

PERSON-ENVIRONMENT FIT: WORK-RELATED ATTITUDES AND BEHAVIORAL
OUTCOMES IN CONTINUING CARE RETIREMENT COMMUNITIES

by

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B.S., Fu-Jen University, Taiwan, 2001

M.B.A., Fu-Jen University, Taiwan, 2005

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Abstract

Academics and practitioners alike have studied the concept of person-environment fit (P-E fit) during the last two decades. How well a person fits the work environment may be an effective indicator of attitudes and behaviors in organizations. P-E fit is not completely conceptualized, so existing studies of fit theory have focused only on particular dimensions of fit leading to contradictory results. Therefore, Study 1, using multi-dimensional environment fit, tested relationships among the environment fits, work related attitudes, and outcomes at the individual, group, and organization levels. In addition, Study 2 examined the effect of relationship qualities between hierarchical levels (supervisor-subordinate) and multi-dimensional fit on employee turnover intention.

To empirically test the proposed relationships, 288 foodservice employees at continuing care retirement communities (22 facilities) statewide submitted questionnaires. Of these, 261 and 254 were usable in study 1 and study 2, respectively, for further data analysis. The results of structural equation modeling (Study 1) suggested that employee need-supply fit, demand-ability fit, person-group fit, and person-organization fit were positively related to employee need satisfaction. Further, need satisfaction was positively related to outcome variables like work engagement, interpersonal citizenship behavior, and organizational commitment. Results of hierarchical multiple regressions (for Study 2) showed that employee need-supply fit perception related negatively to turnover intention. The study also found that the leader-member exchange relationship moderated the need-supply fit and turnover intention. Thus, a close exchange relationship between leaders and subordinates could keep subordinates from leaving because of a need-supply misfit. Further discussion and managerial implications of the findings along with directions for future studies are provided.

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Chapter 1 - Introduction

According to the Department of Health & Human Service (HHS, 2009), the population of senior Americans will double from 2000 to 2030, to comprise approximately 20% of the U.S. population affecting the demand for high quality, end-life living. In 2020, for example, approximately 12 million people will need long-term care services (American Association of Homes and Services for Aging [AAHSA], 2008). As housing and support services for aging seniors increases, more workers will also be needed. However, the number of qualified workers for the anticipated demand falls far short of what is necessary (Powers & Powers, 2010). Recruiting new employees and, more importantly, retaining existing employees have become increasingly difficult across the country (Stone & Dawson, 2008), and this lack of care workers will become a more salient concern in continuing care retirement communities (CCRCs) in the future (Castle, Engberg, Anderson, & Men, 2007).

CCRCs are a labor-intense workplace. Employees in CCRCs may need to help residents with daily living activities like eating, housekeeping, and transportation. Additionally, they may fulfill other social, cultural, and educational functions (Quinn, 2002). These employees are thus critical to the quality of life of CCRCs residents. Weinberg, Zinzavage, Pfefferle, Dossa, and Bishop (2007) concluded that committed employees are more likely to engage in considerate, friendly care of residents, which creates positive living conditions. Moreover, if staff are attached to the facility, they become a stable workforce creating a better relational environment for residents.

Care services in CCRCs can be team-based or home-based, where the front-line employees not only work independently but also cooperate with others. Employees must offer extra assistance when other employees need help. Further, because residents are central to the facilities,

employees must surpass residents' wishes, while not compromising service quality. Moreover, physical and mental dysfunction among residents may require employees to make decisions on their behalf, so employees must consider residents' best interests (Pratt, 2010).

To offer the intense and complicated care that residents need, facilities must have employees who can do their jobs well and fit in with their work group and organization (Kristof-Brown, Jensen, & Colbert, 2002). Staff members at CCRCs presumably have the appropriate professional abilities and knowledge but need proper work values as well. Employees should interact easily with other personnel, cooperate with team members, and follow the leadership of their supervisors. The extent to which employees' skills, abilities, and values match with a work domain (i.e., job, group, or organization) suggests levels of fit (i.e., person-job fit, person-group fit, and person-organization fit), which in turn contribute to assorted work-related attitudes and behaviors (Kristof-Brown, Jasen, & Colbert, 2002; Kristof-Brown, Zimmerman, & Johnson, 2005; Resick, Baltes & Shantz, 2007). Other studies have examined the effects of fit in the workplace. When staff does not get along, they likely will have fewer positive attitudes and behaviors: engaging in work (i.e., work engagement), putting residents' best interest first (i.e., customer-oriented behavior), helping coworkers (i.e., interpersonal citizenship behavior), and developing attachment to their organizations (i.e., organizational commitment).

Quinn (2002) found that the quality of existing relationships with coworkers as well as residents in CCRCs create favorable attitudes toward work. Recognition and respect for working and caring for residents also affects this positive attitude. Respect, recognition, and reward are important to employee job satisfaction, as is having a voice in workplace decisions (Deutschman, 2001; McGilton, 2002). Additionally, according to the self-determination theory, once employee needs for relationships with others are satisfied, once they are competent at their work and autonomous, they naturally develop a variety of intrinsically motivated behaviors in their work

environment (Baard, Deci & Ryan, 2004, Deci & Ryan, 2008). Therefore, this study first proposes that employees who perceive a good fit between themselves and their work domain would be better satisfied with work relationships, competence, and autonomy, and in return work their best, help their coworkers, display customer oriented behaviors, and commit to the organization.

The relationship between managers/supervisors and employees in CCRCs has become more important in recent years. In response to a severe shortage of employees in CCRCs, long-term care facilities must develop a more effective way to recruit and retain staff. Previous research has commented that effective management is a high priority in retaining stable staffing and maintaining high-quality care in the facilities. Supervisors who create an environment that supports and encourages staff would enhance employee motivation to achieve, relate to, and enjoy their work (Tellis-Nayak, 2007), while helpful and positive feedback facilitate employee attachment to the workplace and lead to better relational environment for residents (Bishop, Weinberg, Leutz, Dossa, & Zincavage, 2008). In fact, Donoghue and Castle (2009) found that when supervisors exclude employees from discussion and make decisions for employees, employees are more likely to quit. Supervisors who allow employees autonomy, giving them freedom to make decisions, lose fewer employees.

Staff in CCRCs often consider supervisors as agents of the facility. The quality of the relationship between leaders and staff (i.e., leader-membership exchange, or LMX) thus not only affects staff members, but also work groups and facilities as a whole (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011). The study argued that high quality exchange relationships, not only between the people and their work environment but also supervisors, allows employees to secure resources and support from each exchange relationship, which benefits facilities by decreasing negative attitudes (and thus turnover). This implies that LMX is critical to the processes of

employee quality-care development. Because of this unique characteristic, LMX has been the focus of research in many different areas; however, little has been done to investigate the effect of LMX on relationships between fit perception and workplace outcomes. Moreover, this study further argues that LMX moderates the effects of misfit perception in the work environment. Specifically, the study suggests that, for low fit employees, turnover intention would be improved as they develop high LMX with their supervisor.

Statement of Problems

Although research has examined fit theories to explain work-related attitudes and behaviors of employees, existing studies have focused only on particular dimensions of fit. Further, the author found only limited empirical research, particularly in senior services.

Incomplete Concept of Person-Job Study

Previous studies of person-job fit (P-J fit) have focused on the level of skills and abilities employees can bring to their jobs to meet job requirements (i.e., demands-abilities fit, or D-A fit; Kristof, 1996). However, the P-J fit can also refer to environmental benefits for the employee (i.e., needs-supplies fit, or N-S fit). Much previous research assessing P-J fit considers only how job candidates' skills and abilities or individual characteristics fit with job demands, instead of focusing on how individual needs can be satisfied by their job (i.e., employees' need fulfillment; Cable & DeRue, 2002; Resick, Baltes, & Shantz, 2007).

Thus, P-J fit can be either D-A fit or N-S fit; each fit affects employee attitudes and behaviors differently (Resick et al., 2007). The organization should consider employees as instruments for organizational effectiveness but must also consider the subjective well-being of employees. Therefore, considering both fits in P-J fit concept may provide a better explanation of related factors (Li & Hung, 2010).

In addition, using an incomplete concept (only one aspect of P-J fit) to assess fit may result in inconsistent results. For example, job satisfaction has been mentioned as a strong outcome of P-J fit, but fit is usually considered D-A fit in other research (Kristof-Brown et al., 2002; Kristof-Brown et al., 2005; Gregura & Diefendorff, 2009). However, Cable and ReDue (2002) included D-A, N-S, and P-O fit in their study and found that N-S fit, not D-A fit, was

more closely related to job satisfaction. Therefore, this study incorporates both fits (D-A fit and N-S fit) to better explain needs satisfaction among employees.

Unbalanced Efforts of Person-Environment Study

Person-environment (P-E) fit has been further categorized into P-J fit, person-vocation fit, person-organization (P-O) fit, person-group (P-G) fit (Kristof, 1996), and person-supervisor fit (Kristof-Brown et al., 2005). Compared to P-J fit and P-O fit, other types of fit have been under explored (Kristof-Brown et al., 2005). Kristof-Brown et al. (2005) suggested that P-G fit could be an effective tool in selecting employees to increase their contributions beyond job requirements. Companies that rely on employees working interdependently or emphasize team work are especially likely to count on P-G fit.

Greguras and Diefendorff (2009) found that D-A fit, P-G fit, and P-O fit distinctly affect organizational commitment and job performance through types of needs satisfaction. They argued, for example, that the P-G fit maybe less important in the service-oriented organization because it focuses more heavily on customers. However, good service cannot be achieved without cooperation among employees. These authors called for more research on other types of P-E fit.

Unclear Role of Needs Satisfaction in CCRCs

The concept of needs satisfaction stems from the self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000), which argues that overall needs satisfaction is a basic requirement for people to provide positive outcomes in any setting. Needs satisfaction has been discussed in a variety of life domains (i.e., home, school and work), in different relationships (i.e., friendship, family, spousal), over many topics (coaching, academics, volunteer engagement, and job performance; Gagne, 2003; Gagne & Deci, 2005; Wei, Shaffer, Young, & Zakalik, 2005;

Reinboth & Duda, 2006; Van den Broeck, Vansteenkiste, Witte, & Lens, 2008). However, on the whole, relatively little research has been done in CCRC settings.

Strength of Vertical Dyads

The relationship between supervisor and employee has been a major concern in long-term care services. Related issues include supervisor support, managers' attitudes (Tellis-Nayak, 2007), respect from supervisors (Bishop, Weinberg, Leutz, Dossa, & Zinavage, 2008), empowerment (Caspar & O'Rourke, 2008), characteristics of managers and employees (Bishop et al., 2009), leadership style (Donoghue & Castle, 2009), and supervisor behavior (Probst, Baek, & Laditka, 2010). Research in the area often assumes that leaders treat employees equally. However, supervisors, in fact, develop different types of relationships with each employee. Research focusing on this issue is still scarce.

Purpose and Objectives

Given the shortcomings of current research in this area, the purpose of this study is to propose and test an integrated model delineating relationships among multi-dimensional fit, work-related attitudes, and behaviors at individual, group, and organization levels in CCRCs. The specific objectives of this study are

- (a) To relate the concepts of N-S fit, D-A fit, P-G fit, and P-O fit with psychological needs satisfaction of employees;
- (b) To investigate the effects of psychological needs satisfaction on work engagement, customer-oriented behavior, interpersonal citizenship behavior, and organizational commitment in CCRCs; and
- (c) To examine the effects of leader-member exchange in moderating the N-S fit, D-A fit, P-G fit, and P-O fit consequences of turnover intention.

Significance of the Study

The current study responds to the need for a multi-dimensional view in P-E fit theory. By including four types of fit, D-A, N-S, P-G, and P-O, this study proposes a theoretical model where the relationships between employee perceptions of types of fit and work-related attitudes (work engagement and organizational commitment) and behaviors (customer oriented behaviors and interpersonal citizenship behaviors) are mediated by psychological needs fulfillment of employees. In addition, this study examines the leader-employee exchange relationship as a moderator of the relationship between P-E fits and turnover intention. The study will, first, contribute to the P-E fit literature by investigating the processes through which multi-dimensions of fit influence employee work engagement, customer oriented behaviors, interpersonal citizenship behaviors, and organizational commitment. This study secondly contributes to the self-determination theory by investigating the consequences of needs satisfaction on favorable attitudes and behaviors of employees. Third, the study contributes to the P-E fit literature by examining how relationship qualities between hierarchical levels (supervisor-subordinate) affect employees' turnover intention.

Hypotheses

To achieve the purpose and objectives of this study, the following hypotheses are proposed:

Hypotheses of Study 1

H1: Employee perceived N-S fit has a positive effect on needs satisfaction.

H2: Employee perceived D-A fit has a positive effect on needs satisfaction.

H3: Employee perceived P-G fit has a positive effect on needs satisfaction.

H4: Employee perceived P-O fit has a positive effect on needs satisfaction.

H5: Needs satisfaction has a positive effect on work engagement.

H6: Needs satisfaction has a positive effect on customer oriented behavior.

H7: Needs satisfaction has a positive effect on interpersonal citizenship behaviors.

H8: Needs satisfaction has a positive effect on organizational commitment.

Hypotheses of Study 2

H9: Employee perceived N-S fit has a negative effect on turnover intention.

H10: Employee perceived D-A fit has a negative effect on turnover intention.

H11: Employee perceived P-G fit has a negative effect on turnover intention.

H12: Employee perceived P-O fit has a negative effect on turnover intention.

H13: Leader-member exchange has a negative effect on turnover intention.

H14: Leader-member exchange moderates the relationship between N-S fit and turnover intention.

H15: Leader-member exchange moderates the relationship between D-A fit and turnover intention.

H16: Leader-member exchange moderates the relationship between P-G fit and turnover intention.

H17: Leader-member exchange moderates the relationship between P-O fit and turnover intention.

Definition of Terms

Person-Job (P-J) Fit: Person-job fit is the “job or the specific set of tasks required for a given position. If a person has the abilities necessary to perform the requisite tasks effectively or the job meets that individual’s needs, then a good PJ fit exists” (Kristof et al., 2002, p. 985).

Needs-Supplies (N-S) Fit: Needs-supplies fit refers to “employee desires and job supplies available to meet those desires” (Edwards, 1991, p. 285).

Demands-Ability (D-A) Fit: Demands-abilities fit addresses “job demands and employee abilities available to meet those demands” (Edwards, 1991, p. 285).

Person-Group (P-G) Fit: Person-group fit is defined as “the compatibility between individuals and their work groups” (Kristof, 1996, p.7).

Person-Organization (P-O) Fit: Person-organization fit is defined as congruence between organization and employees in terms of values and norms (Chatman, 1989).

Needs Satisfaction (NS): Needs satisfaction refers to the fundamental nutrient for people growth and development, including the needs for autonomy, relatedness and competence (Deci & Ryan, 2008).

Work Engagement (WE): Work engagement refers to “the harnessing of organization members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances” (Kahn, 1990, p. 694).

Customer Orientation (CO): Customer orientation refers to the degree to which staff, in the CCRCs, offer the care service based on residents’ best interest (Saxe & Weitz, 1982).

Interpersonal Citizenship Behaviors (ICB): Interpersonal citizenship behavior is defined as the employees’ engagement in unrewarded and discretionary cooperative assistance to other group members, thus contributing to individual or group performance (Setton & Mossholder, 2002).

Organizational Commitment (OC): Organizational commitment refers to the relative strength of an individual’s identification with and involvement in a particular organization (Mowday, Porter, & Steers, 1982).

Leader-member exchange (LMX): Leader-member exchange refers to the quality of dyadic relationship between leaders and each of their followers (Dansereau, Graen, & Haga, 1975; Graen, Alvares, Orris, & Martella, 1970).

Limitation & Delimitation of the Study

The limitations of the proposed study are addressed below:

First, a cross-sectional design was used to examine the proposed relationships among the constructs. Knowing that the employees' attitudes and behaviors may change dynamically, the data collected at one point in time in this research may not catch changes over time related to various fit dimensions.

Second, data were collected from foodservice employees in continuing care retirement communities statewide. Thus, the results of the study should be interpreted only for certain types of organizations and industries. That is, the findings in this study may not generalize to other work settings.

Third, self-reported questionnaires were used to collect data for all constructs. Employees were a single source for the variables in consideration. The result should be interpreted with caution because social desirability may inflate or deflate the relationships among constructs in this study.

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Chapter 2 - Review of Literature

Effects of an Aging Population

Globally, better health and improved life expectancy has greatly increased the number of seniors. According to United Nations Department of Economic and Social Affairs (UN DESA, 2010), the number of people aged 60 and over in the world surpassed 700 million in 2009. This population's growth rate (2.6% per year) is higher than any younger group and should reach a billion by 2030 (National Institute on Aging [NOA], 2007; UN DESA, 2010). In addition, the number of people 80 and older will increase to five times the current number by 2050: approximately 379 million people (UN DESA, 2002). In line with the aging population around the world, nearly half of US citizens are older than 40 (United States Census Bureau, 2011). According to the US Census 2010 (United States Census Bureau, 2011), the current population of those 65 and over is 40.3 million, approximately one senior citizen for every eight citizens. This number will keep growing as the first baby boomers reach 65 by 2011.

Currently, occupancy levels at senior housing facilities stand at more than 90% percent in the United State (Pratt, 2010). The growing population of the aging has increased the need for long-term care facilities. On average, ten candidates apply for every new living unit; individuals who want to enter long-term care facilities stay on the waiting list for 13.4 months (American Association of Health Senior Association [AAHSA], 2007). Additionally, chronic diseases and/or disability that are often part of aging affect elders' decisions on how much to spend for senior care housing. According to the Centers for Disease Control and Prevention/ National Center for Health Statistics (CDC/ NCHS, 2011), approximately 7% of elderly citizens needed assistance in 2010. As these people reach 85 and older, the percentage needing assistance for daily living activities will reach 19.1%, about five times higher than 65 years and older (CDC/

NCHS, 2011). Approximately 69% of people aged 65 or older will eventually need some type of assistance in senior house community or residential care facilities (AAHSA, 2007).

The decision to move into a CCRC may involve more than a sense of improved quality of life, to include “push” and/or “pull” factors (Bekhet, Zauszniewski, & Nakhla, 2009; Tong, 2009). Elders with a spouse in failing health, or who want to shed responsibilities, or have no family to help them, may prefer to live in retirement communities (Gilleard, Hyde, & Higgs, 2007). The familiarity and reputation of the facility, its security, and those friends who also join can attract older people to CCRCs, and the move may help the elderly age in place (Gilleard et al., 2007). CCRCs typically provide lifetime use at three levels of living arrangements: (a) independent living units, (b) assisted living units, and (c) non-Medicare-certified skilled nursing facility. The types of services offered in each unit vary considerably. People may enter the CCRCs in any stage of their life. Residents may move from one building to another in the community to receive more services as they age. They can live in a familiar environment, keep close relationships with spouse, friends, and/or family members, and still have professional employees take care of their physical and psychological needs (Hays, Galanos, Palmer, McQuoid, & Flint, 2001; Pratt, 2010).

Employees in CCRCs

The expectation of a better quality of life in long-term care facilities has changed CCRCs' emphasis from disease-or-condition-related treatment to person-centered care (Doty, Koren, & Sturla, 2008). Facilities adapt their services to accommodate residents' demands for assistance with primary health care, self-care (bathing, dressing, toileting, transferring, and eating), and religious, educational, and social services (Subasi & Hayran, 2005; American Health Care Association and National Center of Assisted Living [AHCA/NCAL], 2010). Facilities offer a home-like atmosphere that allows residents to develop close relationships with other residents and staff members (Haran, 2006). A relationship of mutual friendliness and respect between staff and residents would enhance the perceived quality of care.

Providing quality health and social care requires a wide range of workers in senior care facilities (Fujisawa & Colombo, 2009). However, the physical and mental labor required makes it difficult to attract and retain employees in these facilities (Rondeau & Wagar, 2006). For example, according to a survey conducted by National Center for Assisted Living (2010), the overall turnover rate for staff in assisted living is 38% and is especially high in foodservice (45.8%) and nursing (40.9%). Pratt (2010) mentioned that the less than exciting work environment, irregular work hours, limited wage increases, and disagreeable residents in healthcare facilities present challenges to recruiting highly-trained employees (nurses and therapists) and support employees (dietary and housekeeping staffs). Issues related to quality of organizational environment like staffing level and organizational work pressure may be the critical predictors of turnover intention among staff members in long-term care facilities (Castle & Engberg, 2006; Karsh, Booske & Sainfort, 2005).

P-E Fit, Attitudes, and Behaviors: The Mediating Role of Needs Satisfaction (Study 1)

Although employees do not seem to like the working environment in CCRCs, positive feeling from providing care to seniors may buffer negative attitudes toward organizations (Wagner, 2004). Foote and Tang (2008) argued that favorable attitudes stem from improved co-worker relationship and can enhance employee attachment to teams and in turn increase mutual helping behaviors. According to the self-determination theory, the extent to which individuals have autonomy, relatedness, and competence within their organizations affects well-being within the organization (Deci, Ryan, Gagne, Leone, & Kornazheva, 2001). That is, if the environment enables employees to meet their own psychological needs, employees can and will engage in positive work-related attitudes and behaviors.

Moyle, Skinner, Rowe, and Gork (2003), who studied job attitudes among certified nursing assistants, food service employees, and housekeeping/laundry employees, have concluded that enjoyable relationships with team members and the chance to help residents can improve employee satisfaction. That is, employees whose values are similar to their coworkers as well as the characteristics of organizations are more likely to view their work favorably (Kritstov, 1996). Therefore, in Study 1, it proposes that employee perceptions of fit at each work domain will lead to overall needs satisfaction and, in turn, to better work-related attitudes and behaviors. Specifically, in CCRCs, employees who fit with their job, group, and organization will be better satisfied and thus engage in their job, provide more helpful service to the residents, care about their coworkers, and commit to their organizations.

Person-Environment Fit

Even employees qualified to work for CCRCs may not fit their jobs perfectly. Although they bring abilities, skills, and knowledge to the facilities, their level of perceived fit with each work environment (job, group, and organization) will not be ideal, resulting in negative attitudes and behavior.

Person-environment (P-E) fit is a multidimensional concept of the compatibility between two work domains in terms of P-J fit, P-G fit, P-O fit, person-vocation fit, and person-supervisor fit (Kristof, 1996). Previous research has found that different types of P-E fit have a distinct effect on work-related outcomes. For example, Lauver and Kristof-Brown (2001) found that P-O fit is a better predictor than P-J fit of the intention to quit and of contextual performance. Additionally, Vianen, Pater and Dijk (2007) noted that newcomers are more likely to commit to their organization and remain on the job when their preferences in organizational culture are more similar to their supervisors than their coworkers.

Because P-E fit comprises a series of dimensions, investigating P-E fit using a multidimensional perspective is necessary (Kristof-Brown, Zimmerman, & Johnson, 2005). Very recently, new research studies have tackled this issue. For example, Greguras and Diefendorff (2009) tested the effects of P-J, P-G, and P-O fit on organizational commitment and job performance. Vogel and Feldman (2009) investigated the relationships among P-V fit, P-J fit, and P-O fit with other outcome variables using P-G fit as a moderator. Although these studies have tried to explain the effects of sub-dimensions of P-E fit on organizational outcomes, the antecedents and consequences of the whole construct remains blurred. Also, little research has investigated the effect of P-E theory in CCRCs. This study, therefore, investigates the effects of different levels of P-E fit (i.e., D-A fit, N-S fit, P-G fit, and P-O fit) on employee attitudes and behaviors in the CCRC setting.

Supplementary and Complementary Fit

P-E fit has been conceptualized into two perspectives: supplementary and complementary (Muchinsky & Monahan, 1987). The supplementary perspective means people feel they fit in the environment because they share demographic factors, values, or goals with others in the environment. They commit globally to the environment by supporting the values and activities of the environment. The complementary perspective, on the other hand, means that fit exists when either employees or environment can meet their needs. That is, good fit occurs when individual needs or wants are satisfied by environmental structures or systems. Thus, P-G fit and P-O fit would be understood as supplementary whereas P-J fit would be complementary. In other words, employees would perceive congruency when they have characteristics similar to other group members or in the organizations (culture congruency). For P-J fit, individuals fit well in their job when they have the required knowledge, skills, and abilities for their job demands.

Objective, Perceived and Subjective fit

Another issue with the person-environment fit is how to measure the various types of fit. Fit assessment used in the literature can be grouped into three categories: objective, perceived, and subjective (Kristof, 1996).

Objective fit, an indirect cross-level measurement, involves collecting information from employees and their organizations (Kristof, 1996). Employees report their characteristics, and representatives of organizations (managers) also describe the same dimensions of the organization. The level of fit then is determined by congruency between what employees report and how organization representatives describe aggregate organizational characteristics (Chatman, 1989; Caldwell & O'Reilly, 1990; O'Reilly, Chatman & Caldwell, 1991). This method has a stability not easily affected by employee-specific socialization experiences, so this type of fit is

essential to P-E fit studies and provides a logical interpretation on true fit calculation (Edward, 1991). Evaluating the level of fit indirectly can help researchers not only understand the unique effects of both environment and individuals, but also the relationship between two domains (Yang, Levine, Smith, Ispas & Rossi, 2008). Assessing objective fit should be part of employee selection and the early stage of post-entry P-O fit evaluation when job applicants or newcomers are not familiar with the characteristics of the organization (Hoffman & Woehr, 2006).

Compared to objective fit, which collects information from two different sources, perceived fit is a direct individual-level measurement, asking employees to address their own characteristics and the working environment simultaneously (Kristof, 1996; Kristof-Brown et al., 2005). Then, fit is determined solely from employee descriptions. Environmental characteristics are thus affected by employee characteristics but also by employee perceptions (Hoffman & Woehr, 2006). People react to what they perceive in the environment, so this method may better reflect reality and relate more strongly to employee behavior than objective fit (Kristof-Brown et al., 2005; Hoffman & Woehr, 2006).

Subjective fit asks employees to report the extent to which they feel that they fit in their environment (Verquer, Beehr & Wagner, 2003). Fit, thus, is indirectly assessed by comparing personal and environmental characteristics from the same person (Kristof, 1996; Kristof-Brown et al., 2005). In contrast to objective fit, which is a better predictor of individual outcomes in the pre-entry stage, subjective fit better explains those attributes in the post-entry stage (Cooper-Thomas, Annelies & Neil, 2004). Because employee perceptions of fit can change over time, a series of socialization activities derived from the environment would significantly affect individual attitudes. Moreover, of these three different types of fit, subjective fit has the strongest relationship with perceived attitudinal outcomes (Cable & Judge, 1996; Cable & Judge, 1997;

Verquer et al., 2003). Therefore, to better predict post-entry fit outcomes, subjective fit will be used in this study.

Dimensions of Fit

Person-Job Fit

P-J fit is commonly operationalized as the degree to which the rewards supplied by a job can meet employee needs, in the same way employee knowledge, skills, and abilities match job demands (Cable & DeRue, 2002). These two domains, the match between person and job, have been conceptualized into the needs-supplies and demands-abilities perspectives (Edwards, 1991). The N-S fit concerns the extent to which job characteristics can fulfill employees' physical or psychological needs. The need expectation may include good salary, job security, work challenge, job autonomy, and supervisor support (Chilton, Hardgrave, & Armstrong, 2010; Silverthorne, 2004), emphasizing that employers need to understand what they should offer to satisfy employees' needs and, in turn, avoid turnover. D-A fit, on the other hand, addresses the extent to which employee knowledge, skills, and abilities fulfill demands of the job like hard work, cooperation, creativity, or respect for authority (Silverthorne, 2004). Employee abilities could include GPA, honors, and activities (Kristof-Brown, 2000), work competencies, or communication skills (Nikolaou, 2003). Employees need to know which knowledge, skills, and abilities would allow them to perform their jobs properly.

From the perspective of a job candidate, P-J fit is more significant to the decision to accept a job than P-O fit. Individuals use the selection process to evaluate the extent to which they fit the job and the organization. Individual attitudes during the job search may affect how prospective employees perceive the quality of P-J fit. People who actively collect information, search intensely for jobs, and structure their career path should have a higher level of P-J fit

because they have a better sense of what they need for themselves and from the environment (Singh & Greenhaus, 2004). The feeling of fitting the job would also affect their perception of a job's attractiveness and, thus, increase the likelihood of obtaining the job (Carless, 2005). Pre-entry fit would also continuously influence the level of post-entry fit, which influences employee attitudes and behavior within the organization and such things as job satisfaction, organizational commitment, and organizational identification (Saks & Ashforth, 2002).

From the organizational side, companies offering a supportive environment to their employees could derive many benefits from employees with a high P-J fit. Companies with structured mentor programs, clear information about career paths, and a culture that values newcomers would benefit from employee perceptions of fit, worth, and positive attitudes (Riordan, Weatherly, Vandenberg, & Self, 2001). Scroggins (2008) argued that the match between employee self-image and task performance would result in better performance and better job retention, especially when employees find meaning in their jobs.

Employees who fit well in their jobs will more likely develop positive attitudes and behavior: intrinsic job satisfaction (O'Reilly III et al., 1991), job satisfaction (Lauver & Kristof-Brown, 2001; Saks & Ashforth, 2002; Kristof-Brown et al., 2005), organizational commitment, organizational identification (Saks & Ashforth, 2002), job performance, organizational citizenship behavior toward individual and organization (Scroggins, 2008), and decreased turnover intention (O'Reilly III et al., 1991; Saks & Ashforth, 2002; Scroggins, 2008), as well as less job ambiguity and fewer physical stress symptoms (O'Reilly III et al., 1991).

Most research on P-J fit has focused on explaining how employees can benefit their jobs (D-A fit) (Kristof, 1996). However, N-S fit has been relatively neglected in the P-J fit literature (Cable & DeRue, 2002; Resick, Baltes, & Shantz, 2007). The incomplete conceptualization in P-J fit research creates ambiguities in predicting antecedents and consequences of N-S fit and D-A

fit. Previous research suggests that P-J fit, mostly as assessed by D-A fit, is a stronger predictor of job satisfaction and job performance than other types of fit (Kristof-Brown et al., 2005). However, Cable and ReDue (2002) found that D-A fit has no relationship with job performance and N-S fit would be a good indicator of job satisfaction, career satisfaction, and occupational commitment. Because P-J fit is determined by D-A fit and N-S fit, these two dimensions may affect employee attitudes and behavior differently. Consequently, we need more research on the complete concept of P-J fit to better understand its effect on work-related attitudes and behavioral outcomes.

Person-Group Fit

With employees increasingly required to engage in interpersonal interactions at work, organizations that rely heavily on employee collaboration may emphasize P-G fit more than P-O fit (Werbel & Johnson, 2001). In addition, the degree of value congruence among immediate work members/peers is important to team-based work environment. According to the social information processing theory, people are more likely to share information and opinions with those who have similar characteristics, in this case, immediate coworkers (Salancik & Pfeffer, 1978). Existing studies have investigated P-G fit and demographic variables, emphasizing employee similarities in demographics, including generation (Cennamo & Gardner, 2008), gender (Elfenbein & O'Reilly, 2007; Young & Hurlic, 2007), and ethnicity (Elfenbein & O'Reilly, 2007).

However, Elfenbein and O'Reilly III(2007) argued that, for P-G fit, value congruency would explain employee behavior better than demographic similarity. Employees with congruent values would feel understood by other group members. Through conversation, individuals would more likely to adopt coworkers' perceptions as a frame of reference for evaluating their own fit

in the organization (Vianen et al., 2007). Within-group agreement would let group members create their own norms and cultures, distinct from other groups in the organization (Kristof, 1996; Werbel & Johnson, 2001). Additionally, employees whose values are similar to coworkers will more likely feel positively about their coworkers (Kristof-Brown et al., 2005), group cohesiveness, and cooperation (Werbel & Johnson, 2001) and feel job satisfaction and commitment toward the organization (Vancouver & Schmitt, 1991).

The focus of P-G fit has been relatively neglected among all types of fit in previous studies, more specifically, the effect of value congruence between group coworkers on attitudinal or behavioral outcomes (Adkins, Ravlin, & Meglino, 1996). Therefore, our research will investigate P-G fit as part of a deeper discussion on congruence of values between employees and coworkers.

Person-Organization Fit

The concept of P-O fit has been used in hiring to show how job applicants interpret organizational factors as well as how organizations choose employees. Employees have different needs, wants, and preferences and, therefore, will be attracted to, selected by, and stay in an environment that suits them (Schneider, 1987). The concept of P-O fit becomes more salient, in particular, when contextual factors do not meet job applicants' expectations. Specifically, employees who have low value congruence with an organization may seek new jobs (Resick et al., 2007). However, employees who fit their organization well are less likely to leave their jobs or limit changes to movement within an organization (Lauver & Kristof-Brown, 2001; Verquer et al., 2003).

P-O fit is the similarity in culture between individuals and organizations (value and norms; Cable & Judge, 1994) and between personality and work environment (Chuang & Sackett,

2005). Culture fit could involve general or specific culture in an organization, including ethics (Valentine, Godkin & Lucero, 2002), morals (Sim & Keon, 1997; Ambrose, Arnaud & Schmink, 2007), time (Hecht & Allen, 2005), diversity (Ng & Burke, 2005), work-to-family segmentation (Chen, Powell & Greenhaus, 2009), or goals (Kristof-Brown & Stevens, 2001; Westerman & Yamamura, 2006). Hoffman and Woehr (2006) have concluded that culture fit would better explain behavioral criteria than other forms of fit. Thus, our study will follow their recommendation to use value congruence with the persons and organizations both as a definition of P-O fit and to assess P-O fit.

P-O fit may be more related to organizational level outcome (Kristof, 1996; Kristof-Brown et al., 2005). Post-entry P-O fit perceptions would have positive impact on positive affect (Hecht & Allen, 2005), job satisfaction (Lauver & Kristof-Brown, 2001; Verquer et al., 2003; Arthur Jr, Bell, Villado, & Doverspike, 2006; McCulloch & Turban, 2007; Wheeler, Gallagher, Brouer, & Sablynski, 2007; Vogel & Feldman, 2009), organizational commitment (Saks & Ashforth, 2002; Verquer et al., 2003; Arthur Jr et al., 2006), contextual performance (Lauver & Kristof-Brown, 2001), organizational citizenship behavior (Hoffman & Woehr, 2006), organizational identification (Cable & DeRue, 2002), perceived organizational support (Cable & DeRue, 2002), and task performance (Hoffman & Woehr, 2006). Further, previous research shows that P-O fit decreases negative attitudes and behaviors among employees: anomic feelings (Lara, 2008), turnover intention (Lauver & Kristof-Brown, 2001; Cable & DeRue, 2002; Verquer et al., 2003; Arthur Jr et al., 2006; Hoffman & Woehr, 2006; McCulloch & Turban, 2007; Vogel & Feldman, 2009), and psychological strain (Hecht & Allen, 2005).

Needs Satisfaction

Needs satisfaction, which is basic for human survival, growth, and integrity, was first introduced in the theory of self-determination to promote positive psychological well-being (Deci, Ryan, & Williams, 1996). Needs satisfaction not only increases individual psychological well-being but makes organizations more effective (Deci & Ryan, 1985). Specifically, needs satisfaction facilitates positive psychological well-being, which leads to work engagement, as well as work outcomes, including organizational citizenship behavior and organizational commitment (Marescaux, Winne, & Sels, 2010; Van den Broeck, Vansteenkiste, Witte, & Lens, 2008, 2010). Therefore, needs satisfaction may be one critical mechanism in the relationship between social environment and affective outcomes among employees.

Ryan and Deci (2000) divided needs satisfaction into three types: autonomy, competence, and relatedness. Autonomy means that people act from an integrated self and are not controlled by extrinsic regulations and pressure. Under this type of needs satisfaction, people would feel psychological freedom in their work or actions (Deci, Ryan, Gagne, Leone & Usunov, 2001). Competence refers to the sense that an individual has the abilities and skills to work efficiently. Relatedness develops from connecting with and having warm relationships with others (Ryan & Deci, 2000). Individuals who are satisfied with their needs for autonomy, relatedness, and competence will have intrinsic motivation and, in turn, will internalize the culture and regulations in their environment (Ryan & Deci, 2000).

Every environment has its own values and regulations. People do not spontaneously adjust their behaviors, however, unless they are interested (Ryan & Deci, 2000). Employee performance, adjustment, persistence, and creativity should improve as an organization or workplace continuously fulfills their basic needs. Satisfying basic needs makes individuals feel fully functional (Ryan & Deci, 2000; Ryan, Huta, & Deci, 2008). These feelings motivate people

intrinsically to maintain this level of needs satisfaction by internalizing extant values and regulations in social contexts (Baard, Deci, & Ryan, 2004).

Casper and O'Rourke (2008) have noted that the quality of individual care may improve if staff are satisfied with what they want and need. Staff in nursing care facilities reported that they most want respect for the work that they do and the decisions they make (i.e., autonomy), recognition by other staff members and residents (i.e., relatedness), and being allowed to speak for themselves in formal meetings (i.e., need for competence) (Deutschman, 2001; McGilton, 2002). Many studies discuss the effects of staff empowerment on quality of care in long term care facilities (Casper & O'Rourke, 2008, Faulkner & Laschinger, 2008; Kuo, Yin, & Li, 2008; Tellis-Nayak, 2007). Similarly, organizational factors like access to informal or formal power and resources may increase staff autonomy, perceived respect, and in turn, contribute to resident care.

Person-Job Fit to Needs Satisfaction

Needs-Supplies Fit to Needs Satisfaction

Cable and DeRue (2002) noted that previous research has focused little attention on N-S fit although it may be a critical predictor for employee attitudes and decision-making. N-S fit concerns the match between individual and environment. Deci and Ryan (1985) proposed that needs satisfaction is essential for human development. An environment that fulfills these needs (autonomy, relatedness, and competence) would increase subjective well-being.

According to the work adjustment theory (Dawis & Lofquist, 1984), employees will devote themselves to achieve and maintain the link between individual requirements and environment. When the needs of employees and the capability of the organization match, employees feel fulfillment in their work. Based on the psychological needs fulfillment theory,

once the environment fulfills individual needs, the individual is likely to develop positive attitudes (French, Caplan, & Van Harrison, 1982). Therefore, individuals surrounded by a good environment can connect to the environment (i.e., relatedness), do tasks efficiently (i.e., competence), and act independently (i.e., autonomy) (Van den Broeck et al, 2008). Thus, the following hypothesis is proposed:

H1: Employee perceived N-S fit has a positive effect on needs satisfaction.

Demands-Abilities Fit and Needs Satisfaction

Theoretically, meeting job requirements increases individual needs satisfaction for competence, autonomy, and relatedness. Employees who can perform their duties are likely to work efficiently and maintain high quality. Self-efficacy prompts them to cooperate properly over tasks (Bandura, 1991) and learning (Martocchi & Judge, 1997). Moreover, Werbel and Johnson (2001) proposed that a high D-A fit would motivate individuals through self-efficacy to become proficient on the job. They also found a positive correlation between D-A fit and individual's satisfaction of needs for competence. Thus, individuals with higher D-A fit would more likely feel a sense of accomplishment, capability, and mastery (Greguras & Diefendorff, 2009).

A sense of achievement allows employees to build favorable attitudes towards their jobs (Werbel & Johnson, 2001). Employees with confidence in themselves know what to do next to meet the demands of work. They also can sense that they initiate their own actions (i.e., autonomy). Meaningful interaction and appreciation from management then enhances relatedness (Reis, Sheldon, Gable, Roscoe & Ryan, 2000). Thus, the following hypothesis is proposed in the study:

H2: Employee perceived D-A fit has a positive effect on needs satisfaction.

Person-Group Fit to Needs Satisfaction

Coworkers in CCRCs are members of the work group, and staff members will have a good P-G fit in their work group when they are compatible with their coworkers (Adkins et al., 1996; Kristof-Brown & Stevens, 2001). According to the similarity attraction paradigm (Byrne, 1971), employees are more likely to build strong bonds with people who share common values than with those who do not. Similarly, employees who perceive compatibility with their coworkers (i.e., P-G fit) will communicate and interact more often to enhance a collegial relationship (Jasen & Kristof-Brown, 2006). The more similar the employee culture, the more employees perceive fit with their work group. The quality of informational exchange among fellow workers could also create a sense of connectedness with peers (Greguras & Diefendorff, 2009). This feeling of attachment to coworkers could help employees feel more competent at their work, decreasing task difficulty because they can ask for advice and instruction from coworkers. This eliminates any feeling of job ambiguity, giving them “volition” to do their jobs (i.e., autonomy) (Chiaburu & Harrison, 2008). Based on the above discussion, we propose the following relationship:

H3: Employee perceived P-G fit has a positive effect on needs satisfaction.

Person-Organization Fit to Needs Satisfaction

P-O fit is the match of values and norms between individuals and their organizations (Kristof, 1996). Specifically, policies and regulations create an organizational culture whereas employee value systems determine what employees want from the organizations (Werbel & Johnson, 2001). The congruence between what organizations can offer and what individuals want from an organization affects fit with the organization. According to the attraction-selection-attrition (ASA) theory, people stay where structure and systems meet their needs (Schneider, 1987). The better an employee fits in an organization, the more the organization meets employee

needs. Greguras and Diefendorff (2009) concluded that needs satisfaction would be more easily met if individual values align with organizational values. Specifically, people who are attracted to, selected by, and stay with an organization have similar values and would feel connected to and supported by their organizations. Support from an organization also frees employees psychologically to make decisions and achieve goals. As such, the study hypothesizes that the extent to which individuals and organizations have congruent values will positively affect the satisfaction of basic needs.

H4: Employee perceived P-O fit has a positive effect on needs satisfaction.

Work Engagement

Work engagement has been defined as a “positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Salanova, Gonzales-Roma, & Bakker, 2002, p.72). Vigor refers to a high level of energy as well as mental resilience that an individual has toward work. People with high vigor may be more highly motivated to work and thus overcome any problems (Mauno, Kinnunen, & Ruokolainen, 2007). Dedication concerns strong individual involvement in work, including feeling significance, enthusiasm, inspiration, pride, and challenge. Absorption requires full concentration, being deeply engrossed in a job. People with high absorption would have positive feelings about work and immerse themselves in it (Schaufeli et al., 2002).

Work engagement has been conceptualized similarly to workaholism, organizational commitment, and job involvement. Researchers have tried to distinguish it from other constructs; Schaufeli, Taris, and Van Rhenen (2008), for example, argued that work engagement differs from workaholism because engaged employees work for fun, not because of an overwhelming

inner urge to work. Also, work engagement, which often accompanies positive attitudes and proactive behaviors, could enhance psychological health, whereas workaholics endanger their health, decreasing happiness and reducing interpersonal relations. Saks (2006) differentiated engagement and organizational commitment. He argued that engagement includes components of “cognition, emotion and behavior” and refers to “the attentive and absorbed in the performance of their role,” whereas organizational commitment emphasizes attitude and attachment to organizations.

In CCRCs, staff who work in the same house would have more opportunities to communicate and interact with each other, especially with colleagues who hold similar values. Harter, Schmidt, and Hayes (2002) found that an engaged staff often includes someone with a high level of energy, enthusiastic about the job. Because engaged staff members communicate with coworkers positively and pro-actively, group members immersed in this atmosphere would develop similar attitudes (Bakker, Van Emmerik, & Euwema, 2006; Salanova, Agut, & Peiro, 2005).

Also, engaged staff members can improve their own resources and environmental resources, becoming more engaged in their work over time (De Lange, De Witte, & Notelaers, 2008). Employees in the service industry particularly not only improve organizational productivity but enhance organizational relationships with customers (Harter et al., 2002). Additionally, engaged employees know how to use environment resources to avoid burnout (Schaufeli & Bakker, 2004; Hakanen, Bakker, & Schaufeli, 2006; Bakker et al., 2006; De Lange et al., 2008). Therefore, CCRCs need engaged employees to (1) stimulate positive emotions in coworkers, (2) create personal and job resources to improve organizational performance and the quality of resident care, and (3) enhance their own psychological health and well-being.

Needs Satisfaction to Work Engagement

The motivational process from needs satisfaction to work engagement can be illuminated using the Job Demand-Resource (JD-R) Model and Fredrickson's (2001) Broaden-and-Build theory. According to the JD-R model, as the organization provides more job resources (i.e., satisfying employee needs for autonomy, relatedness, and competence), employees become more engaged in their work. In addition, the Broaden-and-Build theory suggests that positive emotions (i.e., engagement) "broaden people's momentary thought-action repertoires which in turn serves to build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources" (Fredrickson, 2001, p.219). For example, staff members who interact well and/or feel connected with coworkers and residents in CCRCs would feel a higher level of energy, more involved, and thus they immerse themselves in their work. Additionally, staff who receive recognition and respect increase in confidence, becoming more competent and in turn, devoting more time to service, even sacrificing meal time (Salanova et al., 2005). Therefore, needs satisfaction is a critical predictor, fueling both motivation and energy, and explaining the development of work engagement.

Saks (2006) concluded that work engagement can also be understood through the Social Exchange Theory (SET) (Blau, 1964). SET, using social interaction and interpersonal interaction, proposes that people express feelings of gratitude or thankfulness after receiving services from others. Failure to show thankfulness would be considered rude and grounds for considering further help undeserved. On the other hand, those providing a proper social response would receive further assistance, creating a consistent relationship for social exchange (Blau, 1964). In organizational management, this concept involves employees receiving benefits from the organization and reciprocating with positive emotion. Specifically, employees who feel psychological freedom (i.e., autonomy), understood (i.e., relatedness), and effective and efficient

(i.e., competent) are more likely to become engaged in their work. Therefore, the study proposes the following hypothesis:

H5: Needs satisfaction has a positive effect on work engagement.

Customer Orientation

Customer orientation refers to the efforts of salespeople to identify what would help customers make the best decisions for their needs, a concept important to relationship marketing. Employees with high customer orientation would build quality relationships with customers (Saxe & Weitz, 1982) and positively affect customer satisfaction (Korunka, Scharitzer, Carayon, Hoonakker, & Sonnek, 2007; Lee, Nam, Park, & Lee, 2006; Stock & Hoyer, 2005), increase customer commitment to companies (Dean, 2007), and strengthen customer loyalty (Macintosh, 2007). In much the same way, CCRC employees with high customer orientation would provide services that best suit resident needs and build quality relationships with residents.

The benefits of positive service provider-client interactions have been discussed in relationship marketing research. Employees with behaviors highly oriented to customers may be a key to improving customer attitudes and behavior. Service quality enhances customer satisfaction (Stock & Hoyer, 2005), and employees who offer satisfying service help customers feel attached to service providers and maintain the relationship (Dean, 2007). This positive relationship would then directly affect customer loyalty and word-of-mouth intention (Macintosh, 2007).

In CCRCs, little research has investigated how employee attitudes affect how employees care for residents. A CCRC offers to residents the service of caring. Such caring includes, but is not limited to, medical care and psychological support. Additionally, residents in CCRCs are

touted as family members, not customers. That is, the facilities themselves claim that they are customer/resident-oriented, not service-oriented or marketing-oriented. Employees with high customer orientation would develop empathy with residents and adjust service according to their understanding of residents. Employees who make residents their priority also make residents feel valued.

Needs Satisfaction to Customer orientation

At CCRCs, front line employees are critical in creating resident perceptions of the facility. A facility's level of service quality depends on employees who keep residents satisfied. To be considered customer oriented, CCRCs must motivate employees to interact well with residents (Saxe & Weitz, 1982), treating residents attentively, pleasantly, and responsively.

The relationship between needs satisfaction and customer orientation suggests that if employees have their basic needs met, they will be motivated to satisfy resident needs. According to the self-determination theory, individuals internalize and integrate external regulations and culture once their needs are satisfied by the organization context (Deci & Ryan, 1985), which would enhance their willingness to regulate their own behavior and enjoy doing so. Thus, CCRC employees who receive recognition or appreciation from residents, feel a sense of accomplishment, and see their suggestions taken seriously would internalize the facility's culture (in this case, resident-centered culture). Employees who internalize cultural values would be more likely to express customer oriented behavior, shown by meeting resident needs (Thakor & Joshi, 2005).

H6: Need satisfaction has a positive effect on customer oriented behavior.

Interpersonal Citizenship Behaviors

Organizational citizenship behavior (OCB) was first defined as individual cooperative behaviors that are discretionary, but not formally rewarded by organizations (Organ, 1988). The definition later became the “performance that supports the social and psychological environment in which task performance takes place” (Organ, 1997, p. 95) to avoid confusion about intra- and extra-role activities. Organ (1998) proposed the most well-known, five-factor OCB construct, using conscientiousness, altruism, sportsmanship, courtesy, and civic virtue. Setton and Mossholder (2002) argued that employees might not participate in all OCBs equally, focusing on those that have meaning to them. For example, while an employee who is not satisfied with his/her organization may not engage in discretionary behavior toward the organization, he or she may offer extra assistance to particular individuals close to him or her in the organization. Our study limits discussion of OCBs to the individual perspective to focus on better understanding the mechanism of work/interpersonal relationships.

Interpersonal citizenship behavior (ICB) has gone under different names in previous studies: altruism (Organ, 1988), interpersonal helping (Moorman & Blakely, 1995), OCB-individual (William & Anderson, 1991), helping coworkers (George & Brief, 1992), and helping and cooperating with others (Borman & Motowidlo, 1993). Setton and Mossholder (2002) argued that these types of actions might be called overall interpersonal citizenship behavior (ICB) when people engage in “cooperative assistance behaviors for individuals in need.” Two perspectives, person-focused ICB and task-focused ICB, were suggested in their model. Person-focused ICB includes conscientiousness, courtesy, and altruism and is based on an “affiliative-promotive” perspective where actions that can help maintain coworker self-esteem and resolve personal problems. Task-focused ICB focuses more instrumentally to facilitate job performance and resource exchange.

People may engage in ICB at work for a number of reasons that link individual conceptions and perceptions. One of the most extensive discussions of ICB development involves positive moods (George & Brief, 1992). That is, employees always try to maintain positive moods. Helping behavior may be a resource of positive mood; therefore, people with a positive mood (for instance, job satisfaction, needs satisfaction) would more likely help others in an effort to make them feel good about themselves. Similarly, social exchange behavior, an equivalence evaluation, argues that people strive for reciprocal behavior, providing a favor to someone who has given them a favor (Blau, 1987). Specifically, employees may help employees or supervisors because they would then be liked. Bowler and Brass (2006) concluded, in addition, that employees with strong ties of friendship would be more motivated help.

Needs Satisfaction to Interpersonal Citizenship Behavior

Ryan and Deci (2000) argued that people naturally care for and help others when the context fulfills their psychological needs. An environment that lacks this essential element makes people more self-centered, satisfying their own needs instead of helping others. Sheldon and Bettencourt (2002) argued that individuals whose psychological needs are satisfied generate high positive and low negative energy in a group. A positive mood enhances the motivation to work harder and help others (Elfenbein & O'Reilly III, 2007).

Personal norm theory posits that people engage in helping behavior based on their personal norm--their self-enhancement or self-deprecation (Schwartz, 1973; Schwartz & Fleishman, 1982). That is, individuals may avoid helping colleagues if they are self-deprecating because they perceive that help as having a high cost. On the other hand, employees whose needs are satisfied should be more willing to help others. These ideas have application in the work place.

ICB is a relationship oriented behavior. The bond between two individuals determines how much help one person will offer another (Setton & Mossholder, 2002). Williams and Anderson (1991) argued that employees evaluate how much assistance they must offer their colleagues to balance the help they themselves received from others, whether employees or organizations. In a work group, employees often seek advice from other employees, which makes employees feel supported, valued, and attached to others at work (i.e., relatedness), makes them feel more confident about the work they do (i.e., competence), and feel capable of making decisions about their jobs (i.e., autonomy). This positive interaction should increase positive moods and empathic concern with coworkers and result in a higher level of ICB (George & Brief, 1992; Sheldon & Bettencourt, 2002).

H7: Needs satisfaction has a positive effect on interpersonal citizenship behaviors.

Organizational Commitment

With not only anticipated employee shortages but also the growing need for elder care, maintaining a committed staff is important to CCRCs. Committed employees can consistently offer stable and high quality service to residents. Committed employees working in CCRCs benefit facilities by internalizing the concept of resident-centered daily care (Sikorska-Simmons, 2005). Therefore, comprehending what influences staff commitment is critical.

Organizational commitment, the bond between employees and employers, was originally defined as a hidden investment in Becker's (1960) article. Becker defined organizational commitment as consistent engagement in the type of social participation valued in an organization. Porter, Steers, Mowday, and Boulian (1974) argued that organizational commitment should be considered as an attitude, not a "commitment-related behavior." They

suggested that organizational commitment is the process of psychological attachment to an organization, which takes time to develop. A later, more detailed definition was “the relative strength of an individual’s identification with and involvement in a particular organization” (Mowday, Steer, & Porter, 1979, p. 27). The characteristics related to organizational commitment should, at the least, include “(a) belief in and acceptance of organizational goals and values, (b) willingness to exert effort on behalf of the organization, and (c) a desire to maintain membership in the organization” (Mowday et al., 1979, p.27).

Organizational commitment is a powerful mechanism in the workplace. With high organizational commitment, people devote themselves to their work, go beyond the job requirements, enhance job performance, and feel job satisfaction (Lamber & Paoline, 2008; Testa, 2001; Van Knippenberg & Sleebos, 2006). On the other hand, low organizational commitment results in employee turnover (Karch, Booske & Sainfort, 2005). The same result has already been found in the long-term care setting (Kinjerski & Skrypnek, 2008).

Previous research shows that demographics explain only some variance in organizational commitment. That is, organizational commitment is mainly determined by the job, organizational characteristics, and human resource practices, not gender, age or personality (Mathieu & Zajac, 1990). Karsh et al. (2005) examined how organizational commitment develops among employees of a nursing home. They concluded that if the employees feel positively about their job characteristics and work environment, they commit more to their organization. This positive attitude affects not only job satisfaction but also commitment, which, in turn, reduces turnover.

Needs Satisfaction to Organizational Commitment

According to the self-determination theory, intrinsic values support basic needs (Deci & Ryan, 1985). In other words, people are attracted to and stay in environments where they can act independently, feel effective, and connect to others. To the extent that they can find such an environment, they engage in behaviors to maintain their membership in that environment. Specifically, meaningful discussion with colleagues, feeling understood, and remaining connected to a work environment help employees identify themselves with that organization. An organization that offers fulfillment to employees would generate employee commitment (Greguras & Diefendorff, 2009; Van den Boreck et al., 2010). Therefore, the study hypothesizes that employees whose needs are satisfied by their organizations would feel commitment to those organizations.

H8: Need satisfaction has a positive effect on organizational commitment

P-E Fit and Turnover Intention: Moderating Role of LMX (Study 2)

Introduction

As the increasing number of seniors has highlighted the demands for workers in senior care, employee shortages are a global problem in long-term care facilities (Kachi, Inoue, & Toyokawa, 2010; Rosen, Harris, & Kacmar, 2011; Van der Heijden, Van Dam, & Hasselhorn, 2009). Staffing in long-term care facilities, therefore, would be challenging and complicated. The consequences of turnover in the workplace include a series of administrative costs associated with personnel selection, recruitment, and training (Zahrt, 1992). Additionally, quality of care in such facilities would suffer because of employee turnover. Remaining employees would need to take over departed employees' job responsibilities, affecting the quality of care in CCRCs.

Research on person-environment (P-E) fit has major implications for individual well-being (Arthur Jr et al., 2006; Hoffman & Woehr, 2006). The fit theory assumes that the fit exists when an individual's characteristics satisfy environmental needs and vice versa. According to the theory of workplace adjustment (Dawis & Lofquist, 1984), individuals seek to establish and maintain correspondence (i.e., fit) with their environment. The level of correspondence achieved between person and environment could potentially predict tenure in that work environment. If employees fail to adjust to the environment, they often choose to switch to other facilities or leave the industry entirely (Rosen et al., 2011).

The perspective of social identity (Ashforth & Mael, 1989) explains variations in employee attitudes and behaviors. Individuals naturally favor people who are similar to themselves and thus would receive and provide more resources in a more enjoyable environment. Many studies have confirmed that the cultural similarity within a work group as well as the overall organization is positively related to such outcomes as decreasing turnover intentions

(Brigham, De Castro, & Shepherd, 2007; McCulloch & Turban, 2007; Moynihan & Pandey, 2007; Vianen et al., 2007).

Previous research has noted effective management is important in retaining staff and maintaining high-quality care. Supervisors create an environment with support, and encouragement enhances employee motivation to achieve, relate, and enjoy work (Tellis-Nayak, 2007). Donoghue and Castle (2009) confirmed that supervisors who include employees in discussion and give them freedom to make decisions lose fewer employees. McGilton, McGills, Wodchis, and Petroz (2007) found that supportive supervisors can help their employees become loyal and devoted caregivers. For example, leaders who give staff helpful and positive feedback facilitate employee attachment to the workplace, which leads to a better relational environment for residents (Bishop, Weinberg, Leutz, Dossa, & Zinavage, 2008).

The relationship between managers/supervisors and employees in CCRCs has drawn considerable attention in recent years (Bishop, Squillace, Meagher, Anderson & Wiener, 2009; Tellis-Nayak, 2007). Growing evidence reveals that supervisor-subordinate relationship affects desirable employee outcomes heavily as well as the quality of senior care (Touangeau, Widger, Cranley, Bookey-Bassett, & Pachis, 2009). Employees in a high-quality exchange may receive a series of benefits from supervisors: preferential treatment, more job-related communication, and more promotions (Sin, Nahrgangm & Morgeson, 2009). From the social exchange perspective, employees in this type of relationship may feel obliged to reciprocally engage in supervisor valued behaviors. Tellis-Nayak (2007) found that employees who develop dependable and empathic relationship with their supervisors are more likely to interact with residents empathically and reliably.

Thus, a central question in this study is how the leader-member exchange (LMX) process shapes employees attitudes and behaviors in the workplace. The study integrates LMX into the

relationship between P-E fit and employee turnover intention. This study argues that a high-quality exchange relationship may provide employees with the affective and resource-based support to deal with the potential negative effects of low fit perceptions. That is, having supervisor support makes employees feel secure in an organization even if they perceive organization expectations as difficult to meet or their needs remain unmet by the organization. Support from a supervisor can ameliorate the tension between heterogeneous group members and, in turn, create group cohesiveness through interpersonal support and assistance. Also, even employees who do not share values with the organization may attempt to maintain their membership. The quality of the vertical dyad may help employees identify connections with their organization and balance negative reactions to organizational cues.

In sum, this study proposes that LMX may facilitate cooperation with a supervisor and reduce cognitive dissonance as a result of a less than ideal work environment. This study investigates the interactive effect of the dyadic relationship between supervisor and employees (LMX) and P-E fit on employee turnover intention. Specifically, the author expects that employees fail to match with job requirement, get what they want from work environment, and share similarities with their peer-group or organization will still maintain their association with the organization when they enjoy high LMX.

Turnover Intention

In the last two decades, the CCRC environment has changed from treatment based to a lifestyle provider. Thus, the community supplies more complex services to accommodate a diverse population. The dining operations, for instance, are flexible to meet residents' health requirements and overcome physical limitations. In a resident centered perspective, facilities

have improved menu variety, expanded meal offering hours, and provide more points and types of services (Buzalka, 2005). To maintain quality in dining service, facilities need more on-site staff. However, hiring new staff and, more importantly, retaining existing employees is difficult, as has been reported.

National Center for Assisted Living (2010) conducted a survey on employee vacancy, retention, and turnover at 600 assisted living communities. The overall retention rate was 50.9%, and the turnover rate was 38.3%. The turnover rate of dietician aide/dining staff was highest among all job positions in assisted living (49.3%). Similarly, nursing facilities also reported high turnover rates. Foodservice staff in nursing home included dietician supervisor (7%) and other foodservice staff (93%). Approximately half of food service staff remained in their positions, and four out of ten foodservice staff left their facility entirely (American Health Care Association and National Center for Associated Living, 2011). Because meals are one way to build community, foodservice employees are critical to resident living quality, serving, communicating with, and making residents feel good about their lives. Identifying what causes turnover in the long-term care workforce is important in continuing to improve the quality of residential care.

Factors related to turnover intention often fall into three major groups: environmental or economic, individual, and organizational (Castle, Engberg, Anderson, & Men, 2007).

Previous research in long-term care facilities found that organizational characteristics (e.g., staffing level) have more significant impact on employee turnover intention than other variables (Brannon et al., 2007; Castle & Engberg, 2006; Castle et al, 2007, Van der Heijden et al., 2009). The results reveal that high voluntary turnover is more significantly associated with several facility characteristics (Castle & Engberg, 2006). Employees who change to new facilities are looking for an environment with reduced workload, higher work quality, and high rewards (Castle & Engberg, 2006). Employees leave organizations not only because of job

problems but also because of upward mobility. Branno et al. (2007) found that the career development is significantly related to employee turnover intention. Likewise, employees who value helping others, whose supervisors show appreciation, and who are satisfied with their wages are more likely to be retained. With all the problems employee turnover causes an organization, our study focused on the salient impact of P-E fit and LMX on the construct in CCRCs.

Person-Environment Fit

P-E fit refers to the compatibility between people and work environment. The term work environment includes the job itself, peer-group, and organization (Kristof, 1996). Based on Kristof-Brown, Zimmerman, and Johnson's (2005) meta-analysis study, people have optimal behavioral outcomes and reduce counter behaviors when the two domains, people and work environment, show good fit, staying in their job, work group, and organization.

Different dimensions of P-E fit may affect individual work related responses differently (Cable & DeRue, 2002; Greguras & Diefendorff, 2009; Kristof-Brown, Jansen, & Colbert 2002; Vogel & Feldman, 2009). Foodservice employees may leave CCRCs because of the levels of misfit they experience at work. Employees may experience physical or emotional demands at work. Employees facing the challenges of workforce shortages or negative emotion among residents about illness may have negative perceptions of their job. Alternatively, employees new to senior care facilities may not be familiar with working with seniors or creating a home-like environment for the residents may feel a misfit with the facility. The turnover process is a series of stages through which an individual moves in deciding to leave their employment. The types of

fit may relate to factors that help form their intention to leave. In other words, individuals who perceive more points of fit in their work environment are less likely to leave the facility.

Although previous studies have proposed that P-E fit comprises several dimensions, few consider P-E fit as multi-dimensional. Consequently, the effect of these sub-dimensions on organizational outcomes remains blurred. This study, therefore, uses a complete concept of P-E fit including needs-supplies fit, demands-abilities fit, person-group fit, and person-organization fit to better understand P-E's effects on foodservice employee turnover intentions in CCRCs.

Need-supply and demand-ability fit

Another under-researched area of P-E fit involves simultaneous evaluation of both need-supply (N-S) and demand-ability (D-A) fit in the domain of turnover intention. These two versions of fit are viewed as complementary. Complementary fit exists when a “need of the environment is offset by the strength of the individual, and vice versa” (Muchinsky & Monahan, 1987, p.271).

N-S fit has been defined as the extent to which the environment fulfills what an individual requires. Individuals come to their positions with a wide range of expectations about the job they want to keep. Employees believe a job will provide what they are looking for. The resources that employees expect would be any type of financial, physical, or psychological compensation such as good salary, job security, work challenge, work autonomy, and supervisor support (Chilton et al., 2010; Silverthorne, 2004). If the job cannot supply an acceptable level of compensation for the time and energy required to perform the job, the job is a mismatch with an employee's needs.

The assumption underlying D-A fit is that the basis of “good fit” should be oriented to organizational objectives. Because individuals benefit from their positions, they pay the facility

back in physical and psychological devotion. D-A fit, therefore, examines the congruence between an individual's ability to carry out the tasks of the job and the demands of the job. In exchange for the position, the job demands acceptable level of knowledge, skills, abilities, time, effort, commitment, and experience (Kristof-Brown, 2000; Nikolaous, 2003; Silverthoigne, 2004). In a word, N-S fit focuses on what employers should provide to employees whereas D-A fit concerns the elements that employees bring to perform the job.

Previous studies have proposed that person-job fit, mostly assessed from the D-A fit perspective, is a potential predictor of employee job satisfaction and performance (Arther Jr et al., 2006; Hecht & Allen, 2005; Greguras & Diefendorff, 2009; Vogel & Feldman, 2009). However, controversial results have been found when D-A and N-S were examined simultaneously. Barr, Livingstone, and Nelson (1997) incorporated both fits in their discussion of creativity. Their work found that D-A fit increases employee job satisfaction when the environment involves high creativity. On the other hand, Cable and DeRue (2002) found that N-S better explained job and career focused outcomes (e.g., satisfaction, career satisfaction, and occupational commitment) than D-A fit and P-O fit. Similarly Scorggins (2007) found that N-S fit has most additive effect on job satisfaction and intention to quit whereas D-A has no effect on either.

The Theory of Work Adjustment to turnover intention

The theory of work adjustment (TWA, Dawis & Lofquist, 1984) has been used to explain person-environment fit. The TWA proposed that P-E fit is the "correspondence between an individual and his/her environment" (Dawis, Lofquist, & Weiss, 1968, p.3). To achieve correspondence, individuals bring certain skills into the environment (i.e., D-A fit), and the environment fulfills the requirements of individuals (i.e., N-S fit). In other words, individuals come to an environment with certain abilities whereas the environment provides individuals with

rewards (e.g., compensation, prestige, personal relations). Once the correspondent relationship is achieved, stability becomes important. Stability of correspondence between the individual and the work environment is manifested as tenure in the job and would be achieved as long as acceptable responses were mutually received. If the individual fails to create correspondence, turnover may result.

The environment sometimes is not what an individual expects, and sometimes both individuals and work environment change. Individuals must cope with both. The process of achieving and maintaining the minimum acceptable correspondence is called adjustment. For example, if foodservice employees are not familiar with the atmosphere of CCRCs, although they go through training or orientation, they may find the physical and psychological demands of their jobs are more than they expected. Even those who have experience serving customers and hosting in restaurants may find taking care of seniors in long-term care facilities may require more patience and skill. If they fail to adjust, the pressures or stress may make them consider quitting. Lack of supplies or feeling unappreciated, poor mentoring and overwork may also decrease correspondence between individuals and environment, possibly increasing turnover. Therefore, the following hypotheses are proposed.

H9: Need-supply fit has a negative effect on turnover intention.

H10: Demand-ability fit has a negative effect on turnover intention.

Person-group fit

Culture is a tool for analyzing and understanding a complex work setting (Frost, Moore, Louis, Lundberg & Martin, 1985). Cultural values are a tool of change and an avenue to organizational development. Although a dominant culture can rule out problems in an organization, the work setting often has subcultures. The subculture may share some

characteristics of the organizational culture; however, its distinguishing feature would be that the group solves problems in its own way. Foodservice employees work as a team from making meals to serving. Coordination and collaboration are required. However, although individuals may be influenced by the characteristics of the facility, each shift may work differently as a team, with coworkers interacting with each other differently.

Person–group (P-G) fit can be either complementary fit or supplementary fit (Muchinsky & Mnahanm, 1987). Supplementary fit was adopted in this study: the individual “supplements, embellishes, or possesses characteristics which are similar to other individuals in this environment” (p.289). Individuals who share values, goals, demographic characteristics, or personality and have their work environment in common would have supplementary fit. Complementary fit takes place when an individual can compensate for what a work group is missing.

People, in general, like other people who hold similar attitudes and opinions. From social categorization and identification theory, individuals with similarities in demographic characteristics, attitudes, and lifestyle, tend to have similar perceptions because they are likely to classify and interpret environmental stimuli similarly (Salancik & Pfeffer, 1978). The pattern of communication and information exchange among members creates a structure of interdependence among individuals, forming channels to exchange resources and information. When these relationships become concrete, some salient similarity develops into norms and procedures that convey what is liked and expected in the group, and thus a group culture develops (Werbel & Johnson, 2001). For this study, supplementary fit would be used.

Previous studies have established a link between P-G fit and certain desirable organizational outcomes. Vianen et al. (2007) concluded that PG fit is significantly related to organizational citizenship behaviors, co-worker job satisfaction, need satisfaction, and group

performance (Adkins et al., 1996). Vancouver and Schmitt (1991) also found that P-G fit affects school teachers' attitudes and turnover intention. Similar results were found in Van Vianen's work (2000), especially the extent to which the similarity between newcomers and their peers appeared to explain their turnover intention. Our study will examine the outcome of P-G fit to identify the unique meaning of this construct to employees.

Person-Group Fit and Turnover Intention

In research on turnover intention among employees in long-term care facilities, the impact of peer-group fit has been ignored. This exclusion creates an omitted variable bias. Because staff in CCRCs work in different living facilities, in different houses, and on different work shifts, the peer group can vary. Employees become familiar with people in the same peer-group or on the same shift, so relationships among group members develop. Individuals with similar values feel accepted in a peer group and more allied with other group members. Employees who match up with their work group would have more access to resources and support (Burt, 1982). Their connection with colleagues provides both instrumental and emotional support (Van der Heijden et al., 2009). Likewise, that support helps employees feel connected to their group and more likely to enjoy their work. They are, therefore, less likely to leave. Vianen et al. (2007) also argued that people who work together daily as a team strongly affect employee turnover intention. Tourangeau et al. (2010) agreed, concluding that long-term care employees are more likely to leave if they have a weak group relationship. Thus, the author proposes the following:

H11: Person-group fit has a negative effect on turnover intention.

Person-Organization Fit

The last fit construct examined in this study is person-organization (P-O) fit. P-O fit has been defined as “the compatibility between people and organizations that occurs when (a) at least one entity provides what the other needs, or (b) they share similar fundamental characteristics, or (c) both” (Kristof, 1996, pp. 4–5). Like P-G fit, P-O fit could be considered either complementary or supplementary. Organizational culture is a set of cognitions shared among employees, a stable collection of values, beliefs, and norms that make an organization a unique social construct (Pedersen & Sorensen, 1989). Moreover, value congruence, as seen in value similarity and person-culture fit, is a commonly used criterion that better explains employee behaviors in P-O fit (Verquer, Beehr & Wagner, 2003). P-O fit, therefore, would be accessed by supplementary perspective based on values/organizational culture in this study.

P-O fit has been extensively studied and positively linked to organizationally desirable attitudes and behaviors. For example, the value congruence between individual and organization is associated with organizational commitment (Saks & Ashforth, 2002; Verquer et al., 2003; Arthur Jr et al., 2006) and employee retention (Lauver & Kristof-Brown, 2001; Cable & DeRue, 2002; Verquer et al., 2003; Arthur Jr et al., 2006; Hoffman & Woehr, 2006; McCulloch & Turban, 2007; Vogel & Feldman, 2009). Positive affective experience that results from P-E fit would help individuals adjust their attitudes and behaviors to maintain comfort in the workplace.

Alternatively, a similarity-attraction perspective (Byrne, 1971; Newcomb, 1961) has also been mentioned in association with P-O fit and organizational outcome relationships. That is, people feel more comfortable in communicating with individuals who are psychologically similar to them. Through daily conversation, people verify and reinforce what is meaningful to themselves: beliefs, affect, and behavior (Swann, Stein-Seroussi, & Giesler, 1992). Thus, people who are similar to one another interact and, in turn, display more favorable attitudes and

behaviors. The consequence, reduced employee turnover intention, of P-O fit is the focus of this study.

Person-Organization Fit to Turnover Intention

Schneider (1987), in discussing the attraction-selection-attrition theory, proposed that individuals will be attracted to, selected by, and remain with organizations that closely match them. Thus, using the fundamental assumption of the P-O fit theory, people are attracted to and retained in organizations because of their preferences (Kristoff, 1996), not just because of financial rewards. Moreover, employees may become attached to an organization because it gives them the opportunity to carry out work that holds intrinsic value to them. Value refers to “a desirable states, objects, goals, or behaviors, transcending specific situations and applied as normative standards to judge and to choose among alternative modes of behaviors” (Sagie, Elizur, & Yamauchi, 1996, p.573), which means it influences the behaviors of both organization and its members. Value within the work context could be “what people specifically strive for in work, and they may, therefore, be more directly related to decisions about staying or leaving the job” (p.190). Chatman (1989) found that employees remain with organizations where behavioral norms and values are similar to their own. A sample of nurses has confirmed the negative relationship between P-O fit and real turnover (Vandenberghe, 1999). Ambrose et al. (2007) concluded that individual associate themselves with organizations that hold ethical values consistent with their own. Verguer et al, (2003) conducted a meta-analysis that confirmed the significant relationship between P-O fit and turnover intention. Based on these findings, the author proposes the following:

H12: Person-organization fit has a negative effect on turnover intention.

Leader-Member Exchange (LMX)

LMX has focused on a stable one-to-one relationship between leaders and each of their followers over time. Compared to traditional leadership theory, LMX argues that supervisors develop differentiated relationships with their followers instead of treating them uniformly (Dansereau, Graen, & Haga, 1975; Graen, Alares, Orris, & Martella, 1970). Graen and Scandura (1987) proposed a three-phase sequence for this interactive relationship: (a) role taking, (b) role making, and (c) role routinization. There is no time line for each relationship phase; however, failure in any phase may take the supervisor-member relationship back to the previous stage.

In the initial role taking stage, also called as sampling phase, employees work in a more formal way through economic exchange for their work contract (Graen & Scandura, 1987). When employees are new to the organizations, leaders have limited knowledge of them. In this phase, leaders would initiate the interaction by sending requests, demands, or assignments to new subordinates. The quality of employee performance and the level of their motivation allow leaders to evaluate worthiness and decide whether to spend more time and energy with employees (Bauer & Green, 1996).

As the relationship proceeds, leaders put trust into action by giving employees more autonomy to see if employees measure up to challenge. On the employee side, these actions may motivate them to perform better in return (Bauer & Green, 1996). Once expectations are met by one or another side, further exchange (typically initiated by leaders) between supervisor and subordinate would be expected. The interaction would not be limited to contractual transactions but also involve some social exchange. This phase of LMX development begins the role development phase (i.e., role making) by reciprocally sharing valued resources on a personal and work level (Bauer & Green, 1996). For example, leaders may offer both of material benefits and psychological rewards such as professional growth or accomplishment, latitude, support,

attention, and money rewards. Employees would reciprocate with personal and professional contributions to impress their leaders.

After a series of cooperating of dyads in the role development phase, supervisor and subordinates eventually arrive at balance, a stable vertical-dyad linkage (i.e., role routinization). In this commitment phase, the behavior of leaders and employees on work tasks becomes predictable. The mature dyadic relationship shares specific norms to create efficient functioning. That is, supervisors and employees know what to expect from one another and react and cooperate accordingly. In addition, both sides are loyal to one another, enjoying each other's company, and establishing an emotional bond.

Members in high quality exchanges, with mutual respect, trust, and obligation, are traditionally viewed as the "in-group" (Graen & Uhl-Bien, 1995). Close relationships allow in-group members to consult their supervisors more often, understand expectations, and solicit support from supervisors. Interactions between employees and managers in strong LMX relationships typically reinforce positive affect and strengthen the relationship bond. Supervisors claim that the quality of this relationship enhances employee commitment and goodwill (Truckenbrodt, 2000). Collins (2007) found that young, part-time associates are more satisfied with their work and saw more meaning and importance in job content when they had strong bonds with their immediate supervisors. Other research has also reported ample positive outcomes of high LMX: role clarity, good citizenship, perceived organizational support, job satisfaction, wellbeing, reduced role conflict, lower turnover intentions, and better job performance (Gerstner & Day, 1997; Hooper & Martin, 2008; Settoon, Bennett, & Liden, 1996; Wayne, Shore, & Liden, 1997).

Henderson, Liden, Gibkowski, and Chaudhry (2008) indicated that the determinants of quality LMX (i.e., congruency in goals, demands, and cultural norms of the organization) should

be well communicated to employee in the work environment. Boies and Howell (2006) also noted that supervisors should be cautious when identifying the configuration of high- and low-quality relationships with each of their employees that could threaten their teams. Employee feels frustrated and disappointed when the relationship with supervisor is not as they expected, particularly when they put effort into enhancing relationship (Maslyn & Ugl-Bien, 2000). Employees in low quality exchange, the “out-group”, stop investing in changing their status and are more likely to retaliate against the organization (Townsend, Phillips, & Elkins, 2000). The lack of a high-quality exchange relationship is, therefore, associated with not only the absence of positive consequences but also disruptive behaviors.

Graen and Uhi-Bien (1995) have suggested the need to go beyond a focus on “in-group” and “out-group.” A more effective leadership process should provide equal opportunities to develop quality relationships with each follower. By allowing more employees the opportunity to build high-quality relationships with their supervisors, more effective leadership and expanded organizational capability would be possible.

Leader-Member Exchange to Turnover Intention

Previous research has found a negative relationship between LMX quality and employee turnover intention. Many things affect employees’ willingness to stay in a work environment. For example, the affective force (i.e., the quality of LMX) may help determine turnover (Maertz & Griffeth, 2004). According to the central theme of LMX, the strength and context of a positive leader-member relationship offers affective benefits to group members. Managers who keep high-quality exchange relationships with employees help keep them in organization and therefore represent a disincentive for employees to quit. From social exchange perspective, subordinates in a high LMX group would perceive emotional support, intense dyadic

communication, and trust from supervisors, which would encourage them to remain with the organization.

Alternatively, support may also increase the motivation to stay in an organization (Maertz & Griffeth, 2004). The in-group enjoys several tangible benefits from their supervisors: more opportunity for professional development, support for more challenging assignments, influence on critical decisions, and access to inside information (Sin et al., 2009). Employees in such a favorable environment would more likely remain on the job (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011; Graen, Liden, & Hoel, 1982; Vecchio & Gobdel, 1984; Venkataramani, Green, & Schleicher, 2010). They would be aware that all high-end benefits would disappear if they decide to leave an organization. In short, LMX is critical to employee decisions on leaving a job.

However, a low-quality relationship with supervisors may push other employees out of an organization. A work environment where employees are often without sufficient information, resources, and trust, would force employees to search for ways to improve the situation. Quitting would be one option (Maertz & Griffeth, 2004). Therefore, the following hypothesis is proposed:

H13: Leader-member exchange has a negative effect on the turnover intention.

LMX as a Moderating Role between Fits and Turnover Intention

Moderating Effect of Leader-Member Exchange in the Need-Supply Fit and Turnover Intention

Once employees fit in their job and are satisfied with the environment, they are more likely to sense a connection with their organization. Moreover, employees often consider supervisors/managers as agents of an organization, with whom they can communicate and negotiate. Once employees perceive a match between their needs and the rewards provided by

the organization, their relationship with their supervisors would further enhance their psychological attachment to the organization. The resources provided by their supervisor would reinforce their attitudes and behaviors favored by the organization. The consequences of relationship quality between leaders and employees (LMX) should decrease any withdrawal behaviors within the organization (Dulebohn et al., 2011).

On the other hand, this study proposed that LMX may decrease the impact of low N-S fit on turnover intention. Employees with no hope of receiving the benefits of LMX in their workplace are more likely to leave, but if they have a good relationship with their supervisors the chance that they will leave may be reduced (Liden & Graen, 1980; Wayne et al., 1997). Thus, the rewards, support, and resources provided by supervisors may make up for what is missing in the work environment and in turn reduce the negative consequences of a perception of misfit.

Few studies have directly investigated the interactive relationship between N-S fit and LMX on employee turnover intention. This study proposed that this interaction would be significant in a CCRC. The interaction between good N-S fit and quality leader-member relationship should significantly decrease employee turnover intention. Alternatively, the study also argues that even employees, who perceive low fit with their organization, would still identify with the organization if a good LMX compensates for the lack of fit.

H14: Leader-member exchange moderates the relationship between needs-supply fit and turnover intention

Moderating Effect of Leader-Member Exchange in the Demand-Ability Fit and Turnover

Intention

Employees who are not a good fit as far as ability goes may need some time to learn what their jobs require of them. Training would decrease tension and allow them sufficient time to find fit. Supervisors with good relationships with their followers would be more likely to provide quality mentoring in such a case, making employees feel empowered and nurtured. Moreover, such mentoring would make employees feel respected and more likely to remain with the job, even if the fit was not initially ideal. Therefore, the study proposed that a quality vertical dyadic relationship could ease any negative perceptions of employees' D-A fit and, in turn, decrease turnover.

H15: LMX moderates the relationship between demand-ability fit and turnover intention

Moderating Effect of LMX in P-G Fit and Turnover Intention and P-O fit and Turnover

Intention

The study also focuses on the role of interpersonal and person-work unit relationships in explaining employee turnover intention. When any type of fit is low, employees must find another reason to stay in the organization. LMX may be one of the most important aspects of work, a concrete relationship for employees to rely on. If employees lose motivation to do their jobs, a quality relationship with their supervisors motivate them differently. LMX could replace employee focus on fit and become the primary motivator when employees perceive a lack of fit between their group values and organizational values.

Employees who are close to their supervisors (i.e., they have high LMX) are in an environment with affective and resource-based support. This study, thus, proposed that employee turnover intention would be low when LMX is high with correspondingly high value congruency with work units. Furthermore, the study also argues that high LMX would compensate for low value congruency. High LMX means that supervisor and employees maintain a trust-based relationship (Graen & Uhl-Bien, 1995). Therefore, although employees may interact or collaborate little with others, they at least have their supervisor as a strong ally. Having a high-quality relationship with supervisors could give employees the chance to create a desirable work environment and a personal network to access resources easily (Sparrow & Liden, 2005; Venkataramani, Green & Schleicher, 2010). Thus, even with a mismatch with peer-group or organization, LMX can help create organizational experiences that keep employees with the organization.

In conclusion, this study argues that employees with low value congruence would more likely maintain membership in the work unit if they have high quality LMX. Further, supervisors working to strengthen relationships with each employee via LMX could reduce the negative effects of low value congruency with peer-group as well as organization, including turnover.

H16: LMX moderates the relationship between P-G fit and turnover intention.

H17: LMX moderates the relationship between P-O fit and turnover intention.

Proposed Model

Figure 2.1 displays the conceptual model that will be tested in this study. The model presents the relationships among employee perceived person-environment fit (N-S fit, D-A fit, P-G fit, P-O fit), needs satisfaction, and work related attitudes and behaviors (work engagement, customer oriented behavior, ICB, organizational commitment) in CCRCs. Four dimensions of P-E fit are considered exogenous variables, whereas needs satisfaction and other work related attitude and behavioral outcomes are treated as endogenous variables.

Figure 2.2 presents the second model for testing the moderating effects of LMX on employee perceptions of fit and their turnover intention. Specifically, the LMX moderates the relationships of N-S fit, D-A fit, P-G fit and P-O fit on turnover intention.

Figure 2-1 Proposed Structural Model for Study 1

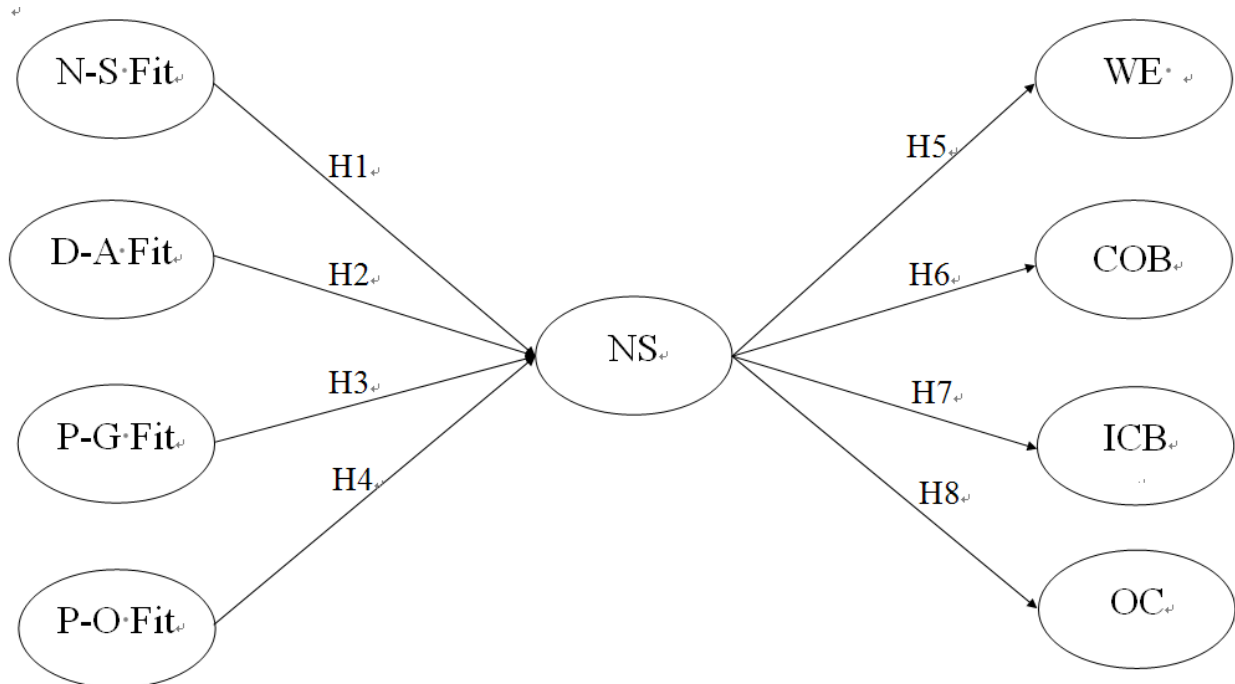
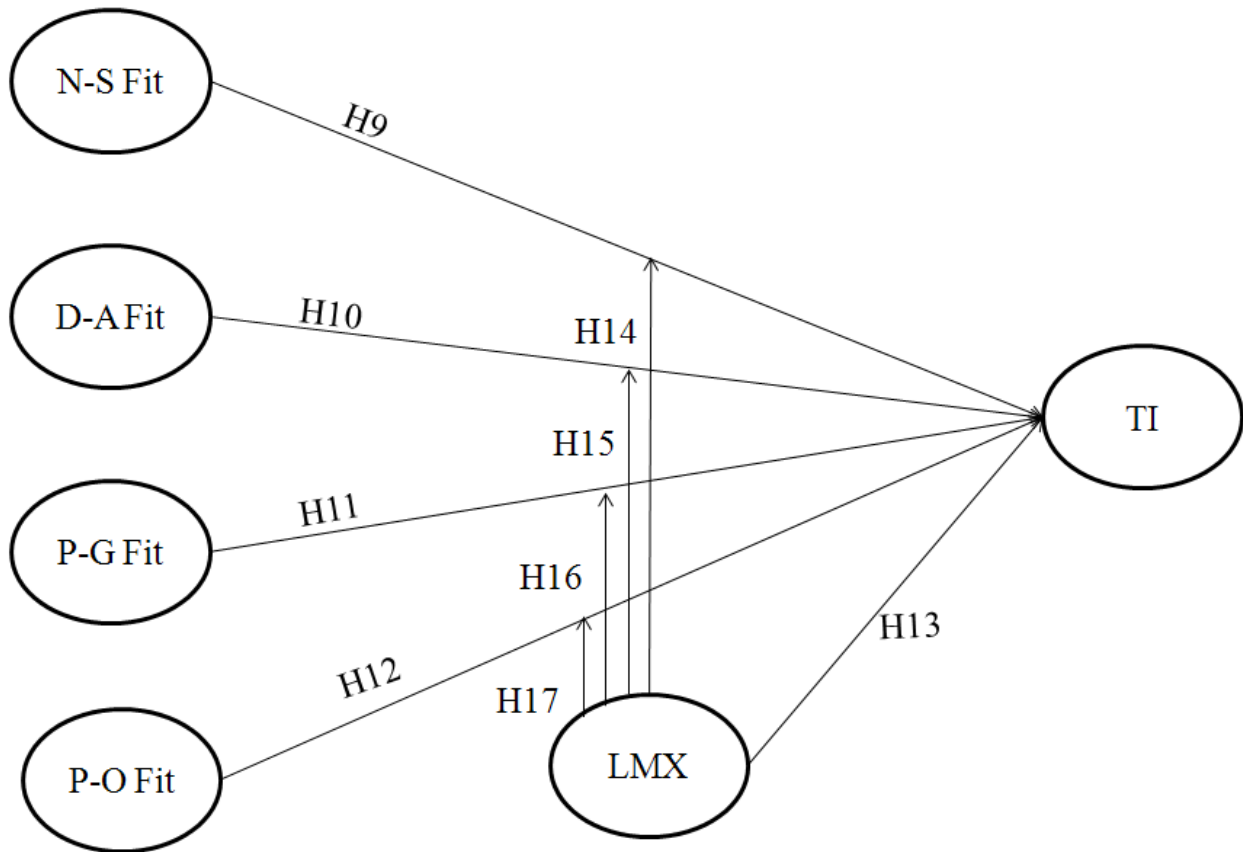


Figure 2-2 Proposed Relationships for Study 2



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Chapter 3 - Research Methodology

This chapter discusses the research methodology used in the current study. The procedures of research method in terms of instrument development, measurement testing, data collection and data analysis are shown in Figure 3.1. More specifically, in phase 1, the researcher identified existing measurements with high reliability and validity through a literature review. These measurements, in phase 2, were modified according to the work environment in CCRCs and reviews by 15 hospitality faculty and graduate students. Then, in phase 3, the modified questionnaire was sent to Institutional Review Board (IRB) to obtain approval for conducting the study. After receiving approval, the main survey, in phase 4, was distributed to CCRC facilities for food service employees. Finally, in phase 5, the collected data was analyzed for characteristics of participants and support for study hypotheses.

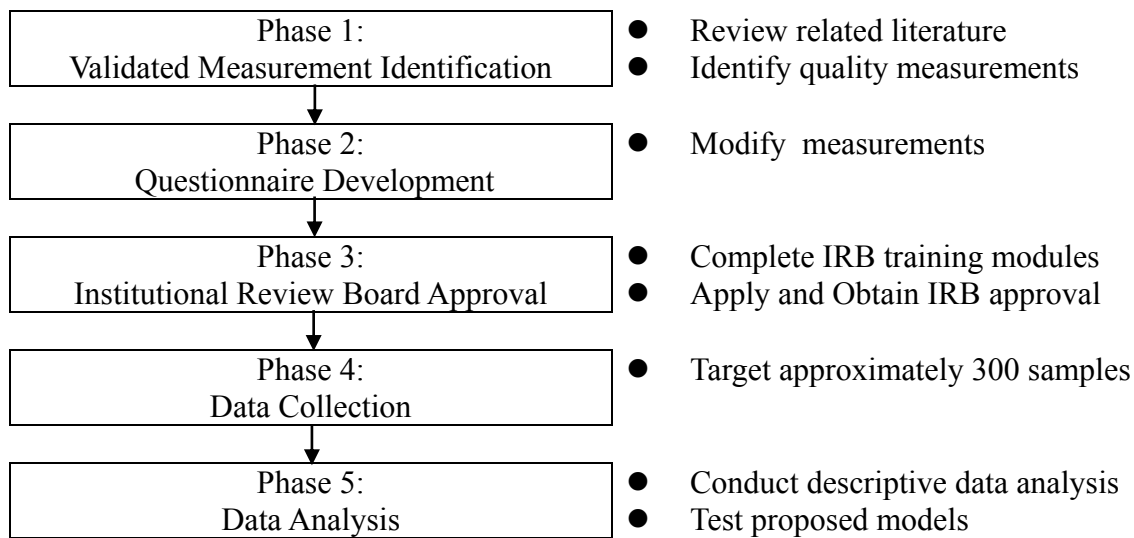


Figure 3-1 Research Procedures of the Study

Instrument Development

The survey included two versions. The main survey investigated employees' perceptions of fit, satisfaction, and subsequent attitudes and behaviors. This main questionnaire consisted of eight measurements and one section for personal information. These measurements were identified from a literature review and presented with P-E fit first, followed by needs satisfaction, work engagement, and organizational commitment, behaviors of customer-oriented and interpersonal citizenship, and LMX and turnover. These measurements were adapted to senior service settings with varying levels of modification covering the eleven constructs in the study. The last part in the questionnaire asked about participant demographic characteristics. A total number of 74 items were included in the main survey.

The other survey was a short version designed for managers/directors of facilities. The purpose of this questionnaire was to get more information about the work environment. The survey consisted of two sub-categories: characteristics of the facility and characteristics of dining operations; each had 4 questions. Questions about number of residents, foodservice employees, and number of meals provided in each dining operation were included.

Measurement of Variables

P-E fit

P-J fit and P-O fit were assessed by a 9-item scale of the Perceived Fit Scale (PFS) (Cable & DeRue, 2002). The scale included three dimensions: N-S fit, D-A fit, and P-O fit. N-S fit was examined by three items asking about the degree of fit between an employee's psychological needs and job characteristics (e.g., "There is a good fit between what my job offers me and what I am looking for in a job"). The D-A fit was examined by three items addressing the

match between job requirements and employee's ability and skills to perform the job (e.g., "The match is very good between the demands of my job and my personal skills").

The P-O fit was assessed by three items, examining to the extent of the value and culture congruence between employees and organizations (e.g., "The things that I value in life are very similar to the things that my organization values"). In addition, P-G fit was assessed using questions modified from the P-O fit scale by changing "organization" to "group" (Cable & DeRue, 2002). The concept of P-G fit was evaluated by three items, measuring the extent to which the individuals have similar values and culture congruent with their coworkers (e.g., "The things that I value in life are very similar to the things that my group values"). Subjects were asked to indicate their level of perception on a seven-point rating scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Needs Satisfaction

Needs satisfaction was measured by the short version of the Basic Needs Satisfaction–work scale (BNS-W) which was borrowed from Van den Broeck, Vansteenkiste, Witte, Soenens, and Lens (2010). The scale was designed for investigating relationships between needs satisfaction and other factors in the work environment. The scale contains 16 items, which measure satisfaction with three psychological needs: autonomy (6 items), competence (4 items), and relatedness (6 items). Examples of items are "I feel I can be myself at my job (autonomy)"; "I really master my tasks at my job (competence)"; and "I really feel connected with other people at my work (relatedness)." Respondents were asked to respond to these items on a seven-point rating scale, where 7 was "strongly agree" and 1 was "strongly disagree."

Work Engagement

Work engagement was assessed by 9-item scale developed by Schaufeli, Bakker, and Salanova (2006). The Utrecht Work Engagement Scale (UWES-9) included three subscales: vigor (e.g., “At work, I feel bursting with energy”), dedication (e.g., “I am enthusiastic about my job”), and absorption (e.g., “I feel happy when I am working intensely”). The UWES had 24 items initially but was reduced to 17 items (Schaufeli, Martínez, Marques-Pinto, Salanova, & Bakker, 2002). Then, a shorter scale using 9 items was developed and tested in a cross-nation sample (Schaufeli et al., 2002). Seppala, Mauno, Feldt, Hakanen, and Schuaufeli (2009) reported that UWES-9 has better construct validity than UWES-17. Respondents were asked to indicate the extent to which they perceive themselves as engaged at work in their organization on a seven-point Likert scale ranging from (1) “not at all” to (7) “completely.”

Customer orientation

The construct of customer orientation was assessed using the short form of selling orientation-customer orientation (SOCO) scale developed by Thomas, Soutar, and Ryan (2001). This short scale contained two subscales: service-oriented and customer-oriented. The scale was developed to measure behaviors of marketing personnel. Only the subscale of customer oriented behavior was used in our study. The author replaced “salespeople” with “service employee,” “sell” with “deliver,” and “product” with “service.” One example would be “A good service employee has to have the resident’s best interests in mind.” The five items of the construct were scored on a seven-point scale with the following anchors: 7 “completely” to 1 “not at all.”

Interpersonal Citizenship Behaviors

ICB was assessed by the 6-item scale developed by Setton and Mossholder (2002). The person-focused interpersonal citizenship behavior (8 items) is related to the “affiliative-promotive feature” (e.g., “listens to coworkers when they have to get something off their chest”). All items were evaluated using a 7-point Likert scale ranging from (1) “not at all” to (7) “completely.”

Organizational Commitment

A short form of original organizational commitment questionnaire (Mowday, Porter, & Steers, 1982) was used in this study. The 6-item measurement examined the extent of an employee’s perceived psychological attachment to an organization in terms of attitudes and commitment (e.g., “I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful”). The scale asks participants to respond to nine statements using a 7-point Likert scale, ranging from 1= strongly disagree to 7= strongly agree.

Leader-Member Exchange

The LMX in the study was assessed by LMX-7 scale (Grae & Uhl-Bien, 1995). LMX-7 has 7 items that characterize three dimensions of LMX: the perceived extent of respect, trust, and obligation. The scale assessed the quality of the dyadic relationship between a leader and a follower. Participants were asked to score their responses using a 7-point Likert scale, ranging from 1= strongly disagree to 7= strongly agree.

Turnover Intention

Turnover intention was assessed with three items (Seashore, Lawler, Mirvis, & Cammann's (1982). The first item was, "I frequently think about leaving this organization." The second item asked the extent of employee intentions to leave the organization within the next year. The last question asked, "I frequently think about looking for a job in another organization."

Pre-test

A pre-test was conducted to evaluate the ecological validity of the survey instrument. The initial questionnaire was handed out to 15 graduate students and faculty members in the Department of Hospitality Management and Dietetics to evaluate the accuracy and appropriateness of instructions, questions, and measurements. The instrument was refined based on feedback related to wording, inappropriate questions, and badly understood reversed questions. A total of 72 items were left after the pre-test (See Table 3.1).

Table 3-1 Measurements for The Study (Employee)

Measurement	Construct	Authors	Number of Items
Perceived Fit Scale	N-S Fit, D-A Fit, P-G Fit, P-O Fit	Cable & DeRue (2002)	12
Basic Needs Satisfaction – work Scale	Needs Satisfaction	Van de Broeck et al (2010)	16
Utrecht Work Engagement Scale	Work Engagement	Schaufeli et al (2006)	9
Organizational Commitment Questionnaire	Organizational commitment	Mowday et al. (1982)	6
Interpersonal Citizenship Behavior	ICB	Setton and Mossholder (2002)	6
Selling Orientation-Customer Orientation Scale	Customer Oriented Behavior	Thomas, Soutar, and Ryan (2001)	5
LMX-7 Scale	LMX	Graen & Uhl-Bien (1995)	5
Turnover Intention Scale	Turnover Intention	Seashore, Lawler, Mirvis, & Cammann's (1982)	3
Personal Information	Demographic Characteristics		10

Main Survey

Population and Sample

The study population consisted of foodservice employees working in CCRCs in the United States. The directory of Continuing Care Retirement Communities in the United States listed on LeadingAge and Commission on Accreditation of Rehabilitation Facilities (CARF) was used as a sampling frame for the study. The survey packets were distributed to approximately 1200 food service employees in 22 facilities. Facilities participating in the study included one for-profit business facility, twenty non-profit facilities and one government organization. A total of 288 employees answered, yielding a response rate of 24%.

Sample Data Collection Procedure

Approximately 1300 facilities were contacted through website access, fax, or executive personnel email (e.g., CEO, executive director, or food service director) from January to April 2012. The contacted person received a one page cover letter designed to encourage facilities to participate in the study. The first paragraph briefly described the purpose and significance of study and the research methodology. Contacts were informed that participation in the study was voluntary, and confidentiality of responses was assured. Managers/directors who were interested in the study contacted the researcher either by email or phone to specify the number of survey packets needed in their facility. A parcel with of the requested number of questionnaires was sent to each facility directed to the attention of the contact. A cover letter (see Appendix A), questionnaire (see Appendix B), and gift card preference sheet were enclosed in each questionnaire package. After one week, a follow-up email was sent to ensure the questionnaire was delivered. A reminder e-mail was sent to each contact two weeks later to encourage employee participation. The 8-item survey about facility characteristics and dining operations

(see Appendix C) was attached to the email. Foodservice employees returned completed questionnaires directly to the research institution in pre-paid envelopes. A 5-dollar gift card was sent to each participant as a token of appreciation for their participation.

Data Analysis

Prior to data analyses, incomplete questionnaires and responses from (assistant) managers or directors were removed from the data set. Data screening was performed before the data were actually analyzed to check for random missing values and multivariate outliers. The final usable sample for study 1 and study 2 were 261 and 254, respectively. Confirmatory factor analysis (CFA) was conducted to examine the overall model fit, convergent validity, and discriminate validity of the constructs in both studies.

Study 1

The measurement model for Study 1 included 9 factors with 51 indicators and analyzed by a two-step procedure (Anderson & Gerbing, 1988). First, fit of the measurement model to the data was examined using CFA with maximum likelihood estimation. Composite reliability (CR) of each construct should be higher than the suggested value of .70 (Nunnally, 1978). Convergent validity was examined by the value of each indicator's loading and statistical significance. The values of standardized factor loadings of indicators were higher than the suggested cut-off of .60 (Hair, Anderson, Tatham, & Black, 2010).). Discriminate validity was supported when the average variance extracted estimation (AVE) of each construct was greater than the squared correlation of the paired constructs. Second, the structural equation modeling was performed to test proposed hypotheses. Several fit indices were used to examine goodness-of-fit of the model: the traditional chi-square statistics (χ^2), the goodness of fit (GFI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). To identify the strength and nature

of mediational effect, a series examination of mediational effect was further conducted (Baron & Kenny, 1986; Sobel, 1982).

Study2

A total of six constructs with 20 measurement items were covered in study 2. First, CFA was employed to examine the reliability and validity of the constructs. Once the measurement model had satisfactory fit, the hierarchical multiple regression was conducted to test hypotheses 9 to 17. The demographic variable (i.e. tenure) was treated as a control variable in step1. The main effects of N-S fit, D-A fit, P-G fit, and P-O fit, were tested at step 2. In step 3, turnover intention was regressed on LMX. This was followed by step 4, which included the interactions of all types of fit with LMX to test the moderating effect as proposed.

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Chapter 4 - P-E Fit, Attitudes, and Behaviors: The Mediating Role of Needs Satisfaction

Abstract

The concept of person-environment (P-E) fit has received a great deal of attention during the last two decades from academics and practitioners alike. How well a person fits the work environment is an effective indicator of one's attitudes and behaviors at work. P-E fit has not been completely conceptualized, and therefore existing studies of fit theory have focused only on particular dimensions of fit. Consequently, P-E fit research has led to contradictory results. Therefore, this study, using multi-dimensional environmental fit, tested relationships between environment fit and work related outcomes through needs satisfaction at the individual, group, and organization levels.

To empirically test the proposed relationships, data were collected from 288 foodservice employees working at continuing care retirement communities statewide. Of the collected data, 261 surveys were usable for further data analysis. The results of structural equation modeling suggested that all fits had significant positive relationships to needs satisfaction. Needs satisfaction, in turn, explained certain variations in work engagement, interpersonal citizenship behavior, and organizational commitment. The study also examined the mediating effect of needs satisfaction between employee fit perceptions and work organizational outcomes. The results suggested partial mediating effects between need-supply fit and work engagement as well as person-organization fit and organizational commitment. Needs satisfaction showed a full mediation effect between person-group fit and interpersonal citizenship behavior. Finally, demand-ability fit was directly related to both needs satisfaction and customer oriented. Further

discussion and managerial implications of the findings along with directions for future studies are provided.

Keywords: person-environment fit, need satisfaction, work engagement, customer oriented behavior, interpersonal citizenship behavior, organizational commitment

Introduction

Globally, better health and improved life expectancy has greatly increased the number of seniors. According to United Nations Department of Economic and Social Affairs (UN DESA, 2010), the number people aged 60 and over in the world surpassed 700 million in 2009. This population's growth rate (2.6% per year) is higher than any younger group and should reach a billion by 2030 (National Institute on Aging [NOA], 2007; UN DESA, 2010). In line with the aging population around the world, nearly half of US citizens are older than 40 (United States Census Bureau, 2011). According to the US Census 2010 (United States Census Bureau, 2011), the current population of those 65 and over is 40.3 million, approximately one senior citizen for every eight citizens. This number will keep growing as the first baby boomers reach 65 by 2011.

The growth of the aging population has increased the need for seniors to stay in long-term care facilities. Approximately 69% of people aged 65 or older will eventually need some type of medical or physical assistance, and, therefore, move to senior community or residential care facility in their later life (AAHSA, 2007). As the need for housing and supported services to care for aging seniors increases, more workers will be needed. More importantly, hiring the right person who can align well with available job would be a salient concern in senior care industry in the future.

Among the senior care facilities, continuing care retirement communities (CCRCs) offer their residents flexibility and security for aging in place. CCRCs typically provide life time use to residents, who know they will be surrounded by a familiar environment, with close relationships with spouse, friends, and/ or family members while still having professional employees to take care of their needs. Residents, in many cases, can move from one building to another in the community to receive increased services as they age. Additionally, CCRCs not

only offer assistance for daily activities but also hold plenty of programs for socialization, entertainment, and personal development to satisfy residents' needs (Buzalka, 2005).

To satisfy a broad range of physical and psychological care that residents need, CCRCs must have employees who can do their jobs well and fit in with their work group and organization (Kristof-Brown, Jensen, & Colbert, 2002). Staff members at CCRCs presumably have appropriate professional abilities and knowledge but need proper work values as well. Employees should easily interact with other personnel, cooperate with team members, and follow what the organization values. The extent to which employees' skills, abilities, and values matches with work characteristics (i.e., job, group, or organization) suggests levels of fit between individuals and work units (Kristof-Brown et al., 2002; Kristof-Brown, Zimmerman, & Johnson, 2005; Resick, Baltes & Shantz, 2007).

Recent years have witnessed increased attention given to person-environment (P-E) fit, a multi-dimensional concept of the compatibility between two domains, individual and work environment (Kristof-Brown et al., 2002; Kristof-Brown et al., 2005; Resick et al., 2007). Previous research concluded that P-E fit plays a significant role in the organization, and different types of P-E fits have distinct effects on work-related outcomes. As person-job (P-J) fit literature has focused on the level of skills and abilities that employees can bring to their jobs (i.e., demands-abilities fit, or D-A fit; Kristof, 1996), the needs-supplies (N-S) fit which refers to environmental benefits for the employee, in many cases, has been ignored. The organization should consider the employee not only as an instrument for organizational effectiveness but also the subjective well-being of their employees. Using an incomplete concept (only one aspect of P-J fit) to assess fit may result in inconsistent results. For example, job satisfaction has been mentioned as a strong outcome of P-J fit, but fit is usually considered D-A fit in most studies (Kristof-Brown et al., 2002; Kristof-Brown et al., 2005). However, Cable and ReDue (2002)

included D-A, N-S, and person-organization (P-O) fit in their study and found that N-S fit, not D-A fit, was more closely related to job satisfaction.

Compared to the discussion of the match between person and their jobs (i.e., P-J fit) as well as person and their organization (i.e., P-O fit), other types of fit remain under-explored (Kristof-Brown et al., 2005). Kristof-Brown et al. (2005) suggested that person-group (P-G) fit could be an efficient tool in selecting employees to increase their contribution beyond job requirements. Facilities like CCRCs, which rely on employees working interdependently or emphasize team work more to provide good service, are especially likely to count on P-G fit.

To link the relationships between P-E fit and desired outcomes in organization, the mediating role of employee psychological need was suggested in the literature. Deci and Ryan (1985) have argued that individuals engage in optimal functioning once the environment fulfills their basic needs. In other words, individuals with better fit to their work environment would have more potential to meet their basic needs and result in optimal organizational outcomes. For example, Greguras and Diefendorff (2009) found that D-A fit, P-G fit and P-O fit significantly relate to organizational commitment and job performance through types of needs satisfaction. Their study further suggested testing needs-supply (N-S) fit and more organizational outcomes to clarify the mechanism in the development of desired organization outcomes in the P-E fit literature.

The purpose of this study was to test relationships among the multi-dimensional constructs of fit theory, work related attitudes, and outcomes at the individual, group, and organization levels. Specifically, the study related the concepts of employee needs satisfaction to D-A fit, N-S fit, P-G fit, and person-organization (P-O) fit and investigated the effects of needs satisfaction on work engagement, customer orientation behavior, organizational citizenship behaviors-interpersonal helping, and organizational commitment.

Theoretical Background and Hypotheses

Person-Environment Fit

P-J fit, in line with complementary fit, occurs when an individual can compensate for what the work group is missing (Edwards, 1991). P-J fit is commonly operationalized as the degree to which the rewards supplied by a job can meet employee needs, in the same way employee knowledge, skills, and abilities match job demands (Cable & DeRue, 2002). These two domains, the match between person and job, have been conceptualized into the needs-supplies and demands-abilities perspectives (Edwards, 1991). The N-S fit concerns the extent to which job characteristics can fulfill employees' physical or psychological needs. Needs expectation may include good salary, job security, work challenge, job autonomy, and supervisor support (Chilton, Hardgrave, & Armstrong, 2010; Silverthorne, 2004), emphasizing that employers need to understand what they should offer to satisfy employees' needs and, in turn, avoid turnover. D-A fit, on the other hand, addresses the extent to which employee knowledge, skills, and abilities fulfill demands of the job: hard work, cooperation, creativity, or respect for authority (Silverthorne, 2004).

Care services in CCRCs can be team-based or home-based, where the front-line employees not only work independently but also cooperate with others. Employees in each house or work shift may develop their own culture that differs from other groups or even the whole organization. With employees increasingly required to engage in interpersonal interactions at work, organizations like CCRCs that rely heavily on employee collaboration may also emphasize P-G fit (Werbel & Johnson, 2001). According to the social information processing theory, people are more likely to share information and opinions with those who have similar characteristics, in this case, immediate coworkers (Salancik & Pfeffer, 1978). Employees with congruent values

would feel understood by other group members (Vianen, Pater, & Dijk, 2007). Within-group agreement would let group members create their own norms and cultures, distinct from other groups in the organization (Kristof, 1996; Werbel & Johnson, 2001). Additionally, employees whose values are similar to coworkers will more likely feel positively about their coworkers (Kristof-Brown et al., 2005).

The concept of P-O fit has been used quite often in evaluating employees' post-entry fit. P-O fit refers to how job applicants interpret organizational factors as well as how organizations choose employees. According to attraction-selection-attrition theory, employees have different needs, wants, and preferences and, therefore, will be attracted to, selected by, and stay in an environment that suits them (Schneider, 1987). In other words, employees would stay in the organization where the culture or norms are similar to theirs. Therefore, previous studies have suggested the relationship between P-O fit and organizational oriented outcomes.

Since P-E fit comprises a series of dimensions, investigating P-E fit in a multidimensional perspective is necessary (Kristof-Brown et al., 2005). Very recently, new research studies have tackled this issue (Greguras & Diefendorff, 2009; Vogel & Feldman, 2009). Although these studies have tried to explain the effects of sub-dimensions of P-E fit on organizational outcomes, the antecedents and consequences of the whole construct remains blurred. Also, little research has investigated the effect of P-E theory in CCRCs.

Needs Satisfaction

Needs satisfaction, which is basic for human survival, growth, and integrity, was first introduced in the theory of self-determination to promote positive psychological well-being (Deci, Ryan, & Williams, 1996). Needs satisfaction not only increases individual psychological well-being but makes organizations more effective (Deci, Ryan, Gagne, Leone & Kornazheva,

2001). Specifically, needs satisfaction facilitates positive psychological well-being, which leads to work engagement, as well as other work outcomes, including organizational citizenship behavior and organizational commitment (Marescaux, De Winne, & Sels, 2010; Van den Broeck, Vansteenkiste, Witte, & Lens, 2008, 2010). Therefore, needs satisfaction may be one critical mechanism in the relationship between social environment and affective outcomes among employees.

Ryan and Deci (2000) divided needs satisfaction into three types: autonomy, competence, and relatedness. Autonomy means that people act from an integrated self and are not controlled by extrinsic regulations and pressure. Under this type of needs satisfaction, people would feel psychological freedom in their work or actions (Deci, Ryan, Gagne, Leone & Usunov, 2001). Competence refers to the sense that an individual has the abilities and skills to work efficiently. Relatedness develops from connecting with and having warm relationships with others (Ryan & Deci, 2000). Individuals who have satisfied their needs for autonomy, relatedness, and competence will have intrinsic motivation and, in turn, will internalize the culture and regulations in their environment (Ryan & Deci, 2000).

Casper and O'Rourke (2008) have noted that the quality of individual care may improve if staff are satisfied with what they want and need. Staff in nursing care facilities reported that they most want respect for the work that they do and the decisions they make (i.e., autonomy), recognition by other staff members and residents (i.e., relatedness), and being allowed to speak for themselves in formal meetings (i.e., need for competence) (Deutschman, 2001; McGilton, 2002). Many studies discuss the effects of staff empowerment on quality of care in long term care facilities (Casper & O'Rourke, 2008, Faulkner & Laschinger, 2008; Kuo, Yin, & Li, 2008; Tellis-Nayak, 2007). Similarly, organizational factors like access to informal or formal power and resources may increase staff autonomy, perceived respect, and in turn, contribute to resident

care. However, these studies have a limited focus. They do not address other important needs, specifically for relatedness and competence, as well as value congruence between staff members and their work domains.

Person-environment fit to need satisfaction

According to the work adjustment theory (Dawis & Lofquist, 1984), employees will devote themselves to achieve and maintain the link between individual requirements and environment. When the needs of employees and the capability of the organization match, employees feel fulfillment in their work. According to the psychological needs fulfillment theory, once the environment fulfills individual needs, the individual is likely to develop positive attitudes (French, Caplan, & Van Harrison, 1982). Individuals surrounded by a good environment can connect to the environment (i.e., relatedness), do tasks efficiently (i.e., competence), and act independently (i.e., autonomy) (Van den Broeck et al., 2008)

Theoretically, meeting job requirements increases individual needs satisfaction for competence, autonomy, and relatedness. Employees who can perform their duties are likely to work efficiently and maintain high quality. Self-efficacy prompts them to cooperate properly with tasks (Bandura, 1991) and learning (Martocchi & Judge, 1997). Moreover, Werbel and Johnson (2001) proposed that a high D-A fit would motivate individuals through self-efficacy to become proficient on the job. They also found a positive correlation between D-A fit and satisfying the individual's need for competence. Thus, individuals with higher D-A fit would more likely feel a sense of accomplishment, capability, and mastery (Greguras & Diefendorff, 2009). A sense of achievement allows employees to build favorable attitudes towards their jobs (Werbel & Johnson, 2001). Employees with confidence in themselves know what to do next to meet the demands of work. They also can sense that they initiate their own actions (i.e.,

autonomy). Meaningful interaction and appreciation from management then enhances relatedness (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

Coworkers in CCRCs are members of the work group, and staff members will have a good P-G fit in their work group when they are compatible with their coworkers (Adkins, Ravlin, Meglino, 1996; Kristof-Brown & Stevens, 2001). According to the similarity attraction paradigm (Byrne, 1971), employees are more likely to build strong bonds with people who share common values than with those do not. Similarly, employees who perceive compatibility with their coworkers (i.e., P-G fit) will communicate and interact more often to enhance a collegial relationship (Jasen & Kristof-Brown, 2006). The more similar the employee culture, the more employees perceive fit with their work group. The quality of informational exchange among fellow workers can also create a sense of connectedness with peers (Greguras & Diefendorff, 2009). This feeling of attachment to coworkers could help employees feel more competent to do their work, decreasing task difficulty because they can ask for advice and instruction from coworkers. This eliminates any feeling of job ambiguity, giving them “volition” to do their jobs (i.e., autonomy) (Chiaburu & Harrison, 2008).

P-O fit is the match of values and norms between individuals and their organizations (Kristof, 1996). Specifically, policies and regulations create an organizational culture whereas employee value systems determine what employees want from the organizations (Werbel & Johnson, 2001). The congruence between what organizations can offer and what individuals want from an organization affects fit with the organization. According to the attraction-selection-attrition (ASA) theory, people stay where structure and systems meet their needs (Schneider, 1987). The better an employee fits in an organization, the more the organization meets employee needs. Greguras and Diefendorff (2009) concluded that needs satisfaction would be more easily met if individual values align with organizational values. Specifically, people who are attracted

to, selected by, and stay with an organization have similar values and feel connected to and supported by their organizations. Support from an organization also frees employees psychologically to make decisions and achieve their goals. Based on the above discussion, the following relationships are proposed.

H1: Employee perceived N-S fit has a positive effect on needs satisfaction.

H2: Employee perceived D-A fit has a positive effect on needs satisfaction.

H3: Employee perceived P-G fit has a positive effect on needs satisfaction.

H4: Employee perceived P-O fit has a positive effect on needs satisfaction.

Work Related Outcomes

Need satisfaction to work engagement

Work engagement has been defined as a “positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002, p.72). The motivational process from needs satisfaction to work engagement can be illuminated using the Job Demand-Resource (JD-R) Model and Fredrickson’s (2001) Broaden-and-Build theory. According to the JD-R model, as the organization provides more job resources (i.e., satisfying employee needs for autonomy, relatedness, and competence), employees become more engaged in their work. In addition, the Broaden-and-Build theory suggests that positive emotions (i.e., engagement) “broaden people’s momentary thought-action repertoires which in turn serves to build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources” (Fredrickson, 2001, p.219). For example, staff members who interact well and/or feel connected with their coworkers and residents in CCRCs would feel a higher level of energy, more involved, and thus immerse themselves in their work. Additionally, staff who receive recognition and

respect increase in confidence, becoming more competent and in turn, devoting more time to service, even sacrificing meal time (Salanova, Agut, & Peiro, 2005). Therefore, needs satisfaction is a critical predictor, fueling both motivation and energy, and explaining the development of work engagement.

H5: Needs satisfaction has a positive effect on work engagement.

Need satisfaction to Customer-oriented Behavior

A CCRC offers to residents the service of caring. Such caring includes, but is not limited to, medical care and psychological support. Additionally, residents in CCRCs are touted as family members, not customers. That is, the facilities themselves claim that they are customer/resident-oriented, not service-oriented or marketing-oriented. Customer orientation refers to the efforts of salespeople to identify what would help customers make the best decisions for their needs, a concept important to relationship marketing.

The relationship between needs satisfaction and customer orientation suggests that if employees have their basic needs met, they will be motivated to satisfy resident needs. According to the self-determination theory, individuals internalize and integrate external regulations and culture once their needs are satisfied by the organization (Deci & Ryan, 1985), which would enhance their willingness to regulate their behaviors and enjoy doing so. Thus, CCRC employees who receive recognition or appreciation from residents, feel a sense of accomplishment, and see their suggestions taken seriously would internalize the facility's culture (in this case, resident-centered culture). Employees who internalize cultural value would be more likely to express customer oriented behavior, shown by meeting resident needs (Thakor & Joshi, 2005).

H6: Need satisfaction has a positive effect on customer oriented behavior.

Need satisfaction to interpersonal citizenship behavior

Interpersonal citizenship behavior (ICB) has gone under different names in previous studies: altruism (Organ, 1988), interpersonal helping (Moorman & Blakely, 1995), OCB-individual (William & Anderson, 1991), helping coworkers (George & Brief, 1992), and helping and cooperating with others (Borman & Motowidlo, 1993). Setton and Mossholder (2002) argued that these types of actions might be called overall interpersonal citizenship behavior (ICB) when people engage in “cooperative assistance behaviors for individuals in need.” People may engage in ICB at work because of a number of motives that link individual conceptions and perceptions. One of the most extensive discussions of ICB development involves affective consistency (George & Brief, 1992). Employees always try to maintain positive moods. Helping behavior may help create a positive mood; therefore, people with a positive mood (for instance, job satisfaction, needs satisfaction) would more likely help others in an effort to make them feel good about themselves.

Ryan and Deci (2000) argued that people naturally care for and help others when the context fulfills their psychological needs. An environment that lacks this essential element makes people more self-centered, satisfying their own needs instead of helping others. Sheldon and Bettencourt (2002) argued that individuals whose psychological needs are satisfied will generate high positive and low negative energy in a group. A positive mood enhances the motivation to work harder and help others (Elfenbein & O’Reilly III, 2007).

ICB is a relationship oriented behavior. The relational bond between two individuals determines how much help one person will offer another (Setton & Mossholder, 2002). Williams and Anderson (1991) argued that employees evaluate how much assistance they must offer their colleagues to balance the help they received from others, whether employees or organizations. In a work group, employees often seek advice from other employees, which makes employees

feel supported, valued, and attached to others at work (i.e., relatedness), makes them feel more confident about the work they do (i.e., competence), and feel capable of making decisions about their jobs (i.e., autonomy). This positive interaction should increase positive moods and empathic concern with coworkers and result in a higher level of ICB (George & Brief, 1992; Sheldon & Bettencourt, 2002).

H7: Needs satisfaction has a positive effect on interpersonal citizenship behaviors.

Need satisfaction to organizational commitment

With not only anticipated employee shortages but also the growing needs for elder care, maintaining a committed staff is important of CCRCs. Committed employees can consistently offer stable and high quality service to residents. Committed employees working in CCRCs benefit facilities by internalizing the concept of resident-centered daily care (Sikoeaka-Simmons, 2005). Organizational commitment, the bond between employees and employers, has been defined as “the relative strength of an individual’s identification with and involvement in a particular organization” (Mowday, Steer, & Porter, 1979, p. 27). The characteristics related to organizational commitment should, at the least, include “(a) belief in and acceptance of organizational goals and values, (b) willingness to exert effort on behalf of the organization, and (c) a desire to maintain membership in the organization” (Mowday et al., 1979, p. 27).”

People are attracted to and stay in environments where they can act independently, feel effective, and connect to others. To the extent that they can find such an environment, they engage in behaviors to maintain their membership in that environment. Specifically, having meaningful discussion with colleagues could make employees feel understood as well as connected to a work environment, and thus they identify themselves with that organization. An organization that offers fulfillment to employees would generate employee commitment

(Greguras & Diefendorff, 2009; Van den Boreck et al., 2010). Therefore, the study hypothesizes that employees whose needs are satisfied by their organizations would feel commitment to those organizations.

H8: Needs satisfaction has a positive effect on organizational commitment

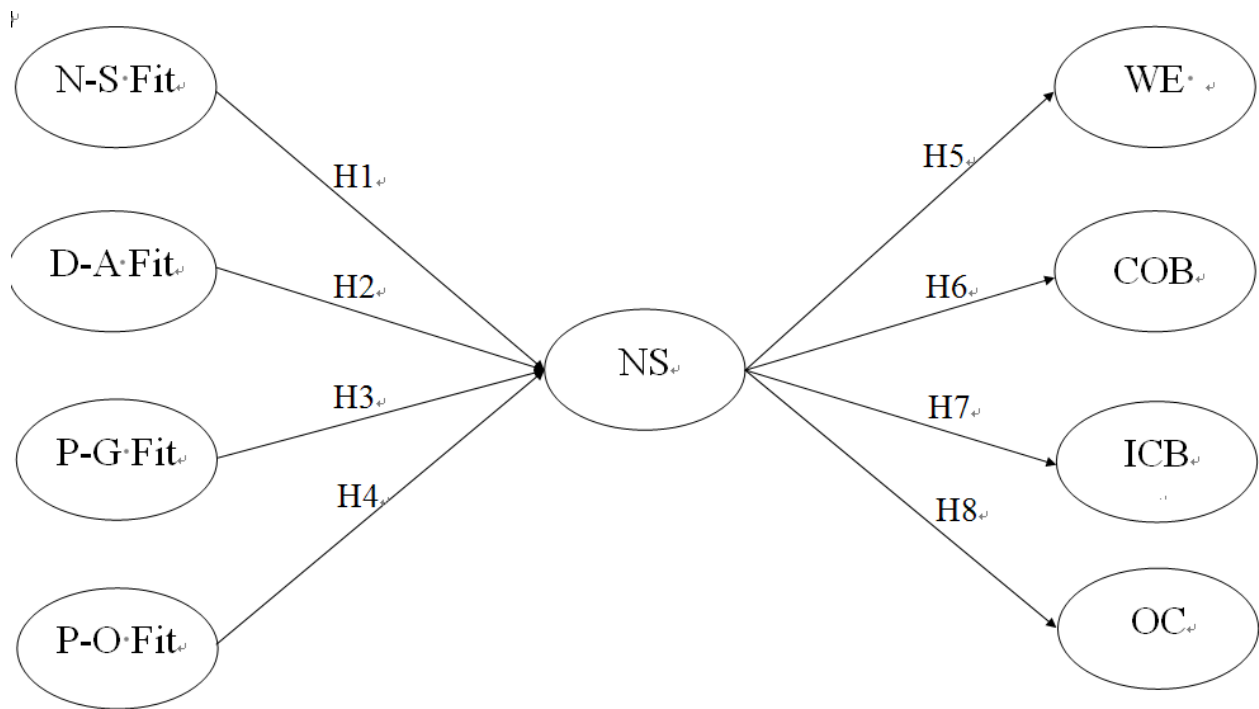


Figure 4-1 Conceptual Model for P-E Fit, Attitudes and Behaviors: Mediating Role of Need Satisfaction

Methodology

Sample

A total of 1,200 surveys were sent to long-term care facilities and 288 returned to the research institute resulting 24% response rate.

Data Collection

The facilities listed on the directory of CCRCs of LeadingAge or Commission on Accreditation of Rehabilitation Facilities (CARF) website were invited to participate in the study. An email or fax was sent to the facility under CEO or foodservice directors' attentions. After confirming managers/ directors' willingness to have their foodservice staff participate in the study, the follow-up survey packets were sent to the interested facilities. Employees who filled out the questionnaire sent their responses directly to the researcher.

Measures and Instrument Development

To empirically test the proposed model, a questionnaire was used in this study. Existing measurements with good reliability and validity were identified from the literature. A total of nine cognitive constructs were included in the study. Each construct was examined by multi-item measurement ranging from three to sixteen items. Scales were scored on a seven-point scale with the following anchors: 7 "completely" to 1 "not at all."

The concept of person-environment fit covers four constructs in the current study, named N-S fit, D-A fit, P-G fit and P-O fit. Nine items from Perceived Fit Scale (Cable & DeRue, 2002) were used to test N-S fit, D-A fit and P-O fit. Additional three items of P-G fit were modified from P-O fit by changing "organization" to "group" (Cable & DeRue, 2002). A short version of 16-item Basic Needs Satisfaction –work scale (BNS-W) was borrowed from the work of Van den Broeck et al. (2010). The scale assessed three psychological needs: autonomy (6 items), competence (4 items), and relatedness (6 items). The short form Utrecht Work Engagement Scale (UWES-9) with nine items adopted from Schaufeli, Bakker, and Salanova (2006) was recruited in the study to assess work engagement. Customer orientation was measured by 5 items from subscale of selling orientation-customer orientation (SOCO) (Thomas, Soutar, & Ryan,

2001). The scale person-focused interpersonal citizenship behavior (8-item; Setton & Mossholder, 2002) which related to “affiliative-promotive feature” was employed to examine interpersonal citizenship behavior. The construct was measured by a 6-item scale borrowed from Original Organizational Commitment Questionnaire (Mowday et al., 1982).

Data Analysis and Results

Prior to data analyses, 19 responses from foodservice (assistant) managers or directors were removed from the data set. The returned questionnaires with systematic missing values (n=8) were removed. The random missing values were replaced with the means of multi-item scales of the particular participant. Multivariate outliers were examined using Mahalanobi’s D^2 measure. Six cases below the threshold value of .001 were identified (Tabachnick & Fidell., 2007). The data were analyzed with and without outliers, and no differences among relationships in the proposed model were found. The detected outliers were, therefore, retained in the original data set, resulting a final data number of 261.

Characteristics of Participated Facilities

Most of the facilities participating in the study were not-for-profit organizations (90%). Fifteen communities were operated under a CEO as free standing units (68.2%), while seven of them were part of a corporate system (31.8%). All facilities participating in the study had independent living, assisted living, and nursing home facilities. The CCRCs, on average, managed four dining operations on site and each dining operation provided approximately 150 meals for residents and resident families daily. CCRC foodservice is operated by three managers, 21 full-time employees, and 21 part-time employees on average.

Demographic Characteristics of Participants

The demographic characteristics of participants are presented in Table 4.1. Of the overall foodservice staff, most were female (n=208, 80.0%), white (n=194, 74.3%), in the Midwest (n=178, 68.1%), with 12 or fewer years of education (n=156, 60.0%), and have worked as full-time employees (n=188, 73.7%). For age, approximately three out of ten respondents were between 21-30 years old (n=83, 33.1%), followed by 41-50 years old (n=43, 17.1%). Almost 40% (n=92) of the respondents had worked in the same facility more than five years, and 26.5% (n=66) had remained with the facility between one and three years. In terms of manager tenure, 34.7% (n=85) had worked with their current manager/supervisor for 1-3 years whereas 20.4% (n=50) spent five years or more with their managers.

Table 4-1 Characteristics of Respondents

Characteristics	Frequency	Percent (%)
Gender (n=260)		
Male	52	20.0
Female	208	80.0
Age (Mean=37.73, n=251)		
18-20	34	13.5
21-30	83	33.1
31-40	25	10.0
41-50	43	17.1
51-60	41	16.3
61 or older	25	10.0
Race/Ethnicity (n=257)		
White	194	74.3
Black/African-American	38	14.8
American Indian/Alaska Native	2	.80
Asian	13	5.1
Hispanic/Latino	7	2.7
Other	3	1.2
Geographic Regions (n=261)		
West	32	12.3
Midwest	178	68.1
Northeast	25	9.6
South	26	10.0
Years of Education (n=253)		
12 year or less	156	60.0
13-16 years	92	35.4
16 years or more	12	4.6
Job Tenure (n=249, Mean= 6.10)		
1 year or less	51	20.5
1-3 years	66	26.5
3-5 years	40	16.1
5 years or more	92	36.9
Manager Tenure (n=245, Mean=3.60)		
1 year or less	67	27.3
1-3 years	85	34.7
3-5 years	43	17.6
5 years or more	50	20.4
Employee Status (n=255)		
Part-time	67	26.3
Full-time	188	73.7
Foodservice Department (n=251)		
Food Production Employee	80	68.1
Dining Service Employee	171	31.9

Measurement Model

To examine the proposed model, the analysis followed a two-step approach recommended by Anderson and Gerbing (1988). Confirmatory Factor Analysis (CFA) was first performed to assess the reliability and validity of the measurement. The measurement model comprised four independent factors (N-S fit, D-A fit, P-G fit and P-O fit), one mediator (need satisfaction) and four dependent factors (work engagement, customer-oriented behavior, ICB and organizational commitment). Four types of fit were modeled by their three indicators. Need satisfaction was composed of three indicators, the three separate needs of autonomy, relatedness and competence. Work engagement, customer oriented behavior, ICB and organizational commitment were represented by their nine, five, six and six indicators, respectively. Various fit indices provided by Amos 18.0 were used to evaluate the fit of measurement model. The chi-square (χ^2) was initially used to evaluate the goodness of fit of the measurement model. Other indices like root mean squared error of approximation (RMSEA), Tucker-Lewis index (TLI), and comparative fit index (CFI) were used to compensate for the sensitivity of χ^2 to sample size (Bagozzi & Yi, 1988). A good fit to the data is generally indicated when the RMSEA is lower than .08, TLI and CFI are close to .90, and χ^2/df is less than 3 (Hair, Anderson, Tatham, & Black, 2010).

Overall measurement testing followed to confirm the goodness of fit. The result of the initial estimation of the overall measurement model did not provide a satisfactory result with a χ^2 value of 1089.5 ($df=518$), which was significant at the $p < .001$ level. Other fit indices revealed a moderate fit ($\chi^2/df = 2.10$, TLI=.84, CFI=.86, RMSEA=.08). Referring to the modification index and standardized regression weight provided by Amos 18.0, some indicators were removed from the model to improve the goodness of fit. Problematic indicators were removed one at a time, and each time the model was reevaluated. A total of 11 items in need satisfaction, work

engagement, customer orientation, and organizational commitment were removed, with the following results: χ^2 (368, n=261) =770.24, $p < 0.001$, TLI=.93, CFI=.94, RMSEA=.07. Overall, except the significant χ^2 statistic, other goodness of fit indices indicated that the model fit was acceptable to good. The TLI and CFI were both above the suggested cutoffs of .90. The RMSEA was below the acceptable value of .08.

Table 4-2 Measurement Items and Loadings

Constructs and items	Standardized Loadings ^a
Needs-supplies fit (N-S fit)	
1. There is a good fit between what my job offers me and what I am looking for in a job.	.86
2. The attributes that I look for in a job are well satisfied by my present job.	.94
3. My current job gives me just about everything that I want from a job.	.90
Demand-Ability fit (D-A fit)	
1. There is a good match between the demands of my job and my personal skills.	.84
2. My abilities and training are a good fit with the requirements of my job.	.77
3. My abilities and education are in line with the demands that my job places on me.	.82
Person-Group Fit (P-G fit)	
1. The things that I value in life are very similar to the things that my peer group's values.	.86
2. My personal values match my peer group's values and culture.	.95
3. My peer group's values and culture are similar to the things that I value in life.	.93
Person-Organization Fit (P-O fit)	
1. The things I value in life are similar to the things that my facility's values.	.94
2. My personal values match my facility's values and culture.	.95
3. My organization's values and cultures provide a good fit with the things that I value in life.	.93

^a. All factor loadings are significant ($p < .001$).

Constructs and items	Standardized Loadings ^a
Need Satisfaction	
1. Autonomy	.83
2. Relatedness	.63
Work Engagement	
1. I am passionate about my job.	.76
2. My job inspires me.	.88
3. When I get up in the morning, I feel like going to work.	.82
4. I feel happy when I work intensely.	.71
5. I am immersed in my work.	.68
Customer-oriented behavior (COB)	
1. I try to figure out the residents' needs.	.74
2. I take a problem-solving approach in providing services to residents.	.73
3. I recommend services that are best suited to solving problems to residents.	.91
4. I try to find out which kinds of services would be most helpful to the residents.	.87
Interpersonal Citizenship Behavior (ICB)	
1. I take time to listen to my coworkers' problems and worries.	.76
2. I take a personal interest in my coworkers.	.82
3. I show concern and courtesy toward coworkers.	.77
4. I make an extra effort to understand the problems faced by coworkers.	.86
Organizational Commitment (OC)	
1. I find that my values and the organization's values are very similar.	.90
2. I am extremely glad that I chose this facility to work for over others I was considering at the time I joined.	.73
3. For me, this is the best of all possible organization for which to work.	.72
^a . All factor loadings are significant ($p < .001$).	

Reliability and validity. Composite reliability (CR) of each construct exceeded the cut-off point of .70, ranging from .70 to .96. Convergent validity was evaluated by indicator loadings. All indicators loaded on the proposed constructs were significantly and the values of factor loadings were greater than .60 (Hair et al., 2010). AVE was higher than .50, ranging from .54 to .89 (Fornell & Larcker, 1981). In terms of discriminant validities, nearly all AVE of each

construct were greater than the squared correlation of the paired constructs (see Table 4.5). Three exceptions, however, were identified: between work engagement and needs satisfaction, between organizational commitment and needs satisfaction, and between organizational commitment and P-O fit. Each two potentially correlated constructs were combined into one at a time to perform the χ^2 difference examination (Anderson & Gerbing, 1988). To satisfy the discriminant validity criterion, the fit of the newly combined model should be significantly better than the fit of the original model with a critical chi-square value of 3.84 ($df=1$). The chi-square-difference statistics of new combined models on work engagement-needs satisfaction, organizational commitment-PO fit and organizational commitment-needs satisfaction were $\Delta\chi^2(12) = 46.08$, $\Delta\chi^2(12) = 99.40$, and $\Delta\chi^2(12) = 62.10$. The χ^2 differences of three models were more than the suggested values at $\Delta\chi^2(12) = 46.08$; therefore, discriminant validity was established.

Table 4-3 Descriptive Statistics and Associated Measures

	Items	M	SD	AVE	NS fit	DA fit	PG fit	PO fit	NS	WE	CO	ICB	OC
NS fit	3	4.68	1.63	0.81	0.93^b	0.63 ^c	0.50	0.65	0.73	0.71	0.05	0.31	0.69
DA fit	3	5.66	1.24	0.66	0.40 ^d	0.85	0.46	0.55	0.64	0.53	0.25	0.31	0.58
PG fit	3	4.59	1.48	0.84	0.25	0.21	0.94	0.67	0.65	0.44	0.09	0.28	0.54
PO fit	3	4.78	1.54	0.89	0.42	0.30	0.44	0.96	0.70	0.56	0.12	0.32	0.88
NS	2	4.94	1.18	0.54	0.53	0.41	0.42	0.48	0.70	0.80	0.11	0.39	0.83
WE	5	4.94	1.32	0.60	0.50	0.28	0.20	0.31	0.64	0.88	0.23	0.31	0.72
CO	4	6.05	1.01	0.66	0.00	0.06	0.01	0.02	0.01	0.05	0.89	0.47	0.13
ICB	4	5.50	1.14	0.65	0.10	0.10	0.08	0.10	0.15	0.10	0.22	0.88	0.38
OC	3	5.00	1.52	0.62	0.47	0.34	0.29	0.77	0.70	0.52	0.02	0.14	0.83

Goodness-of-fit statistics:

χ^2 (368, n=261) =770.24, $p < 0.001$, TLI = .93, CFI = .94, RMSEA = .07.

N-S fit= need-supply fit; D-A fit = demand-ability fit; P-G fit=person-group fit; P-O fit= person-organization fit; NS = need satisfaction; WE = work engagement; COB = customer oriented behavior; ICB = interpersonal citizenship behavior; OC = organizational commitment; AVE = average variance extracted; NFI = normed fit index; Tucker-Lewis index (TLI); CFI = comparative fit index; RMSEA = root mean square error for approximation

^a. All measurements are on a 7-point Likert scale. ^b. Composite reliabilities are along the diagonal; ^c. Correlations are above the diagonal; ^d. Squared correlations are below the diagonal

Structural Model

Hypothesis Testing

To examine whether need satisfaction was predicted by fit and thus impact proposed outcome variables, the proposed model was tested using structural equation modeling. In hypotheses 1 to 4, the study argued that different dimensions of P-E fit would have a positive effect on individual basic needs. Thus, four paths were added to connect N-S fit, D-A fit, P-G fit, and P-O fit to needs satisfaction in the model. Later, another four paths were drawn from needs satisfaction to the proposed outcomes: work engagement, customer oriented behavior, interpersonal citizenship behavior, and organizational commitment. The proposed model, overall, yielded an acceptable-fit statistics; $\chi^2(390, n=261) = 957.06, p < .001$, IFI = .90, TLI = .89, CFI = .91, and RMSEA = .08.

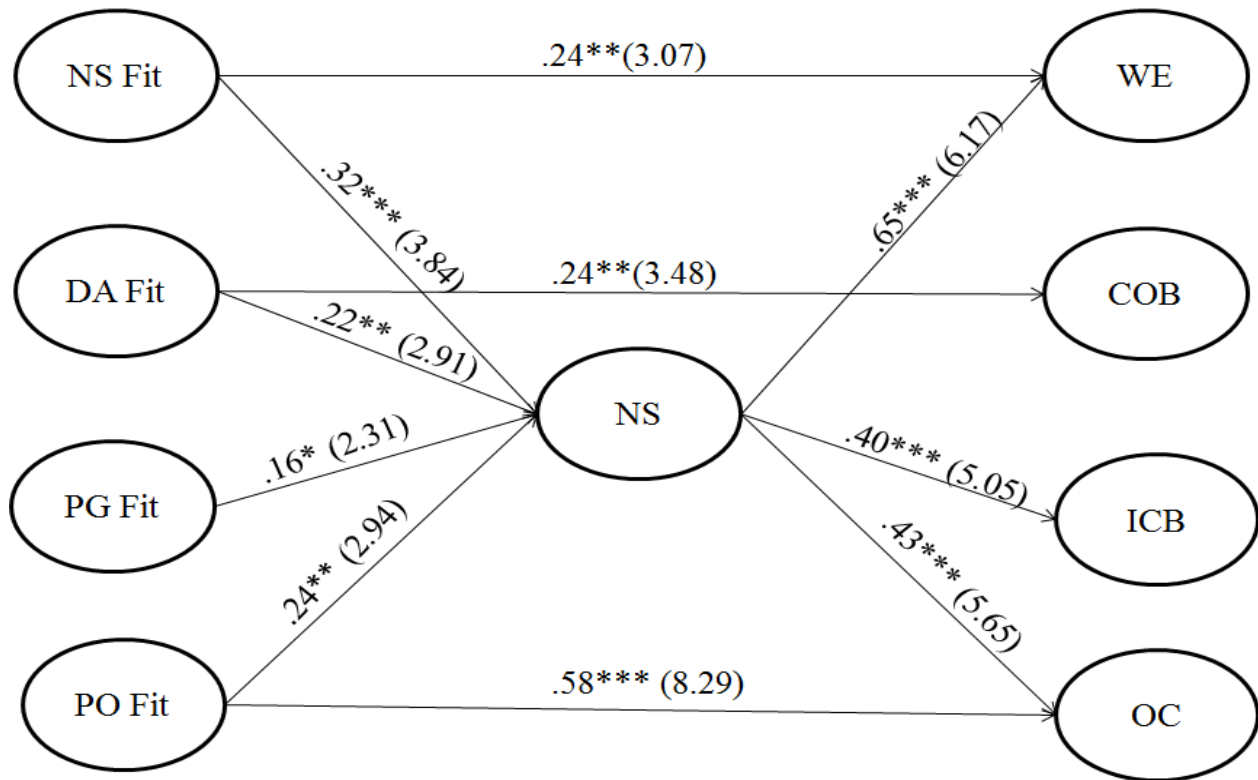
Modification indices suggested three additional paths improving the model fit: N-S fit to work engagement, D-A fit to customer oriented behavior and P-O fit to organizational commitment. All suggested relationships have been supported in previous research. The model, then, was revised based on modification indices. After dropping one non-significant paths and adding three recommended paths, a significant increase in model fit was confirmed; $\Delta\chi^2(2) = 70.11, p < .001$. This revised model yield a better model fit to the data; $\chi^2(388, n=261) = 886.95, p < .001$, TLI = 0.91, CFI = 0.92 and RMSEA = 0.07. Figure 4-2 presented the final structural model.

In Figure 4.2, the standardized path coefficients and t-values of significant paths are presented. To sum up, each dimension of fit had a distinct effect on predicting needs satisfaction. Specifically, N-S fit had a strongest positive relationship with needs satisfaction ($\beta=.32, p < .001$, H1 supported), followed by P-O fit ($\beta=.24, p < .01$, H4 supported), D-A fit ($\beta=.22, p < .01$, H2

supported), and P-G fit ($\beta=.16, p <.05$, H3 supported). Needs satisfaction had positive effects on work engagement ($\beta=.59, p <.001$, H5 supported), organizational commitment ($\beta=.43, p <.001$, H7 supported), and ICB ($\beta=.32, p <.001$, H8 supported). However, no relationship was found between needs satisfaction and customer oriented behavior (H6 rejected). Additionally, three direct paths other than initially proposed relationships were found from fits to outcome variables. First, the direct relationship was found from N-S fit to work engagement ($\beta=.24, p <.01$). Then, D-A fit had a significant relationship on customer oriented behavior ($\beta=.23, p <.001$) and P-O fit was positively related to organizational commitment ($\beta=.58, p <.001$).

The squared multiple correlations in the revised model indicated that four fits accounted for 63% of the total variance on needs satisfaction. 71% of total variance of work engagement was explained by N-S fit and needs satisfaction. D-A fit itself explained 6% of total variance on customer oriented behavior. Needs satisfaction explained 16% of total variance of ICB. A total of 86% variance of organizational commitment was explained by P-O fit and needs satisfaction.

Figure 4-2 Test Results of the Revised Model



Note. N-S fit=need satisfaction fit; D-A fit= demand-ability fit; P-G fit= person-group fit; P-O fit= person-organization fit; NS= need satisfaction; WE= work engagement; COB= customer-oriented behavior; ICB= interpersonal citizenship behavior; OC= organizational commitment.

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

1. Numbers in parentheses are the t-values.

2. Numbers outside of parentheses are the standardized path coefficients.

Mediational Test

The study further examined the nature and strength of mediating effect of needs satisfaction between four types of fits and their corresponding outcomes. Four models, evaluating mediating effects of needs satisfaction between predictors and outcomes (N-S fit-work engagement, D-A fit- customer oriented behavior, P-G fit- ICB and P-O fit-organizational commitment), were evaluated based on a serial of four-step mediation tests (Baron & Kenny, 1986), χ^2 tests and Sobel tests (Sobel, 1982).

Four-Step Mediation Test

According to Baron and Kenny (1986), to establish mediation four procedures must be followed: First, the predictor significantly relates to the outcome variable; second, the predictor significantly relates to the mediator; third, the mediator significantly predicts the outcome variable after controlling for the predictors; and fourth, the mediation effect could be established by checking if the effect of predictor on outcome variable is decreased (partial mediation) or went from significant to non-significant (full mediation).

The first two steps, significant relationships between predictors and outcome variables as well as predictors and mediator were assessed by examining the values of path coefficients presented in Figure 4.3 and Table 4.4. Step 3 was performed by constraining the direct effect from the mediator to outcomes one at a time whereas the final step was conducted by allowing the direct path linking between the mediator and outcomes. If the relationship between the predictor and the outcome became weak, it indicates a partial mediating effect existed between the predictor and the outcome. If the relationship between the predictor and the outcome variable went from significant to non-significant, a complete mediating effect is identified.

Since needs satisfaction did not significantly relate to customer oriented behavior, the mediating effect of needs satisfaction associated with D-A fit and customer oriented behavior was failed. The results of final step suggested that both strengths of path coefficient from N-S fit to work engagement ($\beta = .74, t = 9.92, p < .001$) as well as P-O fit to organizational commitment ($\beta = .86, t = 11.05, p < .001$) were decreased ($\beta = .30, t = 3.68, p < .001$ and $\beta = .56, t = 8.09, p < .001$, respectively). The partial mediator of needs satisfaction association with these two paths was found. Additionally, the initially significant relationship between P-G fit and ICB ($\beta = .24, t$

= 4.33, $p < .001$) became non-significant ($\beta = .09$, $t = 1.11$, $p > .05$), indicating a complete mediating role of as needs satisfaction. Table 4.4 reports path coefficients and its significance.

χ^2 Test

The χ^2 test was later performed to examine whether the mediating model was better fit suited to the data than non-mediating model (Anderson & Gerbing, 1988). The test was conducted by calculating the χ^2 difference between non-mediating models and mediating models. That is, if the mediating model is significantly better than non-mediation model, the $\Delta \chi^2$ from non-significant model to mediation model should be dropped greater than 3.84 for one degree of freedom. The results across three models in Table 4.5 indicated that the mediating models regarding N-S fit to work engagement, P-G fit to IC and P-O fit to organizational commitment provided significantly better estimation to the data than non-mediating models ($\Delta \chi^2 = 50.36$, 12.20, and 38.68 respectively).

Sobel Test

Preacher and Hayes (2004) have recommended a necessary step to confirm mediation effect by using the Sobel test along with Baron and Kenny method. Sobel test is a more directly way to examine the mediating effect than a series regression analysis suggested by Baron and Kenny (1982).

Sobel test compares the strength of the indirect effect of predictors on outcomes. The indirect effect of predictor on outcome has been defined as the product of predictor on mediator path (a) and the mediator on outcome path (b), or ab . For Sobel test, ab should be divided by the standard errors of the indirect effect, S_{ab} , resulting a critical ratio. The ratio could be compared

with the value from the standard normal distribution appropriate for a give alpha level. The S_{ab} could be calculated by using following equation: $S_{ab} = \text{SQRT} (b^2 * S_a^2 + a^2 * S_b^2)$

where a = unstandardized regression coefficient of path a;

S_a = standard error of a;

b = unstandardized coefficient of path b;

S_b = standard error of b.

According to the results of Sobel test presented in Table 4.4, the first indirect effect from N-S fit to work engagement through needs satisfaction was supported ($z = 3.29, p < .001$).

Meditation was again checked for the relationship from P-G fit to ICB through needs satisfaction.

The indirect effect of the observed relationship between P-G fit and interpersonal citizenship behavior was significant ($z = 2.37, p < .01$). Finally, the indirect effect of P-O fit on

organizational commitment via needs satisfaction was also confirmed ($z = 2.60, p < .01$). In

summary, according to the results of hypothesis test as well as meditational test, satisfaction of psychological needs acted as a partial mediator in the relationships between N-S fit and work engagement as well as P-O fit and organizational commitment. As needs satisfaction was a full mediator associated with P-G fit and ICB, it fully accounted for the relationship between P-G fit and ICB.

Table 4-4 Mediating Effects of Needs Satisfaction

Between	Statistic of $P^a \rightarrow O^b$, when $M^c \rightarrow O$ is set at 0					Statistic of $P \rightarrow O$, when $M \rightarrow O$ allowed					Decrease ^d in χ^2	Sobel Test (z)
	<i>B</i>	<i>SE</i>	<i>B^e</i>	<i>t</i>	χ^2	<i>B</i>	<i>SE</i>	β	<i>T</i>	χ^2		
NS fit-> WE	.46	.05	.74	9.93***	937.31	.19	.05	.29	3.65***	886.95	50.36	3.29***
PG fit-> ICB	.24	.06	.29	4.35***	897.93	.08	.07	.09	1.14	885.73	12.20	2.37**
PO fit-> OC	.68	.06	.86	11.05***	925.58	.49	.06	.58	8.23***	886.90	36.68	2.60**

^a predictor variable.

^b outcome variable.

^c Mediator

^d Decrease in for the decrease for one degree of freedom

^e Size of direct effect when the direct effect of the mediator on the dependent variable is controlled

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

Discussion and Implications

As hypothesized by fit theories (Jansen & Kristoff-Brown, 2006), employees engage in desired outcomes when their needs are fulfilled. Self-determination theory (Deci & Ryan, 1985) further emphasizes the links between environment and optimal development by satisfying psychological needs. The proposed model was tested linking these two concepts where N-S fit, D-A fit, P-G fit, and P-O fit satisfy overall psychological needs, and the extent of psychological needs satisfaction results in work engagement, customer oriented behavior, interpersonal citizenship behavior, and organizational commitment. The findings of this study have several theoretical and practical implications. The results provide a way for organizations to encourage optimal employee attitudes and behaviors by emphasizing various forms of fit that from employees' need satisfaction. In turn, need satisfaction can encourage employees' positive attitude and behavior. The administrators in senior care facilities should be aware if multiple fits were achieved for their employees to foster organizationally desired attitudes and behaviors.

Generally, the results are consistent with previous findings with one exception: the relationship between need satisfaction and customer oriented behavior. As stressed by fit theory and self-determination theory, this study confirms the four dimensions of fit generate favorable outcomes largely through satisfaction of psychological needs. That is, employees surrounded by different levels of fit are more likely to experience a feeling of needs satisfaction. Once psychological needs are met by the work environment, employees are intrinsically motivated to engage in positive attitudes and behaviors (Van Broeck et al., 2008; Van Broeck et al., 2010; Marescaux et al., 2010; Vansteenkiste, Neyrinck, Niemic, Soenens, B & van den Broeck, 2007).

Findings in this study imply that individuals could identify each dimension of fit in their work environment (Cable & DeRue, 2002; Hinkle & Coi, 2009; Kristof-Brown, 2000; Lauver &

Kristof-Brown, 2001) and relate them to distinct outcomes benefiting organizations through needs satisfaction (Greguras & Diefendorff, 2009; Scroggins, 2007). The results not only expand P-E literature to include the importance of using multidimensional fit methodology but also responds to the real work environment because people interact with their jobs in several dimensions, not just one (Jasen & Kristof-Brown, 2006).

The Relationship between P-E fit and Needs Satisfaction

The findings of current study support that multiple dimension of fit could also be potential predictors on need satisfaction. That is, employees' satisfaction of needs would increase either when the requirement and supply are both satisfied between individuals and the work environment or the value congruent could be met between themselves and their group members or their organization. Specifically, distinctive P-E fit offers levels of need satisfaction fulfillment. The present study, therefore, suggests that P-E fit plays an important mechanism for foodservice employees meeting basic psychological needs within senior care facilities.

The Relationship between Needs Satisfaction to Outcome Variables

In line with previous studies, the results indicate that needs satisfaction increases employee's attitude and behavior in the work environment (Baard, Deci, & Ryan, 2004; Gagne, 2003). The current study is consistent with author's assumption that satisfaction of needs predicts individual work engagement, ICB and organizational commitment. The result also provides good support for self-determination theory that needs satisfaction is fundamental to orient people toward devoting themselves in their jobs, paying more attention to others and attaching to their facilities psychologically. A detailed discussion of each direct and indirect relationship between fits and organizational outcomes follow.

The Relationships between N-S Fit and Work Engagement

The direct relationship between N-S fit and work engagement can be explained by needs satisfaction. High N-S fit employees are likely to engage in their work not only because of satisfactory returns, but also because their basic needs are fulfilled. Staff members whose needs are fulfilled by the work environment are more likely to experience satisfaction in CCRCs, and, therefore, immerse themselves in their work. In short, the better the match between individual needs and job supplies, the better satisfied employees will be, resulting in stronger engagement.

This study provides support that N-S fit is positively related to work engagement. This demonstrates the critical role of N-S fit in predicting employee attitudes, suggesting that achieving congruence with specific individual needs would be important in work environment. Alternatively, people who perceive a good match between their needs and the job would more likely be engaged in their jobs or work roles.

The Relationships from D-A Fit to Needs Satisfaction and Customer Oriented Behavior

This study found both direct relationships between D-A fit and needs satisfaction as well as D-A fit and customer oriented behavior. Employees capable of performing their duties are likely to work efficiently and maintain high quality. Thus, a high D-A fit would satisfy the need for mastery, accomplishment, and capability (Greguras & Diefendorff, 2009). The direct effect of D-A fit on customer oriented behavior indicates employees whose work demands are satisfied are more likely to help residents. Contrary to the author's expectations, needs satisfaction was not significantly related to customer oriented behavior. This suggests that employees who work in senior service communities may consider customer orientation is a basic requirement for their job. Since they believe their abilities match the job demand, making residents happy becomes an obligation for employees to perform their job.

The Relationships between P-G Fit to ICB.

A fully mediated relationship was found between P-G fit and interpersonal citizenship behavior. In previous studies, P-G fit was considered a supporting role in predicting important outcomes (Resik et al., 2007). It has also been suggested as a way to compensate for D-A misfit causing low employee performance. The result of study suggested the indirect effect of P-G fit on interpersonal citizenship behavior through needs satisfaction. That is, the direct relationship between P-G fit and interpersonal citizenship behavior was explained by needs satisfaction. Employees who fit with their peer-group would feel increased satisfaction with their autonomy and relatedness, resulting in helping their coworkers. These relationships indicate employees prefer to work with people who share similar values (Byrne, 1971) and thus feel fully functional. In particular, employees in CCRCs often work as a team. They must assist each other to complete their jobs instead of working by themselves. Working with someone who are similar to them would make employees more confident and related. Interpersonal citizenship behavior is a relationship oriented behavior, so once employees feel supported, valued, and attached to others at work; they will more likely help their coworkers.

The Relationship between P-O Fit to Organizational Commitment

The study found a direct relationship between P-O fit and organizational commitment, confirming the findings of previous studies (Ambrose, Arnaud, & Schmink, 2007; Meyer, Hecht, Gill, & Toplonytsky, 2010; Silverthorne, 2004; Valentin, Godkin & Lucero, 2002). Additionally, those employees who fit in their organizations are likely to be committed at work because of needs satisfaction, another finding of this study. This indirect relationship supports the attraction-selection-attrition theory, which posits that people stay where value and culture are similar to themselves. Greguras and Diefendorff (2009) concluded that needs satisfaction would be more

easily met if individual values align with organizational values. Similarly, people will stay in environments where culture and values match what they value most in life. They can, therefore, act independently, feeling effective, and connecting to others in this environment.

In conclusion, facilities who intend to link the series of positive relationships from N-S fit, P-G fit and P-O fit to needs satisfaction and, more importantly, employee engagement, interpersonal citizenship behavior, and organizational commitment should reconsider their attention to types of fit throughout an employees' career. For example, starting from the hiring stage, the recruiters should focus not only on applicants' abilities. They should also assess whether job applicants' values are similar to organizational as well as group values. Furthermore, during an interview, recruiters should clearly communicate and answer job seekers' questions about the organization; therefore, prospective employees can fully consider the position as part of their career. In terms of P-G fit, the role analysis proposed by Werbel and Johnson (2001) may be used to guide managers to specific procedures aimed at increasing employee P-G fit. As the organizational culture may be complicated and hard to assess, managers may evaluate organizational culture through Organizational Culture Profile to identify critical aspects of the organizations and match with job applicants' (Chatman, 1988). Furthermore, during an interview, recruiters should clearly communicate and answer job seekers' questions about the organization; therefore, prospective employees can fully consider the position as part of their career.

Once employees enter a facility, manager should encourage group members to participate in information sharing for enhancing their intentions of interpersonal helping behaviors. Other than that, managers may provide some formal or informal mechanisms to help employees blend in the organizations. By giving clear information for career path, arranging mentor program or other socialization practices to newcomers, it would help them feel worth and connect with other people at their jobs other than feel along in the work group. The facility sponsored social

activities is also a good way to communicate organizational culture and ensure stable value congruent between organization and employees. Encourage employees participating in social activities could also speed up their learning of socialization in the organizations and experience the bond with their organization. As the fit between environment and employees maybe changed cross time, the managers and organizations may aware the challenge of adjusting organization or group culture system to maintain the match. Once the multi dimension fit was created between employees and organizations, managers should maintain vigilance about employee concerns over time to ensure multidimensional fit continues.

Limitations and Suggestions for Future Research

As with any study, some limitations should be acknowledged when interpreting the findings.

First, the data in this study was collected at a single point in time, as a cross-sectional study. Although causal relationships in this study were developed according to theoretical predictions and related literature, longitudinal research is encouraged for future study to confidently interpret the pattern of relationships found in this study. Additionally, people's fit perceptions are dynamic (Cable & Parson, 2001). As the characteristics of environment and individual change over time, perceptions of fit may change. Longitudinal methodology would illuminate any such changes.

The samples and measurements may not generalize to other populations. Although the study collected data nationwide, the participants were rather homogeneous in gender and race/ethnicity at foodservice departments in senior care facilities. Thus, it is possible the certain values, supplies, and psychological needs are shared within this group particularly. Future

studies may want to focus on more diverse samples to better generalize the results to other industries or types of employees with confidence.

Additionally, the potential of common variance bias should be addressed for all self-reported measurement used in the study. As all responses among factors were obtained from employees only, the relationships among factors in the study may be inflated. The Harmon's single-factor test (Podsakoff, MacKenzie, Lee & Podsakoff, 2003) was, thus, conducted to ensure that the majority of variance was not explained by one general factor. The result of the un-rotated factor analysis revealed that only 37.12 % of total variance was explained by a single global factor and, therefore, evidenced that common method variance was not a substantial problem in this study.

All dimensions of fit in present study were assessed subjectively. Subjective fit was tested assuming that individuals can identify and report any misfit that they experience in their work environment (Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). Although subjective fits were confirmed as the most significant in testing individual attitudes (Saks & Ashforth, 1997; Cable & Judge, 1996; Kristof, 1996; Verquer, Beehr, & Wagner, 2003), other methods (e.g., objective fit) have been used in other studies to evaluate the "real fit" between individual and organizations (Cooper-Thomas, Annelies, & Neil, 2004; O'Reilly III, Chatman, & Caldwell, 1991; Vianen et al., 2007). Hoffman and Woehr (2006) also argued that the way fit is evaluated in studies would affect relationships with outcomes. A fair test of perceived or objective fit relationships, such as that offered in the present study, could be conducted to confirm our results.

In the link between fit and psychological need concepts, employees in an enjoyable environment would more likely compensate for any misfit. A satisfactory environment would fulfill employees' basic needs and help them feel more satisfied with the quality of the job. The

findings suggest that desired outcomes could be developed by fulfilling employee needs through fit in the work environment, so future studies could explore other work-related attitudes and behaviors that enhance fit-need satisfaction. For example, broad consequences of stress, burnout, and emotional exhaustion could be considered. Additionally, this study examined the consequences of types of fit. Understanding the mechanism of fit development can benefit organizations and managers as they create a better workforce. For the future study, more studies should identify antecedents of each fit dimension to understand more fully how fit develops.

The construct of needs satisfaction in this study was compromised by three indicators, representing three separate needs of autonomy, competence and relatedness. However, the need of competence was deleted in the measurement fit analysis for model improvement. Unlike studies in other fields proposing that competence is a critical source for human well-being and psychological well-being (Bettencourt & Sheldon, 2001; Reinboth et al., 2004), in senior care setting, the need of autonomy and relatedness were more important to the employees working there. Additionally, autonomy and relatedness in senior service settings are complementary. Having both autonomy and related need satisfaction was more salient for foodservice line employees in the team-work and relationship based working environment. Foodservice employees in the senior care facilities not only wanted to have the chance to make decision for their work tasks but also understood and connected other than challenge themselves for greater job achievement. Therefore, the future study may put more the efforts in increasing employees' autonomy and relatedness in the work environment. Also, the study suggested that importance of each type of needs satisfaction to employees maybe different with the variance of value system of the industry. The similar study could be replicated to other settings.

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Chapter 5 - P-E Fit and Turnover Intention: The Moderating Role of Leader-Member Exchange

Abstract

As the population of the elderly has grown in the United States, a workforce to provide supporting services in senior care service is needed. However, hiring new employees and retaining them is not easy. Although recent studies have tackled this issue, few have considered employee perception of fit with their work environment and their relationship with their immediate supervisor. This study, therefore, examined the moderating effect of hierarchical relationship qualities (supervisor-subordinate) associated with multi-dimensional fit (need-supply, demand-ability, member-member, and member-organization) and turnover intention.

To empirically test the proposed relationships, data were collected from 288 foodservice employees working at continuing care retirement communities statewide. Of the collected data, 254 responses were used for data analysis. Results of hierarchical multiple regressions showed that employees' need-supply fit perception and leader-member exchange were negatively related to turnover intention. Additionally, the results showed that leader-member exchange compensated for need-supply fit and reduced turnover intention. Specifically, having a quality exchange relationship between supervisor and subordinates can weaken turnover intention due to employee misfit. Further discussion and managerial implications of the findings along with directions for future studies are provided.

Introduction

As the increasing number of seniors has highlighted the demands for workers in senior care, employee shortages are a global problem in long-term care facilities (Kachi, Inoue, & Toyokawa, 2010; Rosen, Harris, & Kacmar, 2011; Van der Heijden, Van Dam, & Hasselhorn, 2009). Staffing in long-term care facilities, therefore, can be challenging and complicated. The consequences of turnover in the workplace include a series of administrative costs associated with personnel selection, recruitment, and training (Zahrt, 1992). Additionally, quality of care in such facilities may suffer because of employee turnover. Remaining employees must take on additional job responsibilities because of turnover, affecting the quality of care in CCRCs.

Research on person-environment (P-E) fit has major implications for individual well-being (Arthur Jr, Winfred, Suzanne, Villado., & Doverspike, 2006; Hoffman & Woehr, 2006). The fit theory assumes that fit exists when an individual's characteristics satisfy environmental needs and vice versa. According to the theory of workplace adjustment (Dawis & Lofquist, 1984), individuals seek to establish and maintain correspondence (i.e., fit) with their environment. The level of correspondence achieved between person and environment could potentially predict tenure in that work environment. If employees fail to adjust to the environment, they often choose to switch to other facilities or leave the industry entirely (Rosen et al., 2011).

The perspective of social identity (Ashforth & Mael, 1989) explains variations in employee attitudes and behaviors. Individuals naturally favor people who are similar to themselves and thus both take and give more resources in an enjoyable environment. Many studies have confirmed that cultural similarity within a work group as well as the overall organization is positively related to such outcomes as decreasing turnover intentions (Brigham, De Castro, & Shepherd, 2007; McCulloch & Turban, 2007; Moyniham & Pandey, 2007; Vianen, Pater, & Dijk, 2007).

Previous research has noted effective management is important in retaining staff and maintaining high-quality care. Supervisors create an environment with support, and encouragement enhances employee motivation to achieve, relate, and enjoy work (Tellis-Nayak, 2007). Donoghue and Castle (2009) confirmed that supervisors who include employees in discussion and give them freedom to make decisions lose fewer employees. McGilton, McGills, Wodchis, and Petroz (2007) found that supportive supervisors can help their employees become loyal and devoted caregivers. For example, leaders who give staff helpful and positive feedback facilitate employee attachment to the workplace, which leads to a better relational environment for residents (Bishop, Weinberg, Leutz, Dossa, & Zinavage, 2008).

The relationship between managers/supervisors and employees in CCRCs has drawn considerable attention in recent years (Bishop, Squillace, Meagher, Anderson & Wiener, 2009; Tellis-Nayak, 2007). Growing evidence reveals that supervisor-subordinate relationship affects desirable employee outcomes heavily as well as the quality of senior care (Touangeau, Widger, Cranley, Bookey-Bassett, & Pachis, 2010). Employees in a high-quality exchange may receive a series of benefits from supervisors: preferential treatment, more job-related communication, and more promotions (Sin, Nahrgang, & Morgeson, 2009). From the social exchange perspective, employees in this type of relationship may feel obliged to reciprocally engage in supervisor valued behaviors. Tellis-Nayak (2007) found that employees who develop dependable and empathic relationship with their supervisors are more likely to interact with residents empathically and reliably.

Thus, a central question in this study is how the leader-member exchange (LMX) process shapes employees attitudes and behaviors in the workplace. The study integrates LMX into the relationship between P-E fit and employee turnover intention. This study argues that a high-quality exchange relationship may provide employees with the affective and resource-based

support to deal with the potential negative effects of low fit perceptions. That is, having supervisor support makes employees feel secure in an organization even if they perceive organization expectations as difficult to meet or the organization fails to meet their needs. Support from a supervisor can ameliorate the tension between heterogeneous group members and, in turn, create group cohesiveness through interpersonal support and assistance. Also, even employees who do not share values with the organization may attempt to maintain their membership. The quality of the vertical dyad may help employees identify connections with their organization and balance negative reactions to organizational cues. This study investigates the interactive effect of the dyadic relationship between supervisor and employees (LMX) on the relationship between P-E fit and employee turnover intention.

Turnover Intention

In the last two decades, the CCRC environment has changed from treatment based to a lifestyle provider. Thus, the community supplies more complex services to accommodate a diverse population. The dining operations, for instance, are flexible to meet residents' health requirements and overcome physical limitations. Resident-centered CCRC have improved menu variety, expanded meal offering hours, and provide more points and types of services (Buzalka, 2005). To maintain quality in dining service, facilities need more on-site staff. However, hiring new staff and, more importantly, retaining existing employees is difficult, as has been reported.

National Center for Assisted Living (2010) conducted a survey on employee vacancy, retention, and turnover at 600 assisted living communities. The overall retention rate was 50.9%, and the turnover rate was 38.3%. The turnover rate of dietetic aide/dining staff was highest among all job positions in assisted living (49.3%). Similarly, nursing facilities also reported high turnover rates. Foodservice staff in a nursing home included dietitian supervisor (7%) and other

foodservice staff (93%). Approximately half of food service staff remained in their positions, and four out of ten foodservice staff left their facility entirely (American Health Care Association and National Center for Associated Living, 2011). Because meals are one way to build community, foodservice employees are critical to resident living quality through serving, communicating with, and making residents feel good about their lives. Identifying what causes turnover in the long-term care workforce is important in continuing to improve the quality of residential care. Factors related to turnover intention often fall into three major groups: environmental or economic, individual, and organizational (Castle, Engberg, Anderson, & Men, 2007).

Previous research in long-term care facilities found that organizational characteristics (e.g., staffing level) have more significant impact on employee turnover intention than other variables (Brannon, Barry, Kemper, Schreiner, & Vasey, 2007; Castle & Engberg, 2006; Castle et al, 2007, Van der Heijden et al., 2009). The results reveal that high voluntary turnover is more significantly associated with several facility characteristics (Castle & Engberg, 2006).

Employees who change to new facilities are looking for an environment with reduced workload, higher work quality, and high rewards (Castle & Engberg, 2006). Employees leave organizations not only because of job problems but also because of upward mobility. Branno, Barry, Kemper, Schreiner, & Vasey (2007) found that the career development is significantly related to employee turnover intention. Likewise, employees who value helping others, whose supervisors show appreciation, and who are satisfied with their wages are more likely to be retained. Considering all the problems employee turnover causes an organization, our study focused on the salient impact of P-E fit and LMX on the turnover in CCRCs.

Person-Environment Fit

P-E fit refers to the compatibility between people and work environment. The term work environment includes the job itself, peer-group, and organization (Kristof, 1996). Based on Kristof-Brown, Zimmerman, and Johnson's (2005) meta-analysis study, people have optimal behavioral outcomes and reduce counterproductive behaviors when the two domains, people and work environment, show good fit, staying in their job, work group, and organization.

Different dimensions of P-E fit may affect individual work related responses differently (Cable & DeRue, 2002; Greguras & Diefendorff, 2009; Kristof-Brown, Jansen, & Colbert 2002; Vogel & Feldman, 2009). Foodservice employees may leave CCRCs because of the levels of misfit they experience at work. Employees may experience physical or emotional demands at work. Employees facing the challenges of workforce shortages or negative emotion among residents about illness may have negative perceptions of their job. Alternatively, employees new to senior care facilities may not be familiar with working with seniors or creating a home-like environment for the residents may feel a misfit with the facility. The types of fit may relate to factors that help form their intention to leave. In other words, individuals who perceive more points of fit in their work environment are less likely to leave the facility.

Although previous studies have proposed that P-E fit comprises several dimensions, few considered P-E fit as a multi-dimensional concept in their studies. Consequently, the effect of these sub-dimensions on organizational outcomes remains blurred. This study, therefore, uses a complete concept of P-E fit including needs-supplies fit, demands-abilities fit, person-group fit, and person-organization fit to better understand P-E's effects on foodservice employee turnover intentions in CCRCs.

Need-supply and demand-ability fit

Another under-researched area of P-E fit involves simultaneous evaluation of both need-supply (N-S) and demand-ability (D-A) fit in the domain of turnover intention. These two versions of fit are viewed as complementary. Complementary fit exists when a “need of the environment is offset by the strength of the individual, and vice versa” (Muchinsky & Monahan, 1987, p.271).

N-S fit has been defined as the extent to which the environment fulfills what an individual requires. Individuals come to their positions with a wide range of expectations about the job they want to keep. Employees believe a job will provide what they are looking for. The resources that employees expect would be any type of financial, physical, or psychological compensation such as good salary, job security, work challenge, work autonomy, and supervisor support (Chilton, Hardgrave, & Armstrong, 2010; Silverthorne, 2004). If the job cannot supply an acceptable level of compensation for the time and energy required to perform the job, the job is a mismatch with an employee’s needs.

The assumption underlying D-A fit is that the basis of “good fit” should be oriented to organizational objectives. Because individuals benefit from their positions, they pay the facility back in physical and psychological devotion. D-A fit, therefore, examines the congruence between an individual’s ability to carry out the tasks of the job and the demands of the job. In exchange for the position, the job demands acceptable levels of knowledge, skills, abilities, time, effort, commitment, and experience (Kristof-Brown, 2000; Nikolaous, 2003; Silverthorne, 2004). In a word, N-S fit focuses on what employers should provide to employees whereas D-A fit concerns the elements that employees bring to perform the job.

Previous studies have proposed that person-job fit, mostly assessed from the D-A fit perspective, is a potential predictor of employee job satisfaction and performance (Arthur Jr.,

2006; Hecht & Allen, 2005; Greguras & Diefendorff, 2009; Vogel & Feldman, 2009). However, controversial results have been found when D-A and N-S were examined simultaneously. Barr, Livingstone, and Nelson (1997) incorporate both fits in their discussion of creativity. Their work found that D-A fit increases employee job satisfaction when the environment involves high creativity. On the other hand, Cable and DeRue (2002) found that N-S better explained job and career focused outcomes (e.g., satisfaction, career satisfaction, and occupational commitment) than D-A fit and P-O fit. Similarly, Scorggins (2007) found that N-S fit has the most additive effect on job satisfaction and intention to quit whereas D-A has no effect on either.

The Theory of Work Adjustment to turnover intention

The theory of work adjustment (TWA, Dawis & Lofquist, 1984) has been used to explain P-E fit. TWA proposed that P-E fit is the “correspondence between an individual and his/her environment” (Dawis, Lofquist, & Weiss, 1968, p.3). To achieve correspondence, individuals bring certain skills into the environment (i.e., D-A fit), and the environment fulfills the requirements of individuals (i.e., N-S fit). In other words, individuals come to an environment with certain abilities whereas the environment provides individuals with rewards (e.g., compensation, prestige, personal relations). Once the correspondent relationship is achieved, stability becomes important. Stability in the correspondence between the individual and the work environment is manifested as tenure in the job and would be achieved as long as acceptable responses were mutually received. If the individual fails to create correspondence, turnover may result.

The environment sometimes is not what an individual expects, and sometimes both individuals and work environment change. Individuals must cope with both. The process of achieving and maintaining the minimum acceptable correspondence is called adjustment. For

example, if foodservice employees are not familiar with the atmosphere of CCRCs, although they go through training or orientation, they may find the physical and psychological demands of their jobs are more than they expected. Even those who have experience serving customers and hosting in restaurants may find taking care of seniors in long-term care facilities requires more patience and skill. If they fail to adjust, the pressures or stress may make them consider quitting. Lack of supplies or feeling unappreciated, poor mentoring, and overwork may also decrease correspondence between individuals and environment, possibly increasing turnover. Therefore, the following hypotheses are proposed.

H9: Need-supply fit has a negative effect on turnover intention.

H10: Demand-ability fit has a negative effect on turnover intention.

Person-group fit

Culture is a tool for analyzing and understanding a complex work setting (Frost, Moore, Louis, Lundberg & Martin, 1985). Cultural values are a tool of change and an avenue to organizational development. Although a dominant culture can rule out problems in an organization, the work setting often has subcultures. The subculture may share some characteristics of the organizational culture; however, its distinguishing feature would be that the group solves problems in its own way. Foodservice employees work as a team from making meals to serving. Coordination and collaboration are necessary. However, although individuals may be influenced by the characteristics of the facility, each shift may work differently as a team, with coworkers interacting with each other differently.

P-G fit can be either complementary or supplementary (Muchinsky & Monahan, 1987). Supplementary fit was adopted in this study: the individual “supplements, embellishes, or possesses characteristics which are similar to other individuals in this environment” (p.289).

Individuals who share values, goals, demographic characteristics, or personality and have a work environment in common would have supplementary fit. Complementary fit takes place when an individual can compensate for what a work group is missing.

People, in general, like those who hold similar attitudes and opinions. From social categorization and identification theory, individuals with similarities in demographic characteristics, attitudes, and lifestyle, tend to have similar perspectives because they are likely to classify and interpret environmental stimuli similarly (Salancik & Pfeffer, 1978). The pattern of communication and information exchange among members creates a structure of interdependence among individuals, forming channels to exchange resources and information. When these relationships become concrete, some salient similarity develops into norms and procedures that convey what is liked and expected in the group, and thus a group culture develops (Werbel & Johnson, 2001). For this study, supplementary fit was used.

Previous studies have established a link between P-G fit and certain desirable organizational outcomes. Vianen et al. (2007) concluded that P-G fit is significantly related to organizational citizenship behaviors, co-worker job satisfaction, need satisfaction, and group performance (Adkins, Ravlin, & Meglino, 1996). Vancouver and Schmitt (1991) also found that P-G fit affects school teachers' attitudes and turnover intention. Similar results were found in Van Vianen's work (2000), especially the extent to which the similarity between newcomers and their peers appeared to explain their turnover intention.

Person-Group Fit and Turnover Intention

In research on turnover intention among employees in long-term care facilities, the impact of peer-group congruence has been ignored. Because staff in CCRCs work in different living facilities, in different houses, and on different work shifts, the peer group can vary.

Employees become familiar with people in the same peer-group or on the same shift, so relationships among group members develop. Individuals with similar values feel accepted in a peer group and more allied with other group members. Employees who match up with their work group would have more access to resources and support (Burt, 1982). Their connection with colleagues provides both instrumental and emotional support (Van der Heijden et al., 2009). Likewise, that support helps employees feel connected to their group and more likely to enjoy their work. They are, therefore, less likely to leave. Vianen et al. (2007) also argued that people who work together daily as a team strongly affect employee turnover intention. Tourangeau et al. (2010) agreed, concluding that long-term care employees are more likely to leave if they have a weak group relationship. Thus, the study proposes the following:

H11: P-G fit has a negative effect on turnover intention.

Person-Organization Fit

The last fit construct examined in this study is person-organization (P-O) fit. P-O fit has been defined as “the compatibility between people and organizations that occurs when (a) at least one entity provides what the other needs, or (b) they share similar fundamental characteristics, or (c) both” (Kristof, 1996, pp. 4-5). Like P-G fit, P-O fit could be either complementary or supplementary. Organizational culture is a set of cognitions shared among employees, a stable collection of values, beliefs, and norms that make an organization a unique social construct (Pedersen & Sorensen, 1989). Moreover, value congruence, as seen in value similarity and person-culture fit, is a commonly used criterion that better explains employee behaviors in P-O fit (Verquer, Beehr & Wagner, 2001). P-O fit, therefore, as a supplementary perspective based on values/organizational culture, was used in this study.

P-O fit has been extensively studied and positively linked to organizationally desirable attitudes and behaviors. For example, the value congruence between individual and organization is associated with organizational commitment (Saks & Ashforth, 2002; Verquer et al., 2003; et al., 2006) and employee retention (Lauver & Kristof-Brown, 2001; Cable & DeRue, 2002; Verquer et al., 2003; Arthur Jr et al., 2006; Hoffman & Woehr, 2006; McCulloch & Turban, 2007; Vogel & Feldman, 2009). Positive affective experience that results from P-E fit would help individuals adjust their attitudes and behaviors to maintain comfort in the workplace. Alternatively, a similarity-attraction perspective (Byrne, 1971; Newcomb, 1961) has also been mentioned in association with P-O fit and organizational outcome relationships. That is, people feel more comfortable in communicating with individuals who are psychologically similar to them. Through daily conversation, people verify and reinforce what is meaningful to them: beliefs, affect, and behavior (Swann, Stein-Seroussi, & Giesler, 1992). Thus, people who are similar to one another interact and, in turn, display more favorable attitudes and behaviors. The consequence, reduced employee turnover intention, of P-O fit is the focus of this study.

Person-Organization Fit to Turnover Intention

Schneider (1987), in discussing the attraction-selection-attrition theory, proposed that individuals will be attracted to, selected by, and remain with organizations that closely match them. Thus, using the fundamental assumption of the P-O fit theory, people are attracted to and retained in organizations because of their preferences (Kristoff, 1996), not just because of financial rewards. Moreover, employees may become attached to an organization because it gives them the opportunity to carry out work that holds intrinsic value to them. Value refers to “a desirable states, objects, goals, or behaviors, transcending specific situations and applied as normative standards to judge and to choose among alternative modes of behaviors” (Sagie,

Elizur, & Yamauchi, 1996, p.573), which means it influences the behaviors of both organization and its members. Value within the work context could be “what people specifically strive for in work, and they may, therefore, be more directly related to decisions about staying or leaving the job” (p.190). Chatman (1989) found that employees remain with organizations where behavioral norms and values are similar to their own. A sample of nurses has confirmed the negative relationship between P-O fit and real turnover (Vandenberghe, 1999). Ambrose, Arnaud, & Schmink (2007) concluded that individual associate themselves with organizations that hold ethical values consistent with their own. Verguer et al (2003) conducted a meta-analysis that confirmed the significant relationship between P-O fit and turnover intention. Based on these findings, the following is proposed:

H12: Person-organization fit has a negative effect on turnover intention.

Leader-Member Exchange (LMX)

LMX has focused on a stable one-to-one relationship between leaders and each of their followers over time. Compared to traditional leadership theory, LMX argues that supervisors develop differentiated relationships with their followers instead of treating them uniformly (Dansereau, Graen, & Haga, 1975; Graen, Alares, Orris, & Martella, 1970). Graen and Scandura (1987) proposed a three-phase sequence for this interactive relationship: (a) role taking, (b) role making, and (c) role routinization. There is no time line for each relationship phase; however, failure in any phase may take the supervisor-member relationship back to the previous stage.

In the initial role taking stage, also called the sampling phase, employees work in a more formal way through economic exchange (Graen & Scandura, 1987). When employees are new to the organizations, leaders have limited knowledge of them. In this phase, leaders initiate

interactions by sending requests, demands, or assignments to new subordinates. The quality of employee performance and the level of their motivation allow leaders to evaluate worthiness and decide whether to spend more time and energy with employees (Bauer & Green, 1996).

As the relationship proceeds, leaders put trust into action by giving employees more autonomy to see if employees measure up to challenge. On the employee side, these actions may motivate them to perform better in return (Bauer & Green, 1996). Once expectations are met by one or another side, further exchange (typically initiated by leaders) between supervisor and subordinate would be expected. The interaction would not be limited to contractual transactions but also involve some social exchange. This phase of LMX development begins the role development phase (i.e., role making) by reciprocally sharing valued resources on a personal and work level (Bauer & Green, 1996). For example, leaders may offer both material benefits and psychological rewards such as professional growth or accomplishment, latitude, support, attention, and money rewards. Employees would reciprocate with personal and professional contributions to impress their leaders.

After a series of cooperating of dyads in the role development phase, supervisor and subordinates eventually arrive at balance, a stable vertical-dyad linkage (i.e., role routinization). In this commitment phase, the behavior of leaders and employees on work tasks becomes predictable. The mature dyadic relationship shares specific norms to create efficient functioning. That is, supervisors and employees know what to expect from one another and react and cooperate accordingly. In addition, both sides are loyal to one another, enjoying each other's company and establishing an emotional bond.

Members in high quality exchanges, with mutual respect, trust, and obligation, are traditionally viewed as the "in-group" (Graen & Uhl-Bien, 1995). Close relationships allow in-group members to consult their supervisors more often, understand expectations, and solicit

support from supervisors. Interactions between employees and managers in strong LMX relationships typically reinforce positive affect and strengthen the relationship bond. Supervisors claim that the quality of this relationship enhances employee commitment and goodwill (Truckenbrodt, 2000). Collins (2007) found that young, part-time associates are more satisfied with their work and saw more meaning and importance in job content when they had strong bonds with their immediate supervisors. Other research has also reported ample positive outcomes of high LMX: role clarity, good citizenship, perceived organizational support, job satisfaction, wellbeing, reduced role conflict, lower turnover intentions, and better job performance (Gerstner & Day, 1997; Hooper & Martin, 2008; Settoon, Bennett, & Liden, 1996; Wayne, Shore, & Liden, 1997).

Employees feel frustrated and disappointed when the relationship with supervisor is not as they expected, particularly when they put effort into enhancing the relationship (Maslyn & Uhl-Bien, 2000). Employees in low quality exchange, the “out-group”, stop investing in changing their status and are more likely to retaliate against the organization (Townsend, Phillips, & Elkins, 2000). The lack of a high-quality exchange relationship is, therefore, associated with not only the absence of positive consequences but also disruptive behaviors.

Leader-Member Exchange to Turnover Intention

Previous research has found a negative relationship between LMX quality and employee turnover intention. Many things affect employees’ willingness to stay in a work environment. For example, the affective force (i.e., the quality of LMX) may help determine turnover (Maertz & Griffeth, 2004). According to the central theme of LMX, the strength and context of a positive leader-member relationship offers affective benefits to group members. Managers who keep high-quality exchange relationships with employees help keep them in the organization and

therefore represent a disincentive for employees to quit. From social exchange perspective, subordinates in a high LMX group would perceive emotional support, intense dyadic communication, and trust from supervisors, which would encourage them to remain with the organization.

Alternatively, support may also increase the motivation to stay in an organization (Maertzand & Griffeth, 2004). The in-group enjoys several tangible benefits from their supervisors: more opportunity for professional development, support for more challenging assignments, influence on critical decisions, and access to inside information (Sin et al., 2009). Employees in such a favorable environment would more likely remain on the job (Dulebohn, Boomer, Liden, Brouer & Ferris, 2011; Graen, Liden, & Hoel, 1982; Vecchio & Gobdel, 1984; Venkataramani, Green, & Schleicher, 2010). They would be aware that all high-end benefits would disappear if they decide to leave an organization. In short, LMX is critical to employee decisions about leaving a job.

However, a low-quality relationship with supervisors may push other employees out of an organization. A work environment where employees are often without sufficient information, resources, and trust, would force employees to search for ways to improve the situation. Quitting would be one option (Maertz & Griffeth, 2004). Therefore, the following hypothesis is proposed:

H13: Leader-member exchange has a negative effect on the turnover intention.

LMX as a Moderating Role between Fits and Turnover Intention

Moderating Effect of Leader-Member Exchange in the Need-Supply Fit and Turnover Intention

Once employees fit in their job and are satisfied with the environment, they are more likely to sense a connection with their organization. Moreover, employees often consider supervisors/managers as agents of an organization, with whom they can communicate and negotiate. Once employees perceive a match between their needs and the rewards provided by the organization, their relationship with their supervisors would further enhance their psychological attachment to the organization. The resources provided by their supervisor would reinforce their attitudes and behaviors favored by the organization. The consequences of relationship quality between leaders and employees (LMX) should decrease any withdrawal behaviors within the organization (Dulebohn et al., 2011).

Employees with no hope of receiving the benefits of LMX in their workplace are more likely to leave, but if they have a good relationship with their supervisors, the chance that they will leave may be reduced (Liden & Graen, 1980; Wayne et al., 1997). Thus, the rewards, support, and resources provided by supervisors may make up for what is missing in the work environment and in turn, reduce the negative consequences of a perception of misfit. Few studies have directly investigated the interactive relationship between N-S fit and LMX on employee turnover intention. Therefore, the study proposes that the interaction between N-S fit and leader-member relationship significant in predicting employee turnover intention.

H14: Leader-member exchange moderates the relationship between N-S fit and turnover intention.

Moderating Effect of LMX in Demand-Ability Fit and Turnover Intention

Employees who are not a good fit as far as ability goes may need some time to learn what their jobs require of them. Training would decrease tension and allow them sufficient time to find fit. Supervisors with good relationships with their followers would be more likely to provide quality mentoring in such a case, making employees feel empowered and nurtured. Moreover, such mentoring would make employees feel respected and more likely to remain with the job, even if the fit was not initially ideal. Therefore, we proposed that a quality vertical dyadic relationship could ease any negative perceptions of employees' D-A fit and, in turn, decrease turnover.

H15: LMX moderates the relationship between D-A fit and turnover intention.

Moderating Effect of LMX in P-G Fit and Turnover Intention and P-O fit and Turnover Intention

This study also focuses on the role of interpersonal and person-work unit relationships in explaining employee turnover intention. When any type of fit is low, employees must find another reason to stay in the organization. LMX may be one of the most important aspects of work, a concrete relationship for employees to rely on. If employees lose motivation to do their jobs, a quality relationship with their supervisors motivates them differently. LMX could replace employee focus on fit and become the primary motivator when employees perceive a lack of fit between their group values and organizational values.

Employees who are close to their supervisors (i.e., they have high LMX) are in an environment with affective and resource-based support. Our study, thus, proposed that employee turnover intention would be low when LMX is high with correspondingly high value congruency with work units. Furthermore, this study also argues that high LMX would compensate for low

value congruency. High LMX means that supervisor and employees maintain a trust-based relationship (Graen & Uhl-Bien, 1995). Therefore, although employees may interact or collaborate little with others, they at least have their supervisor as a strong ally. Having a high-quality relationship with supervisors could give employees the chance to create a desirable work environment and a personal network to access resources easily (Sparrow & Liden, 2005; Venkataramani, Green & Schleicher, 2010).

In conclusion, this study argues that employees with low value congruence would more likely maintain membership in the work unit if they have high quality LMX. Further, supervisors working to strengthen relationships with each employee via LMX could reduce the negative effects of low value congruency with peer-group as well as organization, including turnover.

H16: LMX moderates the relationship between P-G fit and turnover intention.

H17: LMX moderates the relationship between P-O fit and turnover intention.

Methodology

Measures and Instrument Development

Six constructs were used in this study: Four dimensions of P-E fit as well as LMX and employee turnover intention. All constructs were measured on a 7-point scale where 1 is “strongly disagree” and 7 is “strongly agree”.

The 9-item measurement, Perceived Fit Scale (PFS), developed by Cable and DeRue (2002) was used to assess N-S fit, D-A fit, and P-O fit. P-G fit was measured using items from P-O fit in the same scale but changing “organization” to “group.” P-G fit was evaluated by the extent to which the individuals have similar values and culture congruent with their peer-group.

The quality of the dyadic relationship between a leader and a follower, Leader-Member Exchange (LMX), was measured on LMX-7 scale (Grae & Uhl-Bien, 1995), adding five items to the final survey. Turnover intention was assessed with three items (Seashore, Lawler, Mirvis, & Cammann, 1982). Table 5.2 lists all measurement items and reliabilities.

Procedures for Collecting Data

CCRCs, approximately 1300, listed on the websites for LeadingAge and Commission on Accreditation of Rehabilitation Facilities (CARF) were contacted via email. A total of 22 facilities replied with an interest in participating in the study. A survey parcel with the requested numbers of survey packets (including cover letter, survey questionnaire, gift card information form, and postage-paid envelopes) were sent to the facilities to either chief executive officer or foodservice director's attention. The representatives of the facilities provided the surveys to their employees. After employees filled out surveys, the surveys were returned directly to the researcher in the provided postage-paid envelope. A five-dollar gift card chosen from several national chain retailers was provided to participants as a token of appreciation. One thousand and two hundred paper surveys were sent to the interested facilities, and 288 completed surveys were returned to the research institution, for a response rate of 24%. After deleting those surveys with incomplete answers, the data analysis included responses from 254 foodservice staff members in CCRCs.

Data Analysis and Results

Sample Characteristics

The foodservice employees who participated in the study were mainly female (n=205, 80.7%), white (n=190, 75.4%), full-time employees (n=184, 73.3%). Most work in the dining room (n=169, 67.9%) as line employees in Midwest (n=175, 68.9%). The average age is 38.18, with largest group between 21 and 30 (n= 81, 32.4%), followed by the age group 41 to 50 (n=44, 17.6%) and 51 to 60 (n=43, 16.3%). Almost three fifths of the participants (n=150, 59.3%) had 12 years of education or less. For job tenure, 37.4% of them (n=95) worked in their current facility for 5 years or more, whereas 26.4% (n=67) had been there for 1 to 3 years. They have worked with their current immediate supervisor for 1 to 3 years (n=85, 34.1%) and 27.2% of them (n=69) had spent 1 year or less with their current supervisor.

Table 5-1 Characteristics of Respondent

Characteristics	Frequency	Percent (%)
Gender (n=254)		
Male	49	19.3
Female	205	80.7
Age (Mean=38.18, n=250)		
18-20	34	13.6
21-30	81	32.4
31-40	24	9.6
41-50	44	17.6
51-60	40	16.0
61 or older	27	10.8
Race/Ethnicity (n=252)		
White	190	75.4
Black/African-American	37	14.7
American Indian/Alaska Native	2	.80
Asian	13	5.2
Hispanic/Latino	7	2.8
Other	3	1.2
Geographic Regions (n=254)		
West	29	11.4
Midwest	175	68.9
Northeast	24	9.4
South	26	10.3
Year of Education (n=253)		
12 year or less	150	59.3
13-16 years	91	36.0
16 years or more	12	4.7
Job Tenure (n=254, Mean=6.13)		
1 year or less	52	20.5
1-3 years	67	26.4
3-5 years	40	15.7
5 years or more	95	37.4
Manager Tenure (n=249, Mean= 3.60)		
1 year or less	69	27.2
1-3 years	85	34.1
3-5 years	43	17.3
5 years or more	52	20.9
Employee Status (n=251)		
Part-time	67	26.7
Full-time	184	73.3
Foodservice Department (n=249)		
Food Production Staff	80	32.1
Dining Service Staff	169	67.9

Measurement and Hypothesis Testing

Before testing the hypotheses, a confirmatory factor analysis (CFA) was conducted to assess the convergent and discriminant validity of the measures (Fornell & Larcker, 1981). The results of fit indices statistics indicated that the factor structure fit data well: χ^2 (137, $N=254$) = 223.80, $p < .001$ ($\chi^2/df = 1.63$; CFI=.98; NFI=.95; RMSEA=.05). Table 5.2 shows all items corresponded to proposed constructs with standardized loadings ranging from .79 to .95 with p values less than .001, confirming convergent validity. The value of composite reliabilities of each construct ranged from .85 to .96. The discriminant validity of each construct was examined by values of averaged variance extract (AVE) with cut-off at .50. The AVE in N-S fit was .80, D-A fit .65, P-G fit .85, P-O fit .88, LMX .76, and turnover intention .76. The largest squared correlation between latent variables was the one between P-G fit and P-O fit at .67. These results provide support for the discriminant validity of the constructs.

Table 5.3 shows those correlations that were of specific interest. The first was the significant association between different dimensions of fit. Four types of fit were distinct from each other with small to moderate correlations. N-S fit was significantly associated with P-G fit ($r = .48$), D-A fit ($r = .58$), and P-O fit ($r = .61$). Moderate to strong correlations were observed from D-A fit to P-G fit ($r = .43$), D-A fit to P-O fit ($r = .51$) and P-G fit to P-O fit ($r = .64$). Other correlations of interest are between variables related to dependent variable- turnover intention. All four P-E fits were negatively related to turnover intention. Based on the correlation analysis, N-S fit was the most strongly correlated with turnover intention ($-.53$), followed by P-O fit ($-.37$), D-A fit ($-.33$), and P-G fit ($-.18$). LMX also had a negative correlation with turnover intention ($r = -.42$).

Table 5-2 Measurement Items and Loadings

Constructs and items	Standardized Loadings ^a
Needs-supplies fit (N-S fit)	.92^b
1. There is a good fit between what my job offers me and what I am looking for in a job.	.85
2. The attributes that I look for in a job are well satisfied by my present job.	.94
3. My current job gives me just about everything that I want from a job.	.89
Demand-Ability fit (D-A fit)	.85
1. There is a good match between the demands of my job and my personal skills.	.83
2. My abilities and training are a good fit with the requirements of my job.	.77
3. My abilities and education are in line with the demands that my job places on me.	.81
Person-Group Fit (P-G fit)	.94
1. The things that I value in life are very similar to the things that my peer group's values.	.88
2. My personal values match my peer group's values and culture.	.95
3. My peer group's values and culture are similar to the things that I value in life.	.93
Person-Organization Fit (P-O fit)	.96
1. The things I value in life are similar to the things that my facility's values.	.94
2. My personal values match my facility's values and culture.	.95
3. My personal values match my facility's values and culture.	.92
Leader-Member Exchange (LMX)	.88
1. I feel that my immediate supervisor understands my problems and needs.	.88
2. I feel that my immediate supervisor recognizes my potential.	.84
3. I have enough confidence in my immediate supervisor that I would defend and justify his or her decisions if he or she were not present to do so.	.88
4. I would characterize my working relationship with my immediate supervisor as close.	.89
Turnover Intention (TI)	.91
1. I frequently think about leaving this organization.	.89
2. It is likely that I will leave this organization within the next year.	.79
3. I frequently think about looking for a job in another organization.	.94

^{a.} All factor loadings are significant ($p < .001$).

^{b.} Composite reliabilities are in bold

Table 5-3 Means, Standard Deviations, and Inter-correlations among Variables

Variable	M	SD	1	2	3	4	5	6	7
1 Tenure	6.13	7.25	—						
2 N-S fit	4.66	1.62	.19**	—					
3 DA fit	5.64	1.25	.04	.58**	—				
4 P-G fit	4.58	1.49	.02	.48**	.43**	—			
5 P-O fit	4.77	1.53	.07	.61**	.51**	.64**	—		
6 LMX	4.72	1.61	.06	.56**	.40**	.30**	.47**	—	
7 Turnover Intention	3.25	1.94	-.18**	-.53**	-.33**	-.18**	-.37**	-.42**	—

Note. N-S fit = need-supply fit; D-A fit = demand-ability fit; P-G fit = person-group fit; P-O fit = person-organization fit; LMX = leader-member exchange.

** $p < .001$;

Moderated Regression Analysis

To test the hypotheses of this study, a series of regression analyses were performed to examine the association between four dimensions of fits, LMX, and turnover intention.

Specifically, the moderating effect of LMX on turnover intention was investigated by the method suggested by Sharma, Durand, and Gur-Arie (1981). Sharma et al. (1981) proposed that the types of moderators should be grouped into pure- and quasi-moderators. A pure moderator would relate to dependent variable only when it interacts with other independent variables (Cohen & Cohen, West, & Aiken, 1975). Alternatively, a quasi-moderator not only predicts dependent variable when it interacts with other independent variables but itself is also a predictor of dependent variable.

Following this method, a hierarchical regression analysis was performed to examine the proposed hypotheses in terms of control variable (i.e. organizational tenure), independent variables (i.e. four types of fits), moderator (i.e. LMX) and four interaction terms, respectively. Organizational tenure has been theorized as a significant predictor of employee turnover (Min & Emam, 2003; Knudsen, Ducharme, & Roman, 2009; Leiter, Jackson, & Shaughnessy, 2009); thus, tenure was entered as a control variable in the first step. In the second step, the main effect of

independent variables of interests was included. That is, turnover intention was regressed on four dimensions of fit. Including these four fits added a significant amount of variance explained in the turnover intention ($\Delta R^2 = .28$, $\Delta F = 24.95$, $p < .001$). LMX was next entered to the model (Step 3) and added a marginal amount of variance explained ($\Delta R^2 = .02$, $\Delta F = 6.03$, $p < .05$). For four interactions, each pair was first centered by mean value to prevent collinearity with its constituent parts and then a product term was formed (Aiken & West, 1991). Finally, the four interaction terms were entered in step 4.

Table 5.4 shows the results of regression coefficients (B), standard error of the coefficients (SE), standardized beta coefficients (β), and t-values (t) among all factors in each step. Overall, the final model (model 4) is significant, and the change in R^2 indicates an additional contribution for the interaction term ($\Delta R^2 = .03$, $\Delta F = 3.04$, $p < .05$). In terms of control variable, tenure ($\beta = -.08$, $p > .05$) does not significantly relate to employee turnover intention. As stated in Hypothesis 9, results for Model 4 indicate that N-S fit was a significant predictor of turnover intention ($\beta = -.37$, $p < .001$). The data does not support hypotheses that D-A fit (H10), P-G fit (H11), P-O fit (H12), and LMX (H13) affect turnover intention. The first interaction of N-S fit and LMX in the regression equation was significant ($\beta = .24$, $p < .01$), supporting H14. Although the regression coefficients for LMX were not significant, the interactive term (i.e., LMX * N-S fit) was significant in predicting turnover intention. Therefore, LMX was identified as a pure moderator for the association between N-S fit and LMX (Sharma et al., 1981). The beta weight associated with three other interaction terms was not significant, ($\beta = -.04$, $p > .05$; $\beta = -.11$, $p > .05$; $\beta = -.01$, $p > .05$, respectively); thus, H15, H16, and H17 were rejected.

Table 5-4 Testing Moderating Effects of LMX Associated with N-S Fit, D-A Fit, and P-O Fit and Turnover Intention

	Model 1				Model 2				Model 3				Model 4			
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
Constant	3.55	.16		22.57***	3.39	.14		25.07***	3.40	.13		25.38***	3.21	.15		22.19***
Tenure	-.05	.02	-.18	-2.89**	-.02	.01	-.08	-1.51	-.02	.01	-.09	-1.63	-.02	.01	-.08	-1.43
N-S Fit					-.56	.09	-.47	-6.31***	-.48	.09	-.0	-5.09***	-.45	.10	-.37	-4.63***
D-A fit					-.07	.10	-.04	-.62	-.05	.10	-.03	-.46	-.11	.12	-.07	-.92
P-G fit					.24	.09	.18	2.57*	.22	.09	.17	2.40*	.17	.09	.13	1.90
P-O fit					-.22	.10	-.17	-2.21*	-.18	.10	-.14	-1.75	-.14	.10	-.11	-1.39
LMX									-.19	.08	-.16	-2.46*	-.11	.08	-.09	-1.41
N-S fit * LMX													.16	.06	.24	2.81**
D-A fit * LMX													-.03	.06	-.04	-.51
P-G fit * LMX													-.08	.05	-.11	-1.42
P-O fit * LMX													.01	.07	.01	.11
<i>R</i> ²			.03				.31				.33				.36	
ΔR^2			.03				.28				.02				.03	
ΔF			8.34**				24.95***				6.03*				3.04*	

Note: Dependent Variable= turnover intention; N-S fit=need-supply fit; D-A fit= demand-ability fit; P-O fit = person-organization fit; LMX = leader-member exchange.

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

The significant interaction was plotted using the procedure recommended by Cohen et al (2003). Specifically, the figure plots the hierarchical linear model equation at conditional value of LMX. High LMX was one standard deviation above the mean of LMX whereas low LMX was one standard deviation below the mean of LMX. As seen in Figure 5.1, when staff reported low exchange relations with their supervisor (low LMX), the relation between turnover and N-S fit was strong and negative. However, when staff reported high exchange with their supervisor (high LMX), the turnover intention become moderate, and the relation between N-S fit and turnover intention appears weaker than in the low LMX case, although it remains negative.

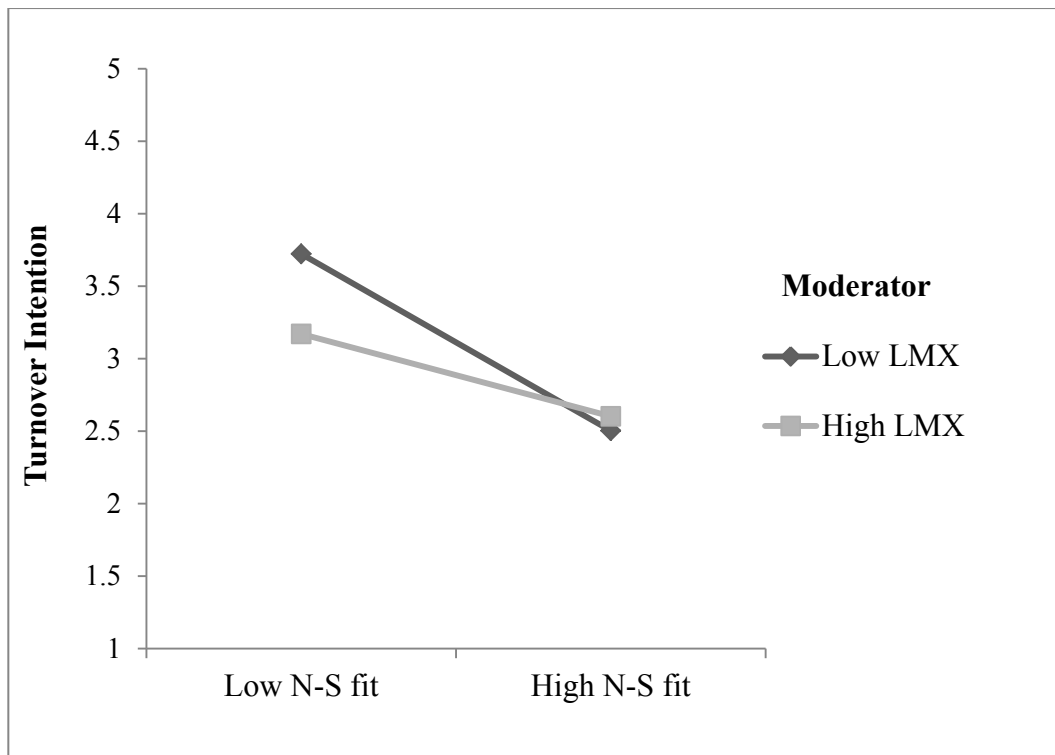


Figure 5-1 Interactions between N-S fit and LMX in Predicting Turnover Intention.

Discussion and Implications

Discussions

P-E fit has been studied for decades to explain employee attitudes and behaviors. According to the P-E literature, having employees with multiple fit to the work environment would increase positive behavior as well as decrease turnover. The present study, therefore, examined the role of multidimensional fit and LMX in understanding employee turnover intention. In this study, D-A fit, P-G fit and P-O fit did not significantly relate to employee turnover intention. The result demonstrates the complex nature of turnover intention in CCRC. Alternatively, N-S fit was a salient predictor of turnover intention, corroborating results reported in other studies (Scroggins, 2007; Tak, 2011) that P-J fit is more important in explaining employee turnover intention than P-O fit. Furthermore, N-S fit has a unique effect on turnover. That is, this study suggested achieving individual needs is more significant than meeting job demands or having values congruent with organizational values in reducing employee turnover. Stated differently, if individuals have good N-S fit with their job, they more likely will remain in their job.

The current study further confirmed the interaction of LMX and N-S fit on turnover intention. LMX weakens the effect of N-S misfit on turnover intention. If an employee considers leaving a job because of misfit, having a high quality relationship with the immediate supervisors may keep them on the job. This suggests that high LMX could compensate for the potentially negative consequences caused by N-S misfit.

Practical Implications

The findings have several practical implications. First, because N-S fit is salient to predicting intent to leave, managers should be aware of how different types of fit affect employee attitudes and behaviors and adapt their practices accordingly. Managers often emphasize D-A fit while selecting and recruiting employees and value consistency (i.e., P-O fit) after hiring (training and socialization). However, although individuals who can meet job demands would enhance facilities' performance, D-A fit does not predict turnover. Employees who have other types of misfit would be more likely to leave.

Many researchers have recommended managers consider value congruent or ability based perspectives for organizational function; however, our results suggest more emphasis on N-S fit. To prevent employees from leaving, facilities could close the gap between employee needs and job supplies at pre-entry and post-entry stages. In the pre-entry stage, recruiters should clearly explain job responsibilities and compensation to job candidates. The more information job candidates get from recruiters, the more easily job interviewees can evaluate how the job meets their expectations.

Employees are concerned about what the job supplies them, so facilities should aim to satisfy employee concerns across time. The results showed the need to buffer the adverse effects of N-S misfit on turnover. That is, the facilities should not undermine LMX, and supervisors should work to develop quality relationships with each of their subordinates. An employee satisfied with the relationships at work is less likely to leave. Similarly, supervisors are more likely to identify employee misfits during leader-subordinate day-to-day interaction. Managers could examine the effects of job changes (e.g., job context) on N-S fit and work to ease pressures caused by misfit. For example, via close interaction, managers who listen to their employees and understand what the most relevant to their subordinates could tailor promotion and retention

strategies to suit their employees. Thus, facilities should be aware of and manage employee turnover intention using the interaction of N-S fit and LMX.

A quality relationship between supervisors and subordinates will help retain employees. Graen and Uhi-Bien (1995) have suggested going beyond “in-group” and “out-group.” A more effective leadership process would provide equal opportunities to develop quality relationships between supervisor and each follower.

The final implication of the results would be supervisor training. Previous studies have confirmed that supervisors can be trained to exhibit good LMX. Nish and Mayer (2009) suggested diversity training for supervisors. In the diversity training, supervisors go through not only traditional training on stereotypes but learn to be aware of the strengths and weaknesses of their employees and thus help them develop quality relationships with employees. This training should help managers develop diverse role behaviors (Chrobot-Mason, 2004).

Limitations and Suggestions for Future Research

Although this study makes some contributions to the literature, some limitations must be acknowledged to interpret results properly.

First, the data in this study were collected at a single point in time. As a cross-sectional design of study, the causal relationship among the constructs may be biased. In addition, some studies have suggested the relationship between turnover intention and actual turnover was not truly strong (Peter, Jackofsky, & Salter, 1981). Moreover, individual perceptions of multidimensional fit are dynamic. That is, either employee perceptions of their values or their desires may change over time. Therefore, a longitudinal study in the future could verify causal relationships suggested in this study as well as links between employee turnover intention and actual turnover (Tak, 2011).

Secondly, common method variance was a limitation in the study. The study assessed all constructs using self-report measurements. Although using subjective fit measurement may be more strongly linked to behavioral outcomes, some researchers still question if “real fit” was examined. This issue is also a problem with the LMX construct. For example, Tjosvold, Hui and Law (1998) have suggested examining LMX using different sources of information (i.e., both employees and supervisors) to enhance drawing conclusions about turnover intention outcomes. Podsakoff, MacKenzie, Lee and Podsakoff (2003) also addressed using self-reported questionnaire, which may increase social desirability response bias. When the questionnaire derives answers from a single source, the employees in this case, participants may answer questions to reflect socially desirable responses. The Harman’s single factor test recommended by Podsakoff et al (2003) was performed in the study. The result evidenced that less than half of the variance was accounted for by one general factor (Podsakoff et al., 2003). Although the common method variance was not a pervasive problem in the study, the future study should consider weakening the impact of common method variance on their results.

Third, generalizability presents another potential limitation. Participants in this study worked in the foodservice departments of non-profit CCRCs. Additionally, participants were self-selected white females who often work as a team with less salary and skills. The conclusions may thus be limited by the homogeneity of sample characteristics, and the main and interaction effects among observed constructs may attenuate. The results should be interpreted with caution in the other hospitality contexts or industries where employee characteristics are different.

In our study, LMX moderated the relationship between N-S fit and turnover intention. The results suggested that LMX had no significant effects on employee turnover intention, and only N-S fit and LMX interacted with turnover intention. It may be that LMX is a pure moderator in this study’s construct, affecting only the form of the relationship between predictor (i.e., N-S

fit) and criterion factor (i.e., turnover intention). To consider LMX as the only moderator for the relationship between fit and turnover intention may limit the generalizability of findings. Thus, future studies could examine other moderators to investigate the relationship between multiple types of fits and turnover intention.

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Chapter 6 - Summary and Conclusions

In this final chapter, the research objectives are first summarized, and major findings from both studies are provided. The conclusions in each study are also addressed. The chapter also discusses several theoretical and practical implications. Suggestions for future study and the limitations are also presented.

Research Summary

Increased numbers of seniors in the United States has created a need for support service in senior care. CCRCs provide a variety of services: independent living, assisted living, and nursing home care. To provide these services, facilities need employees who fit in their job, engage in their work, have the passion to make residents happy, enjoy assisting their coworkers, commit themselves to doing good for their facilities, and remain in their positions. P-E fit creates positive employee attitudes and behaviors. In spite of its importance, most studies have ignored or minimized the distinct differences in dimensions of fit and their effect on outcomes (Livingstone, Nelson and Barr, 1997; Kristof-Brown, Zimmerman, & Johnson, 2005).

This study first identified the consequences of dimensions of person-environment fits in the workplace. Based on the theories of fit and self-determination, the study examined direct and indirect relationships between four fits and outcomes via needs satisfaction. Specifically, the study first examined the relationships of N-S fit, D-A fit, P-G fit, and P-O fit to needs satisfaction. Then, the relationships of need satisfaction with work engagement, customer-oriented behavior, interpersonal citizenship behavior, and organizational commitment were tested. The study further examined indirect effects of the four fits and desired outcomes with psychological needs satisfaction as a mediator.

The study tackled the critical issue of employee turnover in senior care. The study argued that how employees perceive fit should be an important trigger for turnover intention. Additionally, the study argued the moderator, LMX, would compensate for misfit in turnover decisions. In other words, the quality of leader and subordinate relationships would buffer the negative link between misfit and turnover.

Major Findings

Model of P-E Fit, Attitudes and Behaviors: The Mediating Role of Needs Satisfaction (Study 1)

A total of 288 foodservice employees responded the paper-and-pencil based survey, yielding a response rate of 24%. Respondents from nineteen participants who claimed themselves hold as manager or director positions and eight incomplete responses were dropped from further analysis. 261 responses from foodservice employees remained for data analysis. Generally, the participants were female and white, working as full-time employees in non-profit facilities. They work as line employees, and most work in the dining room instead of the kitchen. The facilities usually have 3 to 4 supervisors to manage four dining operations on site, providing dining services to residents in independent living, assisted living, and nursing home.

The first study examined the consequences of multiple dimensions of fits. Specifically, the study initially proposed the four types of fit (N-S fit, D-A fit, P-G fit, and P-O fit) would relate positively to basic needs satisfaction, and needs satisfaction would consequently have a positive relationship with work engagement, customer oriented behavior, interpersonal citizenship behavior, and organizational commitment. Eight hypotheses were tested using structural equation modeling. The study further confirmed each mediating effect from fits to

determining outcomes in four-step mediation test (Baron & Keeny, 1986), χ^2 difference test (Anderson & Gerging, 1988), and Sobel test (Sobel, 1982).

Based on results of structural equation modeling and a serial of mediation tests, the proposed hypotheses were confirmed, other than the relationship between needs satisfaction and customer oriented behavior. The results suggested that N-S fit, D-A fit, P-G fit, and P-O fit have significant and positive relationships with needs satisfaction. Needs satisfaction, in turn, enhances positive attitudes and behaviors among employees in work engagement, interpersonal citizenship behavior, and organizational commitment. Additionally, three direct paths from N-S fit to work engagement, D-A fit to customer oriented behavior, and P-O fit to organizational commitment were suggested to the final model. Alternatively, mediating effects between fits and work related outcomes through needs satisfaction were also examined. In summary, two partial mediating effects were found between N-S fit and work engagement and between P-O fit and organizational commitment. That is, both N-S fit and P-O fit have direct relationships to their corresponded outcomes, work engagement and organizational commitment, and indirect effects through needs satisfaction also existed. D-A fit directly predicted customer oriented behavior and needs satisfaction. Finally, needs satisfaction fully mediated P-G fit and interpersonal citizenship behavior. Table 6.1 presents the results of Study 1.

Table 6-1 Summary of Hypotheses Results of Study 1

	Hypotheses	Result
H1	Employee perceived N-S fit has a positive effect on needs satisfaction.	Supported
H2	Employee perceived D-A fit has a positive effect on needs satisfaction.	Supported
H3	Employee perceived P-G fit has a positive effect on needs satisfaction.	Supported
H4	Employee perceived P-O fit has a positive effect on needs satisfaction.	Supported
H5	Needs satisfaction has a positive effect on work engagement.	Supported
H6	Needs satisfaction has a positive effect on customer oriented behavior.	Rejected
H7	Needs satisfaction has a positive effect on interpersonal citizenship behaviors.	Supported
H8	Needs satisfaction has a positive effect on organizational commitment.	Supported

***P-E Fit and Turnover Intention: The Moderating Role of Leader-Member Exchange
(Study 2)***

Again, of the approximately 1200 questionnaires sent out to interested facilities, 288 were returned, resulting in a response rate of 24%. After deleting participants with manager/director related positions and incomplete questionnaires, 254 responses from foodservice employees remained for data analysis. Most respondents were female (n= 205, 80.7%) and white (n= 190, 75.4%) who work full-time (n= 184, 73.3%) in the dining room (n= 169, 67.9%) as line employees.

The second study tested the moderating effect of leader-member exchange (LMX) association with the four types of fit and turnover intention. A total of nine hypotheses were examined using a statistical analysis of hierarchical multiple regression. The results showed that N-S fit had the most significant negative relationship with employee turnover intention. The other hypotheses on D-A fit, P-G fit, and P-O fit and their relationships with turnover intention were not supported. Additionally, the relationship between LMX and turnover intention was not

significant. However, LMX had a significant moderating effect on the relationship between N-S fit and turnover intention. Other interactive terms of D-A fit-LMX, P-G fit-LMX, P-O fit-LMX were not significant in predicting turnover intention; therefore, the moderating effects of those fits and LMX on turnover intention were rejected. Table 6.2 presents the results of Study 2.

Table 6-2 Summary of Hypotheses Result of Study 2

	Hypotheses	Result
H9	Employee perceived N-S fit has a negative effect on turnover intention.	Supported
H10	Employee perceived D-A fit has a negative effect on turnover intention.	Rejected
H11	Employee perceived P-G fit has a negative effect on turnover intention.	Rejected
H12	Employee perceived P-O fit has a negative effect on turnover intention.	Rejected
H13	Leader-member exchange has a negative effect on turnover intention.	Rejected
H14	Leader-member exchange moderates the relationship between N-S fit and turnover intention.	Supported
H15	Leader-member exchange moderates the relationship between D-A fit and turnover intention.	Rejected
H16	Leader-member exchange moderates the relationship between P-G fit and turnover intention.	Rejected
H17	Leader-member exchange moderates the relationship between P-O fit and turnover intention.	Rejected

Conclusions and Implications

The concept of fit has been used in several studies, but few of them have assessed fit as a multi-dimensional concept. P-E fit is commonly assessed incompletely, so some types of fit may be over or under addressed. This study combined multi-dimensional fit and needs satisfaction in

predicting desired outcomes. The study also proposed a model to moderate the consequences of misfit in organizations.

Based on the findings, some conclusions could be drawn: (1) each dimension of fit has a distinct effect on employee psychological needs satisfaction; (2) employee psychological satisfaction with the work environment enhances work engagement, interpersonal citizenship behavior, and organizational commitment; (3) employees who maintain a close exchange relationship with their supervisors are less likely to quit because the relationship buffers any negative need-supply fit. Some theoretical and practical implications are discussed below.

First, these two studies link multiple fits to different outcomes (work engagement, interpersonal citizenship behavior, organizational commitment, and employee turnover intention). The results indicate that the senior care industry must have employees with multiple fits to their work environment. As more dimensions of person-environment fit were met at work, employees' needs were more likely to be met, which, in turn, enhanced optimistic attitudes and positive behaviors (Deci, Ryan, & Williams, 1996).

Secondly, the study found that employees prefer to work for an organization with which they have multiple fits, which increases satisfaction of their needs. Facilities could create cultures that emphasize meeting employees' basic needs. This result also highlights considering P-E fit as a critical predictor for developing employee needs satisfaction. Additionally, the suggested relationships between general need satisfaction and work engagement, interpersonal citizenship behavior, and organizational commitment also extends the known consequences of meeting employees' psychological needs. Human resource practices, therefore, should be developed to address the distinct characteristics of each fit. Organizations should consider types of fit in selecting, recruiting, staffing, and adjusting socialization events as employees develop their career.

Third, organizations should also enhance distinct attitudes or behaviors through some types of fit. For example, the N-S fit was the most significant factor in predicting turnover. High turnover among foodservice employees has been reported for years, so managers should understand how the work environment could meet employees' personal needs instead of simply considering values congruent with organizational values.

The results further suggested that leaders in CCRCs should be encouraged to develop a close relationship with each of their subordinates. In that way, leaders could intervene earlier when employees show signs of misfit. Also, employees who trust their leaders feel better understood and more supported, which in turn decreases turnover intentions. However, facilities must be aware of low LMX among low N-S fit employees because these employees are more willing to leave.

Finally, organizations should consider leadership training programs for LMX. This training should include not only performance-based skill improvement, but also leadership skill improvement. Leaders should acknowledge the strengths of maintaining a good relationship with each employee and ways to develop quality LMX with all subordinates. Chrobot-Mason (2004) suggested diversity role modeling for managers.

Limitations and Suggestions for Future Research

Some limitations must be acknowledged in this study.

One limitation is that this study used cross-sectional design. The data were collected at a single point in time. Although the hypotheses were based on a literature review and applicable in the real work environment, a replicated longitudinal study could confirm our results. In addition, perceptions of fits and characteristics of environment change over time. Again, a longitudinal study that examines how constructs change would be useful.

Additionally, because all of the constructs in the study were assessed by self-reported measurements, social desirability bias may be present (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). Although confidentiality was assured, participants still might fill out the survey not based on their personal experience but based on what they think the organization or society would like. Harmon's one-factor test has been performed in the studies regarding the common method variance of the data. According to the results in both studies, the whole data was not explained by only one general factor, rejecting the possibility of common method variance.

Subjective fit was adopted to assess all types of fits in the study. This method was used assuming that individuals can tell the extent of their own misfit in the work environment. Although some researchers have argued that subjective fit is the best way to examine individual attitudes (Saks & Ashforth, 2002; Cable & Judge, 1997; Kristof, 1996; Verquer, Beehr, & Wagner, 2003), other studies have argued for examining "real fit" between individuals and organizations through objective fit or perceived fit (Cooper-Thomas, Annelies, & Neil., 2004; O'Reilly, Chatman, & Caldwell, 1991; Vianen, 2000). Thus, a fair test would replicate this study using other conceptual fits.

Moreover, the results may not generalize to other populations. The data were collected from foodservice employees working in service oriented and team based senior care settings. Also, the participants are fairly homogeneous in gender and race. It would be worthwhile to establish the validity and generalizability of our findings across different contexts.

Based on the findings of current study, some directions for future study may be considered: (1) antecedents of multi-dimension P-E fit; (2) other consequences of fits and need satisfaction; (3) other moderators than LMX. The present study has confirmed the distinct effects of fits and organizational desired outcomes. More studies, using multi-dimension fit, could investigate the antecedents of each P-E fit. Fit theory assumed the concept of fits could encourage

positive outcomes and weaken negative consequences in the organizations. The current study could only demonstrate certain consequences of each fit dimension. In particular, the current fit literature often focuses on discussing positive attitudinal outcomes. Future studies may want to explore how fit could prevent withdrawal attitudes and negative behavior. Although LMX still systematically modified the form of the relationship between the N-S fit and turnover intention, the result suggests that LMX is more likely a pure moderator. Moreover, LMX was considered as only one moderator in the study, which may affect the generalizability of the results. Therefore, additional investigation of other moderators that buffer the relationship of misfit to turnover intention should be considered.

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Appendix A - Cover Letter



**Department of Hospitality
Management and Dietetics**
104 Justin Hall
Manhattan, KS 66506-1404
785-532-5521
Fax: 785-532-5522

January, 2012

Dear Participants:

You are invited to participate in a research study examining the effects of person-environment fit as well as the relationships between supervisor and staff on employees' job attitudes and behaviors. This study is conducted by Wen-Shen Yen, a PhD student at the Department of Hospitality Management and Dietetics, Kansas State University, under the supervision of Dr. Chihyung Ok. I am looking forward to having your participation and support in completing the attached questionnaire.

It will take less than 20 minutes to complete this survey. Your participation is strictly voluntary. Refusal or choosing not to participate at any time will involve no penalty or loss of benefits. Submission of a completed questionnaire indicates your willingness to participate. You must be at least 18 years of age to participate. All responses will remain anonymous. Participants who successfully complete the survey will receive a \$5 gift card from selected stores. If you choose to claim the gift card, please provide your name and contact information on the provided information sheet. Your name and contact information will be separated from your response immediately after we receive the survey. Your answers will remain confidential and will not be seen by anyone except the researchers. No individual responses will be shared. Only aggregate responses will be reported.

This study has been approved by the committee for Research Involving Human Subjects (IRB #4556) at Kansas State University. If you have any question regarding this study, please feel free to contact me at 785-532-2211 or Dr. Chihyung Ok at 785-532-2207. For questions about your rights as a participant or the manner in which the study is conducted, you may contact Dr. Rick Scheidt, Chair of the Committee on Research Involving Human Subjects, (785) 532-3224, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506.

Sincerely

Wen-Shen Yen, M.B.A.
PhD Candidate
Dept. of Hospitality Management & Dietetics

Chihyung Ok, Ph.D.
Assistant Professor
Dept. of Hospitality Management & Dietetics

Appendix B - Survey Questionnaire (Employees)

SECTION I: PERSON-ENVIRONMENT FIT

INSTRUCTION: The following statements ask how you feel about your job, coworkers and organization. **Please indicate the level of agreement with each statement by circling the number on the scale.** Though some of the questions may seem similar, you need to respond to all of them. There are no “right” or “wrong” answers. Your opinions are valuable for the study.

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

Strongly
disagree Neutral Strongly
agree

	←	←	←	→	→	→	
1. The match is very good between the demands of my job and my personal skills.	1	2	3	4	5	6	7
2. My abilities and training are a good fit with the requirements of my job.	1	2	3	4	5	6	7
3. My personal abilities and education provide a good match with the demands that my job places on me.	1	2	3	4	5	6	7
4. There is a good fit between what my job offers me and what I am looking for in a job.	1	2	3	4	5	6	7
5. The attributes that I look for in a job are satisfied very well by my present job.	1	2	3	4	5	6	7
6. The job that I currently hold gives me just about everything that I want from a job.	1	2	3	4	5	6	7
7. The things that I value in life are very similar to the things that my group values.	1	2	3	4	5	6	7
8. My personal values match my group’s values and culture.	1	2	3	4	5	6	7
9. My group’s values and culture provide a good fit with the things that I value in life.	1	2	3	4	5	6	7
10. The things that I value in life are very similar to the things that my organization values.	1	2	3	4	5	6	7
11. My personal values match my organization’s values and culture.	1	2	3	4	5	6	7
12. My organization’s values and culture provide a good fit with the things that I value in life.	1	2	3	4	5	6	7

SECTION II: NEED SATISFACTION

INSTRUCTION: The following set of statements asks **your level of satisfaction with your job**. Please circle the number that most closely corresponds to how you feel about your job.

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
	1	2	3	4	5	6	7
					Strongly disagree	Neutral	Strongly agree
	⇐	⇐	⇐			⇒	⇒
1. I feel like I can be myself at my job.	1	2	3	4	5	6	7
2. At work, I often feel like I have to follow other people's commands.	1	2	3	4	5	6	7
3. If I could choose, I would do things at work differently.	1	2	3	4	5	6	7
4. The tasks I have to do at work are in line with what I really want to do.	1	2	3	4	5	6	7
5. I feel free to do my job the way I think it could best be done.	1	2	3	4	5	6	7
6. In my job, I feel forced to do things I do not want to do.	1	2	3	4	5	6	7
7. I really master my tasks at my job.	1	2	3	4	5	6	7
8. I feel competent at my job.	1	2	3	4	5	6	7
9. I am good at the things I do in my job.	1	2	3	4	5	6	7
10. I have the feeling that I can even carry out the most difficult tasks at work.	1	2	3	4	5	6	7
11. I really feel connected with other people at my job.	1	2	3	4	5	6	7
12. At work, I feel part of a group.	1	2	3	4	5	6	7
13. I don't really mix with other people at my job.	1	2	3	4	5	6	7
14. At work, I can talk with people about things that really matter to me.	1	2	3	4	5	6	7
15. I often feel alone when I am with my colleagues.	1	2	3	4	5	6	7
16. Some people I work with are close friends of mine.	1	2	3	4	5	6	7

SECTION III: WORK ENGAGEMENT AND ORGANIZATIONAL COMMITMENT

INSTRUCTION: The following set of statements asks **your attitude toward your job and organization**. Please circle the number that indicates the frequency of how you feel for each item.

Not at all	Rarely	Occasionally	Sometimes	Fairly often	Very often	Completely
1	2	3	4	5	6	7

	Not at all		Completely
	⇐	⇐	⇐
	⇒	⇒	⇒
1. At my work, I feel bursting with energy.	1	2	3
2. At my job, I feel strong and active.	1	2	3
3. I am passionate about my job.	1	2	3
4. My job inspires me.	1	2	3
5. When I get up in the morning, I feel like going to work.	1	2	3
6. I feel happy when I am working intensely.	1	2	3
7. I am proud of the work that I do.	1	2	3
8. I am immersed in my work.	1	2	3
9. I get carried away when I am working.	1	2	3
10. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.	1	2	3
11. I would accept almost any types of job assignment in order to keep working for this organization.	1	2	3
12. I find that my values and the organization's values are very similar.	1	2	3
13. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.	1	2	3
14. I really care about the fate of this organization.	1	2	3
15. For me, this is the best of all possible organizations for which to work.	1	2	3

SECTION IV: BEHAVIORS OF CUSTOMER-ORIENTED AND INTERPERSONAL CITIZENSHIP

INSTRUCTION: The following set of statements asks **your behaviors toward your residents and group members**. Please circle the number that indicates the frequency of how you feel for each item.

	Not at all	Rarely	Occasionally	Sometimes	Fairly often	Very often	Completely
	1	2	3	4	5	6	7
					Not at all		Completely
	⇐	⇐	⇐			⇒	⇒
1. I try to figure out the resident's needs.	1	2	3	4	5	6	7
2. I have the resident's best interest in mind.	1	2	3	4	5	6	7
3. I take a problem solving approach in providing services to residents.	1	2	3	4	5	6	7
4. I recommend services that are best suited to solving problems.	1	2	3	4	5	6	7
5. I try to find out which kinds of services would be most helpful to the resident.	1	2	3	4	5	6	7
1. I listen to coworkers when they have to get something off their chest.	1	2	3	4	5	6	7
2. I take time to listen to coworkers' problems and worries.	1	2	3	4	5	6	7
3. I take a personal interest in coworkers.	1	2	3	4	5	6	7
4. I show concern and courtesy toward coworkers.	1	2	3	4	5	6	7
5. I make an extra effort to understand the problems faced by coworkers.	1	2	3	4	5	6	7
6. I always go out of the way to make newer employees feel welcome in the work group.	1	2	3	4	5	6	7

SECTION V: LEADER-MEMBERSHIP EXCHANGE AND TURNOVER INTENTION

INSTRUCTION: The following set of statements asks **your attitudes toward to your organization and the quality of relationship between you and your supervisor and your turnover intention and performance toward to your organization.** Please circle the number that indicates the frequency of how you feel for each item.

	Not at all	Rarely	Occasionally	Sometimes	Fairly often	Very often	Completely
	1	2	3	4	5	6	7
	Not at all					Completely	
1. I usually know how my immediate supervisor is with what I do.	1	2	3	4	5	6	7
2. I feel that my immediate supervisor understands my problems and needs.	1	2	3	4	5	6	7
3. I feel that my immediate supervisor recognizes my potential.	1	2	3	4	5	6	7
4. I have enough confidence in my immediate supervisor that I would defend and justify his or her decisions if he or she were not present to do so.	1	2	3	4	5	6	7
5. I would characterize my working relationship with my immediate supervisor is close.	1	2	3	4	5	6	7
1. I frequently think about leaving this organization.	1	2	3	4	5	6	7
2. It is likely that I will leave this organization within the next year.	1	2	3	4	5	6	7
3. I frequently think about looking for job in another organization.	1	2	3	4	5	6	7

SECTION VI: INFORMATION ABOUT YOURSELF

INSTRUCTION: The following questions will ask some basic questions about you. Please place a mark in the category that describes you best. **Your responses are for research purpose only.**

- 1) What is your gender?
 Male Female
- 2) What is your age? _____ years
- 3) What is your race/ethnicity?
 White Black/African-American
 American Indian/Alaska Native Asian
 Native Hawaiian/Pacific Islander Hispanic/Latino
 Other (Please specify) _____
- 4) How many years of education do you complete? _____ years
- 5) How long have you been employed at the current facility?
_____ years and _____ months
- 6) How long have you worked with your current immediate managers?
_____ years and _____ months
- 7) What is your employment status at this facility?
 Temporary Agency Part-time Full-time
- 8) What kinds of certification do you have?
 Certified Nursing Assistant (CNA) Certified Dietary Manager (CDM)
 Registered Dietitian (RD) Dietetic Technician, Registered (DTR)
- 9) What is your job title in this facility? _____
- 10) How much time do you spend with residents? _____%

Please make sure you answer all questions and mail back the questionnaire in the self-addressed envelope within a week.

Thank you again for your responses and taking the time to complete this survey!

Appendix C - Survey Questionnaire (Facility)

Dear _____,

Thank you for having your staff to participate in my dissertation. All survey packets have been sent out to your facilities. Please encourage your employees to answer my survey and send them back before this Friday (March 2). Meanwhile, I would like to have some demographic information of your facility and dining operations for better understanding the environment provided to the foodservice employees. All information given by you will be confidential and only used for this study. **Please place an "X" in front of appropriate answer.**

Demographic questions of your facility

1. Is your organization

- profit
- non-profit
- public/government
- other _____

2. Is your organization:

- Free standing (i.e., the CEO/director within your organization has ultimate responsibility for decisions)
- Part of a chain, system or multi-organization corporate structure
- other _____

3. Please indicate the number of residents of your facilities

- Independent living _____
- Assisted living _____
- Nursing home _____

Other _____

4. How many foodservice employees do you have?

Management _____

Full-time _____

Part-time _____

Demographic questions of your dining operation

1. Please indicate the numbers of dining operations in your facilities _____

2. Types of dining operations in your facilities

Restaurant 1 _____

Restaurant 3 _____

Restaurant 2 _____

Restaurant 4 _____

3. Please indicate the number of meals do you serve in each operation per day

Restaurant 1 _____

Restaurant 3 _____

Restaurant 2 _____

Restaurant 4 _____

4. What types of customers does dining operation have?

Restaurant 1 residents resident family public customers

Restaurant 2 residents resident family public customers

Restaurant 3 residents resident family public customers

Restaurant 4 residents resident family public customers

5. The result of the study should be available in August. Would you like to receive an executive summary upon completion? If so, in what form?

not interested

yes

Thank you very much for your participation in this study.