A Model of Antecedents, Mediators and Moderators of Satisfaction and Turnover among Service Workers

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Abstract

Service organizations often struggle with the challenge of providing services to their clients in a cost-effective manner. This problem is particularly acute among health services organizations such as nursing homes. Research has shown that the cost and quality of services is negatively affected by low job satisfaction and high turnover among service workers. Resolving this problem requires a better understanding of the causes of low satisfaction and high turnover among these employees. While some research has focused on market and firm factors that influence satisfaction and turnover, few studies have examined the processes by which these factors affect employee attitudes, or the conditions that moderate their impact. This paper addresses this knowledge gap by developing a research model of the antecedents, mediators and moderators of job satisfaction and turnover intention among service workers.

Key Words: Service workers, job satisfaction, turnover, employee attitudes.

1. INTRODUCTION

Service organizations often struggle with the challenge of providing services to their clients in a cost-effective manner. This problem is particularly acute among health services organizations such as nursing homes. Research has shown that the cost and quality of care in nursing homes is negatively affected by low job satisfaction and high turnover among their service workers (Castle, Engberg, Anderson & Men, 2007). This finding is not surprising since care delivery is a labor-intensive process and the bulk of care to nursing home residents is provided by service workers like nursing aides and licensed practical nurses. A 2006 survey of over 1900 nursing homes found that service workers reported the lowest job satisfaction compared to all other employees (National Survey of Nursing Homes, 2006). A 2003 national survey revealed a 71% turnover rate among healthcare service workers and nearly 52000 vacancies (American Health Care Association, 2003). Dissatisfaction and turnover in service staff can also result in lower occupancy levels, lower resident satisfaction, and problems with regulatory compliance (National Survey of Nursing Homes, 2006). At the national level, nursing home staff turnover is estimated to cost over $4 billion a year, or an average of $250,000 per facility (American Health Care Association, 2003).

Resolving this problem requires a better understanding of the causal mechanisms that lead to low satisfaction and high turnover among service workers (Fitzpatrick, 2002). Although some prior research has examined market and organizational factors associated with satisfaction and turnover, few studies have investigated the processes by which these factors affect a service worker's decision to leave or the contingencies that moderate their impact. A better understanding of mediating processes and moderating conditions should help to develop effective interventions to improve satisfaction and turnover levels. For instance, healthcare jobs can be physically and emotionally demanding, leading to job strain, and in turn, withdrawal and turnover (Foner, 1994). This sequence of events may be mitigated by the worker's sense of empowerment, which by helping her cope better with job demands, can reduce strain and withdrawal. Since internal variables are generally more amenable to managerial intervention, practices that enhance employee empowerment can help alleviate the problem. It is also believed that the solutions to morale and turnover problems have to be based more on management practice than on monetary incentives, not just because cost and reimbursement constraints preclude any significant wage-related response but also because workers have expressed a desire for more autonomy, respect, and advancement opportunities within the organization (Barry, Brannon & Mor, 2005; Bowers, Esmond & Jacobson, 2003).

Some experts suggest that even an adequate complement of well trained service workers will under-perform if the work environment and management practices do not support their efforts (Nakhnikian & Kahn, 2004).   Given the gravity of the retention and turnover problem among service workers in nursing homes, there is need for a comprehensive model that sheds more light on (1) the processes by which work and non-work factors affect satisfaction and turnover among these employees, and (2) the conditions that moderate these relationships. This article develops such a model.

2. PURPOSE

The purpose of this research is to develop a model of antecedents, mediators, and moderators of service worker attitudes in a nursing home setting. The research model focuses on the main effects of two work-related factors and two non-work factors on the intrinsic motivation, job satisfaction, and turnover intention of service workers. The two work-related factors are job design and job demands. The two non-work factors are work-family conflict and family-work conflict. The model also incorporates two mediating variables through which these antecedent factors exercise their effect. The proposed mediators are burnout and empowerment. Additionally, this research model includes three moderating conditions that influence the extent to which the antecedent variables affect intrinsic motivation, job satisfaction and intent to turnover among DCWs. These contingency variables are job control, supportive supervision and supportive coworkers.

3. VARIABLES IN THE MODEL

This section defines the antecedent, mediator, moderator, and outcome variables in the research model. Subsequent sections develop research propositions on the main effects of job design, job demands, work-family conflict and family-work conflict; on the mediating effects of burnout and empowerment; and on the moderating effects of job control, supportive supervision and supportive coworkers. The antecedent variables in the model are job design, job demands, work-family conflict, and family-work conflict. Job design refers to the five core dimensions of the healthcare job that determine the level of job enrichment experienced by these employees. Enriched jobs have higher motivating potential. The extent of enrichment is influenced by five job dimensions – the degree of skill variety, task identity, task significance, autonomy, and feedback experienced by the jobholder (Hackman & Oldham, 1980). Workers in more enriched jobs get more feedback and see the big picture, experiencing greater variety, significance, and autonomy in their work.

Job demands are defined as the perceived requirements for physical and mental effort at work – for instance, the amount of work to be done, how difficult it is, how quickly it has to be done, the level of concentration required, and the presence of conflicts and interruptions (De Croon et al., 2004). Demands may arise from the physical, organizational, or social aspects of the job. Mental effort is common in service jobs and results from the cognitive demands for vigilance, problem-solving, and control over emotions that such jobs can place upon workers. Nursing staff often perceive their jobs to be both physically and mentally demanding (Foner, 1994).

Work-family conflict (WFC) is the degree to which work is perceived as interfering with home or family life (Frone, 2003). WFC can be time-based, strain-based, or behavior-based. Time-based conflict occurs when employees spend an excessive amount of time at work which prevents them from devoting time to responsibilities at home. Strain-based conflict happens when stressful experiences at work spillover into the family domain, interfering with role performance in that realm. Behavior-based conflict occurs when two different behaviors are required in the two domains and employees are unable to adjust to the different expectations from each domain. Family-work conflict (FWC) is the extent to which family obligations impede the fulfillment of work responsibilities (Frone, 2003). FWC occurs when an employee faces family demands and expectations that compete with work demands and expectations.

The mediator variables in the model are empowerment and burnout. Empowerment refers to an individual's positive orientation to his or her work role. It manifests as four cognitive assessments of the work role – meaning, competence, self-determination, and personal consequence (Spreitzer, 1995). Empowered employees see value in their work, have confidence in their own ability, perceive a sense of choice at work, and feel they have an impact on the organization. Burnout is a state of emotional exhaustion, characterized by feelings of physical depletion, emotional drain, reduced personal accomplishment, and cynicism (Pines & Aronson, 1988). It is a 'worn-out' feeling that is more common in persons whose jobs involve excessive contact with other people and typical in service occupations like health care and social work.

The moderator variables in the model are job control, supportive supervision, and supportive coworkers. Job control refers to a person's ability to control his or her tasks and actions in the workplace (Van der Doef & Maes, 1999). It is the degree to which the job provides an individual with the freedom to schedule the work and determine the methods for carrying it out. Supportive supervision is the extent to which employees believe that supervisors show concern for their needs and provide them with support and positive feedback (Deci & Ryan, 1987). Supervisors are seen as being supportive when they encourage subordinates to voice their concerns, enable them to participate in decision-making, facilitate subordinate development, and help them in resolving problems. Supportive coworkers refers to the degree to which coworkers are perceived as being easy to talk to, willing to help out, and reliable sources of support.

The outcome variables in the model are intrinsic motivation, job satisfaction, and turnover intention. Intrinsic motivation is positive work motivation that is closely tied to how well a person performs on the job. It refers to the degree to which an employee feels a sense of accomplishment when a job is well done and a sense of unhappiness when a job is performed poorly (Hackman & Oldham, 1980). Job satisfaction refers to an individual's affective evaluative response to her job. It is a positive state of mind resulting from a favorable appraisal of job experiences (Locke, 1976). Turnover is generally conceptualized as voluntarily leaving the organization. This model includes intent to turnover, a psychological variable that assesses an employee's propensity to quit the organization. Turnover intention is closely related to and an immediate precursor of turnover (Mobley et al., 1979).

4. THE MAIN EFFECTS MODEL

The organizing framework for this research is that employee attitudes are affected by both work and non-work related factors. An enriched job design is expected to positively influence the level of intrinsic motivation and job satisfaction experienced by workers while negatively affecting their intent to turnover (Hackman & Oldham, 1980). Employees who perceive greater variety, identity, and significance in their job tend to see their work as being more meaningful. Workers who are given greater autonomy in their job are more willing to take responsibility for the outcomes of their work. Staff members who receive more feedback in their job are more aware of their performance and more likely to respond with happiness when they do well and with sadness when they perform poorly. This sense of heightened awareness, meaningfulness, and responsibility leads to higher levels of intrinsic motivation and job satisfaction, and lower levels of withdrawal, turnover and absenteeism (Hackman & Oldham, 1980).

Needs satisfaction theory may also explain why enriched jobs are expected to be positively associated with job satisfaction (Miller & Monge, 1986). Employees who are given an opportunity to use their skills in meaningful ways and who see the consequences and impact of their actions are more likely to satisfy higher order needs related to seeking greater challenges, more autonomy, and higher responsibilities (Vandenberg, Richardson & Eastman, 1999). Such needs are fulfilled to an even greater extent when employees feel that they have control over and responsibility for decisions that affect their work. Greater need fulfillment results in higher job satisfaction (Miller & Monge, 1986). Based the preceding discussion, the following research propositions are offered:

> *Proposition 1: Service workers who experience greater levels of job enrichment will have higher levels of intrinsic motivation.*
> *Proposition 2: Service workers who experience greater levels of job enrichment will have higher levels of job satisfaction.*
> *Proposition 3: Service workers who experience greater levels of job enrichment will report lower levels of turnover intention.*

The social information-processing perspective holds that employee attitudes and behavior are directly affected by their perceptions of work (Salancik & Pfeffer, 1978). High job demands decrease an employee's ability to help clients and leads to frustration and job dissatisfaction (Jackson, Schwab & Schuler, 1986). It has been suggested that the physical and cognitive job demands perceived by individuals will influence their absence behaviors and turnover intentions (Parker, Wall & Cordery, 2001). When workers feel that work demands exceed their physical and psychological resources, they withdraw as a way of coping with the overload. De Croon and colleagues (2004) found that both types of job demands were positively related to turnover. Turnover was also found to be positively related to workload among health care workers (Anderson, Issel & McDaniel, 1997).

These arguments lead to following research propositions:

> **Proposition 4**: *Service workers who experience greater job demands will have lower levels of job satisfaction.*
>
> **Proposition 5**: *Service workers who experience greater job demands will report higher levels of turnover intention.*

WFC and FWC are related but distinct constructs and both are expected to be negatively related to job satisfaction (Netemeyer, Boles & McMurrian, 1996). Role theory suggests that people maintain multiple role identities, with work and family roles being the two most important ones for most individuals. Any incompatibility between these two roles can create tension and negative feelings, and the sense that one role is interfering with the other can lead to a negative evaluation of the source of the threat (Lazarus, 1991). If the work role is perceived to interfere with the family role, then the work role is likely to be appraised in a negative way. The extent to which the job and family roles are seen as mutually incompatible will determine the degree to which the jobholder experiences job dissatisfaction (Lazarus, 1991).

A positive relationship between WFC, FWC and turnover intention is expected, based on the argument that individuals who are experiencing increased conflict between their work and home responsibilities might start looking for an alternative work setting – one that offers better work schedules or makes it easier to balance work and family demands (Cohen 1997). Several researchers have suggested that WFC can lead to withdrawal cognitions, which is an antecedent of turnover. Boyar and colleagues (2005) maintain that employees with high WFC experience dissatisfaction and stress due to their inability to meet family responsibilities, and reduce their dissatisfaction and stress by withdrawing from the workplace. It has also been pointed out that individuals are more likely to blame the organization for inter-role conflict, and less willing to accept direct responsibility for managing work-family interface problems on their own (Frone, Russel & Cooper, 1992). These negative attitudes toward the organization can increase withdrawal cognitions and intent to turnover. Hence, it is proposed that:

> **Proposition 6**: *Service workers who experience greater WFC will have lower levels of job satisfaction.*
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> **Proposition 7**: *Service workers who experience greater WFC will report higher levels of turnover intention.*
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> **Proposition 8**: *Service workers who experience greater FWC will have lower levels of job satisfaction.*
>
> **Proposition 9**: *Service workers who experience greater FWC will report higher levels of turnover intention.*

5. MEDIATING EFFECTS IN THE MODEL

Baron and Kenny (1986) describe a mediator as a generative mechanism through which the independent variable (IV) influences the dependent variable (DV), and suggest that mediation exists when the mediator variable accounts for the relationship between the IV and the DV. According to them, a mediating effect exists when the following conditions are met: (1) the independent variable significantly affects the dependent variable, (2) the independent variable significantly affects the mediator variable, and (3) the mediator variable significantly affects the dependent variable when the independent variable is controlled, with the significant effect of the independent variable reduced or eliminated when the mediator is controlled.

The previous section developed research propositions that address Baron and Kenny's first condition for mediation – the expectation of significant relationships between the antecedent variables (job design, job demands, WFC and FWC) and the outcome variables (intrinsic motivation, job satisfaction, and turnover intention). This section develops research propositions regarding the other two mediating conditions. It is proposed that the mediator variables, empowerment and burnout, will be significantly related to the outcome variables, and that their presence will render less significant or insignificant the formerly significant relationships between the antecedent and outcome variables.

Job design will have a positive relationship with empowerment. As defined earlier, employees are considered to be empowered when they feel a sense of self-confidence, self-determination, meaning and impact on outcomes. When jobholders are given more autonomy in their jobs, they are more likely to develop a sense of choice and self-determination. When they use a variety of skills to perform challenging tasks and see the results of their work in a larger context, they are more likely to feel confident in themselves and their ability to impact the organization.

When they believe the work to be of significance, they are more likely to have a sense of meaning and purpose. Empowerment will also be positively related to intrinsic motivation and job satisfaction, and negatively related to turnover intent. Empowered employees have a positive orientation to their work role and they care deeply about how well they perform (Spreitzer, 1995). Hence they are more likely to appraise their job experiences in a favorable manner, reporting higher levels of job satisfaction and a lower propensity to quit. These workers are also more likely to experience a sense of joy when performing well and a sense of disappointment when performing poorly. The following propositions can be made on the basis of the above discussion:

> **Proposition 10**: *Empowerment will mediate the relationship between job enrichment and intrinsic motivation among service workers: Job enrichment will be positively related to intrinsic motivation and empowerment, empowerment will be positively related to intrinsic motivation, and when empowerment is controlled, the significant relationship between job enrichment and intrinsic motivation will be reduced or no longer significant.*
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> **Proposition 11**: *Empowerment will mediate the relationship between job enrichment and job satisfaction among service workers: Job enrichment will be positively related to job satisfaction and empowerment, empowerment will be positively related to job satisfaction, and when empowerment is controlled, the significant relationship between job enrichment and job satisfaction will be reduced or no longer significant.*
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> **Proposition 12**: *Empowerment will mediate the relationship between job enrichment and turnover intention among service workers: Job enrichment will be negatively related to turnover intention and positively related to empowerment, empowerment will be negatively related to turnover intention, and when empowerment is controlled, the significant relationship between job enrichment and turnover intention will be reduced or no longer significant.*

Job demands bear a positive relationship to burnout. Using a conservation of resources framework, Janssen and colleagues (1999) explain that job demands threaten the availability of 'resources' cherished by employees and trigger strain in the form of physical and emotional exhaustion. They suggest that overloaded health care workers often have little time to help clients, resulting in a decline in interaction quality. Inability to meet work and organizational expectations leads to the frustration, cynicism, and disengagement that is characteristic of burnout (Jackson, Schwab & Schuler, 1986). When overextended employees feel they no longer have sufficient emotional resources to handle job-related stressors, burnout sets in (Lee & Ashforth, 1996).

The relationships between burnout, job satisfaction, and turnover intent have been documented in the literature, with high burnout linked to low job satisfaction in healthcare settings (Prosser et al., 1997). The link between burnout and job satisfaction has been explained based on the fact that burnout is the result of an appraisal process whereby an individual evaluates demands relative to her coping resources. The outcome of this appraisal affects the individual's psychological well-being, including job satisfaction.

The effect of burnout on turnover intention can be explained by conceiving of withdrawal from the workplace as a 'flight' response used by employees to cope with job strain (Dwyer & Ganster, 1991). Burned out employees in human services institutions may disengage and desire to leave an organization that they perceive to be dehumanized (Jackson, Schwab & Schuler, 1986). Prior research has found evidence of the effect of job strain on turnover among workers in a variety of service settings including education, social welfare, child-care and health care (De Croon et al., 2004; Jackson, Schwab & Schuler, 1986). These arguments lead to the following propositions:

> **Proposition 13**: *Burnout will mediate the relationship between job demands and job satisfaction among service workers: Job demands will be negatively related to job satisfaction and positively related to burnout, burnout will be negatively related to job satisfaction, and when burnout is controlled, the significant relationship between job demands and job satisfaction will be reduced or no longer significant.*
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> **Proposition 14**: *Burnout will mediate the relationship between job demands and turnover intention among service workers: Job demands will be positively related to turnover intention and burnout, burnout will be positively related to turnover intention, and when burnout is controlled, the significant relationship between job demands and turnover intention will be reduced or no longer significant.*

Previous research suggests positive relationships between WFC, FWC and burnout. Individuals who oscillate between work and family roles in a repetitious cycle experience greater stress levels when they cannot find a personally satisfactory balance between these roles (Wilcox-Mathew & Minor, 1989). The experience of WFC has been shown to be stressful and capable of producing emotional responses such as anxiety, tension, confusion, discontentment, and frustration (Brough & Driscoll, 2005). One theoretical framework that can be used to conceptualize the effects of WFC and FWC on burnout is Marks' (1997) scarcity hypothesis, which contends that individuals have a finite amount of energy and involvement in multiple roles can result in the depletion of energy resources, leading to burnout. The positive relationship between burnout and job satisfaction and the negative relationship between burnout and turnover intention have been discussed in the section leading up to propositions 13 and 14. Accordingly, the following relationships are proposed:

> *Proposition 15: Burnout will mediate the relationship between WFC and job satisfaction among service workers: WFC will be negatively related to job satisfaction and positively related to burnout, burnout will be negatively related to job satisfaction, and when burnout is controlled, the significant relationship between WFC and job satisfaction will be reduced or no longer significant.*
> *Proposition 16: Burnout will mediate the relationship between WFC and turnover intention among service workers: WFC will be positively related to turnover intention and to burnout, burnout will be positively related to turnover intention, and when burnout is controlled, the significant relationship between WFC and turnover intention will be reduced or no longer significant.*
> *Proposition 17: Burnout will mediate the relationship between FWC and job satisfaction among service workers: FWC will be negatively related to job satisfaction and positively related to burnout, burnout will be negatively related to job satisfaction, and when burnout is controlled, the significant relationship between FWC and job satisfaction will be reduced or no longer significant.*
> *Proposition 18: Burnout will mediate the relationship between FWC and turnover intention among service workers: FWC will be positively related to turnover intention and to burnout, burnout will be positively related to turnover intention, and when burnout is controlled, the significant relationship between FWC and turnover intention will be reduced or no longer significant.*

6. MODERATING EFFECTS IN THE MODEL

Baron and Kenny (1986) describe moderators as variables that influence the direction and/or strength of a relationship between two other variables. According to them, a moderator interacts with the IV to affect the level of the DV, and if such an interaction is significant, a moderating effect is said to exist.

Job control can buffer the negative effects of job demands. Control over work has a positive impact on ability to adjust and sense of well-being (Sagie & Krausz, 2003). People use control as a pro-active coping strategy, reducing the stressful aspects of their job by limiting their exposure to emotional demands and deferring some activities to more convenient times (Parker, Wall & Cordery, 2001). Karasek's (1979) demands-control model suggests that high levels of work control protect the employee from the harmful effects of a demanding job. Heavy job demands intensify the strain experienced by employees, but high control over when and how the work is done tends to mitigate the level of strain. Thus, it can be expected that DCWs who feel that they have more control in their jobs will be less stressed out, and hence more satisfied and less likely to think about leaving the organization. Hence, the following relationships are expected:

> *Proposition 19: Job control will moderate the relationship between job demands and job satisfaction among service workers.*
> *Proposition 20: Job control will moderate the relationship between job demands and turnover intention among service workers.*

Social support serves as an important resource or coping mechanism that helps individuals reduce the effects of stressors such as conflict between the work and family roles (Lawrence, 2006). Two frequently used sources of social support are supervisors and coworkers. WFC and FWC create deficits in and threats to individual relationships, achievements and resources. Supportive supervisors are in the most optimal position to alleviate resource constraints and counter such deficits and burnout-producing threats (Lawrence, 2006). Supportive supervisors can create positive work environments that foster healthy relationships in the workplace. They can provide employees with reassurance of worth and self-esteem through affirming feedback, recognition of achievements, and participatory management styles.

They can also ensure that employees have enough physical or time-related resources to fulfill the conflicting expectations posed by multiple roles. For instance, supportive supervisors take employee concerns and needs into account when assigning workloads or setting deadlines, or they allocate more staff to take over aspects of an employee's work role when WFC is experienced (Gilbreath, 2004).

The buffering role of supportive coworkers is based on the premise that individuals are more likely to mobilize support from people who are similar to them (Thoits, 1986). Greater situational and socio-cultural similarity makes coworkers an effective source of emotional support for countering WFC-related threats to relationships, and of feedback support for alleviating threats to the achievement domain (Lawrence, 2006). By being in the same boat, so to speak, colleagues can be more empathetic about inter-role predicaments and more willing to help out. Individuals are more likely to confide in or vent to peers than to supervisors. Coworkers can also provide reassurance regarding an individual's performance in the workplace and share information on how they themselves cope with work-family issues. Thus, it is proposed that:

> *Proposition 21: Supportive supervision will moderate the relationships between WFC and the two outcome variables, job satisfaction and turnover intention.*
> *Proposition 22: Supportive supervision will moderate the relationships between FWC and the two outcome variables, job satisfaction and turnover intention.*
> *Proposition 23: Supportive coworkers will moderate the relationships between WFC and the two outcome variables, job satisfaction and turnover intention.*
> *Proposition 24: Supportive coworkers will moderate the relationships between FWC and the two outcome variables, job satisfaction and turnover intention.*

7. CONCLUSION

Dissatisfied service workers and a revolving door phenomenon that keeps turnover high have contributed to increasing costs and low quality of care in the nursing home industry. This can be attributed to a paucity of knowledge regarding the manner in which external factors, organizational characteristics, and individual attitudes affect the job satisfaction and turnover intention of workers. Little, if any, research has been done on the mediators and moderators of job satisfaction and turnover among these workers. Managers need more information on the types of interventions that can be implemented to address this problem. They also need to know how conditions on the ground can affect the success of such interventions and what they can do if particular interventions are not as effective as hoped for. This paper address this lack of knowledge by offering a model of external and internal antecedent factors that affect job satisfaction and turnover intention among service workers. The model also proposes two mediation pathways through which these antecedents are expected to influence outcomes and three moderating conditions that will determine the extent to which the antecedents and mediators will impact the outcomes. This model is well grounded in theory and an extensive review of the literature was conducted to ensure that all the research propositions were developed using appropriate management concepts and well-regarded organizational behavior frameworks.

The model developed in this paper will be beneficial to both management researchers and practicing managers. Management scholars will be interested in testing the various research propositions offered in this article and the results of their empirical investigations will add to the body of knowledge in this important area of management. Managers can use this model to better understand how their programs and policies work and to figure out why, in some circumstances, their actions may not have the desired effects. This article offers job redesign as an affordable alternative to expensive incentive programs to managers who want to boost worker satisfaction and retention. It explains how job characteristics can be improved to empower employees and reduce burnout. It suggests that managerial initiatives can be strengthened by providing a more supportive atmosphere and work-related control to employees.

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