

***THE OREGON NURSE RETENTION PROJECT:***

***Final Report to the Northwest Health Foundation***

**August 1, 2009**

**Overview and Aims**



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## ***The Oregon Nurse Retention Project: Acknowledgements***

The research presented in this report was supported by a grant from the Northwest Health Foundation (Proposal 14180) to Portland State University. We are grateful to the Northwest Health Foundation (NWHF) for supporting this work, particularly Judith Woodruff who helped focus the research on critical topics and who encouraged us to choose certain paths that ultimately led to some important discoveries. Our research team is now pursuing several lines of research that would not have been possible without NWHF support. Several staff members at both the Oregon Nurses' association and Portland State University have been extraordinarily helpful in managing the financial and logistical aspects of the study, particularly Anh Ly at Portland State and Pisith Kong at ONA. Finally, and most importantly, we deeply appreciate the help of all of the nurses who contributed to the research, including those who participated in focus groups that helped us develop and refine the survey instruments and the study participants, who took a great deal of time out of their busy lives to tell us about their work. We hope we can honor their contributions by using this research to help create a healthier workplace for nurses in the future.

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### **Recommended Citation:**

Sinclair, R. R., Mohr, C. P., Davidson, S., Sears, L. E., Deese, M. N., Wright, R. R., Waitsman, M., Jacobs, L., Cadiz, D. (2009). *The Oregon Nurse Retention Project: Final Report to the Northwest Health Foundation*. Unpublished Technical Report.

## THE OREGON NURSE RETENTION PROJECT

### Overview

The growing demand for healthcare creates an organizational climate in which hospitals continuously face problems ensuring that sufficient numbers of nurses are available to provide quality care. For instance, a report by the Oregon Center for Nursing (Burton, Morris, & Campbell, 2005) predicts that by 2025, 41% of current RNs are expected to retire. The demand for nurses is also expected to increase as part of the growing demand for health care services in the United States. In fact, the Oregon Healthcare Workforce Institute has reported that 13% of the state's job growth between 2004 and 2014 will be in healthcare occupations. Taken together, these trends suggest a future labor shortage that will substantially affect the health care system. The current economic crisis has eased this shortage in the short term, as nurses have delayed retirements and increased their work hours, but the fundamental systemic problems remain and long term concerns about nurse retention seem unlikely to be resolved any time soon.

Many Oregon nurses leave the profession for reasons other than retirement (Burton, et al., 2005). Few people would find it surprising that nurses experience a great deal of job stress and that stress affects retention issues. For instance, Cangelosi, Markham, and Bounds (1998) found that 42% of nurses rated occupational stress as an important influence on their decision to leave their job. Further, Lucas, Atwood, and Hagman (1993) found that job stress was associated with nurses' intentions to leave their jobs and their actual turnover behavior. The stressful nature of the nursing practice environment exacerbates the intense demands of nursing and is associated with burnout, reduced professional commitment, and lower job satisfaction (cf. Alexander, Lichtenstein, Oh, & Ullman, 1998; Lucas et al., 1993).

Still other research has established that the stress associated with staffing is an important influence on nurse turnover, poor patient outcomes, and nurses' mental and physical well-being (Bradley & Cartwright, 2002; Glazer, 2005; Greenglass, Burke, & Moore, 2003; Hoffman & Scott, 2003; Jamal & Baba, 1992; Krausz & Koslowsky, 1995; Leveck & Jones, 1996; Lucas et al. 1993). Continued research on retention can address this situation by helping to identify and prioritize retention-related concerns and in doing so, increase understanding of the working conditions that most strongly influence retention.

As this brief review shows, nurse retention has become a critical strategic priority for hospitals and a continued concern for the nursing profession. Research can help the nursing profession (including managers, those in direct care, and those in advanced practice) craft effective responses to retention-related challenges. Although many published studies already address retention concerns, some important gaps remain in this literature, particular in relation to the relationship between turnover/retention outcomes and nurses' positive and negative work experiences. The ONRP draws from nursing research as well as research in occupational health psychology to address three of these critical research needs.

- **Research Need #1:** Nurse retention research needs to describe both the critical stressors and positive work experiences that influence nurses' retention.
- **Research Need #2:** Nurse retention research needs an empirically-supported model linking positive and negative work experiences to retention outcomes.
- **Research Need #3:** Nurse retention research needs to address nurses' perspectives on what interventions would affect their positive and negative work experiences.

### **An Occupational Health Psychology Perspective on Stress and Retention**

According to Sauter and Hurrell (1999), Occupational Health Psychology (OHP) emerged in response to three developments: "(a) the growth of and recognition of stress-related disorders as a costly occupational health problem; (b) the growing acceptance that psychosocial factors play a role in the etiology of emergent...problems such as upper extremity musculoskeletal disorders; and (c) recent and dramatic changes in the organization of work that foster both job stress and health and safety problems at work" (p. 177). Quick (1999) suggests that OHP has the general goals of developing, maintaining, and promoting healthy workplaces in the context of industrial and organizational (I/O) psychology. Thus, OHP researchers blend an understanding of the psychological processes that guide individual behavior with a recognition of the occupational and organizational factors that influence how people react to events at work. In keeping with this OHP perspective, our research examined the relationship between positive and negative work experiences and critical indicators of turnover and retention.

### ***The Demanding Nature of Nursing Work***

Given the demanding nature of nursing work, it is not surprising that some people would choose to leave the profession. Occupational health psychologists often characterize such demands as work role stressors. Role stressors are the demands people have to adapt to as they fulfill work-related expectations and responsibilities. Examples include *role conflict*, such as facing conflicting demands from a patient and from coworkers, *role ambiguity*, which involves having unclear work expectations, and *role overload*, such as having more patients than one can effectively manage. Past nursing research has described several specific work role stressors likely to lead to retention/turnover concerns. Examples include interpersonal conflict, performance constraints, and staffing concerns.

### ***Interpersonal conflict and incivility***

Interpersonal conflict is increasingly recognized as an important issue in the health care workplace. Interpersonal conflict can range from workplace violence to incivility. Incivility typically consists of low-intensity but stressful events involving mistreatment by a patient or coworker, such as being treated rudely by a patient, being spoken to in a demeaning manner by a manager or doctor, or getting into an argument with a coworker. Workplace violence has been recognized as a significant performance and health concern for nurses (e.g., Lanza, 2006). However, while physical violence consists of intense but often isolated events, incivility appears to be wide spread. For example, Cortina, Magley, Williams, and Langhout (2001) reported that 71% of their sample of public sector employees experienced at least some incivility at work. Other researchers have estimated that as many as 90% of hospital staff experience some form of verbal abuse at work (Winstanley & Whittington, 2002).

Some research links incivility to retention. Cortina et al. (2001) found that greater exposure to incivility was associated with lower job satisfaction, increased psychological distress, and stronger intentions to leave the organization. Similarly, Guidroz, Wang, and Perez (2006) found that interpersonal conflicts with doctors, patients, and supervisors influenced nurses' retention outcomes by increasing their emotional exhaustion. Interestingly, while some studies found that nurses report being most concerned with aggression from colleagues (horizontal conflict, e.g., Farrell, 1997), Guidroz et al. found that coworker conflict was the only form not associated with higher emotional exhaustion. Thus, while prior research suggests the influence of interpersonal conflict on retention, there is limited

research on interpersonal conflict in health care. Questions remain about the relative effects of interpersonal conflict and other stressors, such as staffing or performance constraints.

### ***Performance constraints***

Many health care systems face constrained financial, material, and human resources. These systems struggle to offer competitive compensation packages, supply state of the art technology, and sometimes even to perform routine facilities maintenance. Such resource limitations are an example of *performance constraints* thought to influence work behavior. Examples of performance constraints include lack of available time, lack of supplies, and excessive workload (Peters, O'Connor, & Eulberg, 1985).

Most research has explored the influence of constraints on job or task performance (e.g., Blumberg & Pringle, 1982; Kane, 1997; Klein & Kim, 1998; O'Connor et al., 1984; Peters & O'Connor, 1980; Peters, et al., 1985). This literature demonstrates that the situational context influences an individual's ability to translate his/her personality, ability, and motivation into successful performance. Other studies have demonstrated the negative outcomes of experiencing situational constraints, including work strain, role demands, anxiety, and frustration (Spector & Jex, 1998). These effects may stem from the effects of performance constraints on one's ability to control workplace events, as control has been shown to be an important predictor of occupational health outcomes in both general (cf. Spector, 2002) and nursing literature (Laschinger, Shamian, & Thomson, 2001).

Gurses and Carayon (2007) identified 36 performance obstacles faced by intensive care nurses. These included *environmental obstacles* such as patients' rooms not being close to each other, *organizational obstacles*, such as delays in getting medications from the pharmacy, *task obstacles*, such as being responsible for orienting a new nurse, and *technological or tools obstacles*, such as having to use equipment that is in poor working condition. Six specific obstacles were faced by over 30% of their sample: distractions from family members, delays in getting medications from the pharmacy, spending time dealing with family needs, spending considerable amounts of time teaching family members, and equipment not being available because someone else was using it. Moreover, several other obstacles were reported by at least 15% of their sample. They noted the need for more research on the effects of performance obstacles, a need that our study addresses.

## Staffing

Staffing demands are one of the most important elements of working conditions for nurses. Table 1 presents several examples of these demands in the nursing context. As these demands illustrate, relatively general measures of work role stressors cannot capture the complex staffing challenges faced by nurses. The Oregon State Legislature has acknowledged the critical need for effective nurse staffing management with the passage in 2001 and subsequent revision in 2005 of House Bill 2800 as well as a promulgation of new administrative rules associated with the statute. This bill includes several mandates for nurse staffing, especially in regard to the formation of staffing committees at Oregon hospitals. HB 2800 certainly represents an important development for Oregon health care. However, the staffing committees mandated by the bill are just beginning to be formed. Thus, it is too early to draw firm conclusions about the impact of the bill on nurse staffing concerns. Nonetheless, HB 2800 highlights the critical role of effective nurse staffing management in health care.

Several studies have linked nurse staffing patterns to both direct and indirect indicators of retention (e.g., Glazer, 2005; Jamal & Baba, 1992). This literature

consistently shows that work schedules exert strong influences on retention. For example, Cangelosi et al., (1998) found that 43.5% of their sample rated their work schedule as an important reason why nurses quit their jobs. Other nursing studies have linked turnover/retention to work status (Lane, Mathews, & Prestholdt, 1990). These findings are consistent with a small but growing organizational literature linking work schedules to turnover (e.g., Martin & Sinclair, 2007), as well a large literature linking employee retention to the general quality of working conditions (e.g., Mansell, Brough, & Cole, 2006; Rogers, Wei-Ting, Scott, Aiken, & Dinges, 2004).

One important issue with previous staffing research concerns the measurement strategies used to capture staffing levels and demands. Although past research has identified several important staffing measures, studies typically only incorporate one or two of these measures (e.g., Aiken, Clarke, & Sloane, 2002; Hall, Doran, & Pink, 2004). Moreover, some staffing demands are very difficult to measure in large cross-sectional studies (such as changes in staffing within a shift). Thus, there continues to be a need for studies assessing multiple aspects of staffing using measures that capture what unfolds on a set of specific shifts, rather than measures of general perceptions about staffing.

**Table 1. Examples of staffing demands.**

Core staffing demands	Working definition
Work load intensity	Amount of direct and/or indirect care necessary to offer patients.
Patient acuity	Severity of patients' conditions.
Staffing mix	Education and experience of other nurses and/or other assistive personnel on the current shift.
Personnel demands	Unexpected absence/presence of other personnel, such as registry staff, as well as unscheduled absences or reassignments.
Charge nurse responsibilities	The extent to which the nurse has regular, relief, or intermittent charge nurse responsibilities.
Patient census	Number and mix of patients on each particular shift.
Performance constraints	Availability of other necessary personnel (e.g., physicians) or resources (e.g., supplies).
Patient characteristics	Characteristics of a patient's condition that create special/additional demands (e.g., obesity, diagnostic group, physiological and/or psychological instability).
Shift characteristics	Length of current shift; time of day of shift, characteristics of other recent shifts (e.g., amount of overtime, shift rotation).

**Table 2. Turnover cognitions as predictors of turnover behavior.**

Predictor	Study	K	N	R <sup>2</sup>
Turnover intention	Tett & Meyer (1993)	6	1034	.43
Withdrawal cognitions	Tett & Meyer (1993)	16	2836	.22
Intention to quit	Griffeth et al. (2000)	71	63232	.14
Withdrawal cognitions	Griffeth et al. (200)	7	1209	.10
Voluntary turnover	McEvoy & Casio (1987)	6	2025	.10
Search Intentions	Griffeth et al. (2000)	19	4308	.08
Thinking of quitting	Griffeth et al. (2000)	10	1964	.06
General job search scales	Griffeth et al. (2000)	9	1811	.05

Notes.

(1) Meta-analyses conducted before 1987 or containing data from less than 5 studies have been omitted.

(2) K = number of studies in meta-analysis; N = number of subjects across all studies; R<sup>2</sup> = percentage of turnover variance explained by the predictor (based on correlations corrected for attenuation and sample size).

### **An Overview of the Turnover Process: Cognitions, Shocks, and Plans**

Most turnover research assumes the turnover process is an orderly chain of events in which people become dissatisfied with their jobs, consider the possibility of leaving, search for and evaluate alternatives jobs, and eventually quit if they find an acceptable alternative. This perspective emphasizes *turnover cognitions* as an important precursor to *voluntary turnover behavior*. These cognitive processes include evaluating one's current situation, weighing the costs and benefits of various courses of action, forming plans for the future, developing ideas about the conditions under which one might change jobs, and forming intentions to find a new job. Consistent with this approach, Table 1 presents the results of several meta-analyses showing that turnover cognitions are an effective predictor of voluntary employee turnover.<sup>1</sup>

Recent research has raised other possible perspectives on employee turnover. Researchers have pointed out that employees may quit (or stay) for reasons that have nothing to do with their working conditions and have noted that employees often may quit without extensive deliberations about their current positions. Two important ideas from this research are turnover plans and shocks.

### **Turnover plans**

Some research has begun to investigate multiple turnover profiles (cf. Harman, Lee, Mitchell, Felps, & Owens, 2007; Maertz & Campion, 2004; Worrell, 2005). This research notes that people may form *turnover plans* that have nothing to do with dissatisfaction with a current position. This research distinguishes having a pre-determined *definite plan to quit when* a particular event occurs (such as when a child leaves for college) from having an *indefinite plan to quit if* a particular event happens (such as having children).

Most research on these alternatives focuses on employees who already have quit a job (e.g., asking them why they left). Our research extends this literature by investigating whether nurses have pre-existing definite or indefinite plans to quit their organization/profession. For example, a nurse may hesitate to leave a job because of family concerns (e.g., children attending a preferred school), the income provided by a spouse's job in the community, or the simple desire not to move. Even though the nurse might not intend to leave, the organization still could be argued to have a retention concern as this nurse might: (a) plan to leave if a certain set of conditions are met (e.g., finding another desirable community to live in), (b) not plan to leave, but may leave immediately if a new local opportunity arose, or (c) remain in his/her current job with but with dissatisfaction affecting the nurse's job performance, health and well-being. One way to improve retention research is by studying all of these pathways in order to understand the varied nature of nurses' reactions to their work experiences.

<sup>1</sup> A meta-analysis accumulates statistical findings from multiple studies to generate a single "best estimate" of the relationship between two variables – typically the average correlation between two variables across multiple studies.

## **Shocks**

Other researchers have studied what are sometimes called “shocks” – critical events that change employees’ preexisting assumptions about their jobs and may prompt people to quit (Lee & Mitchell, 1994). Shocks may be work-related, such as the case of nurses who face mandated undesirable changes in their work schedules that leave them to decide to leave. Shocks may also be non-work related, such as needing to move to take care of a sick family member in another part of the country. Thus, Worrell (2005), found that nurses who left their jobs followed one of three profiles: those who left because of *work-related shocks*, such as coming to the realization that the organization did not intend to honor a commitment; *non-work related shocks*, such as a nurse reporting that his/her spouse received a desirable job overseas; and those who followed the *traditional turnover model*, first becoming dissatisfied, then weighing the costs and benefits of leaving, and ultimately deciding to leave.

The possible existence of shocks highlights the need to study work experiences as they unfold, in order to identify critical changes turnover-related cognitions and to attempt to link them to specific events at work. Such research will help researchers understand the extent to which nurses follow particular pathways to leaving the organization (i.e., shocks vs. conventional processes). However, it also is pragmatically valuable in that it should help to identify particular kinds of critical events that have a strong influence on nurses. Moreover, to our knowledge, research has not studied positive shocks – events that might change a nurse from being somewhat uncommitted and likely to leave, to being highly engaged in his/her work.

### ***Voluntary Turnover: Knowns and Unknowns***

#### ***What do we know about voluntary turnover?***

The traditional retention model suggests a sequence of events where accumulating dissatisfaction with one’s job leads to a search for alternative positions, an evaluation of those alternatives, and eventually, to intentions to leave one’s current position. Recent studies have added two important extensions to this basic model. First, studies show that this cumulative process is one of several paths employees may follow. While many follow the “traditional” turnover sequence, others have definite or definite plans in place to leave when a particular event occurs. Second, studies of people who have already left the organization highlight the idea that some people leave in response to life-changing events called shocks that stimulate a

reevaluation of one’s employment situation. Finally, as we will demonstrate below, past research has established that several organizational (e.g., organizational support) and personal (e.g., community embeddedness) factors may influence the retention process either by contributing to nurses’ evaluations of the desirability of their organization/profession or by changing the nature of the retention process itself.

#### ***What don’t we know about voluntary turnover?***

Despite the size of the turnover literature, there are important gaps in current understanding of turnover and retention. First, while the general process of turnover is relatively well-understood, very little data exists on shocks and plans, particularly with people who are still employed in their jobs. Research is needed to examine events as they unfold, in order to better understand how they influence retention, rather than relying on after-the-fact explanations of why people leave their jobs.

Second, as far as we know, no research has investigated what might be called “positive shocks” – events that might lead someone to change their mind from leaning toward leaving their organization to deciding to stay. Examples of such events could include having a new, more effective manager, receiving a previously unexpected raise, or perhaps having a particularly grateful and rewarding patient. We believe this is the first to attempt to describe the positive *and* negative work experiences that may stimulate changes to nurses’ turnover-related plans. We investigated three important questions about these experiences: (1) what are the important positive and negative events in nursing work? (2) how do positive and negative events influence turnover/retention related outcomes? and (3) do personal or organizational factors change how people react to positive and negative work experiences?

Finally, another crucial need in this literature concerns the distinction between organizational retention and occupational retention. Nurses who are dissatisfied with their current positions find it relatively easy to find new jobs. This is desirable for the nurses, but problematic for hospitals seeking a stable workforce. However, many nurses decide to leave the profession entirely. This is particularly problematic for early career nurses, many of whom leave the profession entirely in the first two years of their employment. There is a tremendous need for more research on professional turnover; a need that we address in the present study by studying both professional and organizational turnover cognitions.

### ***Critical Retention Research Needs***

Although there is strong consensus among researchers about basic elements of the turnover process, there is a continued need for studies linking nurses' work experiences to retention outcomes. Our study addressed three of these needs: (1) describing the positive and negative experiences that have the strongest effects on retention outcomes, (2) testing an integrative theoretical model that links positive and negative work experiences to retention outcomes, and (3) seeking nurses' perspectives on the interventions that would most strongly affect their work experiences.

#### **Research Need #1**

***Nurse retention research needs to describe both the critical stressors and positive work experiences that influence nurses' retention.***

Many studies have investigated work stressors. However, much of this research has a couple of important problems. First, work stress researchers typically study stress in the aggregate – what might be called the “average stress approach” as researchers search for average levels of stress experienced by a person over relatively large periods of time. Such research has made important contributions to the understanding of stressors. However, it also has significant limitations as it leads to a relatively static conception of work experiences that assumes that what happens to a person during any particular period of time is probably what will happen to them in any other period of time. In contrast, nurses work in a dynamic environment, where the needs of patients, the nature of the organizational climate, the behavior of doctors, coworkers, family members, etc. may lead their experiences to differ dramatically from week to week. Moreover, because general work stress measures ask people to describe their job in general (or over a relatively large period of time, such as during the last year), they are subject to various biases and flaws in peoples' ability to remember and report accurately what occurred in the relatively distant past.

Work stress researchers also typically use standardized measures intended to apply to a wide array of occupations. For example, a typical (hypothetical) item to measure work overload might read “My job often involves more work than I can handle”. These kinds of items are useful for making general statements about workers across several occupations. However, they are not particularly useful in practice because they reveal relatively little about the specific aspects of the job that created the problem. For

example, the question about does not indicate what specific demands nurses face that might be problematic. Thus, such items are not particularly *actionable*: they do not point to specific changes that could be made. In fact, research using such general measures often begins with the assumption that indications of problematic stress levels will require further research to uncover the specific problem driving peoples' responses.

### ***Positive Psychology and Positive Work Experiences***

The term positive psychology encompasses a wide array of concepts, ideas, and applications, all of which rely on the assumption that mental and physical health involve more than simply the absence of mental illness. Thus, positive psychology researchers search for ways to promote positive experiences and develop human strengths, not just solutions to psychological problems. The positive psychology movement has been highly influential in health psychology (e.g., Fredrickson, 2001), organizational psychology (e.g., Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, 2005) and even has crossed over into management scholarship (Roberts, 2006).

One implication of positive psychology for retention research is the recognition that the factors encouraging retention may be different from the factors that promote turnover. This implies that researchers should simultaneously investigate the stressful work experiences that lead people to leave their organization/profession and investigate the positive work experiences, personal resources, and organizational characteristics that promote retention. Research focusing just on the negative aspects of nursing work cannot produce a complete understanding of retention/turnover issues.

Given the relative newness of the positive psychology movement, there is no universally accepted model to derive positive work experiences. Most positive psychology research focuses on positive mental states that result from positive experiences, such as resilience, flourishing, subjective well-being and self-actualization (cf. Spreitzer et al. 2005). Other research focuses on personal strengths (sometimes called virtues) that contribute to positive mental health, such as respect, compassion, intellectual honesty, empathy, altruism, and caring (cf. Miller, 2006). Little research has studied the kinds of workplace events that produce these positive mental states.

LePine, Podsakoff, and LePine (2005) distinguished challenge and hindrance stressors. Hindrance stressors refer to the conventional idea of stressors as demands that lead to negative health, performance, or well-being outcomes. In contrast, challenge stressors lead to personal growth when people successfully respond to them (Lazarus & Folkman, 1984). Although most OHP research focuses on hindrance stressors, some studies show challenge stressors are associated with better retention outcomes (cf. Podsakoff, LePine, & LePine, 2007; LePine, et al., 2005; Cavanaugh, Boswell, Roehling, & Boudreau, 2000). Podsakoff et al. (2007) note the need for further effort to explain why challenge and hindrance stressors obtain different relationships with outcomes. Moreover, little of this research examines workplace events, particularly the kinds of events faced by nurses.

We sought to identify positive work experiences that could influence retention. We start with the assumption that many positive work experiences for nurses involve opportunities to provide high quality care to their patients. For example, Miller (2006) described ‘good work’ in nursing as “providing quality care for and assisting persons in achieving a level of wholeness and health that would enable them to attain their desired goals or life plan. (p. 472).” She described several dimensions of good work, including providing good care, making a difference in others’ lives, treating others with respect, honesty, and compassion, promoting excellence in nursing, advocating for the underprivileged, promoting quality education, and creating a positive learning environment.

#### **Four Kinds of Work Experiences**

***Aim #1. We will describe the critical stressors and positive work experiences that influence nurses’ retention.***

Our first research aim was to describe the critical stressors and positive work experiences that influence nurses’ retention. As a starting point, we drew from industrial/organizational psychology research on task and contextual performance (cf. Borman & Motowidlo, 1993; Motowidlo, Borman, & Schmidt, 1997). This research distinguishes actions people take to fulfill their basic job requirements (i.e., task performance) from actions that contribute to the social or organizational context of work (i.e., contextual performance). We propose a similar distinction for the positive and negative events people experience at work. Thus, people experience performance-related and work-context related events.

Table 3 shows a taxonomy of four broad categories of events. *Successes* refer to positive events people experience as they perform their jobs (such as helping a patient die with dignity or figuring out how to perform a difficult task). *Supports* refer to positive interpersonal interactions people have as they do their jobs (such as having a physician acknowledge a well done job or sharing a funny moment with a coworker). *Demands* refer to events that reflect difficulties in performing one’s job, such as staffing shortages, poorly functioning equipment, or difficult patients. Finally, *conflicts* refer to negative social interactions with coworkers, such as experiencing uncivil treatment from a physician or a disagreement with a physician about a treatment strategy. It is important to note that these distinctions are more conceptual than operational. That is, we would expect nurses’ performance to be positively associated with supports and negatively associated with conflicts. Similarly, we would expect the social context of work to be positively associated with successes and negatively associated with demands. Thus, the primary benefit of this taxonomy is as a starting point for identifying and organizing different kinds of work experiences.

**Table 3. A taxonomy of work experiences.**

	Positive Events	Negative Events
Performance-related events	Successes	Demands
Work context-events	Supports	Conflicts

Although there are likely to be individual differences in how nurses’ perceive such events, we were particularly interested in identifying events that most people would agree fit into these categories. Given our focus on stress and retention, one of our main interests was in identifying highly stressful and very positive events. We used multiple strategies to accomplish this goal, including reviewing existing literature, conducting focus groups with nurses, and employing both qualitative and quantitative data collection methods in our study design. Ultimately, we sought strong quantitative evidence about important work events and to supplement this evidence with nurses’ descriptions of these events in their own voices.

**Research Need #2:**

***Nurse retention research needs an empirically-supported model linking positive and negative work experiences to retention outcomes.***

Although many studies have investigated employee stress and a similarly large body of research has investigated turnover, these bodies of literature are not well-integrated. Thus, stress researchers study retention without incorporating findings from recent turnover research. Similarly, turnover researchers recognize that stressors contribute to turnover but lack a model linking these experiences to the psychological processes studied by stress researchers. Finally, neither group has paid sufficient attention to positive experiences at work.

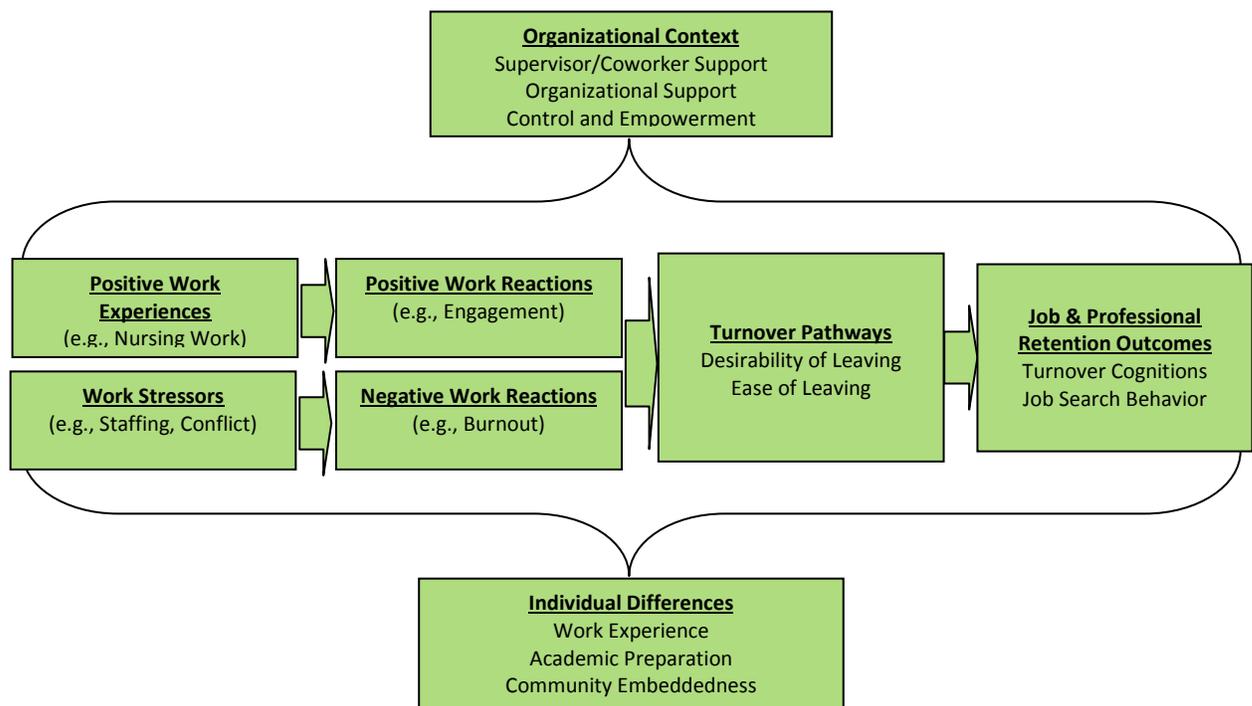
***The Oregon Nurse Retention Model***

We sought a guiding model for our research that would integrate the stress and retention literatures in ways that are theoretically sound, empirically supported, and pragmatically useful. We drew upon a model of military stress called the Soldier Adaptation Model (SAM). Bliese and Castro (2003) developed the SAM to guide work stress research in the military. The SAM synthesizes ideas from general models of

psychological responses to stress (cf., Lazarus & Folkman, 1984) with classic and contemporary models of occupational stress research (e.g., Katz & Kahn, 1978; Schaubroeck, Cotton, & Jennings, 1989). The SAM differentiates between *stressors* – defined as events requiring an adaptive response, *strain* – defined as a set of psychological and physical reactions to stressors, and *outcomes* – which are longer term responses to work strain, such as lower performance, poorer physical and mental health, and increased turnover. Many studies support the basic propositions of the SAM, making it a useful model for evidence-based practice (e.g., Sinclair, Oliver, & Dezsofi, 2004; Sinclair & Tucker, 2006; Sinclair & Oliver, 2004; Tucker, Sinclair, & Thomas, 2005).

Our proposal extends the SAM into the nursing context. Figure 1 shows the resulting *Oregon Nurse Retention Model (ONRM)*. The ONRM assumes that positive and negative work experiences influence retention through their influence on nurses’ burnout and engagement and subsequently, through the perceived desirability of staying and perceived ease of leaving one’s current occupation or organization. The ONRM also recognizes that individual differences and work context variables influence the nature of the stress response. In the following sections we describe the basic components of this model.

**Figure 1. The Oregon Nurse Retention Model.**



**Table 4. Best predictors of voluntary employee turnover cognitions.**

Predictor	Study	K	N	R <sup>2</sup>
Job satisfaction	Hellman et al. (1997)	51	18239	.27
Overall satisfaction	Harter et al. (2002)	19	6505	.13
Org. commitment	Tett & Meyer (1993)	25	5021	.11
Weighted application blank	Griffeth et al. (2000)	6	1329	.10
Engagement	Harter et al. (2002)	19	6506	.09
Performance	McEvoy & Cascio (1987)	24	7717	.08
Continuance commitment	Cooper-Hakim & Viswesvaran (2005)	15	8039	.06
Absence in manufacturing	Mitra et al. (1992)	12	2197	.06
Job satisfaction	Tett & Meyer (1993)	49	13722	.06
Organizational commitment	Cooper-Hakim & Viswesvaran (2005)	105	39508	.05
Organizational commitment	Griffeth et al. (2000)	67	27540	.05
Organizational commitment	Cohen (1993)	36	10596	.05
Overall absence	Mitra et al. (1992)	33	5316	.05
Expected utility of withdrawal	Griffeth et al. (2000)	7	1303	.05
Time lost due to absence	Mitra et al. (1992)	9	1159	.05
Role clarity	Griffeth et al. (2000)	5	795	.04
Occupational commitment	Lee et al. (2000)	8	1645	.04
Tenure	Griffeth et al. (2000)	53	29313	.04
Absenteeism	Griffeth et al. (2000)	28	5364	.04
Affective commitment	Cooper-Hakim & Viswesvaran (2005)	20	7669	.04
Role conflict	Griffeth et al. (2000)	5	780	.04

Notes.

(1) Meta-analyses conducted before 1987 or containing data from less than 5 studies have been omitted.

(2) K = number of studies in meta-analysis; N = number of subjects across all studies; R<sup>2</sup> = percentage of turnover variance explained by the predictor (based on correlations corrected for attenuation and sample size).

### **Organizational Commitment and Nurse Retention**

March and Simon's (1958) highly influential analysis of organizational behavior set the stage for most subsequent turnover research. They argued that turnover stems from an employee's analysis of the desirability of remaining with their organization relative to the ease of obtaining another position. In contemporary research, desirability of staying is typically captured with measures of job satisfaction or organizational commitment; ease of movement is often captured with measures of employees' perceptions of the cost of leaving their position or the quality of available alternatives (cf., Lee, Mitchell, Sablinski, Burton, & Holtom, 2004). In general, this research literature suggests job attitudes are a critical influence on retention.

There are several reasons to study employees' job attitudes in turnover/retention research. First, job attitudes are among the best predictors of turnover.<sup>2</sup> However, Table 4 presents results from several meta-analyses concerning the predictors of turnover cognitions. As the table shows, job attitudes such as job satisfaction and organizational commitment are among the best predictors of turnover-cognitions and, as noted earlier, these cognitions are among the best predictors of actual turnover behavior. Moreover, studies

<sup>2</sup> A full review of the literature on predictors of turnover is beyond the scope of this report. We refer readers seeking such reviews to an excellent article by Holtom, Mitchell, Lee, and Eberly (2008). Readers seeking nurse-focused resources may also visit the ONRP web page ([www.onrp.webnode.com](http://www.onrp.webnode.com)).

specifically examining nurses reach the same general conclusions about the importance of job attitudes (Irvine & Evans, 1995; Leveck & Jones, 1996; Shaver & Lacey, 2003). Second, past research has linked job attitudes to many outcomes of value to employers (e.g., increased job performance), employees (e.g., better health and well-being), and customers/patients (e.g., better service). Third, attitudes are actionable: organizations can improve job attitudes through many actions including supportive leadership, employee participation, and improved staffing systems. Fourth, attitudes are relatively easy to measure. Organizations that track workers’ attitudes (e.g., using employee surveys) should be able to identify and respond to retention-related problems before they become serious.

We focused on organizational commitment as the central predictor of turnover cognitions (i.e., thoughts about leaving) and job search behavior (i.e., actively searching for a new position<sup>3</sup>). Organizational commitment reflects the strength of a person’s attachment to their organization and highly committed employees typically have better personal health, higher performance, and lower turnover (cf. Cooper-Hakim & Visweswaran, 2005; Riketta, 2002). Different types of commitment differ in the target of the relationship and in the underlying nature of the person-organization attachment. The two most relevant targets for nurses are attachments to their organization (i.e., organizational commitment) and to their profession (i.e., occupational commitment). Regarding the nature of these attachments, researchers most commonly study affective and continuance commitment.

**Affective Commitment**

Most past nursing research has focused on affective organizational commitment, which reflects perceived consistency of values between the person and the organization, a willingness to exert extra effort on behalf of the organization, and a strong desire to remain a member of the organization (Allen & Meyer, 1990; Meyer & Allen, 1997). Past research supports an affective commitment-retention link as high levels of affective commitment have been linked to nurses’ intentions to stay or leave (Chang, Du, & Huang, 2006; Glazer, 2005; Werbel & Gould, 1984).

<sup>3</sup> Although we initially considered job satisfaction, we decided to focus only on organizational commitment because job satisfaction and organizational commitment are highly correlated and have very similar patterns of relationships with other measures leading some researchers to contend that both are examples of “general job attitudes” (e.g., Harrison, Newman, & Roth, 2006) and because we felt that other measures (e.g., engagement, burnout, commitment) would capture most relevant variance in nurses’ job attitudes.

**Continuance Commitment**

Other researchers investigate *continuance organizational commitment*. Nurses who have strong continuance commitment (also known as calculative commitment) perceive high costs of leaving the organization (either in social or economic terms) and/or believe that they have few viable employment alternatives (Allen & Meyer, 1990; Meyer & Allen, 1997).<sup>4</sup>

**A Nurse Commitment Taxonomy**

Combining the commitment targets (occupational and organizational) and forms (affective and continuance) yields the four types of commitment we studied (Table 3). Although many studies have examined commitment, retention, and turnover, few studies have examined both organizational and occupational/professional commitment using both affective and continuance commitment measures. This represents an important contribution of the present study as it will enable us to examine the relative importance of and potential influences on occupational and organizational commitment.

**Table 5. An organizational and occupational commitment taxonomy.**

	<b>Organizational Commitment</b> (attachment to the organization)	<b>Occupational Commitment</b> (attachment to profession)
<b>Affective Commitment</b> (shared values, identification)	Affective Organizational Commitment	Affective Occupational Commitment
<b>Continuance Commitment</b> (costs of leaving; lack of alternatives)	Continuance Organizational Commitment	Continuance Occupational Commitment

<sup>4</sup> In our proposal, we discussed measuring multiple dimensions of continuance commitment such as perceived employment alternatives and perceived costs of leaving as well as multiple dimensions of alternatives, such as evaluations of the work context and compensation. Ultimately, we decided to focus on a continuance commitment measure which emphasizes the costs of leaving. This decision reflects our focus on reactions to one’s current workplace.

### ***Turnover Pathways and Cognitions***

Turnover cognitions are the key outcome in the ONRM. We assume that these cognitions are the most proximal antecedent to actual turnover behavior that is within the scope of control of the organization. In contrast with most retention research, we will capture both professional and organizational turnover cognitions. We also will inquire about nurses' specific turnover plans to capture whether they anticipate leaving if a particular condition occurs (e.g., a having a child). While past research has examined similar questions with people who have already left their organization, we know of no studies that have examined this question with current employees.

### ***Critical Work Experiences***

The ONRM is flexible in that any particular study could investigate different work stressors or positive work experiences. As discussed earlier, we began with a set of negative experiences such as staffing, interpersonal conflict, and performance constraints that were suggested by a review of the nursing literature and discussions among our research team members. Miller's (2006) Good Work concept helped stimulate our thinking about positive work experiences, as did the task-contextual distinction in the job performance literature.

### ***Positive or Negative Experiences: Which Matters More?***

One important question related to work experiences involves the relative contributions of positive and negative experiences to retention outcomes. There is some consensus among health researchers that negative experiences exert a stronger effect on people than do positive experiences – that "bad" is stronger than "good" (cf. Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). One common explanation for this is evolutionary; attending to and thus avoiding or adapting to negative events conveys greater survival value than attending to positive events. Although social and personality psychology have investigated these issues, little or no research has examined this issue in the organizational context.

Another interesting issue concerns possible interactions between positive and negative experiences. On any given day, people may experience many positive experiences or negative experiences, and positive and negative experiences often co-occur (Fredrickson, Tugade, Waugh, & Larkin, 2003). These possibilities suggest the need to investigate interactions between

positive and negative work experiences. For example, positive experiences lessen the impact of negative experiences because they reduce the harmful effects of negative emotions (Fredrickson, 2000). Similarly, some research suggests interactions between demands and resources such that job resources may have stronger or weaker effects, depending on the level of job demand (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007). Building on this literature, we expect that the detrimental effects of negative experiences will be weaker for those who also experience positive experiences at work.

### ***Work Reactions: Burnout and Engagement***

Our central measure of employee strain comes from the literature on employee burnout. A large body of research has established that burnout is an important concern for occupations involving intense interpersonal interaction, such as that often experienced by nurses (Laschinger & Leiter, 2006; Leiter & Laschinger, 2006). To define and measure burnout, we focused on Shirom's resource depletion approach. Thus, we measured burnout as a state of emotional exhaustion, physical fatigue, and cognitive weariness (cf. Shirom, 2003).

An emerging body of research has demonstrated the need to study job engagement as a separate state from burnout. Engagement reflects a positive state of vigor, dedication to one's job, and being happily engrossed in one's work. (cf. Schaufeli & Bakker, 2004). Consistent with the general themes of the positive psychology movement, engagement researchers assume that the predictors and consequences of engagement differ from those of burnout.

Engagement is important to study as a proximal reaction to work experiences for several reasons. First, engagement has been shown to predict nurses' intentions to leave their positions (Leiter & Maslach, 2004). Second, as noted above, retention research needs to investigate both positive and negative reactions to work. For example, stronger engagement may help buffer nurses from some of the negative effects of work experiences or to some of the adverse consequences of feelings of burnout. Third, the staffing committees mandated in Oregon by HB 2800 could be viewed as an empowerment intervention, which research already has established should affect nurses' work engagement (Laschinger & Finegan, 2005). Thus, studies of engagement may provide an important link between staffing demands and outcomes desired both by nurses and by health care providers.

### ***Intervening Variables: Organizational Context and Individual Differences***

Although retention research has settled on a set of core predictors of retention, these predictors still do not explain most of the variability in voluntary turnover. This suggests the need to consider differences between nurses and across organizations that might explain additional variability in retention outcomes or that might help identify the conditions under which the critical turnover pathways are stronger or weaker predictors of turnover cognitions and behavior.

The Job Demands-Resources model of stress points out that employees differ in the physical, psychological, social, and organizational resources they can draw upon to cope with work demands (e.g., Bakker, Demerouti, & Verbeke, 2004; Demerouti, Bakker, Nachreiner & Schaufeli, 2001; Schaufeli & Bakker, 2004). Similarly, some applications of the Soldier Adaptation Model discuss the idea of individual differences in the stress-response process (e.g., Thomas et al., 2003). Both of these models assume that differences between organizations and between nurses influence nurses' responses to stressors. For this research, we focus on two sets of contextual variables likely to influence nurse retention: individual differences and the organizational context.

#### ***The Organizational Context***

Prior nursing research has shown a direct relationship between health care management style and several retention issues including group cohesion, turnover intentions, job stress, organizational commitment, and actual turnover (Force, 2005; Laschinger & Finegan, 2005; Laschinger & Havens, 1997; Leveck & Jones, 1996; Shabbrook & Fenton, 2002; Taunton, Boyle, Woods, Hansen, & Bott, 1997; Volk & Lucas, 1991). Nursing researchers also have acknowledged the importance of hospital climate factors such as organizational support, trust, and decision involvement (Aiken et al., 2002; Laschinger & Finegan, 2005; Laschinger & Havens, 1997; Scott, Sochalski, & Aiken, 1999). These findings highlight the idea that retention research needs to study how the work context influences nurses' experiences. Three relevant features of the context include: perceived organizational support, perceived social support, and control at work.

***Perceived Organizational Support.*** Perceived organizational support (POS) reflects employees' sense that their organization values them, recognizes their contributions, and is concerned with their welfare (cf.

Eisenberger, Huntington, Hutchinson, & Sowa, 1986). POS theory predicts that employees who feel stronger support from their employer will respond with more favorable job attitudes and behavior and should have more favorable retention outcomes.<sup>5</sup> A meta-analysis of over 70 studies on POS strongly supported this idea, showing that employees with higher POS report less work stress, more favorable job attitudes, stronger organizational commitment, increased job performance, and lower turnover (Rhoades & Eisenberger, 2002).

***Perceived Social Support.*** A great deal of organizational literature has established that employees' work experiences are strongly affected by perceptions of the quality of their relationship with their coworkers. We use the term perceived social support to refer to employees' perceptions of the extent to which their coworkers provide emotional support (i.e., chances to express negative emotions) informational support (i.e., knowledge that makes one's work live easier), and instrumental support (i.e., tangible actions to help the employee). For nurses, three important groups of coworkers include their nurse colleagues, physicians, and managers. Prior literature on social support strongly suggests that the more support nurses receive from their coworkers, the more favorable their occupational health outcomes (e.g., Rhoades & Eisenberger, 2002) and often shows that perceived support can buffer employees from the adverse effects of job stressors (De Lange, Taris, Kompier, Houtman, & Bongers, 2003).

***Control and empowerment.*** Both POS theory and job stress theory emphasize the protective effects of employees' perceptions of control at work. Workplace control generally refers to the extent to which employees have the opportunity to influence events, decisions, etc. Given the same work demands, employees who believe they have greater control normally experience fewer adverse physical, psychological, and behavioral reactions (Spector, 2002). Similarly, in the POS literature, autonomy (a form of control) has been shown to predict employees' perceptions of the quality of their treatment by the organization. Nursing literature has shown similar effects, as autonomy, control, and collaboration with physicians affect their job attitudes, health outcomes, and perceived quality of patient care (Laschinger, Shamian, & Thomson, 2001; Laschinger & Finegan, 2005).

<sup>5</sup> In our original proposal, we had discussed a focus on organizational fairness. Ultimately, we decided it made more sense to focus on perceived organizational support because POS is more proximal to the processes we were interested in.

### **Individual Differences**

Individual differences are characteristics of nurses thought to affect the relationship between stress and retention. Very little, if any, research has combined state-of-the-art measurement of nurses' work experiences with studies of individual differences. We focused on three individual differences expected to influence nurses' responses to stressors and/or nurse retention: job experience, academic preparation, and community embeddedness.

**Job experience.** Job experience refers to the number of years a nurse has currently worked in nursing and his/her defined specialty. Researchers typically regard 2-3 years as the time during which nurses transition from being considered as novice to being experienced. Past research highlights the need to account for nurses' prior experience in retention studies. For example, although nurses with stronger organizational commitment are less likely to intend to leave their jobs (Chang et al., 2006; Glazer, 2005), some studies conclude that this relationship only exists for nurses with over 1 year of job experience (Werbel & Gould, 1984). Job experience has also been linked to job satisfaction, retention/turnover, and shifts worked (Bowles & Candella, 2005; Cowin, 2002; Leveck & Jones, 1996). Finally, while not a direct focus of our study, past research also strongly supports the link between experience and patient outcomes (cf. Aiken, Clarke, Cheung, Sloane, & Silber, 2003; Blegen, Vaughn, & Goode, 2001; Estabrooks et al., 2005; Hall et al., 2004). Taken together, this research suggests the need to measure nurses' work experience. Inexperienced nurses may experience more negative outcomes from stressful events and may have stronger positive reactions to positive events. Conversely, more experienced nurses may have more negative reactions to certain demands, such as lifting patients.

**Academic preparation.** The educational mix of nurses on a unit also plays a significant role in the quality of patient care (cf. Estabrooks, Midozi, Cummings, Ricker, & Giovannetti, 2005; Hall & Doran, 2004; Potter, Barr, McSweeney, & Sledge, 2003; Seago, Williamson, & Atwood, 2006) and other outcomes (Hall, et al., 2004). Although some research has shown job satisfaction differences by level of experience (e.g., Alexander et al., 1998), there is little research relating retention issues to academic preparation. Thus, one important, but unanswered, question concerns the relationship between nurses' academic preparation and their work experiences.

**Community embeddedness.** Recent research on embeddedness proposes that people's organizational behavior (job performance, turnover, etc.) is affected by the extent to which they are socially enmeshed (or embedded) in their employing organization and community (cf. Lee et al. 2004; Mitchell, Holtom, Lee, Sablinski, Erez, 2001). Mitchell et al. (2001) describe three dimensions of embeddedness: links, fit, and sacrifice. *Links* refer to formal and informal connections of people to others in their community. *Fit* refers to how compatible people feel with their community. Finally, *sacrifice* refers to the perceived costs of leaving a community; higher sacrifice means that people believe they would have to give up more to leave the community.

Embeddedness researchers have discussed both organizational and community embeddedness. However, Lee et al. (2004) found that after controlling for organizational commitment and job satisfaction, community embeddedness predicted turnover outcomes while organizational embeddedness did not. Building on their findings, we will focus on community embeddedness in this study. We developed a new approach to embeddedness research for this study focusing on affective and continuance community commitment. *Affective community commitment* refers to strong feelings of attachment to one's community, based on shared values, etc. *Continuance community commitment* refers to an attachment based on high perceived costs of leaving.

**Aim #2. We will test a new theoretical model that integrates retention research from nursing and organizational psychology with stress research from occupational health psychology.**

The second aim of our research is to test of the Oregon Nurse Retention Model as depicted in Figure 1. This model can be viewed as a system of hypothesized relationships among the core components of the model. The ONRM implies that as positive work experiences decrease and/or negative work experience increase, nurses should report more burnout and less engagement. Higher burnout and lower engagement should be associated with lower organizational and occupational commitment and subsequent increases in both turnover intentions) and job search behavior. Finally, we will present supplemental analyses exploring whether people's definite or conditional turnover plans affect how they react to their work experiences, and present some preliminary findings concerning interactions among positive and negative work experiences.

Several individual and organizational factors may influence the core variables and relationships in this model. We also noted that individual differences and perceptions of the organizational context can influence the core components of the ONRM. We will investigate the three most likely effects of these resources on retention: (a) direct effects on job attitudes and job embeddedness, (b) direct effects on desirability of staying and ease of movement, and (c) buffering effects on the influence of work experiences on burnout and engagement. Specifically, we expected that negative experiences to be less influential for nurses who have more personal and organizational resources to draw upon. We also expected personal and organizational resources to heighten the effects of positive experiences on burnout and engagement.

Throughout our literature review, we emphasized that many components of the ONRM are supported by dozens of past studies. This raises an important question about the relative value of another study assessing these same variables. In our view, there are at least three reasons that testing the ONRM represents a valuable contribution to the literature. First, relatively few studies have been conducted in the nursing context, making this an opportunity to establish the generalizability of relationships established in past research – both to nurses in general and to Oregon nurses in particular. Second, the ONRM test represents an opportunity to integrate findings from many disparate streams of research in a single all-encompassing model. Tests of this model should reveal new relationships among these variables that may not have been identified in prior research and should help prioritize the relative importance of the variables under consideration for future research and practice. Further, testing the ONRM addresses several needed extensions of prior research that we described above. Finally, perhaps the most important reason for examining the ONRM is to provide support for an evidence-based model to guide retention management in health care. The existing evidence for the ONRM is fairly strong, but somewhat indirect. Direct empirical tests of the integrated model are needed with nursing samples.

### **Research Need #3:**

***Nurse retention research needs to address nurses' perspectives on what interventions would affect their positive and negative work experiences.***

As should be evident from the preceding discussion, turnover literature is heavily theoretical. There are many important reasons to conduct theory-oriented research, particularly in an area such as retention where conceptual models help weave together many bodies of research that have not previously been well integrated. However, one problem with this past literature is that it does not provide specific suggestions for interventions to reduce nurses' turnover and/or enhance nurses' positive experiences at work. A second problem is that this literature often does not let nurses' voices come through in research. That is, the concepts, processes, and variables selected by researchers may or may not be the same set that nurses would focus on. Thus, effective management of retention requires research that gives nurses the opportunity to discuss the work-related problems they see as critical on the front lines of health care. Such research also provides a source of confirmatory evidence for models selected by researchers.

***Aim #3. We will identify specific workplace interventions that, from the perspective of nurses, would address positive and negative work experiences.***

We used a similar strategy in response to address Aim #3 as with Aim #1. Specifically, when we asked nurses to describe positive and negative events at work, we also asked them to describe what their organization could do to prevent the negative events and promote the positive events. That is, whereas the vast majority of past research simply asks people how much stress they feel at work, our participants also provided recommendations to further improve their experiences at work.

## ***The Need for Better Research Designs***

Occupational health research often relies on cross-sectional research designs – studies that correlate work stressors with outcomes measured at the same time. Such studies provide a useful “snapshot” of occupational health concerns. However these designs prevent researchers from drawing firm conclusions about the causal influences on retention. That is, because all measures are obtained at the same time, such designs cannot show whether changes in one variable at one time point lead to changes in another variable at a later point in time. One way to improve on cross sectional designs is through longitudinal studies. These studies measure variables at multiple points in time, enabling researchers to draw somewhat stronger conclusions about the “flow” of causality over time. Longitudinal designs help inform occupational health interventions, as they permit more confidence that changes recommended based on research findings will actually yield desired changes in behavior.

A second concern with many work stress studies concerns their relative lack of focus on the actual events experienced by people over the course of their work days. For example, Clark (2006) pointed out that nurse studies often seek statistical generalizations about the “average patient” and the “average nurse” – neither of whom exists in reality. Thus, as Clark notes in the context of nurse staffing research:

*Staffing researchers have extensively studied the shadows of nursing or the traces of nurses’ work left behind in the operations of health systems. Such shadows are found in payroll records and institutional budgets and in incident rates for commonly recorded outcomes that raise questions about possible lapses in care. Although these data, however imperfect, have been key to enormous progress in the field...there are many dangers in crudely quantifying nursing services. (Clark, 2006, p. 162).*

Similar concerns can be raised about studies of nurses’ work experiences. Measures that ask nurses what “generally” happens at work, or what has happened in a wide time interval such as a year, captures “average work experience” but may reveal little about how specific events influence occupational outcomes. We address this concern by using measures of very specific events occurring over relatively narrow time intervals. This approach requires a group of nurses to be sampled repeatedly over time with assessments

that occur much closer in time to the actual events of interest (i.e., rather than asking nurses to recollect events that have taken place over the last several weeks or months).

Such methods are sometimes called interval-contingent recording methods (cf. Reis & Gable, 2000) and are still rare in nursing research (two exceptions are Johnston, Beedie, and Jones, 2006 and Totterdell, Spelten, & Pokorski, 1995). However, along with other related methods such as experience sampling (Miner, Glomb, & Hulin, 2005) and critical incident sampling (Ebright, Urden, Patterson, & Chalko, 2004) are becoming increasingly common in psychology. Recent technological advances have made such research relatively easy to conduct with internet-based or personal digital assistant-based data collection processes. These electronic methods have been praised for their flexibility, accuracy, and efficiency, as they allow for time-stamping of entries and real-time data acquisition, so results may be screened or analyzed as they are being collected (Bolger, Davis, & Rafaeli, 2003).

Finally, researchers normally attempt to design measures that quantify the nature of work demands. Such research often has to make measurement tradeoffs that hinder efforts to capture some of the subtleties of nurses’ experiences at work. In contrast, many researchers contend multiple research methods are necessary to capture complex psychological events (McGrath, 1981). Qualitative assessments allow for new information to be generated that might not fit in the pre-existing structures implied by researchers’ questionnaires, giving nurses the freedom to report their behaviors, attitudes, and thought processes (Strauss & Corbin, 1990). Therefore, our project supplements quantitative measures of work experiences with weekly work experience surveys in which we ask nurses to provide written descriptions of positive and negative events at work as well as interventions that could address these events. Our use of a mixed method approach enables us to extend Miller’s (2006) Good Work concept by investigating whether nurses, when asked to describe specific positive experiences, report similar experiences to those described by Miller or describe other types of positive experiences.