

**THE REQUISITE FOR CAREGIVER ORGANIZATIONAL COMMITMENT  
IN ASSISTED LIVING**

By

**Bernard Rosenson**

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Advisors:

James Gaskin, Ph.D.  
Robert Hilton, DM

CASE WESTERN RESERVE UNIVERSITY

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## ABSTRACT

Caregivers in assisted living are engaged in an important job: taking care of elderly. They love caring for the residents in spite of a difficult environment fraught with hard labor, mental anguish, stress, and low pay. They do this work because of their attachment with residents developed and maintained by social exchanges. In an empowering work-life environment, they are more satisfied and more likely to stay on the job. On the average, assisted living has extremely high turnover and the shock waves that creates throughout the organization is costly. It is imperative that caregivers develop a strong organizational commitment as a determinant for staying on the job and providing quality of life for residents. This study develops a model of organizational commitment to inform practitioners.

**Key words:** Organizational commitment; leadership; job satisfaction; empowerment; attachment; work shift; turnover; social exchange; quality of life.

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## INTRODUCTION

Organizational commitment, as a dependent variable, is not considered in the gerontological literature along with other dominant theories of behavioral management, leaving an important gap in knowledge and research. In this study we are seeking a better understanding of how individual and organizational factors affect caregivers' organizational commitment in assisted living. Organizational commitment is defined as "a state of being" in which an individual becomes bound by his or her actions to beliefs that sustain the activities of his or her own involvement in an organization (Staw & Salancik, 1977: 62). This means that individuals internalize the organization's goals and values on behalf of the organization, increasing organizational commitment (Mowday, Steers, & Porter, 1979). The dependent variable is a requisite measure of caregiver effectiveness and continuing employment (Bishop et al., 2008). Caregivers that are low in commitment to the organization leave their employment or quit the profession entirely (Lum, Kervin, Clark, Reid, & Sirola, 1998). Organizational commitment stems from such antecedents as previous work experiences, personal characteristics, childhood experiences, previous caregiving encounters, and socialization experiences (Saks, 2006). Studying organizational commitment in the context of healthcare is intended to lead to findings that determine quality of life outcomes for residents. When caregivers are not committed, resident quality of life becomes impaired. Assisted living professes to provide quality of life as a primary goal. It is the credo of the Assisted Living Federation of America, (ALFA), and individual facilities attempt to comply.

Social exchange and norm of reciprocity provide an interacting framework for this study (Blau, 1964; Gouldner, 1960). These theories are essential principles of society (Hobhouse, 1956), through obligations, social rules, power relations, and components of

social system stability (Simmel, 1950). Social exchange (Blau, 1964) between leader–member, and resident–caregiver, provides an insight and understanding in the trust, obligation, and nature of the exchange. The party that provides a benefit to the employee (e.g. wages) creates an obligation for the employee to participate (Gouldner, 1960). The exchanges may be social or economic but social exchanges survive longer. Exchange dimensions include the parties to the exchange, quantities and type exchanged, agreement explaining the conditions of the exchange, and direction (unilateral, reciprocal, joint) (Levine & White, 1961). Social exchanges are related to affective commitment (employees’ view of how they are bound to the organization), and transactional leadership style (through contingent rewards) (Bass & Avolio, 1989). The exchange creates a trusting, loving relationship between caregiver and resident. It is an important social source leading to job satisfaction arrived at by altruism and friendship (Seymour & Buscherhof, 1991). It is a basic component of the nurse caring process, which serves as both an antecedent of the decision to become a nurse and to stay on at work (Blegen, 1993; Irvine & Evans, 1995). The depiction of social exchange as a frame of reference is a comprehensive theme guiding this research.

## **LITERATURE REVIEW**

In order to better understand employees’ organizational commitment in assisted living environments, we leverage literature and theories on empowerment, attachment, job satisfaction, quality of work-life, and leadership. As indicated in the organizational literature, these factors are likely to affect the organizational commitment of employees, but are often found lacking in assisted living environments. We thus focus on these constructs as a way to inform relevant gerontological and organizational literature and practice.

## **Empowerment**

Spreitzer, defines empowerment as an “increased intrinsic task motivation manifested in a set of four cognitions reflecting an individual’s orientation to his or her work role: meaning, competence, self-determination, and impact” (Spreitzer, 1995). Meanings refer to the comparison of work goal to an ideal created by an individual. Competence is self-efficacy or a person’s demonstration of ability at work. Self-determination is the individual’s belief that choices are available prior to taking action. Impact is how the individual affects outcomes at work. The antecedents of empowerment at the psychological level are self-esteem or how you feel about yourself, focus of control or how you determine things, information available, and rewards or incentives offered for good performance (Spreitzer, 1995). At the structural level, antecedents of empowerment are power relationships, both formal and informal, derived from policies and procedures (information), training programs (support system), available tools and supplies (resources), and learning systems (growth opportunities) (Kanter, 1977).

## **Attachment**

Attachment theory provides for “a caregiving behavioral system”, where the dependent needs of a person are met by another, as one of the “most generative psychological theories of the last 40 years”, in fact, “a grand theory of social development” (Bretherton, 1992). It is rooted in evolution theory as the linkage to care enhances the chance of survival (Bretherton, 1992; Roisman et al., 2007; Rom & Mikulincer, 2003). The system of caregiving provides support to others as an altruistic, empathetic response. Beginning as the relationship of a mother and child, the theory applies to older human relationships (Hazan & Shaver, 1987). Attachment relates to security, positive work activity, healthy functioning,

social interaction, and well-being (Collins & Feeney, 2000). Attachment manifests itself based on closeness, dependency and anxiety. The dyadic process of attachment is part of the caregiving system (Bowlby, 1969). Trust increases security in intimate relationships with quality exchanges occurring between individuals (Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010). The exchanges are both pragmatic and emotional: a person seeking the support of another for personal benefit and the act of forming relationships.

### **Job Satisfaction**

Job satisfaction is defined as favorable or unfavorable views of work affected by personality factors and various work components (Jenkins, 1994). Job satisfaction is correlated with organizational commitment, perceived control (Lee, Ashford, & Bobko, 1990), work factors (challenges of job, role ambiguity, growth development, rewards, communication with workers, work load, work demands, meaningfulness, autonomy) (Van Saane, Sluiter, Verbeek, & Frings-Dresen, 2003), self-esteem, self-efficacy, focus of control, eroticism (Judge, Erez, & Bono, 1998), level of personal engagement, and organizational citizenship (Williams & Anderson, 1991). Job satisfaction is closely related to organizational commitment and empowerment. The social exchange perspective permeates the construct of job satisfaction as employers and employees exchange rewards, (pay, bonuses, recognition, promotion) affecting expectations, and future job involvement (Mills, 1983). Antecedents of job satisfaction include work conflict (Hom & Kinicki, 2001), organizational commitment (Meyer & Allen, 1991), empowerment (Currivan, 1999), perceived control (Jones, 1986), autonomy (Porter, Steers, Mowday, & Boulian, 1974), and work factors (Hackman & Oldham, 1975).

## **Quality of Work-life**

The work-life environment, behavioral feelings, and perceptions (Csikszentmihalyi, 1991; Northouse, 2007) determine quality of work-life (Dirks & Ferrin, 2002). Quality of work-life, defined by the level of well-being (health, enjoyment, productivity) leads to job satisfaction, organizational commitment, joy, and fulfillment (Harter, Schmidt, Killham, & Agrawal, 2009). Engaged members, both cognitively and emotionally, require clear expectations, resources, equipment, an ability to contribute to the organization, and a person environment fit (Baumeister & Leary, 1995). They need to be heard, able to develop friendships, have organizational input, be aware of expectations, and learn continuously (Harter et al., 2009). Happy employees are more productive and successful (Diener & Biswas-Diener, 2002), when they receive favorable feedback from supervisors (Cropanzano & Mitchell, 2005), are more likely to assist peers (George, 2006), have positive emotions (joy, satisfaction, contentment, enthusiasm) (Boehm & Lyubomirsky, 2008), positive affect, greater job satisfaction (Judge & Piccolo, 2004), less burnout, less absenteeism, less turnover, and have high commitment to the organization (Judge & Piccolo, 2004). Members that are more engaged are more loyal, provide better customer service, and have the intent to stay (Harter et al., 2009). Leaders must provide caregivers with clear defined expectations, resources for work, a feeling of member impact on the organization, trust, advancement opportunities, and make members feel they are important so they contribute to the organization. The workplace that provides a quality work environment: good wages, trust between member and leader, a safe environment, and creative opportunity, is a good place to work at (Loke, 2001).



## **Leadership**

Transactional leadership is characterized by contingent reward (Bass, 1985), resulting from social and economic exchanges (Blau, 1964). Leader and member exchange material and psychological rewards based on the fulfillment of the employee contract obligation (Bass & Avolio, 1989). The leader provides both tangible and intangible assistance and resources to members in exchange for their effort and performance. Members must perceive organizational support from leaders for the exchange to occur as they give back what they have received in kind. A sense of fairness and trust must exist for the exchange to take place: followers proceed on this basis and receive what they need for something the leader wants (Avolio, Walumbwa, & Weber, 2009; Chen, 2004; Walumbwa, Wu, & Orwa, 2008).

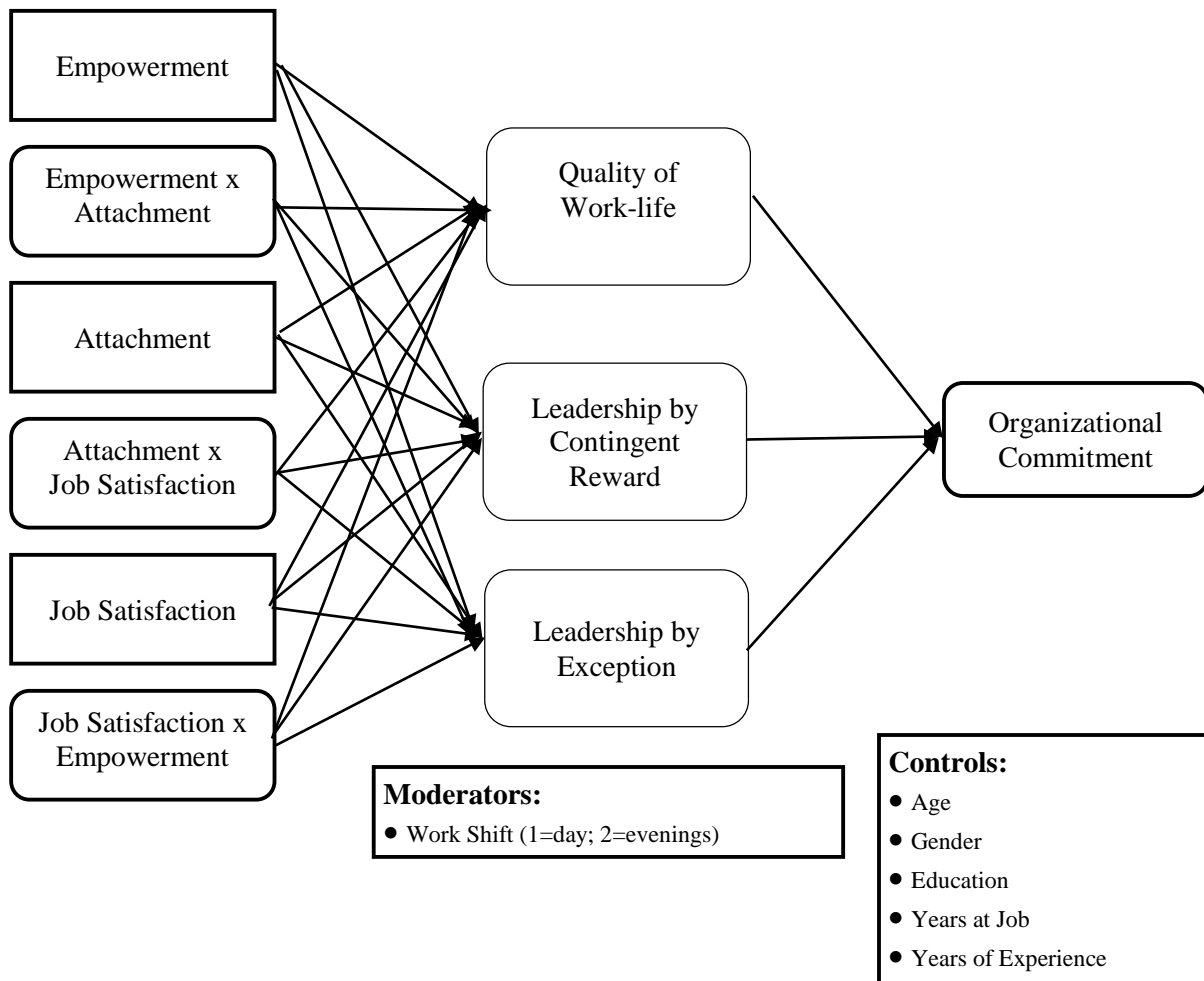
Laissez-faire leadership is marked by passiveness and avoidance (Bass, 1985), leading to decisions delayed, absence of feedback, rewards and involvement (Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007), and motivation, no allegiance leading to role conflict and ambiguity, higher stress, and lower job satisfaction. Laissez-faire leaders are absent when they are needed (Judge & Piccolo, 2004), creating "a destructive form of leadership" (Skogstad et al., 2007: 80). The leader avoids responsibility required, allows problems to remain and accumulate, does not follow-up, and members do not know what the leader is thinking (Hinkin & Schriesheim, 2008). Not responding positively to good performance affects members in a greater way than nonresponse to bad performance as it stifles the motivation and will to perform (Adams, 1965; Byrne & Cropanzano, 2001; Weiner, 1985). Antecedents of leadership theories include spirituality (Sanders, Hopkins, & Geroy, 2003), values, beliefs, and assumptions of members (Lok & Crawford, 1999), normative beliefs and shared expectations (Piccolo & Colquitt, 2006), meanings within the organization (Smircich

& Morgan, 1982), situations and contexts (Jung & Sosik, 2002), charisma (Waldman, Bass, & Yammarino, 1990), and trust (Avolio, Zhu, Koh, & Bhatia, 2004). The correlates of leadership include empowerment (Spreitzer, 1995), organizational commitment, and job satisfaction (Loke, 2001).

## **THEORY DEVELOPMENT**

This model expands the traditional linkages of organizational commitment to empowerment and job satisfaction by including resident attachment. The uniqueness of assisted living is that engaged exchanges of caregivers are not only between leader-member but also with residents. The argument we make is that attachment, marked by a social exchange, has a strong effect on organizational commitment. The leader-member exchange is a meaningful and necessary component of organizational behavior, as we observe in the dynamics of work for pay, motivated workers and, quest for advancement. This is in contrast to the resident-caregiver exchange, which leads to attachment as an unsubscribed, unintended, informal, and natural phenomenon. Both approaches lead to organizational commitment, but leader-member exchange is primarily economic, whereas resident-caregiver exchange is a long-term social engagement. We control for the effects of gender, age, years at work, and years of experience to account for potentially confounding effects. Our conceptual model is shown in Figure 1.

**FIGURE 1**  
**Conceptual Model**



### **HYPOTHESIS DEVELOPMENT**

Formal leadership informs caregivers during the day shift, as management is present (Binstock, George, Cutler, Hendricks, & Schulz, 2006; Sikorska-Simmons, 2005). The leadership style is primarily transactional based on policies, procedures, and regulation. The leadership asserts itself in a top down management style expecting caregivers to follow. At 5pm, formal leadership dissipates and assignment of responsibilities rests with a lesser-trained, lesser-paid individual. Compensation and substitution for laissez-faire leadership

takes place in the form of caregiver teamwork engaged and self-determining, created for ease of managing. The caregivers form communities of practice allowing residents to voice input in the definition of quality of life. Caregivers that stay longer on the job are as committed to the resident as to the organization. The commitment to residents assures the quality of life component of assisted living. The commitment to the organization improves the economic exchange. We next present and then support hypotheses derived from Figure 1.

*Hypothesis 1a-c. Quality of work-life mediates the positive effects of empowerment, attachment, and job satisfaction, on organizational commitment.*

Three cognitions are of concern that affect a caregivers' orientation towards work: meaning, self-determination, and impact (Spreitzer, 1995). Meaning compares work to an ideal created by the individual. Self-determination is based on reliance on choices prior to decision-making. Impact is the effect on outcomes at work. Empowered employees that have been relegated importance and given the opportunity to participate in decision-making, given clear goals, lead to a work-life condition fostering organizational commitment (Kanter, 1977; Spreitzer, 1995). Employees who have opportunity, information, support, resources, formal and informal power are more confident, find greater meaning, have greater impact, and produce better outcomes (Spreitzer, 1995). Quality of work-life is fostered by determination emanating from control, power relationships, rewards and incentives, and growth opportunities (Kanter, 1977).

Caregivers anticipate working long before they actualize the event. They experience an epiphany moment of caring at an early age (Binstock et al., 2006). It may be helping a grandmother survive or visiting a nursing home as part of a church volunteer program. In all circumstances, the imprint and impact of the experience foretells the decision to become a

caregiver. Attachment theory, which begins with the relationship of mother and child, is the first social and economic exchange experience affecting future attachment relationships and outcomes (Bowlby, 1969). It is a powerful lesson learned resulting in both positive (love) and negative (avoidance) behaviors. The caregiver that becomes attached to a resident is more likely to form an organizational commitment.

When caregivers are satisfied, they stay on the job longer (Sikorska-Simmons, 2005). Similar to other type of employees, caregivers employ job satisfaction in order to fulfill their economic, social, and psychological needs both at home and at work. The quality of work-life predicts negative behavior including lateness, absenteeism, and violation of rules, ineffective work, and turnover (Castle, Degenholtz, & Rosen, 2006). The work environment requires sufficient resources, good relationships with co-workers and supervisors, fair pay, and involvement in decision making impacting job satisfaction (Bowers, 2000). Job satisfaction is a requisite for organizational commitment (Choo, 1996). Caregivers will not commit to the organization and become long-stayers unless a positive environment exists in the workplace (Pekkarinen, Sinervo, Perälä, & Elovainio, 2004).

*Hypothesis 2a-c. Leadership by contingent reward mediates the positive effects of empowerment, attachment, and job satisfaction on organizational commitment.*

Caregivers, aware of their salary and benefits, receive an empowerment in the form of an economic exchange. Some caregivers feel more secure and empowered to do their job in an environment where the rules and procedures are given to them, explained, and enforced. This relieves them of the burden of guessing and not knowing. Empowerment with clear and basic information that the firm adopts as policies and procedures can lead to greater organizational commitment. Contingent rewards can help caregivers increase their

attachment to residents as they feel well rewarded to do their job. The economic exchange between leader-member allows for a social exchange between resident and caregiver. The attachment to the resident increases the commitment to the organization creating longer stayers. Caregivers can increase their job satisfaction through contingent rewards. The effect is not long lasting and needs to be repeated in order to continue the effect

*Hypothesis 3a-c. Leadership by exception mediates the positive effects of empowerment, attachment, and job satisfaction on organizational commitment.*

A leader that is not present creates an opportunity for informal leadership empowered by the need to perform and direct caregivers. Empowered caregivers organize to form a community of practice creating a commitment to the organization. Caregivers in the absence of leadership have a social exchange with residents: they offer attention and love and receive the same from the resident. The attachment created is a bond between caregiver and resident and a prime basis for working at the assisted living retirement community. It makes their day and work effort worthwhile. The attachment leads to organizational commitment and forms the underpinnings for a long-stayer. Caregivers that are attached become committed to the organization and stay on longer when leadership is absent. They form their own informal rules that govern their work and relationships.

*Hypothesis 4a-c. Attachment positively moderates the effect of empowerment on quality of work-life, leadership by contingent reward, and leadership by exception.*

Empowered caregivers, attached to the residents, have greater organizational commitment and stay on the job longer (Pekkarinen et al., 2004). Empowered employees feel they are stakeholders in the organizational outcome. Attachment to residents becomes one of the most empowering effects from work as caregivers feel wanted, needed, able to affect resident outcomes, and appreciated for their efforts (Sikorska-Simmons, 2005). The

attachment gives the caregiver a defined meaning, a feeling of having impact, an attachment of competence, and an ability to provide, in concert with the resident, what they need (Spreitzer, 1995).

*Hypothesis 5a-c. Job satisfaction positively moderates the effect of attachment on leadership by quality of work-life, leadership by contingent reward, and leadership by exception.*

Attachment is an antecedent and correlate of job satisfaction and both are requisites for organizational commitment (Collins & Feeney, 2000). Caregivers attached to the resident feel empowered having achieved what they intend to do, caring. This leads to job satisfaction matching the ideal vision of work to the reality of accomplishment.

*Hypothesis 6a-c. Empowerment positively moderates the effect of job satisfaction on quality of work-life, leadership by contingent reward, and leadership by exception.*

Job satisfaction strengthens empowerment by giving authenticity to a favorable view of work leading to more control (Hackman & Oldham, 1975). The more satisfied at work, the greater one feels empowerment and commitment to the organization (Herzberg, Mausnes, Peterson, & Capwell, 1957). Happy and empowered caregivers participate in decisions more readily and help others achieve goals (Cimete, Gencalp, & Keskin, 2003).

*Hypothesis 7. The positive effect of leadership by exception on organizational commitment is stronger for day shift employees.*

Work shift is associated with detrimental health effects (Holdnak, Harsh, & Bushard, 1993) resulting in higher medical costs, absenteeism, accidents, and errors. Missing work, due to illness or accident, detaches the employee from the organization, from relationships, losing continuity and meaning (Coffey, 2006). Caregivers not working the day shift are affected by a deprivation of the circadian natural biological rhythm leading to sleep deprivation and illness (Caruso, Hitchcock, Dick, Russo, & Schmit, 2004). Working double

night shifts creates physical stress and the caregiver in these circumstances feels helpless, manipulated, and lacking commitment to the overall organization (Holdnak et al., 1993). The resident is given priority by evening caregivers over organizational commitment. There is more time to spend with residents. Formal leadership representation is absent after 5pm, and policies and procedures are at best approximated. In spite of this, Holdnak et al. (1993), found the evening shift had better work performance, a better attitude, and greater commitment. The evening and night shift work is not as physically difficult marked by less employees, less stress, and more time for socializing.

The day shift operates under the auspices of formal management. This type of leadership affects the organizational commitment as transactional leadership can be empowering and motivating leading to job satisfaction and organizational commitment (Avolio & Bass, 1985). Economic exchanges lead to short-term commitment. Coffey et al, 1988, found job performance due to job satisfaction highest on the day shift in acute hospital nurses.

Formal leadership, evident on the day shift, has impact on caregiver quality of work-life predicting job satisfaction, supervision satisfaction, and promotion satisfaction (Holdnak et al., 1993). The evening shift is accustomed to management by exception. (The type of leadership where the formal leader is absent). Effective leadership style is associated with job satisfaction, and job retention for both transformational and transactional styles (Kleinman, 2004). Day shift employees, more familiar with a transactional leader style, commit to the organization; evening caregivers, operating under laissez-faire leadership are less likely to identify with the organization.



*Hypothesis 8. The positive effect of leadership by contingent reward on organizational commitment is stronger for night-shift employees.*

Caregivers that are aware of their salary and benefits receive an initial empowerment in the form of an economic exchange. Some caregivers feel more secure and empowered to work in an environment where the rules and procedures are given to them explained, and enforced. This relieves them the burden of guessing and not knowing. Empowerment with clear and basic information that the firm adopts as policies and procedures leads to greater organizational commitment.

Contingent rewards helps caregivers increase their attachment to residents, as they feel socially rewarded to do their job. The economic exchange between leader-member allows for a social exchange between resident and caregiver. The attachment to the resident increases the commitment to the organization creating long stayers. Caregivers can increase their job satisfaction through contingent rewards. The effect is not long lasting and needs to be repeated but it leads to greater organizational commitment. A leader that is not present creates an opportunity for informal leadership empowered by the need to perform and direct caregivers. Empowered caregivers form a community of practice and a commitment to the organization.

## **METHODS**

The survey respondents represented 20 different locations in the United States. The questions in the distributed online survey were obtained from established, reliable, and valid sources (see Appendix). The measures for the moderator, work-shift, were obtained from an exploratory qualitative study, which identified a variation in caregiver behavior from the day

shift to the evenings shift affecting the level of organizational commitment (Rosenson, 2013). This is corroborated in Holdnak et al. (1993) and Kleinman (2004).

We pretested the survey in a Q-sort employing both non-caregivers and caregivers to help refine the new questions and contextualize the validated ones. In the questionnaire, we randomized the order so that respondents would not infer a pattern. Several unrelated questions (attention traps) were added to determine respondent engagement. The final questionnaire comprises 43 questions, from 429 respondents, using mostly five-point Likert scales (strongly disagree to strongly agree). Table 1 summarizes some descriptive statistics for our sample.

**TABLE 1**  
**Demographics of Sample**

<b>N=429</b>					<b>Mean</b>	<b>Std. Dev.</b>
<b>Education</b>	<b>8th Grade</b>	<b>High School</b>	<b>College</b>	<b>Graduate</b>		
	2%	34%	56%	8%	2.720	0.6166
<b>Years at Current Job</b>	<b>1-5</b>	<b>6-10</b>	<b>11-15</b>	<b>16 or more</b>		
	57%	24%	10%	9%	2.131	1.1040
<b>Years of Work Experience</b>	<b>1-5</b>	<b>6-10</b>	<b>11-15</b>	<b>16 or more years</b>		
	57%	24%	10%	9%	2.131	1.1040
<b>Age</b>	<b>18-25</b>	<b>26-35</b>	<b>37-50</b>	<b>Over 50</b>		
	12%	24%	31%	33%	2.862	1.0116
<b>Gender</b>	<b>Men = 1</b>	<b>Women = 2</b>				
	19%	81%			1.807	0.3954
<b>Work Shift</b>	<b>Day = 1</b>	<b>Evening = 2</b>				
	65%	35%			1.462	0.6901

We used SPSS and AMOS to test our measurement and structural models. Mediation was performed using a bootstrapping method for direct and indirect effects. Multi-group moderation was performed testing work-shift (day, evening). Interactions were used to test the moderating effects of leadership (by exception and contingent reward).

## ANALYSIS

The level of analysis considers both the individual and organizational level to bring a clearer understanding of the dynamics of caregiver behavior within the organization. The constructs are well established in the organizational literature except for work-shift. Work-shift is traditionally studied as a detriment impacting the health and work behavior of caregivers. It has not been researched as moderating effects on organizational commitment.

### **Data Screening**

There is no missing data. Outliers are distinctly different and unique from all other observations emanating from either high or low value obtained from both box plots and may not be representative of the population (Field, 2009). This model produces a number of outliers with skewness and kurtosis present. The issue of skewness, common in Likert scale measurement with five intervals (strongly disagree...strongly agree), compels caution throughout the exploratory factor analysis and confirmatory factor analysis at an absolute value greater than 2.00 (Sposito, Holtzclaw, Charlet, Jouany, & Page, 1983) as a benchmark. The problematic kurtotic variables are empowerment, and attachment, in the multivariable composite analysis. The decision to remove 21 respondents (approximately 4% of the sample), apart from the generalized field, was made to conform to a standard threshold for a Mahalanobis test set at 20 (Hair, Black, Babin, & Anderson, 2010). All respondents above an established threshold were eliminated, improving the normality of the sample leaving 429 cases. The test for linearity or how variables are linearity associated was determined by scatter plots. Items are within reasonable distance from the regression line indicating linearity.

Homoscedasticity, or how the dependent variable is variant across the predictive variables, was tested by reviewing scatter plots for variables and their residuals. A Levene's test of variable dispersion equally across other variables, using components of the variables, showed significance, therefore, homoscedasticity. A Box test of equality of performances of co-variances matrices proved not significant indicating normality (Field, 2009). A Variable Inflation Factor test was conducted for multicollinearity or the level of correlation for all exogenous variables at one time. The results show that the variables explaining other variables are within acceptable parameters established by the VIF norm value benchmark of 5 (Field, 2009).

### **Exploratory Factor Analysis**

An exploratory factor analysis (EFA) was performed using Maximum Likelihood Estimate (ML) with a Promax rotation expecting variables to load onto 9 factors set at eigenvalues  $> 1$ . ML was chosen as iterations improve the "parameter estimates to minimize a specified fit function" (Hair et al, 2010 p.614). The 9 factor EFA has correlations ( $>.4$ ) showing that items were moving together with at least 3 items per latent construct. There were 5 cross-loadings identified, subsequently trimmed, improving the model loadings of 9 extracted factors. The loadings range from 0.313 to 0.962. The 9 factors have a cumulative variance of 63%, a good explanatory score (Hair et al, 2010). The KMO and Bartlett's test for sampling adequacy is within the acceptable threshold and is significant (KMO=0.938) (Hair et al, 2010). The Chi-square/df = 1.926 and the P-value indicates a good fit. The original sample items were trimmed to 43 over the course of data screening and measurement validation, helping relieving the issues of normality. The ratio of retained items to original items meets the threshold of 5.00 set by Hair et al. (2010). The reproduced matrix has a 5%

non-redundant residual level (the 5% threshold established by Hair et al. (2010) and is adequate for the 9 factor model. The Cronbach’s alpha for each extracted factor is above 0.70 (Hair et al., 2010). The factors extracted have convergent validity as they load on 9 factors with loading above the threshold of 0.350 required for a sample of 300 (Hair et al., 2010). The factors show discriminant validity, as the correlation matrix has no values above 0.800 (Hair et al., 2010).

**Confirmatory Factor Analysis (CFA)**

The CFA, using ML to discover if observed variables load together as hypothesized, has sufficient correlation, meets the threshold of reliability and validity, and has at least 3 indicators per factor allowing for a sufficient amount of degrees of freedom (Byrne, 2012). In order to improve model fit, modification indices exceeding a 15.0 threshold were addressed (Hair et al., 2010). Model respecification was also conducted for item level residuals for standardized residuals greater than 4.0 (Hair et al., 2010). Table 2 summarizes our model fit metrics. Our observed model fit was not ideal on all accounts, but was adequate on some accounts. Table 3 shows the correlation matrix to support our analysis of convergent and discriminant validity and reliability explained next.

**TABLE 2**  
**Model fit for Measurement Model**

<b>Metric</b>	<b>Observed Value</b>	<b>Ideal Threshold</b>
CMIN/df	2.335	< 3.000
CFI	0.842	> 0.950
GFI	0.701	> 0.950
AGFI	0.679	> 0.800
RMSEA	0.055	< 0.050
PCLOSE	0.000	> 0.050
SRMR	0.072	< 0.090

**TABLE 3**  
**Construct Correlation Matrix**

	CR	AVE	MSV	ASV	EI	OC	JS	EC	LCR	QOW	A	LCE	EM
EI	0.936	0.830	0.389	0.154	<b>0.911</b>								
OC	0.939	0.661	0.480	0.276	0.515	<b>0.813</b>							
JS	0.878	0.555	0.141	0.071	-0.019	-0.375	<b>0.745</b>						
EC	0.851	0.596	0.493	0.184	0.250	0.393	-0.285	<b>0.772</b>					
LCR	0.864	0.521	0.401	0.190	0.624	0.582	0.100	0.155	<b>0.721</b>				
QOW	0.902	0.570	0.480	0.239	0.489	0.396	-0.226	0.383	0.633	<b>0.755</b>			
A	0.816	0.529	0.473	0.246	0.297	0.650	-0.363	0.633	0.340	0.507	<b>0.727</b>		
LCE	0.786	0.554	0.157	0.086	0.248	0.274	0.113	0.329	0.396	0.342	0.285	<b>0.745</b>	
EM	0.923	0.801	0.493	0.244	0.361	0.576	-0.371	0.702	0.292	0.473	0.588	0.275	<b>0.895</b>

Reliability is measured as a composite for each separate factor. All composite factors are set above 0.700, the threshold for reliability affirmation (Fornell & Larcker, 1981).

Convergent validity is achieved as factors with an Average Variance Extracted (AVE) > 0.50 are well within the established parameters (Hair et al., 2010). Discriminant validity, or how the constructs separate themselves from each other, creates unique factors with distinct explanation and content. Discriminant validity is established when the square root of the AVE (on the diagonal) should be greater than any correlation with another construct (Fornell & Larcker, 1981).

The data from a panel survey can lead to measurement bias. Data comes from different sources, collected at different times but requires testing to determine the existence of Common Method Bias (CMB). The Harman test shows that the highest variance of any factor is 32.71%, well below the 50% threshold, meaning that CMB is not present. The Common Latent Factor (CLF) test captures the common variance of observed variables in the model. When the difference in indicator path loadings (with and without the CLF present) is

less than 0.200 then CMB is not present. The CLF difference is less than 0.200 indicating that CMB is not present after trimming 3 items.

We tested for metric invariance between Dayshift and Evenings + Night shift. The results of the metric invariance indicates that 6 items are non-invariant ( $p < 0.05$ ), all others are invariant. Since most items are invariant, we observe partial invariance (Millsap, 2004).

We reassessed model fit for the structural model. All metrics were within the recommended threshold as shown in Table 4. The findings from the structural model are discussed next and summarized in Tables 5 and 6.

**TABLE 4**  
**Model fit for Structural Model**

<b>Metric</b>	<b>Observed Value</b>	<b>Ideal Threshold</b>
CMIN/df	1.854	< 3.000
CFI	.973	> 0.950
GFI	.950	> 0.950
AGFI	.884	> 0.800
RMSEA	.045	< 0.050
PCLOSE	.781	> 0.050
SRMR	.056	< 0.090

## FINDINGS

**TABLE 5**  
**Summary of Findings - Mediation**

Hypothesis	Direct Effect Without Mediator (p-value)	Direct Effect With Mediator (p-value)	Indirect Effect (p-value)	Mediation Type
H1a: Empowerment > Quality of Work-life > Organizational Commitment	.609 (***)	.277 (***)	.373 (**)	Partial Mediation
H1b: Attachment > Quality of Work-life > Organizational Commitment	.661 (***)	.391 (***)	.270 (**)	Partial Mediation
H1c: Job Satisfaction > Quality of Work-life > Organizational Commitment	-.423 (***)	-.237 (***)	-.171 (**)	Partial Mediation
H2a: Empowerment > Leadership by Contingent Reward > Organizational Commitment	.609 (***)	.473 (***)	.179 (**)	Partial Mediation
H2b: Attachment > Leadership by Contingent Reward > Organizational Commitment	.661 (***)	.528 (***)	.130 (**)	Partial Mediation
H2c: Job Satisfaction > Leadership by Contingent Reward > Organizational Commitment	-.423 (***)	-.489 (***)	.087 (**)	Partial Mediation
H3a: Empowerment > Leadership by Exception > Organizational Commitment	.609 (***)	.590 (***)	.020 (*)	Partial Mediation
H3b: Attachment > Leadership by Exception > Organizational Commitment	.661 (***)	.644 (***)	.018 (*)	Partial Mediation
H3c: Job Satisfaction > Leadership by Exception > Organizational Commitment	-.423 (***)	-.466 (***)	.042 (**)	Partial Mediation

The mediation was tested with and without a mediator and using the bootstrap method while controlling for age, gender, education, years at the job, and years of experience. The findings of the mediation support Hypotheses 1a-c as quality of work-life fully mediates empowerment, attachment, and job satisfaction as a correlate of organizational commitment. This is consistent with the existing literature as positive quality of work-life increases the effect of empowerment, attachment, and job satisfaction on organizational commitment (Spritzer, 1973). The stronger the quality of work-life, the stronger the caregiver empowerment, attachment, and job satisfaction and the greater the affect on organizational commitment. Hypotheses 2a-c are supported as leadership by contingent reward mediates the effect of empowerment and attachment positively but it mediates job satisfaction negatively



on organizational commitment. Pecuniary rewards empower individuals through an economic exchange, negotiated by leader and member. Resident attachment is the social exchange which caregivers yearn for before committing to the organization. Job satisfaction which is not positively corroborated is the endemic condition apparent in the caring profession at all levels. Economic exchanges are short lived and the reality of caring for elderly overcomes the job satisfaction measure creating a negative effect. Hypotheses 3a-c are supported as partial mediation and produces a similar effect to leadership by contingent reward. Leadership by exception does not satisfy but forms a basis for organizational commitment through empowerment and resident attachment.

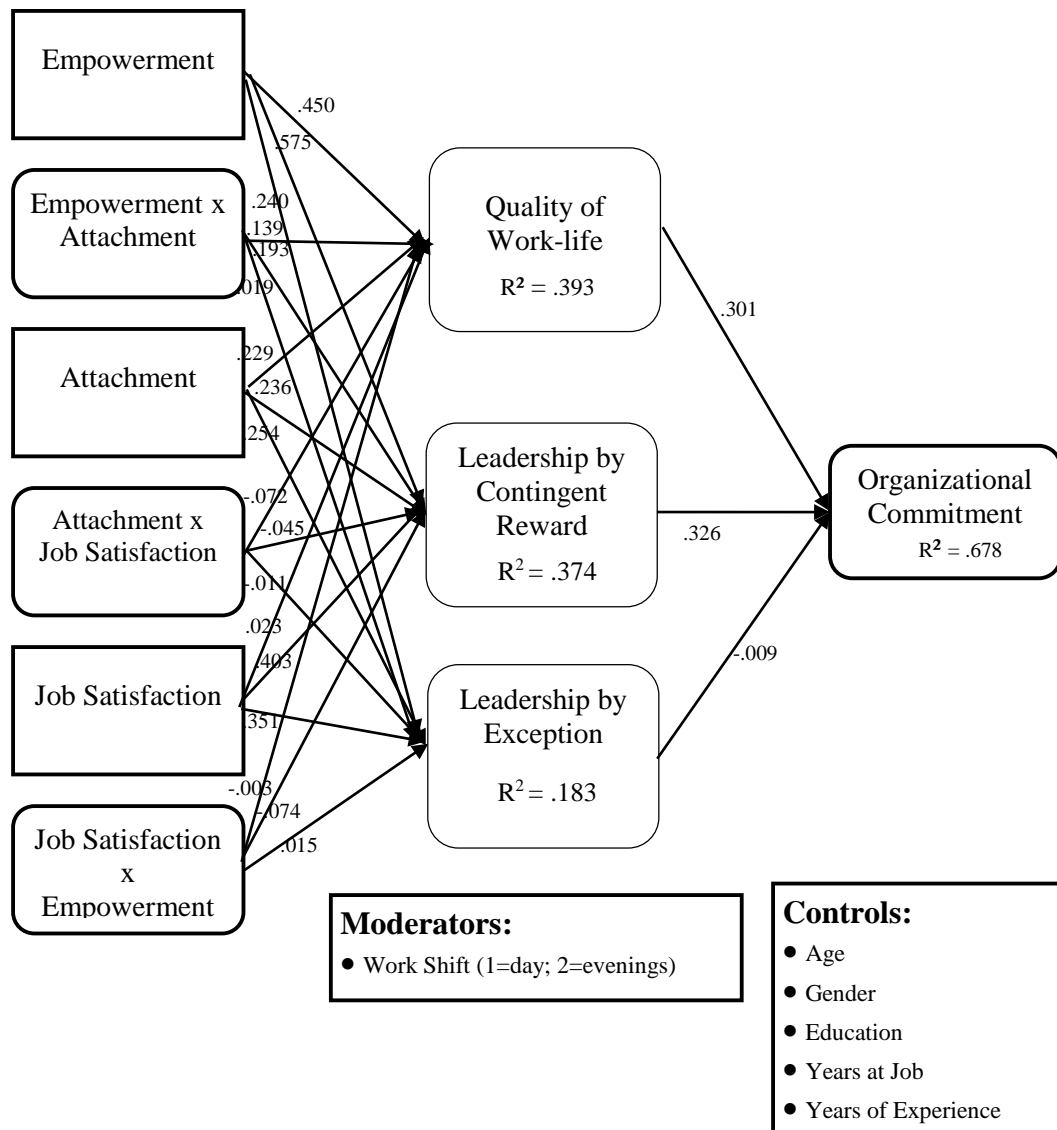
**TABLE 6**  
**Summary of Findings - Interactions**

Summary of Findings - Interactions		
Hypotheses	Standardized Effect (p-value)	Supported
H4a: Empowerment > Quality of Work-life: moderated by Attachment	(P = ***)	<b>Yes</b> , Attachment strengthens the positive relationship between empowerment and quality of work-life
H4b: Attachment > Quality of Work-life: moderated by Job Satisfaction	(P = ***)	No, Job satisfaction dampens the positive relationship between attachment and quality of work-life
H4c: Job Satisfaction > Quality of Work-life: moderated by Empowerment	(P =.596)	No, Empowerment dampens the positive relationship between job satisfaction and quality of work-life
H5a: Empowerment > Leadership by Contingent Reward: moderated by Attachment	(P = ***)	<b>Yes</b> , Attachment strengthens the positive relationship between empowerment and leadership by contingent reward
H5b: Attachment > Leadership by Contingent Reward: moderated by Job Satisfaction	(P =.400)	No, Job satisfaction dampens the positive relationship between attachment and empowerment
H5c: Job Satisfaction > Leadership by Contingent Reward: moderated by Empowerment	(P =.206)	No, Empowerment dampens the positive relationship between job satisfaction and leadership by contingent reward
H6a: Empowerment > Leadership by Exception: moderated by Attachment	(P =.763)	<b>Yes</b> , Attachment strengthens the positive relationship between empowerment and leadership by exception
H6b: Attachment > Leadership by Exception: moderated by Job Satisfaction	(P =.857)	No, Job satisfaction dampens the positive relationship between attachment and leadership by exception
H6c: Job Satisfaction > Leadership by Exception: moderated by Empowerment	(P =.821)	<b>Yes</b> , Empowerment strengthens the positive relationship between job satisfaction and leadership by exception

The interaction effect supports Hypothesis 4a as attachment strengthens the positive relationship between empowerment and organizational commitment. Attachment is significant and increases the effect of empowerment on quality of work-life. The interaction effect between attachment and job satisfaction Hypothesis 4b is not supported as job satisfaction dampens the relationship between attachment and quality of work-life. Job satisfaction negatively affect the effects of the positive relationship between attachment on quality of work-life and is significant. Hypothesis 4c is not supported as empowerment dampens the positive relationship between job satisfaction and quality of work-life. Empowered caregivers cannot overcome the negative effect created by the negativity of job satisfaction. Hypothesis 5a is supported as attachment strengthens the positive relationship between empowerment and leadership by contingent reward. Contingent reward empowers individuals economically and for low paid employees, it is a requisite. Hypothesis 5b is not supported as job satisfaction changes the positive relationship between attachment and empowerment. Job satisfaction overwhelms all other interactions in a negative effect. Resident attachment empowers caregivers socially. Both type of exchanges are required for long stayers to become committed to the organization. Hypothesis 5c is not supported as empowerment dampens the positive relationship between job satisfaction and leadership by contingent reward. This is the case where the economic exchange cannot overcome an inherent job satisfaction which is a well-documented phenomenon in the caring profession. Hypothesis 6a is supported as attachment strengthens the positive relationship between empowerment and leadership by exception. Resident attachment and empowerment in a leadership by exception atmosphere works for the caregiver, at least in the short run. Hypothesis 6b is not supported as job satisfaction dampens the positive relationship between

attachment and leadership by exception. Job dissatisfaction overcomes lowers even strong relationships in a negative way. Hypothesis 6c is supported as empowerment strengthens the positive relationship between job satisfaction and leadership by exception. The combination of empowerment in a laissez-faire environment is conducive to job satisfaction.

**FIGURE 2**  
**Final Model**



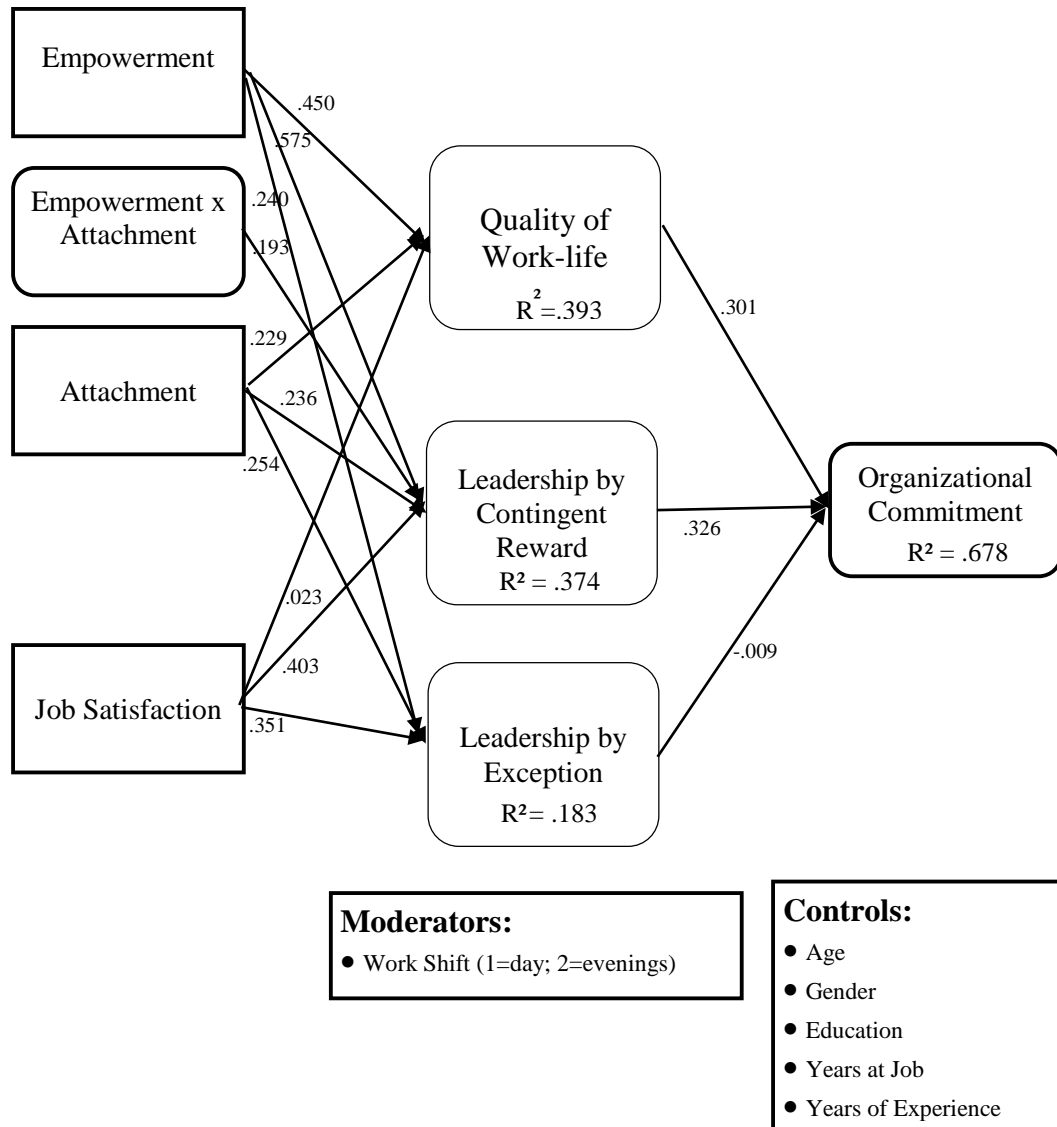
**TABLE 7**  
**Summary of Findings - Multi-Group Moderation**

Summary of Findings - Multi-Group Moderation						
Hypothesis	Leadership by Exception		Leadership by Contingent Reward		Z-Score	Conclusion
	Day	Eve	Day	Eve		
H7: Quality of Work-life->Organizational Commitment: Moderated by Leadership by Exception on Day & Evening Shift	-0.016 (P=0.694)	0.020 (P=0.738)			0.500	Supported, no difference
H8: Quality of Work-life->Organizational Commitment: Moderated by Leadership by Contingent Reward on Day & Evening Shift			0.456 (P=0.000)	0.540 (P=0.000)	1.092	Supported, no difference

The result of the multigroup hypothesis, comparing two groups, leadership by contingent reward and by exception, for day and evening shifts (Hypothesis 7 - 8) reveals that leadership style is not affected by the day or evening shift as it relates to organizational commitment. The expectation that both shifts are committed to the organization by transactional leadership through an economic exchange and laissez-faire leadership by a social exchange is not corroborated. There is no difference between work shift groups and leadership style. Leadership by contingent reward is not significant for both day and evening indicated by the Z-Score. I conclude that no differences exist between day and evening across both leadership type and shift groups. The literature contradicts these findings as leadership by contingent reward does affect quality of work-life (Avolio, Bass, & Jung, 1999). The evidence is that caregivers working for a low wage, place the economic exchange at the top of importance for organizational commitment (in the short run). The caregivers find both types of leadership necessary, one for economic exchange, the other for social

exchange, but the evening shift forms a higher commitment in a laissez-faire leadership environment while the day shift does the same in a transactional leadership.

**FIGURE 3**  
**Structural Model with Significant Paths**



## DISCUSSION

The individual factors: attachment, job satisfaction, empowerment, and the organizational factors: leadership by contingent reward, leadership by exception, and quality

of work-life explain 69% of the variance in organizational commitment. The model hypothesized and developed through statistical testing and refining finds an economic exchange leading to caregiver empowerment and a social exchange leading to attachment affecting commitment to the organization. All paths remaining exhibit significant and strong explanatory power. The purpose of this study is to inform practitioners that these exist new avenues of management strategy, informed by academic research, that lead to less caregiver turnover through higher organizational commitment. This effect lessens the shock waves created by turnover, for residents and staff, implementing quality of care and quality of life. The economic costs are immense, the social costs are incalculable but significant.

The partial mediation of all hypothesis show that quality of work-life, leadership by contingent reward, and leadership by exception are positively congruent with empowerment and attachment. Job satisfaction is a negative concept in the caregiver profession as evidenced in all the interactions performed. Job satisfaction dampens all other independent variables. Further research on job satisfaction within the caregiving profession, at all levels of activity, should be studied to determine the exact conditions creating this phenomenon.

Evening caregivers differ on day shift on quality of work-life. The evening shift marked by laissez-faire leadership and caregiver formations of communities of practice experience a significant and higher quality of work-life measure (see Appendix Figure A2). The dayshift is more committed to the organization through longer stayers (see Appendix Figure A1). In all other variables, there is no significant difference between the two partial invariant groups.

The day shift had a higher correlation than the evening shift on organizational commitment (.70 v.66). Leadership by contingent reward had a higher correlation than

leadership by exception (.45 v.36) indicating the invariance of financial reward. Leadership by exception had a higher correlation on the day shift than the evening shift (.20 v.17) negating the hypothesis that leadership has an effect by work shift. The differences between groups are negligible in this study. The higher commitment for the day shift is understandable as caregivers have more frequent contact with formal management; empowerment explained quality of work-life (.450), and leadership by contingent reward (.575) as significant paths. Job satisfaction correlated significantly with leadership by contingent reward at (.403), but negatively toward organizational commitment (-.232), and positively with leadership by exception (.351). Job satisfaction is affected by the type of leadership (preferring less formal leadership) and pecuniary reward) without committing to the organization. This lack of organizational commitment is responsible for high turnover endemic in the profession. Further research is warranted to exploit this interesting and salient finding. I did not theorize interactions with quality of work-life preferring to focus on leadership styles. This could be an additional area to explore in future research. Quality of work-life positively affects organizational commitment (.291) and in this model was a mediator for empowerment (.450) and attachment (.236). This study addresses several components not previously researched: resident attachment and work shift effects on organizational commitment.

The former was important in this model, significant and causal; the latter disappointing as work shift did not affect the model as expected but as previously noted and, that needs to be pursued in further research. This study has a kurtosis issue in the constructs: attachment and empowerment, reflected by the Likert scale, which showed direction toward the right tail. The controls; age, education, total years as a caregiver, and years at the job

have a small effect on organizational commitment (.06) and insignificant except in total years as a caregiver (.062); age and years at job is highly correlated (.36) and age and total years as caregiver (.41) and that is logically understandable.

## **CONCLUSION**

This study attempts to bring focus and life to the important job caregivers perform every day of the year. Existing academic gerontological literature is unfamiliar with management theories and therefore misses the opportunity to inform practitioners. In applied gerontology, only a handful of academics prevail (e.g. Sikorska-Simmons, 2005), that concern themselves with organizational commitment. The complaint of high caregiver turnover is academically rampant but overlooking and neglecting solutions through management approaches is regrettable. The important take from this paper is that explanation or organizational commitment in assisted living is proximal, and that resident attachment (a social exchange) and empowerment (an economic exchange) are dyadic components leading to organizational commitment. The construct job satisfaction is positive in leadership by contingent reward (transactional leadership) and in leadership by exception (laissez-faire leadership). The important finding is that the type of leadership affects job satisfaction. The problem remains how to achieve caregiver organizational commitment. I suggest that it can be obtained by improving the quality of work-life, supporting resident attachment, rewarding and empowering long stayers, and focusing on leadership by contingent reward.



**APPENDIX**

**TABLE A1  
Pattern Matrix with Cronbach's Alpha**

<b>Factor</b>	<b>OrgCom</b>	<b>JobSat</b>	<b>EmpComp</b>	<b>LCR</b>	<b>QOW</b>	<b>Attach</b>	<b>LCE</b>	<b>Emplmp</b>	<b>EmpMean</b>
<b>Cronbach's Alpha</b>	<b>.927</b>	<b>.922</b>	<b>.882</b>	<b>.898</b>	<b>.898</b>	<b>.885</b>	<b>.850</b>	<b>.933</b>	<b>.815</b>
oc7	.943								
oc5	.922								
oc11	.881								
oc6	.871								
oc4	.814								
oc10	.711								
oc2	.607								
js7	.564								
js12	.484								
js5	.430								
oc1	.411								
js9	.389								
js11		.841							
js8		.816							
js6		.799							
js4		.790							
oc9		.654							
ox12		.641							
ox8		.621							
a1		.572							
js10		.486							
oc3		.462							
js3		.418							
em5			.963						
em4			.896						
em6			.806						
em7			.673						
em8			.538						
em9			.463						
qow1			.449						
lcr4				.836					
lcr5				.823					
lcr1				.805					
lcr3				.769					
lcr6				.719					

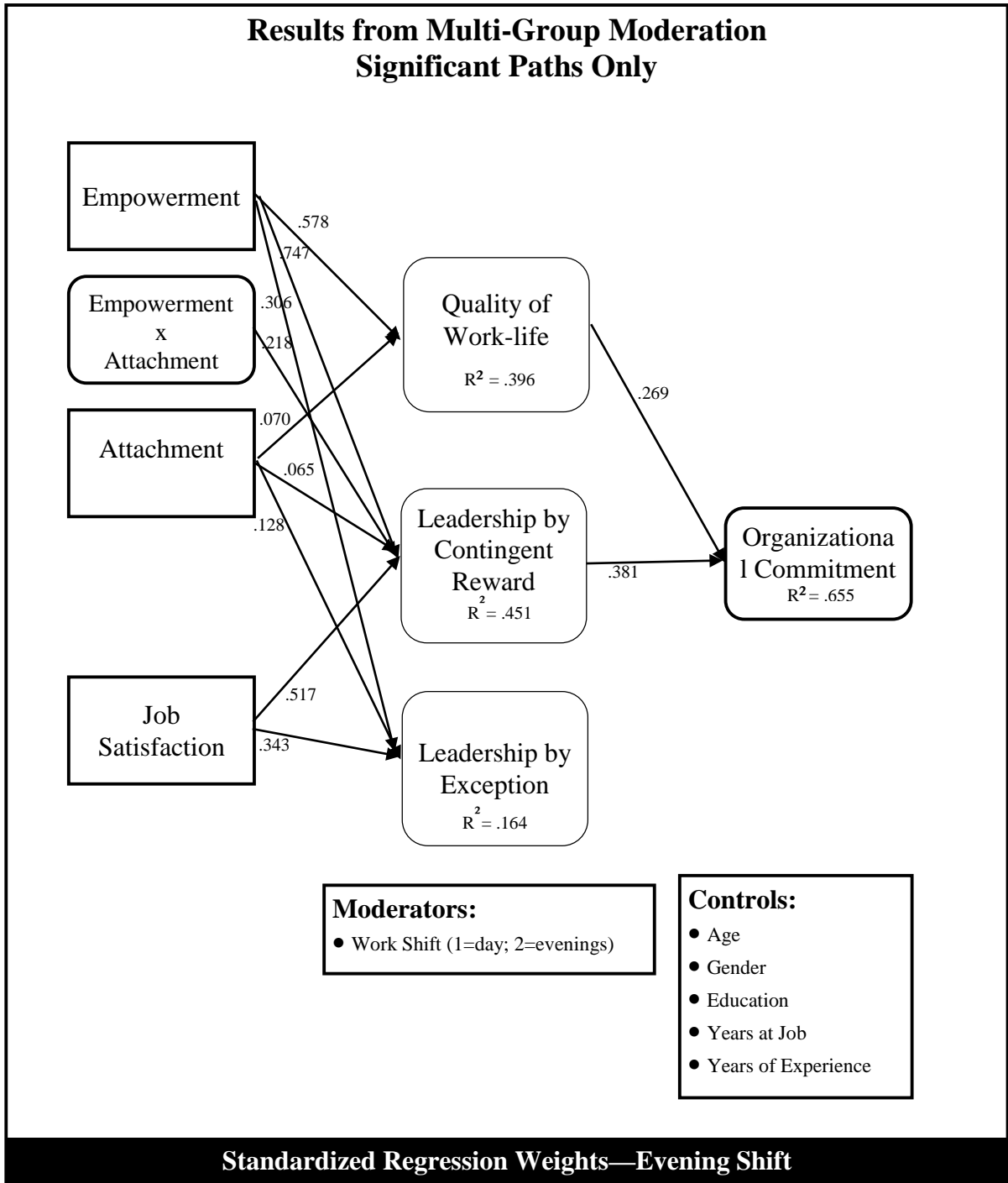
lcr2				.677					
clcr7				.573					
js2				.316					
qow5					.813				
qow6					.735				
qow8					.715				
qow7					.672				
qow4					.664				
qow12					.641				
qow9					.402				
qow10					.313				
a2						.882			
a3						.850			
a7						.611			
a6						.597			
a5						.552			
a1						.463			
a8						.394			
lce5							.839		
lce4							.787		
lce2							.634		
lce3							.564		
lce1							.549		
em11								.962	
em12								.884	
em10								.688	
em3									.907
em1									.812
em2									.787

**TABLE A2**  
**Multi-Group Moderation: Day and Night Shift**

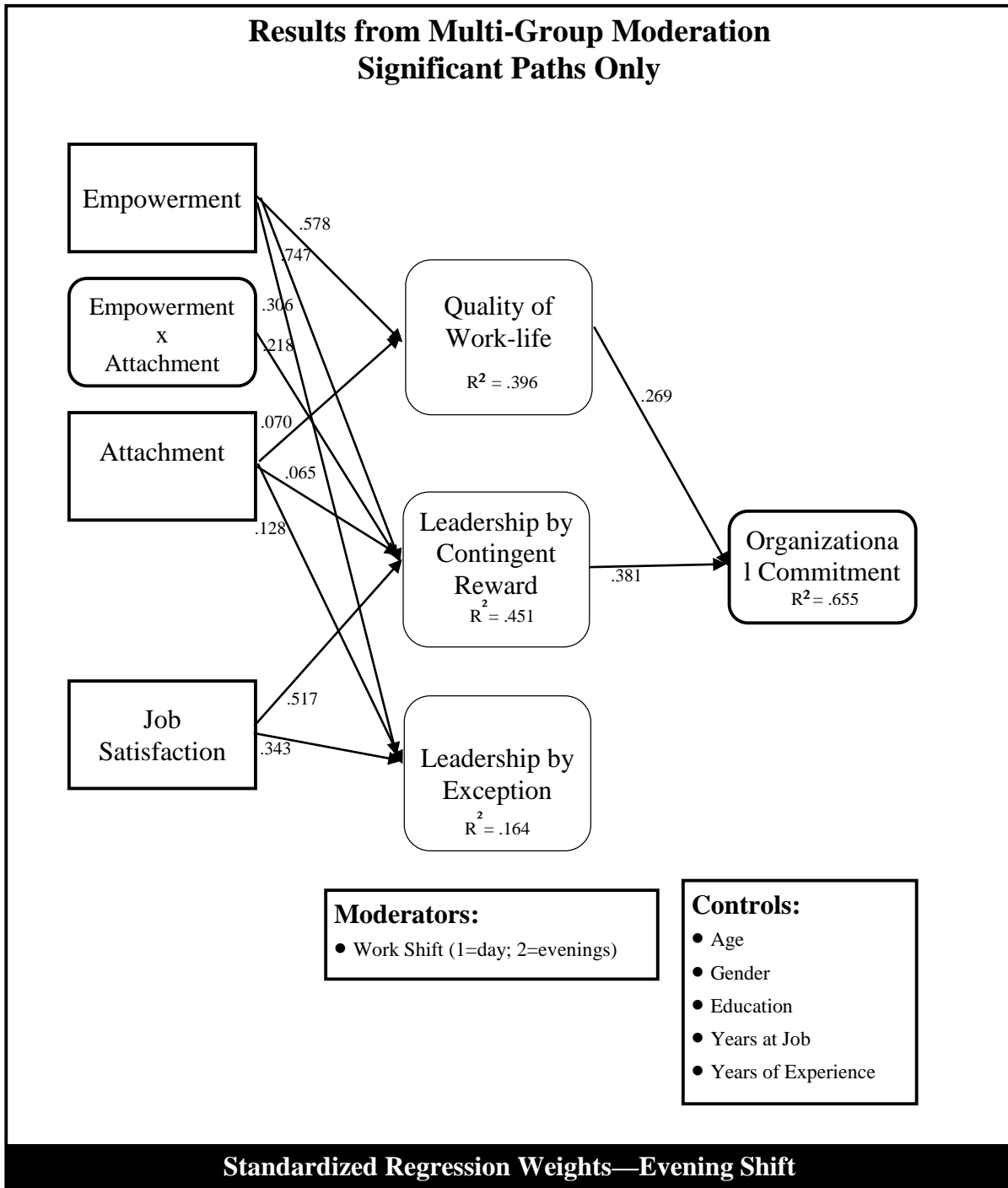
			Day Shift		Evening Shift		z-score
			Estimate	P	Estimate	P	
LCR	<- --	A	0.280	0.000	0.005	0.958	-2.126**
LCE	<- --	JS	0.338	0.000	0.273	0.000	-0.729
LCR	<- --	Emp	0.204	0.000	0.277	0.000	1.510
LCE	<- --	Emp	0.095	0.002	0.121	0.004	0.507
LCR	<- --	JS	0.337	0.000	0.422	0.000	1.020
LCE	<- --	A	0.335	0.000	0.130	0.250	-1.480
OC	<- --	Emp	0.043	0.060	-0.012	0.734	-1.300
OC	<- --	LCR	0.456	0.000	0.540	0.000	1.092
OC	<- --	LCE	-0.016	0.694	0.020	0.738	0.500
OC	<- --	A	0.408	0.000	0.336	0.000	-0.724
OC	<- --	JS	-0.236	0.000	-0.330	0.000	-1.307
OC	<- --	age	0.020	0.502	-0.099	0.026	-2.23**
OC	<- --	educ	-0.088	0.084	-0.046	0.501	-0.659
OC	<- --	total_yrs_caregiver	-0.023	0.544	0.137	0.006	2.575**
OC	<- --	yrs crt job	0.053	0.213	0.057	0.290	1.346

Notes: \*\*\* p-value < 0.01; \*\* p-value < 0.05; \* p-value < 0.10

**FIGURE A1**  
**Standardized Regression Weights—Day Shift**



**FIGURE A2**  
**Standardized Regression Weights—Evening Shift**



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