situation and, therefore, are more effective preceptors than those at previous levels. 33

Expert. This term is used to describe an individual who uses his or her vast amount of experience and knowledge to guide each situation intuitively. Experts have the ability to accomplish multiple tasks concurrently. They do not waste time on alternative solutions but grasp the desired outcome and act immediately to solve problems. Experts cannot always clearly express why an action is necessary, but they intuitively know the action is required in a given situation. Expert nurses have integrated knowledge and cognitive experiences to help them respond to nursing demands intuitively. Consequently, proficient preceptors are able to articulate nursing knowledge to novice nurses more effectively than expert preceptors.

# THE PRECEPTING RELATIONSHIP

The precepting relationship involves a process wherein two people exert an influence on each other. This influence may be either inviting or disinviting. An inviting relationship between individuals tends to foster optimism, cooperation, collaboration, acceptance, respect, trust, and caring. A disinviting relationship is characterized by a sense of frustration, fear, and failure on the part of both members of the relationship. Disinviting characteristics may be intentional or unintentional, but the end result is the disintegration of the precepting relationship. In teaching

relationships, people can be intentionally disinviting, unintentionally disinviting, unintentionally inviting, or intentionally inviting.<sup>35</sup> Definitions of invitational theory terms are listed in Table 1.

In addition, the physical environment can enhance or detract from the preceptee's comfort level. 36 An inviting preceptor assesses the OR surroundings and modifies those surroundings to promote a helping environment. In this way, inexperienced personnel are not threatened by new experiences and will not fear failure. The helping relationship also can be influenced by policies and procedures of the organization. Various OR policies may place undue stress on the helping relationship. An inviting preceptor designs and molds an orientation program so that the preceptee's individual needs and desires are respected.

Orientation programs should be designed to enhance the goals and objectives of the organization' yet remain flexible enough to help preceptees maintain a sense of confidence, thus increasing independence and personal accountability. By planning the orientation program to include aspects of adult learning theory and individual differences, learning is more self directed and successful. The effective preceptor continually evaluates the orientation program and, if necessary, alters it to meet the needs of the learner.

Invitational theory says that individuals perceive inviting or disinviting messages according to their own life experiences. Each inviting message contains hope, respect, and trust between individuals. Each disinviting message contains descriptions of worthlessness, pessimism, and lack of esteem. 40 Individuals tend to be more productive in positive, inviting relationships. Conversely, they tend to be unproductive when in disinviting relationships and try to avoid them. People choose actions based on their perceptions and may have differing interpretations of events depending on individual experiences.41 Preceptors often send messages to preceptees that may even be viewed by outside observers as inviting. On the other hand, preceptees may receive the same messages as disinviting because they evaluate the message based on their own individual worldview.

Self-concept is developed and modified through the use of continuous impulses. Experiences are acquired sequentially with the inner self capable of change based on accumulated encounters with external stimuli. Self-concept is learned and occurs when individuals have unlimited experiences.<sup>42</sup> The helping/learning relationship between preceptor and preceptee is based on the invitation to learn.

#### Table 1

#### INVITATIONAL THEORY TERMS'

## Intentionally disinviting

A level of "lethal functioning" that is the most destructive level of behavior. The preceptor considers himself or herself and others incapable, worthless, and irresponsible. Actions are intended to be deliberately demeaning and insulting to the preceptee.

## Unintentionally disinviting

Displaying negative actions or making statements that often are perceived as uncaring and thoughtless.

## Unintentionally inviting

Being optimistic, respectful, and trusting yet lacking intentionality. These individuals know what they are doing but do not know why and may be unable to replicate the same action.

# Intentionally inviting

Intentionally inviting the success of others intellectually, physically, and psychologically. Displaying direction and purpose with positive actions.

## Personally inviting

Disclosing, supporting, investing, attending, affirming, and cheering the preceptee in the quest for knowledge.

#### Professionally inviting

Clarifying, informing, managing, relying on, and expecting preceptee achievement and success.

#### NOTE

1. W W Purkey, J J Schmidt, *Invitational Counseling: A Self-concept Approach to Professional Practice* (Pacific Grove, Calif: Brooks/Cole Publishing Co, 1996) 60.

Invitation also is defined by a combination of verbal and nonverbal messages that are used in the helping relationship. The basis of invitational theory is the intentional establishment of places, policies, programs, and processes in which a helping relationship is nurtured.<sup>43</sup> A perioperative nurse preceptor in a helping relationship uses personal as well as professional behaviors to present inviting experiences, decrease disinviting events, and help the perioperative preceptee develop future goals.

#### STUDY PURPOSE

There were several purposes for this study. These included

 determining whether the IORTS could be used as a reliable instrument in a clinical setting as specialized as the OR,

- · determining the attitudes of preceptees toward preceptors,
- defining the characteristics of preceptors' professional practice as reported by preceptees using terms from the IORTS,
- recognizing professionally inviting practices used by perioperative nurse preceptors, and
- delineating preceptees' views of preceptors' expertise, as defined by the novice to expert model.44

#### **RESEARCH QUESTIONS**

The following questions were used to guide this study.

- What is the internal consistency reliability of the IORTS for a sample of perioperative nurses?
- What are the professionally and personally inviting behaviors of perioperative nurse preceptors as rated by perioperative nurse preceptees?
- What attributes of perioperative nurse preceptors are associated with high scores on the IORTS?
- How do internal consistency reliability estimates obtained from the IORTS scores of preceptors compare with internal consistency reliability estimates reported in a study of student nurses?

#### METHODS

This study examined whether the IORTS would be reliable for use with perioperative nurses in a clinical setting. The IORTS uses a five-point Likert-type scale designed to measure the prevalence of preceptors' professionally and personally inviting practices in the teaching/learning relationship. The Likert-type scale comprised the following responses:

- very seldom,
- seldom,
- occasionally,
- often, and
- very often.

For analysis, numbers were assigned to the responses with one representing "very seldom" and five representing "very often."

A convenience sample of 113 nurses who had experienced a helping/learning relationship during the past two years was surveyed. This sample was drawn from seven midsized hospitals in the central region of North Carolina. These hospitals consisted of three individual health care institutions and one health care system with four hospitals. Permission and approval to implement the study was obtained from the institutional review boards of the three institutions and one system. Approval also was obtained from the human subjects review committee at the University of North Carolina at Greensboro.

Instrument and instrument adaptation. The ITS was designed to assess various teaching practices as perceived by students and student nurses. According to invitational theory, the ITS is based on the belief that learning starts with an individual's frame of reference.45 To obtain feedback regarding teaching practices, the initial questionnaire containing 420 items was reduced to 140 items. It was reviewed and administered to 15 experts in invitational education and 204 students and faculty members. After data analysis, the survey was shortened to the current 43 items.46

Responses to the ITS are tallied to determine total score, as well as subscores for professionally and personally inviting behaviors. The ITS contains five subscales, including consideration, commitment, coordination, proficiency, and expectation. The researcher adapted the ITS to the perioperative setting and renamed it the IORTS. Various clinical terms were defined in place of nonclinical terms. Items were reviewed for clarity by the authors of the original instrument and two expert clinicians. Final changes were made based on their recommendations. In addition, the instrument solicited demographic data from participants (Table 2).

Validity and reliability. Due to the potential for response bias, randomly selected items were scaled in reverse. These items were changed from positive to negative wording. Validity and reliability studies were performed on the ITS using factor analysis. Cronbach's \alpha reliability coefficients revealed a reliability coefficient for the development of the initial ITS at 0.95.

Data collection. A convenience sample of 113 perioperative nurses from the participating health care institutions was surveyed. The survey requested that preceptees who were involved in a helping/learning relationship during the past two years evaluate their preceptors. Data were analyzed as a total group and not separated by institution.

The researcher sent the health care institutions a cover letter specifying the purposes, description, and participation criteria of the study. She made telephone calls to nursing contacts at each institution and asked to discuss the study with perioperative staff members at a monthly meeting. The researcher brought surveys to each OR during staff meetings and requested voluntary completion. All surveys

Table 2

DEMOGRAPHIC DATA

Age	Frequency	
Median	38	
Minimum	23	
Maximum	60	
Gender	Frequency	Percent
Male	1	2.0
Female	56	98.0
Highest level nursing education	Frequency	Percent
Diploma in nursing	4	7.0
Associate's degree in nursing	32	56.1
Bachelor's degree in nursing	19	33.3
Higher than bachelor's degree	2	3.5
Previous clinical nursing experience	Frequency	Percent
New graduate	5	8.8
RN with previous non-OR experience	15	26.3
RN with previous OR experience	37	64.9
Years in nursing	Frequency	Percent
New graduate	4	7.0
1-2 years	2	3.5
3-5 years	9	15.8
More than 5 years	42	73.7
Knew preceptor previously	Frequency	Percent
Yes	5	8.8
No	52	91.2
Previously a preceptor	Frequency	Percent
Yes	42	73.7
No	15	26.3
Self perception of nursing expertise	Frequency	Percent
Novice	13	22.8
Advanced beginner	8	14.0
Competent	7	12.3
Proficient	17	29.8
Expert	12	21.1
Perception		
of preceptor's nursing expertise	Frequency	Percent
Advanced beginner	2	3.5
Competent	11	19.3
Proficient	20	35.1
Expert	24	42.1

included an informed consent cover letter. The letter informed respondents that participation was voluntary and confidential. Completion of the survey was taken as implied consent to participate.

Surveys were placed beside a locked box. After completing the survey anonymously, preceptees dropped them in the locked box. After a two-week collection period, 58 of the 113 surveys taken by preceptees were returned and arranged for data analysis.

One survey was discarded because of missing information; therefore, 57 usable surveys were analyzed for a return rate of 50.9%.

Data analysis. Analysis of the data was performed using the Statistical Package for the Social Sciences (SPSS) and consisted of several steps.<sup>47</sup> Reliability of the adapted instrument was determined using Cronbach's \alpha reliability coefficient computation. Inter-item reliability coefficients were determined for each subscale of the adapted instrument. Multiitem measures of randomly sampled items were measured for internal consistency. The items that were scaled in reverse on the IORTS were reversed again for data analysis so that higher scores represented more positive values. Mean scores of 3.8 or higher on the scale were considered more inviting (Table 3).

#### **FINDINGS**

The majority (56%) of preceptees held an associate's degree as their highest level of education. A prevailing number (65%) had OR experience, and many (74%) had more than five years of experience in nursing. The majority (91%) of preceptees did not know their preceptor previously, and 26% indicated never having served as a preceptor in the past. Preceptees rated 42% of preceptors as expert level nurses.

The IORTS revealed important information regarding perioperative preceptees' perceptions of their preceptors (Figures 1 and 2). Analysis on the personally inviting

commitment subscale revealed that preceptees perceived that their preceptors occasionally shared out-of-work experiences with them (mean  $[M] = 3.09 \pm 0.91$ ). Preceptees believed that their preceptors were sensitive to their needs ( $M = 3.72 \pm 1.28$ ) and encouraged self-confidence ( $M = 3.81 \pm 1.23$ ). Preceptees also believed preceptors made a special effort to learn their names ( $M = 4.46 \pm 0.96$ ) yet lacked enthusiasm for surgical procedures ( $M = 2.05 \pm 1.03$ ).

Table 3
MEAN AND STANDARD DEVIATION SCORES FOR PERSONALLY AND PROFESSIONALLY INVITING BEHAVIORS OF PRECEPTORS

	Mean	Standard deviation
Shared out-of-work experience	3.09	0.91
Showed sensitivity to needs	3.72	1.28
Encouraged self-confidence	3.81	1.23
Learned preceptee's name	4.46	0.96
Showed enthusiasm for procedures	2.05	1.03
Showed respect	4.11	1.23
Acted friendly	4.32	1.12
Involved preceptee in decisions	3.39	1.25
Chose appropriate activities	3.95	1.20
Answered questions clearly	3.96	1.10
Provided overview of procedures	3.49	1.12
Demonstrated up-to-date knowledge	4.25	0.76
Presented understandable objectives	3.82	0.89
Came to work on time	4.19	1.41
Used work time efficiently	3.93	1.03
Expected successful performance	3.93	0.96

The scoring range was 1 to 5.

The personally inviting consideration subscale analysis revealed that preceptees believed preceptors showed respect for them (M =  $4.11 \pm 1.23$ ) and acted friendly toward them  $(M = 4.32 \pm$ 1.12). Unfortunately, the mean score (M =  $3.39 \pm 1.25$ ) for preceptors involving preceptees in decision-making processes was in the moderate range. The professionally inviting coordination subscale revealed that most preceptees believed their preceptors chose appropriate activities for them  $(M = 3.95 \pm 1.20)$  and answered questions clearly (M =  $3.96 \pm 1.10$ ). The mean score (M =  $3.49 \pm 1.12$ ) for providing adequate overviews of procedures was only in the moderate range.

The professionally inviting proficiency subscale revealed that preceptors demonstrated up-to-date knowledge of surgical proce-

dures  $(M = 4.25 \pm 0.76)$  and presented understandable objectives to preceptees  $(M = 3.82 \pm 0.89)$ . Preceptees also believed that their preceptors were accountable because they consistently arrived to work on time  $(M = 4.19 \pm 1.41)$  and used work time efficiently  $(M = 3.93 \pm 1.03)$ . The final subscale of the professionally inviting dimension is expectation. Respondents believed their preceptors expected successful performance of them  $(M = 3.93 \pm 0.96)$ .

Analysis of the internal consistency and reliability of the IORTS and its subscales using Cronbach's  $\alpha$  correlation coefficient was 0.9775. The personally inviting subscale analysis revealed an internal consistency reliability coefficient of 0.9629. Nine items had correlations warranting closer inspection. Only two items fell consistently below the 0.3 range. Removal of these two items would raise the  $\alpha$  reliability coefficient to 0.9666 and 0.9667, respectively. Additionally, these two items may not be related sufficiently to warrant inclusion in future studies and probably do not contribute to the overall measurement of core information in this study. Other weak items were evaluated on an item-by-item basis and determined not to warrant exclusion.

#### DISCUSSION

This study revealed attributes of perioperative nurse preceptors associated with high scores on the IORTS. A mean score of 3.8 or higher was considered high. The perioperative preceptors in this study were perceived to be proficient/expert clinicians who expected successful performance from preceptees. A strong relationship was revealed between preceptor skill acquisition and preceptee learning practices. Other strong attributes included a belief that preceptors were self-confident, friendly, professional, knowledgeable, and efficient.

Although preceptors attempted to be sensitive to the needs of their preceptees and encourage their self confidence, they may have sent unintentionally disinviting messages by demonstrating a lack of enthusiasm for their role as perioperative nurses. The lack of enthusiasm perceived by preceptees may have been due to intense work and the high degree of burnout experienced by perioperative nurses today.

Frequency analysis on the consideration subscale revealed that although preceptors demonstrated respect and friendliness toward preceptees, they lacked intentionality. Decisions were made regarding the relationship without the support of both parties involved, which may have been due to time constraints. Similar analysis on the coordination subscale revealed that preceptors answered questions clearly yet were unable to provide an adequate overview of each procedure. These findings may be due to the fast-paced OR environment, which prevents preceptors from providing procedural reviews to preceptees in advance.

BUPN OUT
PRECEPING
50% SHIFTS

AORN JOURNAL PROFICIENTLY IN EACH
SERVICE, UTILIZE WEEBLY
UNFAMILIAR

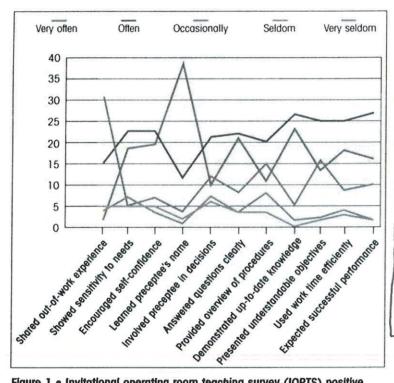


Figure 1 • Invitational operating room teaching survey (IORTS) positive (le, inviting) preceptor attributes as rated by preceptees.

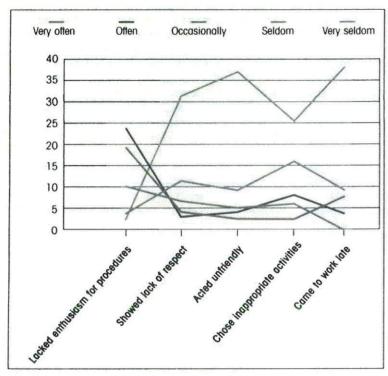


Figure 2 • Invitational operating room teaching survey (IORTS) negative (ie, disinviting) preceptor attributes as rated by preceptees.

Analysis on the proficiency subscale revealed that preceptees believed preceptors demonstrated individual accountability and professionally inviting practices. They demonstrated up-to-date knowledge, provided good objectives, and were on time. Frequency analysis on the expectation subscale revealed that preceptors were viewed as expecting successful performance from preceptees. Today, perioperative nurses are expected to maintain clinical and technical expertise during times of rapid change. Unsuccessful performance may result in negative or adverse patient outcomes (eg, death, permanent disability); therefore, a high degree of successful performance is desired and often demanded of personnel in the OR.

One additional high scoring characteristic of preceptors was found. Proficient/expert nurses expected successful performance from preceptees. A possible explanation is that expert clinicians often use past experiences when problem solving and no longer follow set rules; therefore, they want the preceptees to do so as well. Expert practitioners, however, may not be able to outline the steps necessary so preceptees can learn.

The first research question was answered using Cronbach's a analysis to determine the internal consistency reliability of the IORTS in a perioperative nurse sample. Cronbach's α correlation coefficient revealed a high internal consistency score of 0.9775. The results indicate that the IORTS is useful in evaluating preceptorship programs, improving adult learning, and enhancing preceptors' teaching practices and behaviors. Using this instrument, preceptees' attitudes toward their preceptors may be identified and professionally inviting practices determined.

The second research question addressed perioperative nurse preceptors' professionally and XX

BENEFY

POSS. ADAPT THIS TOOL TO AIP OR 2 personally inviting behaviors. Perioperative preceptors were perceived to be professionally proficient/expert clinicians who expected successful performance from preceptees; however, they tended to make decisions without consulting preceptees about their personal needs and did not provide adequate procedural reviews. Nevertheless, preceptors were personally dependable and professionally knowledgeable and set goals appropriately.

The third research question addressed which preceptor attributes received high scores on the IORTS. High scoring attributes with a mean score of 3.8 to 5 included demonstrating up-to-date knowledge, encouraging self-confidence, learning preceptees' names, answering questions clearly, presenting understandable objectives, and using work time efficiently. Successful performance was expected, but preceptors lacked enthusiasm.

The fourth research question compared internal consistency reliability scores between perioperative nurses and student nurses. Cronbach's  $\alpha$  reliability coefficients revealed a reliability coefficient for the development of the IORTS at 0.9775 as compared to the correlation coefficient of the initial ITS at 0.95.

#### LIMITATIONS

The following limitations of this study have been identified.

- There is a lack of research involving perioperative nurse preceptors, which leads to the inability to compare the results of this study to those of others.
- There is no way to determine whether the responders are different from those who did not respond to the survey. Generalizability is limited because a convenience sample was used. With a response rate of 51%, the results may not be representative of the entire OR population.
- The ITS has not been adapted previously for use with perioperative nurses.
- The sample size was limited to perioperative nurses who had preceptee experience during the past two years and may not be representative of the entire population of perioperative nurses.
- No attempt was made to contact perioperative nurses who had experienced a preceptorship during the past two years but who no longer worked at the surveyed institutions.

# IMPLICATIONS FOR FURTHER RESEARCH

This study reveals the need for further research in the area of perioperative nursing recruitment and retention. Future studies should be conducted to determine relationships and effects of the IORTS on preceptor practices. Studies using the IORTS in the clinical setting may help illuminate other areas of teaching practice that may need to be studied further. A larger sample of perioperative nurses may provide more complete data on preceptees' OR experiences. Additional studies should use a Likert-type scale initially to compare various institutional groups with each other using a t test or analysis of variance.

#### CONCLUSION

This study supports the IORTS' usefulness in providing feedback to preceptors about their teaching practices and behaviors. A different precepting method is needed for novice nurses than for experienced nurses. Knowing an individual's skill level before entering into the helping/learning relationship may further invitational teaching practices.

Nurses begin to develop clinical expertise as students in nursing school. After graduating and coming to the OR, they learn technical surgical skills by observing and being precepted by more experienced perioperative nurses. A closer look at invitational teaching practices coupled with appropriate preceptorship training may be one way to improve orientation programs for new and experienced perioperative nurses.

Nurse preceptors may exhibit inviting or disinviting characteristics when teaching preceptees in the OR. Invitational theory examines these characteristics in the context of the helping/learning relationship. Recruitment and retention of perioperative nurses during nursing shortages may be achieved by redesigning teaching practices. An effective orientation program combines inviting teaching behaviors with proficient clinical instruction.

Nursing administrators should help plan appropriate preceptorship programs and encourage staff members to continue professional development. Nurse preceptors should be encouraged to evaluate their inviting or disinviting tendencies.

Susan D. Finger, RN, MSN, CNOR, is director of surgical and obstetrical services, Angleton Danbury Medical Center, Angleton, Tex.

Tess M. Pape, RN, PhD, CNOR, was a member of the nursing faculty, Alvin Community College, Alvin, Tex, and a nurse consultant, Angleton Danbury Medical Center, Angleton, Tex, at the time this article was written. She currently is a member of the nursing faculty, Abilene Intercollegiate School of Nursing and the University Consortium, Abilene, Tex.

The authors wish to acknowledge W. W. Purkey, MEd, EdD, for his personal and professional inviting behavior and encouragement during the writing of this article.

>BENE

\*\*

DEVELOP OP SPECI TRAININ FOR PRECEPTI

GOAL OF PROJECT

#### NOTES

- 1. C Rauber, "Specialty nursing shortage socks bay area hospitals," San Francisco Business Times (November 7, 1997) http://www.bizjournals.com/sanfrancisco/stories/1997/11/10/story2.html (accessed 6 June 2002).
- S Michelson, "Growing our own: An OR nurse training program," Stanford Nurse 20 (Summer 1998) 6-7.
- 3. J Erwin, "Aging out? Will the rising age of OR nurses lead to a shortage?" nurseweek.com, http://www.nurseweek.com/features/99-3/or.html (accessed 6 June 2002).
- 4. Erwin, "Aging out? Will the rising age of OR nurses lead to a shortage?"
  - 5. Ibid.
- 6. J J Mathews, C Nunley, "Rejuvenating orientation to increase nurse satisfaction and retention," Journal of Nursing Staff Development 8 (July/August 1992) 159-164.
- 7. A W Combs, Florida Studies in the Helping Professions (Gainsville, Fla: University of Florida Press, 1969).
- 8. W W Purkey, J M Novak, Inviting School Success: A Selfconcept Approach to Teaching, Learning, and Democratic Practice, third ed (Belmont, Calif: Wadsworth Publishing Co, 1996) 1-89.
- 9. J M Spikes, "Invitational education: A model for nursing," *Nurse Educator* 12 (May/June 1987) 26.
  - 10. Ibid, 28.
- 11. W W Purkey, J J Schmidt, Invitational Counseling: A Self-concept Approach to Professional Practice (Pacific Grove, Calif: Brooks/Cole Publishing Co, 1996) 29.
- 12. W W Purkey, Inviting School Success: A Self-concept Approach to Teaching and Learning (Belmont, Calif: Wadsworth Publishing Co, 1978) 1-128; W W Purkey, J M Novak, Education: By Invitation Only (Bloomington, Ind: Phi Delta Kappa Educational Foundation, 1988) 1-33.
- 13. Purkey, Schmidt, Invitational Counseling: A Self-concept Approach to Professional Practice, 2.

- 14. Ibid.
- 15. Purkey, Schmidt, Invitational Counseling: A Self-concept Approach to Professional Practice, 3.
- 16. Purkey, Inviting School Success: A Self-concept Approach to Teaching and Learning, 15.
- 17. L'S Bass, "Motivation strategies: A new twist," *Nursing Management* 22 (February 1991) 24-26
- 18. S D Bumgarner, G H Biggerstaff, "A patient-centered approach to nurse orientation," *Journal for Nurses in Staff Development* 16 (November/ December 2000) 249-254.
- 19. B H Owens, C A Herrick, J A Kelley, "A prearranged mentorship program: Can it work long distance?" *Journal of Professional Nursing* 14 (March/April 1998) 78-84
- 20. R J Westra, M J Graziano, "Preceptors: A comparison of their perceived needs before and after the preceptor experience," *Journal of Continuing Education in Nursing* 23 (September/October 1992) 212-215.
- 21. H L Craven, J G Broyles, "Professional development through preceptorships," *Journal of Nursing Staff Development* 12 (November/ December 1996) 294-299.
- 22. K S Hitchings, "Preceptors promote competence and retention: Strategies to achieve success," *Journal of Continuing Education in Nursing* 20 (November/December 1989) 255-260.
- 23. S Siddall, J M Haberlin, Preceptorships in Nursing Education (Rockville, Md: Aspen Systems Corp, 1983) 89-91.
- 24. K Loraine, "Orientation is as simple as 1-2-3," *Nursing Management* 28 (January 1997) 35-36.
- 25. ME Brasler, "Predictors of clinical performance of new graduate nurses participating in preceptor orientation programs," *Journal of Continuing Education in Nursing* 24 (July/August 1993) 158-165.
- 26. P E Benner, From Novice to Expert: Excellence and Power in Clinical Nursing Practice (Menlo Park, Calif: Addison-Wesley Publishing Co, 1984) 20-35.

- 27. Ibid, 20-21.
- 28. Ibid, 24.
- 29. P E Benner, C A Tanner, C A Chesla, Expertise in Nursing Practice: Caring, Clinical Judgment, and Ethics (New York: Springer Publishing Co, 1996) 52.
- 30. Benner, From Novice to Expert: Excellence and Power in Clinical Nursing Practice, 25-27.
- 31. Benner, Tanner, Chesla, Expertise in Nursing Practice: Caring, Clinical Judgment, and Ethics, 119-139.
- 32. Benner, From Novice to Expert: Excellence and Power in Clinical Nursing Practice, 27-31.
- 33. Benner, Tanner, Chesla, Expertise in Nursing Practice: Caring, Clinical Judgment, and Ethics, 119-139.
- 34. Bennet, From Novice to Expert: Excellence and Power in Clinical Nursing Practice, 31-34.
- 35. Purkey, Schmidt, Invitational Counseling: A Self-concept Approach to Professional Practice, 59.
  - 36. Ibid, 99.
  - 37. Ibid, 100.
- 38. B G Chickerella, W J Lutz, "Professional nurturance: Preceptorships for undergraduate nursing students," *American Journal of Nursing* 81 (January 1981) 107-109.
- 39. F S Nelson, "Using adult learning principles for perioperative orientation programs," *AORN Journal* 70 (December 1999) 1046-1054.
- 40. Purkey, Schmidt, Invitational Counseling: A Self-concept Approach to Professional Practice, 34.
  - 41. Ibid, 45.
  - 42. Ibid, 40.
- 43. Spikes, "Invitational education: A model for nursing," 26-29.
- 44. Benner, From Novice to Expert: Excellence and Power in Clinical Nursing Practice, 25-27.
- 45. Purkey, Schmidt, Invitational Counseling: A Self-concept Approach to Professional Practice, 4.
- 46. Amos, Purkey, Tobias, Invitational Teaching Survey (unpublished instrument).
- 47. SPSS—Statistical Pack for the Social Sciences, 10.0 (Chicago: SPSS, Inc).