

# Subjective socioeconomic status as a predictor of long-term care staff burnout and positive caregiving experiences

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## ABSTRACT

**Background:** The potentially negative consequences associated with providing care to older adults are well documented. Recently, there has been an increasing interest in the positive aspects associated with caregiving. Both aspects are believed to represent a continuum of caregiving experiences. Long-term care (LTC) staff members often report high levels of burnout associated with their work. Whereas several job characteristics and objective indicators of socioeconomic status have been identified as potential predictors of LTC staff caregiving experiences, the role of subjective socioeconomic status (i.e. one's view of one's place in society) has not yet been evaluated.

**Methods:** A cross-sectional design of 122 LTC staff members. LTC staff completed the Maslach Burnout Inventory and the Positive Aspects of Caregiving questionnaire. They also completed questions about job characteristics (i.e. staff-to-resident ratio, number of hours worked per day, and years of experience working with older adults), objective sociodemographic variables (i.e. level of education, professional affiliation), and subjective socioeconomic indicator (i.e. MacArthur Scale of Subjective Social Status). Hierarchical regression analyses were conducted to identify the unique contribution of job characteristics, objective socioeconomic status, and subjective socioeconomic status to LTC staff caregiving experiences.

**Results:** Subjective socioeconomic status remained a significant predictor of LTC staff experience even once job characteristics and objective indicators of socioeconomic status were entered into the model. Those who placed themselves higher on the subjective social ladder reported higher levels of positive caregiving experiences and lower levels of burnout.

**Conclusions:** Building a sense of community identity and improving one's status within the community might result in lower levels of burnout and better caregiving experiences among LTC staff.

**Key words:** nursing, job satisfaction, formal caregiving, burnout, patient care

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## Introduction

The provision of care to older adults involves demanding physical and emotional tasks. Some of the physical tasks include dressing, lifting and feeding, whereas emotional aspects of care may involve witnessing physical and mental deterioration, such as gradual impairment in activities of daily living, increased memory problems, loss of insight, paranoia, agitation, depression, or even the death of the care recipient. When care is provided by formal caregivers, such as nurses' assistants and nurses' aides, the low status attributed to the job, the low levels of perceived control and the inadequate pay that often accompany direct care positions contribute to low job satisfaction and high levels of burnout especially among those most involved in direct patient care (Wang, 2005; Lapane and Hughes, 2007).

Researchers have identified three major factors that contribute to staff burnout and dissatisfaction with their work: organizational characteristics, staff characteristics and resident characteristics (Baillon *et al.*, 1996). Nursing staff-to-resident ratio (Aiken *et al.*, 2002; Gunnarsdottir *et al.*, 2007), not having enough staff, having too much work, and lack of perceived control have been identified as influential organizational characteristics (Piazza *et al.*, 2006; Lapane and Hughes, 2007). Researchers also found that those nursing workers who perceived the quality of care in their institutions as high reported greater satisfaction with their work (Castle *et al.*, 2006). Staff characteristics, such as years of experience working with older adults (Hu and Liu, 2004), knowledge about the condition of the resident (Piazza *et al.*, 2006; Lapane and Hughes, 2007), and attitudes toward older residents also play an important role in determining the satisfaction levels of both nursing staff and residents (Train *et al.*, 2005; Zimmerman *et al.*, 2005). In addition, education was inversely related to job satisfaction (Piko, 2006). Residents' characteristics such as dementia, agitation and aggression have also been associated with high levels of burnout among nursing staff (Everitt *et al.*, 1991; Brodaty *et al.*, 2003).

The negative consequences of providing care to older adults have been well documented (Pinquart and Sorensen, 2003). In long-term care (LTC) settings, the high levels of burnout have been associated with job dissatisfaction (Piko, 2006), extremely high turnover rate, absenteeism (Siu, 2002; Kudo *et al.*, 2006), anxiety, and physical symptoms (Bogat *et al.*, 2005). Furthermore, research has shown a direct link between levels of burnout and quality of care (Jenkins and Allen, 1998; Wang, 2005), including patient satisfaction (Vahey *et al.*, 2004) and mortality (Aiken *et al.*, 1994; Aiken *et al.*, 2002).

More recently, increasing attention has been placed on the positive aspects associated with caregiving, suggesting that caregiving can be a meaningful role in life (Kramer, 1997; Cohen *et al.*, 2002). Research on positive aspects of formal LTC caregiving has been qualitative in nature and based on limited sample sizes. This line of research suggests that some of the positive aspects of formal caregiving include gratification (Sung *et al.*, 2005), pride, sense of control (Secrest *et al.*, 2005), interest in working with older adults and financial compensation (Hsieh and Su, 2007). It has been suggested that these positive

aspects contribute to the retention of LTC staff and to better quality care provided to older adults (Castle *et al.*, 2006).

Whereas the literature on informal caregivers' interventions has expanded dramatically in recent years (Pinquart and Sorensen, 2006), research on LTC staff interventions has been quite limited. The few studies conducted have tended not to use rigorous methodology such as randomized controlled trials, but instead have relied on uncontrolled trials, small sample sizes, and qualitative evaluation of progress. These studies have found mixed results (Davison *et al.*, 2007). Some studies have shown a substantial contribution to workers' quality of life and satisfaction with work as a result of mindfulness training (Mackenzie *et al.*, 2006), enhanced communication training (McGilton *et al.*, 2006), or further educational training, clinical supervision and support (Haqqstrom *et al.*, 2005), whereas others did not find such an intervention effect (Chappell and Novak, 1992; Davison *et al.*, 2007). Thus, the specific ingredients that may promote LTC staff quality of life are unclear.

Given the important role that both positive and negative aspects of caregiving play in the life of LTC staff members and older adults there is a need for further research to identify the exact factors that exacerbate or ease the experiences of LTC staff members. One such potential mechanism could be subjective socioeconomic status. In much the same way that past research has shown that subjective perceptions of health status have a unique predictive value over objective indicators of health in determining morbidity and mortality (Idler and Kasl, 1991; Lee, 2000), subjective socioeconomic status has been identified as an important factor in one's physical and mental health. Subjective socioeconomic status refers to one's own perception of his or her social position relative to others (Adler *et al.*, 2000). Examples of subjective indicators of socioeconomic status include one's perception of financial strain or class affiliation. Subjective socioeconomic status is different from objective indicators of socioeconomic status such as level of education, income and professional position because it relies solely on the individual's own perception. The MacArthur Scale of Subjective Social Status is a recent indicator that asks participants to evaluate their social position relative to a reference group on an imaginary social ladder (Adler *et al.*, 2000). Research has consistently shown that subjective socioeconomic status, as measured by the MacArthur Ladder, is a strong predictor of health and well-being even when objective indicators of socioeconomic status are controlled for (Ostrove *et al.*, 2000; Singh-Manoux *et al.*, 2005). Research has also revealed a discrepancy between objective and subjective socioeconomic status, especially among ethnic minorities for whom objective status might be low, but subjective social status within their own community might be satisfactory (Ostrove *et al.*, 2000).

The limited research on LTC social structure suggests that despite recent trends toward multidisciplinary teamwork, which was primarily geared toward diffusing power away from medicine and establishing a more egalitarian social structure (Krause, 1977), a rigid hierarchical social structure is maintained (Cott, 1997). Specifically, a collaborative teamwork that promotes more equal decision-making processes tends to exist among higher status professionals,

whereas the lower status nursing staff is arranged in a hierarchical structure that is task oriented with little room for self-initiative (Cott, 1997). Given the status differential within LTC institutions and the potential impact this might have on LTC staff members' burnout as well as positive caregiving experiences, it is important to evaluate further how subjective socioeconomic status may impact on staff burnout and positive aspects of Ccaregiving. Based on past research, in this study subjective socioeconomic status was expected to be more strongly related to staff burnout and to positive aspects of caregiving than objective indicators of socioeconomic status. Those LTC staff members working on units with low staff-to-resident ratio were expected to report higher levels of burnout and less positive caregiving experiences.

## Methods

### Participants

The study was approved by the Institutional Review Board of Bar Ilan University, Israel. I recruited a convenience sample of 122 LTC staff members from five different LTC institutions, using the snowballing technique. The sample was composed primarily of females (86.1%) who had attained at least a high school standard of education (61.5%). The majority of the sample had been born outside of Israel (66.4%). The sample included 35 (28.7%) paraprofessional caregivers, 44 (36.1%) social workers/physical therapists/occupational therapists, 20 (16.4%) nurses/physicians/administrators, and 23 (18.6%) who identified themselves professionally as "other." Overall, 58 (47.5%) participants were classified as highly burdened according to Maslach *et al.* (1996). These individuals reported scores of  $\geq 27$  on the emotional exhaustion scale, or  $\geq 10$  on the depersonalization scale, or  $\leq 33$  on the personal accomplishment scale. Relative to normative data of medical practitioners provided by Maslach *et al.* (1996), the present sample scored significantly higher on the emotional exhaustion scale ( $M$  sample [SD] = 25.22 [12.29],  $M$  norm[SD] = 22.19 [9.53];  $t[111] = 2.59$ ,  $p = 0.01$ ), the depersonalization scale ( $M$  sample [SD] = 8.73 [5.75],  $M$  norm[SD] = 7.12 [5.22];  $t[106] = 2.85$ ,  $p = 0.005$ ), and the personal accomplishment scale ( $M$  sample [SD] = 38.73 [9.70],  $M$  norm[SD] = 36.53 [7.34];  $t[108] = 2.47$ ,  $p = 0.01$ ). The sample also scored higher on the positive caregiving experiences scale ( $M$  sample [SD] = 36.76 [8.71],  $M$  norm[SD] = 34.00 [9.00];  $t[116] = 3.45$ ,  $p = 0.001$ ) relative to normative data of informal caregivers (Tarlow *et al.*, 2004). For a detailed description of sample characteristics, see Table 1.

### Measures

All measures were available in Hebrew and Russian.

#### OUTCOME VARIABLES

*Maslach Burnout Inventory.* This is one of the most popular measures of occupational burnout and has been used in a variety of studies internationally (Golembiewski *et al.*, 1996; Maslach *et al.*, 2001). The measure consists of 22

**Table 1.** Demographic characteristics of the sample

VARIABLES	MEAN (SD)	N (%)
<i>Maslach Burnout Inventory</i>		
Emotional exhaustion (0–54)	25.22(12.39)	
Depersonalization (0–30)	8.73(5.75)	
Personal accomplishment (0–48)	38.73(9.70)	
<i>Positive Aspects of Caregiving (0–45)</i>	36.76(8.71)	
<i>Subjective Socioeconomic Measures</i>		
MacArthur Social Ladder (0–10)	6.33(2.19)	
<i>Objective Socioeconomic Measures</i>		
Education		
Less than 12 years		15(12.3)
High school		32(26.2)
Professional training		31(25.4)
Bachelor's degree		23(18.9)
Graduate School		17(13.9)
Professional group		
Paraprofessional caregivers		35(28.7)
Social workers/occupational therapists/ physical therapists		44(36.1)
Nurses/physicians/administrators		20(16.4)
Other		23(18.9)
<i>Sociodemographic variables</i>		
Age	40.43(10.72)	
Female		105(86.1)
Born in Israel		41(33.6)
Speaks Hebrew at home		71(58.2)
<i>Work characteristics</i>		
Number of years at the institution	4.43(3.64)	
Number of hours per day	7.46(2.41)	
Staff to patient ratio		
Up to 1:5		28(23)
Up to 1:10		61(50)
More than 1:10		21(17.2)

items that encompass three aspects of the job experience: emotional exhaustion, depersonalization, and personal accomplishment. The three scales are believed to be independent of each other and to represent three different aspects of burnout associated with the helping profession. Participants are asked to rate each statement on a seven-point scale. Greater burnout is indicated by higher scores on the emotional exhaustion and depersonalization scales and a lower score on the personal accomplishment scale (Maslach *et al.*, 1996). Internal consistencies in the present study were 0.86, 0.74 and 0.76, respectively.

*Positive Aspects of Caregiving.* This measure is relatively new and represents a shift in focus from negative aspects of caregiving to more positive ones. To my knowledge this measure has not been used previously with formal caregivers. This is a nine-item measure designed to assess the subjective benefits associated

with caregiving. Respondents are asked to rate their level of agreement with each of the statements on a five-point scale. The measure was tested in a large and diverse sample of caregivers of dementia patients and has shown good psychometric properties (Tarlow *et al.*, 2004). Internal consistency in this study was 0.93.

## PREDICTORS

*MacArthur scale of subjective social status.* This is a 10-rung ladder of subjective socioeconomic standing. Participants are asked to mark the rung that best represents their social position within their community. On the top rung are the richest, most educated and well-off individuals, whereas the poorest and worst-off are at the bottom of the ladder (Adler *et al.*, 2000). The measure has been used extensively with a variety of populations including British civil servants (Singh-Manoux *et al.*, 2003), pregnant American women (Ostrove *et al.*, 2000), adolescents (Goodman *et al.*, 2001), elderly Taiwanese (Hu *et al.*, 2005), British elderly (Wright and Steptoe, 2005), and a representative sample in Hungary (Kopp *et al.*, 2004).

*Objective socioeconomic status.* This is evaluated according to level of education (less than 12 years, high school, professional training, bachelor's degree, graduate school) and professional affiliation (paraprofessional caregivers, nurses/administrators/physicians, social workers/physical therapists/occupational therapists, "other") as indicators of objective socioeconomic status.

*Job characteristics.* These are evaluated according to the number of years working with older adults, number of working hours per day, and staff-to-resident ratio as indicators of job characteristics.

*Demographic information.* This comprises age, sex, place of birth, and primary language based on participants' self-report.

## Statistical analysis

At the outset, the descriptive statistics were run to ensure all variables met statistical requirements. The correlations among predictors were then evaluated in order to rule out multicollinearity. To evaluate the unique contribution of job characteristics, objective socioeconomic status, and subjective socioeconomic status to LTC staff experiences, four hierarchical regression analyses were conducted, one with each of the four outcome variables (emotional exhaustion, depersonalization, personal accomplishment, positive aspects of caregiving). All indicators of job characteristics were first entered into the model (i.e. staff-to-resident ratio, number of years working with older adults, number of working hours per day). Then all objective socioeconomic indicators were entered (i.e. professional affiliation, level of education). Finally, the subjective socioeconomic status were entered (i.e. the MacArthur ladder).

## Results

Table 2 presents first-order correlations of the variables. Subjective socioeconomic status was associated with all four outcome variables. The staff-to-resident ratio was associated with emotional exhaustion and dehumanization.

**Table 2.** First-order correlations of all variables

	EE	DE	PA	PAC	LADDER	EDUCA- TION	EXPERI- ENCE	HOURS
EE								
DE	0.62**							
PA	-0.18	-0.03						
PAC	-0.41**	-0.24**	0.47**					
Ladder	-0.46**	-0.26**	0.32**	0.55**				
Education	-0.13	-0.04	-0.14	-0.06	0.11			
Experience	-0.05	-0.03	-0.06	0.03	0.18	0.05		
Hours	-0.06	-0.15	0.24	0.11	-0.02	-0.10	-0.14	
Ratio	0.22*	0.23*	-0.09	-0.15	-0.26**	-0.09	0.09	-0.07

EE = emotional exhaustion; DE = dehumanization; PA = personal accomplishment; PAC = positive aspects of caregiving

\*indicates  $p < 0.05$ , \*\*indicates  $p < 0.001$ .

ANOVAs revealed significant professional group differences on all four outcome variables (emotional exhaustion:  $F[108,3] = 10.10, p < 0.001$ ; dehumanization:  $F[103,3] = 3.46, p = 0.01$ ; personal accomplishment:  $F[105,3] = 5.46, p = 0.002$ ; positive aspects of caregiving:  $F[113,3] = 6.00, p = 0.001$ ). Pre-planned contrasts showed that paraprofessional caregivers reported significantly greater emotional exhaustion and less personal accomplishment and positive aspects of caregiving than all other professional groups. Paraprofessional caregivers also reported significantly more dehumanization than the “other” professional group.

**Emotional exhaustion**

In terms of job characteristics, those who worked on units with staff-to-resident ratios of 1:10 or lower were more likely to report emotional exhaustion. The explanatory value of the model was 7%. When objective socioeconomic status indicators were entered into the model, all three professional groups were less likely to report emotional exhaustion than paraprofessional caregivers. Those of graduate-level education also reported lower emotional exhaustion than those who had fewer than 12 years of education. The explanatory value of the model was 33%. As soon as subjective socioeconomic status was entered into the model, the explanatory value of the model increased to 39%. Social workers/occupational therapists/physical therapists and those who self identified professionally as “other” were less likely to report emotional exhaustion. In addition, those higher on the MacArthur ladder reported lower emotional exhaustion (see Table 3 for details).

**Dehumanization**

Those who worked on units with staff-to-resident ratios lower than 1 to 10 reported greater levels of dehumanization. When the job characteristics were entered in the model, the explanatory value was 20%. In terms of objective sociodemographic indicators, those who self-identified professionally as “other”

**Table 3.** Hierarchical regression analyses with emotional exhaustion and dehumanization as outcome variables

PREDICTORS	EMOTIONAL EXHAUSTION					DEHUMANIZATION				
	B	SE	B	P	R <sup>2</sup>	B	SE	B	P	R <sup>2</sup>
<b>Step I</b>					<b>0.7</b>					<b>0.20</b>
<i>Work Characteristics</i>										
Staff-to-patient ratio										
Up to 1:5 (reference)										
Up to 1:10	3.86	3.06	1.26	0.20		0.18	1.27	0.08	0.88	
More than 1:10	9.53	9.53	2.42	<b>0.01</b>		6.40	1.71	3.32	<b>&lt;0.001</b>	
Number of hours worked	-0.35	0.52	-0.67	0.50		-0.24	0.21	-0.89	0.27	
Experience with older adults	-0.35	0.37	-0.93	0.35		-0.24	0.15	-1.55	0.12	
<b>Step II</b>					<b>0.33</b>					<b>0.27</b>
<i>Work Characteristics</i>										
Staff-to-patient ratio										
Up to 1:5 (reference)										
Up to 1:10	0.27	2.85	0.10	0.92		0.11	1.33	0.08	0.93	
More than 1:10	5.78	3.88	1.49	0.14		6.14	1.85	3.32	<b>0.001</b>	
Number of hours worked	-0.12	0.50	-0.24	0.80		-0.20	0.23	-0.89	0.37	
Years of experience	0.10	0.35	0.29	0.77		-0.26	0.16	-1.55	0.12	
<i>Objective Socioeconomic status</i>										
Professional group										
Paraprofessionals (reference)										
Social workers/OT/PT	-11.94	3.16	-3.78	<b>&lt;0.001</b>		-1.37	1.52	-0.90	0.36	
Nurses/Physicians/Administrators	-10.59	3.83	-2.76	<b>0.007</b>		-0.61	1.82	-0.34	0.73	
Other	-14.80	3.61	-4.10	<b>&lt;0.001</b>		-4.59	1.74	-2.63	<b>0.01</b>	
Education level										
Less than 12 years (reference)										
High school	-0.77	4.31	-0.18	0.85		-1.28	2.11	-0.61	0.54	
Professional training	-0.85	4.71	-0.18	0.85		-2.23	2.33	-0.96	0.34	
Bachelor's degree	2.85	5.07	0.56	0.57		-1.67	2.47	-0.67	0.50	
Graduate School	-9.77	4.77	-2.04	<b>0.04</b>		-0.67	2.35	-0.29	0.77	



**Table 4.** Hierarchical regression analyses with personal accomplishment and positive aspects of caregiving as outcome variables

PREDICTORS	PERSONAL ACCOMPLISHMENT					POSITIVE ASPECTS OF CAREGIVING				
	B	SE	B	P	R <sup>2</sup>	B	SE	B	P	R <sup>2</sup>
<b>Step I</b>					<b>0.06</b>					<b>0.04</b>
<i>Work Characteristics</i>										
Staff-to-patient ratio										
Up to 1:5 (reference)										
Up to 1:10	0.40	2.20	0.18	0.85		-1.60	2.20	-0.73	0.47	
More than 1:10	-2.67	2.99	-0.89	0.37		-4.80	2.86	-1.67	0.09	
Number of hours worked	0.71	0.37	1.88	0.06		0.36	0.37	0.97	0.33	
Years of experience with older adults	0.002	0.27	0.01	0.99		0.32	0.27	1.20	0.23	
<b>Step II</b>					<b>0.25</b>					<b>0.23</b>
<i>Work characteristics</i>										
Staff-to-patient ratio										
Up to 1:5 (reference)										
Up to 1:10	0.98	2.18	0.45	0.65		-0.80	2.21	-0.37	0.71	
More than 1:10	-0.49	3.02	-0.16	0.87		-3.51	3.02	-1.16	0.24	
Number of hours worked	0.77	0.38	2.03	<b>0.04</b>		0.32	0.38	0.84	0.40	
Years of experience	-0.13	0.27	-0.49	0.62		0.13	0.27	0.47	0.64	
<i>Objective socioeconomic status</i>										
Professional group										
Paraprofessionals (reference)										
Social workers/OT/PT	7.16	2.44	2.93	<b>0.004</b>		6.45	2.44	2.64	0.01	
Nurses/physicians/administrators	9.05	2.94	3.08	<b>0.003</b>		9.02	2.97	3.03	0.003	
Other	8.84	2.82	3.13	<b>0.002</b>		5.12	2.77	1.84	0.06	

**Table 4. Continued**

PREDICTORS	PERSONAL ACCOMPLISHMENT					POSITIVE ASPECTS OF CAREGIVING				
	B	SE	B	P	R <sup>2</sup>	B	SE	B	P	R <sup>2</sup>
Education level										
Less than 12 years (reference)										
High school	-3.35	3.36	-0.99	0.32		-6.31	3.23	-1.95	<b>0.05</b>	
Professional training	-2.92	3.70	-0.79	0.43		-9.10	3.55	-2.56	<b>0.01</b>	
Bachelor's degree	-6.11	3.95	-1.54	0.12		-8.17	3.86	-2.12	<b>0.03</b>	
Graduate School	-4.64	3.77	-1.23	0.22		-4.20	3.60	-1.16	0.24	
<b>Step III</b>					<b>0.31</b>					<b>0.46</b>
<i>Work characteristics</i>										
Staff-to-patient ratio										
Up to 1:5 (reference)										
Up to 1:10	0.56	2.12	0.27	0.79		-1.33	1.88	-0.71	0.48	
More than 1:10	0.14	2.96	0.05	0.96		-1.86	2.60	-0.71	0.47	
Hours worked	0.72	0.37	1.90	0.06		0.29	0.33	0.88	0.38	
Experience with older adults	-0.23	0.26	-0.90	0.37		-0.06	0.23	-0.26	0.79	
<i>Objective socioeconomic status</i>										
Professional group										
Paraprofessionals (reference)										
Social workers/OT/PT	3.87	2.74	1.41	0.16		0.17	2.36	0.07	0.94	
Nurses/physicians/administrators	5.10	3.18	1.61	0.11		2.04	2.77	0.74	0.46	
Other	5.21	3.03	1.72	0.08		-0.99	2.56	-0.39	0.69	
Education level										
Less than 12 years (reference)										
High school	-3.28	3.25	-1.01	0.31		-4.42	2.76	-1.60	0.11	
Professional training	-2.72	3.59	-0.76	0.45		-6.80	3.05	-2.23	<b>0.02</b>	
Bachelor's degree	-6.35	3.83	-1.66	0.10		-6.68	3.29	-2.03	<b>0.04</b>	
Graduate School	-5.00	3.67	-1.36	0.17		-4.07	3.06	-1.33	0.18	
<i>Subjective socioeconomic status</i>										
MacArthur ladder	1.33	0.50	2.64	<b>0.01</b>		2.52	0.42	5.88	<b>&lt;0.0001</b>	

OT = Occupational Therapist; PT = Physical Therapist.

were less likely to report dehumanization relative to paraprofessional caregivers. The explanatory value of the model was 27%. When the ladder was entered into the model, the explanatory value of the model increased to 35%. As before, those who worked on units with staff-to-resident ratios lower than 1 to 10 reported greater levels of dehumanization. In addition, those lower on the ladder reported higher levels of dehumanization. See Table 3 for details.

### **Personal accomplishment**

Job characteristics explained only 6% of the model, with none of the variables being significantly related to personal accomplishments. When objective socioeconomic status was entered into the model, the explanatory value of the model increased to 25%. Those who worked longer days were more likely to report personal accomplishment. In addition, all professional groups reported higher levels of personal accomplishment relative to paraprofessional caregivers. When subjective socioeconomic status was entered into the model, the explanatory value of the model increased to 31%. Those of higher subjective social status reported significantly greater personal accomplishment. None of the other variables remained a significant predictor of personal accomplishment. See Table 4 for details.

### **Positive aspects of caregiving**

First, none of the job characteristics predicted positive aspects of caregiving. This model explained 4% of the variance. When objective socioeconomic indicators were entered into the model, the explanatory value of the model increased to 23%. Both professional affiliation and level of education were significant predictors of positive aspects of caregiving. All professional groups, with the exception of the “other” group, were significantly more likely to endorse positive aspects of caregiving than paraprofessional caregivers. Those who had completed high school and those with professional training or a bachelor’s degree were significantly less likely to endorse positive aspects of caregiving. When the MacArthur ladder was included in the model, the explanatory value of the model increased to 46%. Those with professional training or a bachelor’s degree were significantly less likely to endorse positive aspects of caregiving than those with less than 12 years education. Those higher on the ladder were more likely to endorse positive aspects of caregiving. See Table 4 for details.

## **Discussion**

LTC staff members play a major role in ensuring older adults’ well-being and in providing quality patient care. Identifying those factors that contribute to their burnout as well as to their positive caregiving experiences is therefore of major importance. The present findings demonstrate that one’s placement on the social ladder is the most consistent predictor of staff burnout and positive caregiving experiences. Whereas level of education and professional affiliation continue to play a strong though largely inconsistent role in staff experiences, the

most consistent finding of this study is that those staff members who perceive their social standing as higher relative to others in their community report lower levels of burnout and greater positive caregiving experiences, even when job characteristics and objective indicators of socioeconomic status are accounted for. Whereas the hierarchy among staff members within the majority of LTC institutes is quite pronounced (Hu and Liu, 2004), the study shows that the subjective experience of one's standing within one's own community is an important indicator that needs to be taken into consideration. Given the fact that many objective indicators of socioeconomic status are likely to remain stable (i.e. there is always going to be a need for less educated individuals who fill the lower ranks of the occupational ladder), more attention needs to be placed on subjective social standing as an important and potentially modifiable factor in the life of LTC staff members.

In the present study, none of the job characteristics predicted positive caregiving experiences, suggesting that the role of subjective socioeconomic status is particularly pronounced in determining positive experiences of caregiving. Positive caregiving experiences might be primarily based on emotional content and, thus, are affected primarily by one's subjective experiences. Because the findings suggest that subjective socioeconomic status is an important ingredient in determining workers' burnout and satisfaction with work, and given past research that found that multidisciplinary teams perpetuate the existing LTC hierarchy (Cott, 1997), the development of a sense of community identity independent of the specific LTC institution might be helpful for LTC nursing workers. A recent Israeli initiative to empower foreign nursing care workers may prove beneficial in increasing workers' subjective socioeconomic status. The initiative called "From Caregiver to Shoulder Giver" is geared toward developing a sense of community among nursing care workers. Throughout the training course, nursing workers are encouraged to take on activities geared toward developing their own community organizations and helping other nursing workers in need. Further evaluation of this program and others like it is required in order to identify those ingredients that contribute most substantially to nursing care workers' subjective socioeconomic status and job satisfaction.

Our findings show that relative to social workers/ physical therapists/occupational therapists and those who self-identify professionally as "other", paraprofessional caregivers are more likely to report emotional exhaustion. The finding that those who provide the most direct patient care also report the highest emotional burnout is not a surprise (Lapane and Hughes, 2007), yet it is alarming. Efforts directed at improving the social standing of paraprofessional caregivers in LTC institutions could potentially result in more positive caregiving experience for this professional group.

The curvilinear relationship found between level of education and positive aspects of caregiving suggests that those in the middle of the educational ladder experience the lowest positive caregiving experience. This is contrasted with the subjective socioeconomic indicator where higher perceived status was associated with more positive aspects of caregiving. Thus, objective and subjective social

standings are not completely synchronized and one is not merely a proxy of the other. Possibly, those of low and high educational status capture professional positions that meet their expectations and skills. In contrast, those in the middle of the educational ladder may be overqualified for their professional position. As suggested by past research, even several years following immigration, many of the Russian immigrants in Israel have filled positions for which they are overqualified (Stier and Levanon, 2003). Given that, in the present study, only 30% of the sample was born in Israel and over 50% was born in the former Soviet Union, it is highly likely that many of the workers were overqualified for their position and as a result reported lower positive caregiving experiences.

When all predictors were entered into the model, staff-to-resident ratios of 1:10 or lower were found to result in higher levels of dehumanization of residents. This finding is similar to that of Sasichay-Akkadechanunt *et al.* (2003) who found greater levels of burnout were associated with lower staff-to-resident ratios. This suggests that the dehumanization and “institutionalization” of residents are potentially a result of not having enough time to develop a relationship with the residents. Earlier research has also found higher mortality rates associated with such ratios (Rothberg *et al.*, 2005). Possibly, the detrimental effects associated with low staff-to-resident ratios are partially mediated by a sense of dehumanization experienced by nursing care workers. Thus, maintaining a higher staff-to-resident ratio is an important ingredient in both resident care and nursing staff satisfaction with work.

One limitation of this study was the use of a relatively small convenience sample which lacked information about refusal rates. Thus, the findings may not be representative of the general population of LTC staff members. In addition, the cross-sectional nature of the study does not allow inferences about cause and effect. Participants were not asked about the specific community that they used as their reference group. Future research will benefit from obtaining information about the specific group of reference used by the different professional groups.

Nonetheless, this is the first study to evaluate the role of subjective socioeconomic status in LTC staff burnout and positive caregiving experiences. Emphasizing both negative and positive caregiving experiences as well as objective and subjective social standings are strengths of this study. Whereas previous research has shown that those lower on objective professional and educational indicators often report higher levels of burnout (Wang, 2005), this is the first study to underline the importance of subjective social status among LTC staff. The study shows that the most consistent predictor of LTC staff members' burnout and positive caregiving experiences is subjective social status, even when job characteristics and objective indicators are accounted for. Given that there is always going to be a need for workers who are lower on the occupational and educational ladder, empowering LTC staff and strengthening the subjective status of staff within their community can improve staff caregiving experiences. Future interventions geared towards enhancing LTC staff members' status within their own community of reference might result in lower levels of burnout and better caregiving experiences.

## Conflict of interest

None.

## References

- Adler, N. E., Epel, E. S., Castellazzo, G. and Ickovics, J. R.** (2000). Relationship of subjective and objective social status with psychological and physiological functioning: preliminary data in healthy white women. *Health Psychology*, 19, 586–592.
- Aiken, L. H., Smith, H. L. and Lake, E. T.** (1994). Lower Medicare mortality among a set of hospitals known for good nursing care. *Medical Care*, 32, 771–787.
- Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J. and Silber, J. H.** (2002). Hospital nurse staffing and patient mortality, nurse burnout and job dissatisfaction. *JAMA*, 288, 1987–1993.
- Baillon, S., Scothern, G., Neville, P. G. and Boyle, A.** (1996). Factors that contribute to stress in care staff in residential homes for the elderly. *International Journal of Geriatric Psychiatry*, 11, 219–226.
- Begat, I., Ellefsen, B. and Severinsson, E.** (2005). Nurses' satisfaction with their work environment and the outcomes of clinical nursing supervision on nurses' experiences of well being – a Norwegian study. *Journal of Nursing Management*, 13, 221–230.
- Brodaty, H., Draper, B. and Low, L. E.** (2003). Nursing home staff attitudes towards residents with dementia: Strain and satisfaction with work. *Journal of Advanced Nursing*, 44, 583–590.
- Castle, N. G., Degenholtz, H. and Rosen, J.** (2006). Determinants of staff job satisfaction of caregivers in two nursing homes in Pennsylvania. *BMC Health Services Research*, 6, 60.
- Chappell, N. L. and Novak, M.** (1992). The role of support in alleviating stress among nursing assistants. *Gerontologist*, 32, 351–359.
- Cohen, C. A., Colantonio, A. and Vernich, L.** (2002). Positive aspects of caregiving: rounding out the caregiver experience. *International Journal of Geriatric Psychiatry*, 17, 184–188.
- Cott, C.** (1997). “We decide, you carry it out”: a social network analysis of multidisciplinary long-term care teams. *Social Science and Medicine*, 45, 1411–1421.
- Davison, E. T. et al.** (2007). Controlled trial of dementia training with a peer support group for aged care staff. *International Journal of Geriatric Psychiatry*, 22, 868–873.
- Everitt, D. E., Fields, D. R., Soumerai, S. S. and Avron, J.** (1991). Resident behavior and staff distress in the nursing home. *Journal of the American Geriatrics Society*, 39, 792–798.
- Golembiewski, R. T., Boudreau, R. A., Munzenrider, R. F. and Luo, H.** (1996). *Global Burnout: A Worldwide Pandemic Explored by the Phase Model*. London: JAI Press Inc.
- Goodman, E., Adler, N. E., Kawachi, I., Frazier, A. L., Huang, B. and Colditz, G. A.** (2001). Adolescents' perceptions of social status: development and evaluation of a new indicator. *Pediatrics*, 108, E31.
- Gunnarsdottir, S., Clarke, S. P., Rafferty, A. M. and Nutbeam, D.** (2007). Front-line management, staffing and nurse-doctor relationships as predictors of nurse and patient outcomes. A survey of Icelandic hospital nurses. *International Journal of Nursing Studies*. E-published ahead of print.
- Haqqstrom, E., Skovdahl, K., Flackman, B., Kihlgren, A. L. and Kihlgren, M.** (2005). Work satisfaction and dissatisfaction-caregivers' experiences after a two-year intervention in a newly opened nursing home. *Journal of Clinical Nursing*, 14, 9–19.
- Hsieh, P. C. and Su, H. F.** (2007). Retention and attrition of certified care assistants in the long term care industry from the Taipei area: an interview survey. *International Journal of Nursing Studies*, 44, 93–104.

- Hu, J. and Liu, H.** (2004). Job satisfaction among nurses in China. *Home Health Care Management Practice*, 17, 9–13. DOI: 10.1177/1084822304268154.
- Hu, P., Adler, N. E., Goldman, N., Weinstein, M. and Seeman, T. E.** (2005). Relationship between subjective social status and measures of health in older Taiwanese persons. *Journal of the American Geriatrics Society*, 53, 483–488.
- Idler, E. L. and Kasl, S.** (1991). Health perceptions and survival: do global evaluations of health status really predict mortality? *Journal of Gerontology*, 46, S56–S65.
- Jenkins, H. and Allen, C.** (1998). The relationship between staff burnout/distress and interactions with residents in two residential homes for older people. *International Journal of Geriatric Psychiatry*, 13, 466–472.
- Kopp, M., Skrabski, A., Rethelyi, J., Kawachi, I. and Adler, N. E.** (2004). Self-rated health, subjective social status and middle-aged mortality in a changing society. *Behavioral Medicine*, 30, 65–70.
- Kramer, B. J.** (1997). Gain in the caregiving experience: where are we? What next? *Gerontologist*, 37, 218–232.
- Krause, E. A.** (1977). *Power and Illness: The Political Sociology of Health and Medical Care*. New York: Elsevier.
- Kudo, Y. et al.** (2006). Association between intention to stay on the job and job satisfaction among Japanese nurses in small and medium-sized private hospitals. *Journal of Occupational Health*, 48, 504–513.
- Lapane, K. L. and Hughes, C. M.** (2007). Considering the employee point of view: perceptions of job satisfaction and stress among nursing staff in nursing homes. *Journal of American Medical Directors Association*, 8, 8–13.
- Lee, Y.** (2000). The predictive value of self-assessed general, physical and mental health on functional decline and mortality in older adults. *Journal of Epidemiological Community Health*, 54, 123–129.
- Mackenzie, C. S., Poulin, P. A. and Seidman-Carlson, R.** (2006). A brief mindfulness-based stress reduction intervention for nurses and nurse aides. *Applied Nursing Research*, 19, 105–109.
- Maslach, C., Jackson, S. E. and Leiter, M. P.** (1996). *Manual of the Maslach Burnout Inventory*. 3rd edn. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Schaufeli, W. B. and Leiter, M. P.** (2001). Job burnout. In S. T. Fiske, D. L. Schacter and C. Zahn-Waxler (eds.), *Annual Review of Psychology*, 52, 397–422.
- McGilton, K., Irwin-Robinson, H., Boscart, V. and Spangevic, L.** (2006). Communication enhancement: nurse and patient satisfaction outcomes in a complex continuing care facility. *Journal of Advanced Nursing*, 54, 35–44.
- Ostrove, J. M., Adler, N. E., Kuppermann, M. and Washington, A. E.** (2000). Objective and subjective assessments of socioeconomic status and their relationship to self-rated health in an ethnically diverse sample of pregnant women. *Health Psychology*, 19, 613–618.
- Piazza, I. M., Donahue, M., Dykes, P. C., Griffin, M. Q. and Fitzpatrick, J. J.** (2006). Differences in perceptions of empowerment among nationally certified and noncertified nurses. *Journal of Nursing Administration*, 36, 277–283.
- Piko, B. F.** (2006). Burnout, role conflict, job satisfaction, and psychological health among Hungarian healthcare staff: a questionnaire survey. *International Journal of Nursing Studies*, 43, 311–318.
- Pinquart, M. and Sorensen, S.** (2003). Associations of stressors and uplifts of caregiving with caregiver burden and depressive mood: a meta-analysis. *Journal of Gerontology, B Psychological Science and Social Science*, 58, P112–128.
- Pinquart, M. and Sorensen, S.** (2006). Helping caregivers of persons with dementia: which interventions work and how large are their effects? *International Psychogeriatrics*, 18, 577–595.

- Rothberg, M. B., Abraham, I., Lindenauer, P. K. and Rose, D. N.** (2005). Improving nurse-to-patient staffing ratios as a cost effective safety intervention. *Medical Care*, 43, 785–791.
- Sasichay-Akkadechanunt, T., Scalzi, C. C. and Jawad, A. F.** (2003). The relationship between nurse staffing and patient outcomes. *Journal of Nursing Administration*, 33, 478–485.
- Secrest, J., Iorio, D. H. and Martz, W.** (2005). The meaning of work for nursing assistants who stay in long term care. *Journal of Clinical Nursing*, 14, 90–97.
- Singh-Manoux, A., Adler, N. E. and Marmot, M. G.** (2003). Subjective social status: Its determinants and its association with measures of ill-health in the Whitehall II study. *Social Science and Medicine*, 56, 1321–1333.
- Singh-Manoux, A., Marmot, M. G. and Adler, N. E.** (2005). Does subjective social status predict health and change in health status better than objective status? *Psychosomatic Medicine*, 67, 855–861. DOI: 10.1097/01.psy.0000188434.52941.a0.
- Siu, O. L.** (2002). Predictors of job satisfaction and absenteeism in two samples of Hong Kong nurses. *Journal of Advanced Nursing*, 40, 218–229.
- Stier, H. and Levanon, V.** (2003). Finding an adequate job: employment and income of recent immigrants to Israel. *International Migration*, 41, 81–107.
- Sung, H. C., Chang, S. M. and Tsai, C. S.** (2005). Working in long term care settings for older people with dementia: nurses' aides. *Journal of Clinical Nursing*, 14, 587–593.
- Tarlow, B. J., Wisniewski, S. R., Belle, S. H., Rubert, M., Ory, M. G. and Gallagher-Thompson, D.** (2004). Positive aspects of caregiving: contributions of the REACH Project to the development of new measures for Alzheimer's caregiving. *Research on Aging*, 26, 429–453. DOI: 10.1177/0164027504264493.
- Train, G., Nurock, S., Kitchen, G., Manela, M. and Livingston, G.** (2005). A qualitative study of the views of residents with dementia, their relatives and staff about work practice in long-term care settings. *International Psychogeriatrics*, 17, 237–251.
- Vahey, D. C., Aiken, L. H., Sloane, D. M., Clarke, S. P. and Vargas, D.** (2004). Nurse burnout and patient satisfaction. *Medical Care*, 42 (Suppl. 2), 57–66.
- Wang, J. J.** (2005). Psychological abuse behavior exhibited by caregivers in the care of the elderly and correlated factors in long-term care facilities in Taiwan. *Journal of Nursing Research*, 13, 271–280.
- Wright, C. E. and Steptoe, A.** (2005). Subjective socioeconomic position, gender and cortisol responses to waking in an elderly population. *Psychoneuroendocrinology*, 30, 582–590.
- Zimmerman, S. et al.** (2005). Attitudes, stress, and satisfaction of staff who care for residents with dementia. *The Gerontologist*, 45, 96–105.