

# **TITLE: AFTER RESTRUCTURING: THE ASSOCIATION BETWEEN RESTRUCTURING AND HOME CARE WORKERS' STRESS**

*Presenting Author:* ISIK U. ZEYTINOGLU

*Additional Author:* MARGARET DENTON

*Organisation/affiliation & address details of the presenting author:* MCMASTER UNIVERSITY

Human Resources and Management Area

DeGroote School of Business

1280 Main Street West, Hamilton, ON, Canada L8S 4L8

Tel: 905-525-9140 x 23957

e-mail: zeytino@mcmaster.ca

*Organisation/affiliation & address details of the additional author:* MCMASTER UNIVERSITY

Departments of Health, Aging & Society, and Sociology

1280 Main Street West, Hamilton, ON L8S 4L8, Canada.

E-mail: mdenton@mcmaster.ca

## **ABSTRACT**

The home care sector in Canada experienced major restructuring in the mid-1990s. This paper examines the association between this restructuring and home care workers' stress levels. Specifically, we focus on staff and financial-resource shortages, work intensification, and job- and labour-market insecurity in terms of restructuring, and examine workers' symptoms of stress. Data come from our survey of 822 home care workers employed prior to the 1997 restructuring in a mid-sized city in Ontario, Canada. All eleven organizations along with the six union locals representing workers were partners in this study. Results show that staff shortages, work intensification, and job- and labour-market insecurity are positively and significantly associated with home care workers' reported symptoms of stress. We recommend all stakeholders to take note of the effects of restructuring on workers and take action to decrease home care workers' stress.

## **INTRODUCTION AND BACKGROUND**

There have been dramatic changes in work arrangements in Canada and other mature industrialized countries over the past three decades in response to globalization and the lending policies of international/regional financial institutions (Auer and Chatani 2011; Blyton, Heery and Turnbull 2011; Shaffer and Brenner 2004). These changes resulted in widespread organizational restructuring and downsizing, which led to work intensification and insecurity for workers (Green 2004; Ladipo and Wilkinson 2002; Standing 1997; Zeytinoglu and Muteshi 2000). More recently the recession of 2008 affected all workers, particularly those in mature industrialized countries, with many experiencing unemployment, underemployment, and employment in non-standard types of jobs (ILO 2011).

The health care sector in Canada, including the home health care sector, also experienced major restructuring, budgetary restrictions, downsizing, and jobs becoming more flexible with many part-time and temporary jobs created since the mid-1990s (CHSRF 2000; Wetzel 2005). There were similar developments in other provinces and territories in Canada and elsewhere (Bach 2000; Bach and Givan 2011; Wetzel, Bach, Bray and White 2005). In Ontario the restructuring started with the hospital sector where hospitals merged, beds were closed, and patients discharged early with a move towards community-based care in evolving the home care sector.

The biggest change in home care occurred in 1997 when the sector in Ontario changed from non-competitive, where most of the care was delivered by three not-for-profit home care organizations, to competitive, where both for-profit and not-for-profit organizations compete in a request for proposal process to secure contracts. Contracts are for servicing, that is providing care, at the municipal or local regional level in Ontario. As a result of the restructuring, 14 local Community Care Access Centres (CCACs) were established by the Ontario Ministry of Health and Long-Term Care to manage local care. The CCACs receive funding from the provincial government and render contracts to local home and community care organizations. These service contracts last up to three years, though in recent years some contracts have been extended to seven years or more.

In this labour intensive sector where work must be conducted locally, the move to a competitive environment led to competition based on cost reduction further leading to funding and staff shortages along with intensified work and insecurity for workers (Aronson, Denton and Zeytinoglu 2004; Aronson 2006; Denton, Zeytinoglu, Davies and Hunter 2006; Denton, Zeytinoglu, Kusch and Davies 2007; Zeytinoglu, Denton and Davies 2006). High levels of stress have been reported among various members of the workforce (Caplan 2005; Denton, Zeytinoglu, Webb and Lian 2002; Denton *et al.* 2006). This study complements these earlier studies and refines our understanding of the association between restructuring and symptoms of stress.

For restructuring, we focus on staff and financial-resource shortages, work intensification, and job and labour market insecurity. For stress we examine its symptoms. Data come from our survey of 822 home care workers in a mid-sized city in Ontario, Canada who were employed prior to the 1997 restructuring. All eleven organizations and six union locals representing workers were partners with the authors in this study sending a notice to employees/ members supporting the survey. The organizations also allowed us to go to their human resources office and use their employee mailing lists in sending surveys. Responses to the survey, however, were returned directly to researchers. All workers, meaning managers, office support staff, case managers, visiting nurses, therapists, and personal support workers, were included in the study.

The purpose of this paper is to examine the association between restructuring and stress among home care workers. The foundation of our study is the transactional theory of stress (Lazarus 1990). Transactional theory refers to stress as the transactional process between the individual and her/his reactions to the work environment. When workers experience risk factors in the work environment, reactions of stress/strain presents itself in psychological, physical, or behavioural outcomes (Cooper, Dewe and O'Driscoll 2001). Stress is a short-term outcome (Hauke, Flintrop, Brun and Rugulies 2011) and presents as psychological and/or physical symptoms. Applying the theory to our study and considering the empirical literature showing shortages, work intensity, and insecurity in the home care work environment, we hypothesize that:

*Staff shortages, financial resource shortages, work intensification, job insecurity and labour market insecurity will be positively associated with home care workers' symptoms of stress.*

This paper can provide evidence to policy makers, union leaders and managers in home- and community-care sectors in Europe and elsewhere. The home care sector is one of the fastest growing sectors in Canada, the US, and Europe (Commission on the Reform of Ontario's Public Services 2012; Keefe, Knight, Martin-Mathews and Légaré 2011; Genet, Kroneman and Boerma 2013) and researchers, policy makers, and the public are raising concerns about unhealthy work environments in the sector and urging research on the topic (CHSRF 2006; Dault, Lomas and Barer 2004; Human Resources Development Canada 2004; Koehoorn, Lowe, Rondeau, Schellenberg and Wagar 2002). It is particularly important to examine home care workers in Ontario because they have experienced dramatic restructuring in the past few years. Our study contributes to the knowledge by focusing on the restructuring factors that can be associated with home care workers' symptoms of stress.

## METHOD

### Sample and Data Collection Process

The population of the study was comprised of all visiting and office home care workers (N=1,949) in a mid-sized city in Ontario. Data were collected in 2002 using a self-administered questionnaire mailed to all workers, except CEOs, in the eleven organizations servicing home care in this city. Those who had not returned their questionnaires by a specified date were mailed first a reminder card, and later a second letter and a copy of the questionnaire. A total of 1,311 workers responded to our study. Excluding those who could not be reached, the response rate was 67%. For this paper, 822 home care workers employed prior to the 1997 restructuring and still employed in home care were selected.

### Instrument and Measures

The instrument of this study was a self-completion questionnaire on the health and work life of home care workers (Denton, Zeytinoglu and Davies 2003). Unless specifically explained below, all variables were on a Likert-type scale or item, measured as “1 = strongly disagree” to “5 = strongly agree.” To create scores for each scale, responses to each item were summed together. Some of the items were reverse-scored as suggested by the scale developer. Confirmatory factor analysis with varimax rotation was conducted for all scales, and Cronbach’s alphas were conducted for reliability testing.

*The dependent variable is symptoms of stress* using Denton *et al.*’s (2002) fourteen-item symptoms of stress. This scale is similar to the items used in Statistics Canada’s 1994 National Population Health Survey. A sample item is “during the past month: I am able to sleep through the night” (reverse coded). See Appendix for full scale items. The Cronbach’s alpha for the scale shows good reliability ( $\alpha = 0.85$ ).

*Independent variables are staff shortages, financial resource shortages, work intensification, job insecurity, and labour market insecurity.* Staff shortages variable is a three-item scale from Denton *et al.* (2007). A sample item is: “There are more staff shortages at your agency” (organization) with Cronbach’s alpha ( $\alpha = .74$ ) indicating good internal reliability. The financial resource shortages variable is a single item measure stating “there have been changes in the home care field since 1997. Comparing present time to 1997, please tell me if you agree or disagree with [this] statement: there is a shortage of resource (money) in the home care field.” Work intensification variable is a six-item scale from Zeytinoglu *et al.* (2006), (see also Denton *et al.* 2007). A sample item is: “There is pressure to do more with less time” with Cronbach’s alpha ( $\alpha$ ) of .77, indicating good internal reliability. The measure of job insecurity is a seven-item scale from Zeytinoglu, Denton, Davies and Plenderleith Millen (2009), which was developed based on the job insecurity scale of Cameron, Horsburgh and Armstrong-Stassen (1994) and items from the qualitative study of Denton *et al.* (2003). A sample item is: “I am presently safe from dismissal at this agency” (reverse coded). A higher value of Cronbach’s alpha indicates high internal reliability ( $\alpha = .86$ ) of perceived job insecurity. Labour market insecurity refers to workers’ feelings of being surplus or easily replaceable labour. This is a single item measure worded as “if I lose my job here I will likely find another job in my profession” (reverse coded) and measured as “1 = strongly disagree” to “5 = strongly agree.” See Appendix for full scale items.

*Control variables are age, gender, marital status, occupation, union member, and organizational and peer support.* Age is measured in years and the length of employment is not included due to high collinearity with age. Gender is a binary variable (female=1, male=0), marital status is a binary variable (married=1,not=0), and occupation is included as managers (reference in the regression analysis), other support staff, case managers, nurse, therapist and personal support worker (1 = yes, 0 = else). Union member is a binary variable (1=yes, 0=no). Organizational and peer support scales are from Denton *et al.* (2002) and a sample item for each are “your organization supports you in times of personal crisis, illness or needing time,” and “the people you work with are helpful in getting the job done.” The scales indicate high internal reliability (organizational support  $\alpha = .93$ , and peer support  $\alpha = .84$ ).

## Analysis

Descriptive statistics, correlations and Ordinary Least Square (OLS) regressions are conducted. The equal interval assumption is used for Likert scale measurement of dependent variables. In regression analyses, to maintain our sample size, if less than 5% are missing, those missing cases are coded to the mean for variables on that scale, or to the value “0” for dichotomous variables. In the OLS regressions, full analysis with independent and control variables are shown. Adjusted R<sup>2</sup> is provided to show the variance explained by factors included in each model. The subjectively assessed variables may not be completely independent from each other, and thus collinearity diagnostics were also conducted. Collinearity was not found.

## RESULTS

### Descriptive Results

Stress symptoms are common everyday experiences of home health care workers. Taking into consideration that the respondents are working and not clinically sick, the high levels of stress reported by our respondents should be of concern ( $M=30.19$ ,  $SD=7.36$ ) (Table 1). Home care workers report that they are working with both staff and financial resource shortages in their workplaces ( $M=10.06$ ,  $SD=2.95$ ;  $M=4.47$ ,  $SD=0.76$ , respectively). They say that their work has intensified since 1997 ( $M=21.38$ ,  $SD=4.57$ ), and feelings of job insecurity are high ( $M=21.59$ ,  $SD=5.85$ ). The labour market insecurity variable shows that only a small number of workers feel that if they lose their job they will not be able to find another in their profession ( $M=2.11$ ,  $SD=1.00$ ). This is because the study was conducted at a time when there were labour shortages in the industry; few were entering the home care labour market and, in addition, after the restructuring period many workers had left the sector making those staying feeling more secure in finding a job (Aronson et al., 2004; Denton et al., 2006).

Table 1. Means, standard deviations, and correlations between symptoms of stress (dependent variable) and independent variables

<i>Variables</i>	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1.Symptoms of stress	30.19	7.36	-					
2.Staff shortages	10.06	2.95	.211**	-				
3.Financial resources shortages	4.47	0.76	.123**	.162**	-			
4.Work intensification	21.38	4.57	.251**	.152**	.314**	-		
5.Job insecurity	21.59	5.85	.238**	.036	.187**	.229**	-	
6.Labour market insecurity	2.11	1.00	.070*	.020	-.017	-.099**	.060	-

\* $p < .05$

\*\* $p < .01$

Referring to control variables, average age is 47 years ( $SD=8.66$ ) and the majority are female (96%) and married (70%). For occupational distribution, 9% are managers, 8% are office support staff, 8% are case managers, 18% are nurses, 5% are therapists, and 51% are personal support workers. Home care workers assist those discharged from hospitals, the elderly, or persons with disabilities in their home environment. Managers are responsible for smooth operations and report to CEOs of each organization. Office support staff assist managers and all home care workers. Case managers decide on the care needs of clients and allocate a budget for client care, determining the hours of care that can be provided to clients. Nurses perform tasks such as dressings and intravenous therapy. Therapists provide therapy services. Personal support workers assist clients with the activities of daily living. For example they help clients with personal health care such as bathing and meal preparation and they clean only as part of their health support duties. Age, gender, and occupational characteristics of our respondents are similar to Canadian home care sector worker characteristics (Human Resources Development Canada, 2003). While the sector is not highly unionized, 57% of study respondents are

union members. Home care workers feel supported by their organizations and co-workers (organizational support ( $M=32.77$ ,  $SD=7.16$ ), peer support ( $M=14.58$ ,  $SD=2.99$ )).

## Correlations

Table 1 shows the correlations for dependent and independent variables. All independent variables are positively and significantly associated with symptoms of stress. Staff shortages, financial resources shortages, and work intensification are positively and significantly associated with symptoms of stress ( $0.211$ ,  $p<.01$ ;  $0.123$ ,  $p<.01$ ;  $0.251$ ,  $p<.01$ , respectively). Job- and labour-market insecurity are also positively and significantly associated with symptoms of stress ( $0.238$ ,  $p<.01$ ;  $0.070$ ,  $p<.05$ , respectively). Correlations for all variables are available from the first author.

## Regression Analysis

The results of the regression analyses are presented in Table 2. Briefly referring first to control variables, age, working as a nurse, as well as organizational- and peer support are negatively and significantly associated with symptoms of stress. The magnitude of  $\beta$  for each significant variable shows that working as a nurse ( $\beta=-.180$ ,  $p<.05$ ) followed by organizational support ( $\beta=-.178$ ,  $p<.001$ ), peer support ( $\beta=-.118$ ,  $p<.01$ ), and age ( $\beta=-.068$ ,  $p<.05$ ) are significant factors associated with symptoms of stress. Other control variables are not significantly associated with symptoms of stress.

Table 2. Factors associated with home care workers' symptoms of stress (OLS regressions)

<u>Variables</u>	<u>B (S.E.)</u>
Constant	27.294 (3.231)***
<u>Independent variables:</u>	
Staff shortages	.244 (.094)**
Financial resource shortages	.324 (.350)
Work intensification	.311 (.062)***
Job insecurity	.148 (.046)***
Labour market insecurity	.588 (.258)*
<u>Control variables:</u>	
Age	-.059 (.029)*
Gender	1.882 (1.204)
Marital status	-.359 (.545)
Managers	Reference
Office support staff	-.481 (1.251)
Case manager	1.329 (1.296)
Nurse	-3.408 (1.036)***
Therapist	1.356 (1.372)
Home support worker	-1.202 (.968)
Union member	1.004 (.590)
Organizational support	-.184 (.041)***
Peer support	-.292 (.097)**
Adj.R <sup>2</sup>	.211
R <sup>2</sup>	.228
N	738

\* Statistically significant at the .05 level; \*\* at the .01 level; \*\*\* at the .001 level.

Our *Hypothesis*, which stated that staff and financial resource shortages, work intensification, job- and labour-market insecurity will be positively associated with home care workers' symptoms of stress, is partially supported. As presented in Table 2, staff shortages, work intensification, job- and labour-market insecurity are

all positively and significantly associated with symptoms of stress. Only the financial resource shortages factor is not significantly associated with symptoms of stress. The magnitude of  $\beta$  shows that work intensification is the most important factor associated with symptoms of stress ( $\beta=.190, p<.001$ ). Job insecurity ( $\beta=.117, p<.001$ ) shows that, after working as a nurse, organizational support and peer support, this is the fourth most important factor associated with symptoms of stress. Staff shortages ( $\beta=.097, p<.01$ ) and labour market insecurity ( $\beta=.077, p<.05$ ) are fifth and sixth in importance in association with symptoms of stress, with age as the last important factor associated with symptoms of stress. The variables in the model explain 21% of variance ( $\text{Adj.}R^2=.211, p<0.001$ ).

## DISCUSSION AND CONCLUSIONS

In this study we examine the association between symptoms of stress and restructuring, controlling for the possible effects of other work and individual factors. Results show that where there are staff shortages, workers also tend to report symptoms of stress; if they believe that their work has become more intense compared to 1997, they also report symptoms of stress. If they perceive job insecurity and, to a lesser extent, perceive labour market insecurity, they also report symptoms of stress. Similar to earlier findings that widespread organizational restructuring presents itself in the form of work intensification and insecurity for workers (Green 2004; Ladipo and Wilkinson 2002; Standing 1997; Zeytinoglu and Muteshi 2000), we find the same. Adding to earlier research, we provide evidence that these factors, along with staff shortages and labour market insecurities, are associated with symptoms of stress. Our data is cross-sectional, thus we cannot provide a causal conclusion; however, when we take into consideration the findings here along with our earlier findings on home care workforce (Aronson *et al.* 2004; Denton *et al.* 2006 and 2007; Zeytinoglu *et al.* 2006), there is an indication of a directional relationship between restructuring and symptoms of stress among home care workers.

There are several limitations of our study that should be considered when reaching conclusions from this study. First, this is a survey of workers in a single location in Ontario. Conducting the study focusing on a single location (and including all home care workers in that location) allowed us to thoroughly examine the issues, however, the results cannot be generalized to all home care workers in Ontario or elsewhere. We suggest further studies on the topic, and ideally, a national-level analysis of these issues for generalization. Second, although the response rate to our study is high, we recognize the possibility that those with higher levels of stress symptoms are more likely to respond because they are more interested in the topic, and thus may bias the results. However, we argue that with a high response rate to our survey, this study captures the views of a good majority of workers in the workplaces covered here.

There is increasing interest in the home care sector in Canada, the US and Europe (Commission on the Reform of Ontario's Public Services 2012; Keefe *et al.* 2011; Genet *et al.* 2013) due to the aging population and growth in the sector. Results here provide evidence to policy makers, union leaders, and managers in home and community care sectors in Europe and elsewhere. Restructuring and major workplace changes in the health care and home care sectors (CHSRF 2006; Dault *et al.* 2004) are having an effect on workers. We recommend all stakeholders to take note of these effects and take action to decrease home care workers' symptoms of stress.

## ACKNOWLEDGEMENTS

This study is funded by Canadian Institutes of Health Research, the Workplace Safety and Insurance Board of Ontario, and the Program for Research on Social and Economic Dimensions of an Aging Population (SEDAP II) grants. The authors wish to thank Sharon Davies, Jennifer Plenderleith, Bianca Seaton, and Linda Boos for their assistance in data collection and preparation, and the agencies, unions, and home care workers who participated in this research and shared their experiences with us.

## REFERENCES

- Aronson, J., Denton, M. and Zeytinoglu, I. (2004). 'Market-modeled home care in Ontario.' *Canadian Journal of Public Policy*, 30: 111-125.
- Aronson, J. (2006). 'Silenced complaints, suppressed expectations: The cumulative effects of home care rationing', *International Journal of Health Services*, 36: 535-556.
- Auer, P. and Chatani, K. (2011) 'Flexicurity: still going strong or a victim of the crisis?' in *Research Handbook on the Future of Work and Employment Relations*, eds. K. Townsend and A. Wilkinson, Cheltenham, UK and Northampton, MA, USA: Edward Elgar, pp. 253-278.
- Bach, S. (2000). 'Health sector reform and human resource management: Britain in comparative perspective', *The International Journal of Human Resource Management*, 11:5, 925-942.
- Bach, S. and Givan, R. K. (2011). Varieties of new public management? The reform of public service employment relations in the UK and USA, *The International Journal of Human Resource Management*, 22:11, 2349-2366.
- Blyton, P., Heery, E. and Turnbull, P. (2011). 'Reassessing the employment relationship: An introduction', in *Reassessing the Employment Relationship*, eds. P. Blyton, E. Heery, and P. Turnbull, Hampshire, England: Palgrave MacMillan, pp. 1-20.
- Cameron, S., Horsburgh, M., and Armstrong-Stassen, M. (1994). *Effects of Downsizing on RNs and RNAs in Community Hospitals*. Nursing Effectiveness, Utilization and Outcomes Research Unit: Hamilton, Ontario.
- Caplan, E. (2005). *Realizing the Potential of Home Care: Competing for Excellence by Rewarding Results*. Toronto: Government of Ontario.
- CHSRF (Canadian Health Services Research Foundation). (2000). *The Merger Decade: What have we learned from Canadian health care mergers in the 1990s?* A Report on the Conference on Health Care Mergers in Canada. Organized by the Ottawa Hospital and the Association of Canadian Teaching Hospitals. Ottawa, ON: CHSRF.
- Commission on the Reform of Ontario's Public Services (Drummond Report). (2012). *Public Service for Ontarians: A Path to Sustainability and Excellence*. Toronto: Queen's Printer for Ontario, 2012: 145-202. <http://www.fin.gov.on.ca/en/reformcommission/chapters/report.pdf> (Accessed on February 21, 2013)
- Dault, M., Lomas, J. & Barer, M. (on behalf of the *Listening for Directions II* partners). (2004). *Listening for Directions II: National consultation on health services policy issues for 2004-2007, Final Report*. Canadian Health Services Research Foundation and Institute for Health Services and Policy Research, CIHR. <http://www.chsrf.ca> (Accessed in February 2006)
- CHSRF (Canadian Health Services Research Foundation). (2006). *Looking Forward, Working Together: Priorities for Nursing Leadership in Canada*. [www.chsrf.ca](http://www.chsrf.ca) (Accessed in September 2006)
- Cooper, C.L., Dewe, P.H., and O'Driscoll, M.P. (2001). *Organizational Stress: A Review and Critique of Theory, Research and Applications*. Thousand Oaks, CA: Sage.
- Denton, M., Zeytinoglu, I.U., Webb, S. and Lian, J. (2002). 'Job stress and job dissatisfaction of home care workers in the context of health care restructuring', *International Journal of Health Services*, 32(2): 327-357.
- Denton, M., Zeytinoglu, I.U., and Davies, S. (2003). Organizational Change and the Health and Well-Being of Home Care Workers. *Technical Report*, submitted to Workplace Safety and Insurance Board of Ontario. (Also published under *SEDA Research Paper*, No. 110). 103 pp.
- Denton, M., Zeytinoglu, I. U., Davies, S. & Hunter, D. (2006). 'The impact of implementing managed competition on home care workers' turnover decisions', *Healthcare Policy*, 1: 106-123.
- Denton, M., Zeytinoglu, I.U., Kusch, K., & Davies, S. (2007). 'Market modeled home care: Its impact on job satisfaction and propensity to leave', *Canadian Public Policy*, 33:S81-S99.
- Genet, N., Kroneman, M., Boerma, W.G.W. (2013). 'Explaining governmental involvement in home care across Europe: An international comparative study', *Health Policy*, 110: 84-113.
- Green, F. (2004). 'Why has work effort become more intense?', *Industrial Relations*, 43(4): 709-741.
- Hauke, A., Flintrop, J., Brun, E., and Rugulies, R. (2011). 'The impact of work-related psychosocial stressors on the onset of musculoskeletal disorders in specific body regions: A review and meta-analysis of 54 longitudinal studies', *Work and Stress*, 25(3): 243-256.

- Human Resources Development Canada. (2003). *Canadian Home Care Human Resources Study, Synthesis Report*. <http://www.cacc-acssc.com/english/pdf/homecareresources/EngSynth.pdf> (Accessed in January 2004).
- International Labour Organization [ILO]. 2011. 'A New Era of Social Justice'. *Report of the Director-General, Report I(A), International Labour Conference, 100<sup>th</sup> Session, 2011*. ILC.100/DG/1A. Geneva: International Labour Office.
- Keefe, J.M., Knight, L., Martin-Mathews, A., L'egar'e, J. (2011). 'Key Issues in Human Resource Planning for Home Support Workers in Canada', *Work*, 40: 21-28.
- Koehoorn, M., Lowe, G., Rondeau, K., Schellenberg, G., and Wagar, T. (2002). *Creating High-Quality Health Care Workplaces*. Canadian Policy Research Network, Ottawa, ON.
- Ladipo, D. and Wilkinson, F. (2002). 'More pressure, less protection', in *Job Insecurity and Work Intensification*, eds. B. Burchell, D. Ladipo and F. Wilkinson. London: Routledge, pp. 8-38.
- Lazarus, R.S. (1990). 'Theory-based stress measurement', *Psychological Inquiry*, 1: 3-13.
- Shaffer, E. R. and Brenner, J.E. (2004). 'International trade agreements: Hazards to health?' *International Journal of Health Services*, 34: 467-481.
- Standing, G. (1997). 'Globalization, labour flexibility and insecurity: The era of market regulation'. *European Journal of Industrial Relations*, 3: 7-37.
- Wetzel, K. (2005). 'The Canadian context', in *Labour Relations and Health Reform*, K. Wetzel with contributions from S. Bach, M. Bray and N. White. Hampshire, G.B.: Palgrave Macmillan, pp. 86-90.
- Wetzel, K. with contributions from S. Bach, M. Bray and N. White. (2005). *Labour Relations and Health Reform*. Hampshire, G.B.: Palgrave Macmillan.
- Zeytinoglu, I.U. and Muteshi, J. K. (2000). 'Gender, race and class dimensions of non-standard work'. *Relations industrielles/ Industrial Relations*, 55(1): 133-167.
- Zeytinoglu, I.U., Denton, M., & Davies, S. (2006). 'L'impact de l'intensification du travail sur le stress des travailleurs dans les soins de santé à domicile', in *Organisation et intensité du travail*, co. P. Askenazy, D. Cartron, F. de Coninck et M. Gollac. Toulouse, France: Octares, pp. 291-299
- Zeytinoglu, I.U., Denton, M., Davies, S. & Plenderleith Millen, J. (2009). 'Casualized employment and turnover intention: Home care workers in Ontario, Canada', *Health Policy*, 91: 258-268.

## APPENDIX

Table 1: Items of scales used as dependent, independent, and control variables

---

### Symptoms of stress

Indicate how often you have felt each of the following during the past month.

(Responses are coded as "1=none of the time" to "5=all of the time" and the scale is developed by summing the scores of fourteen symptoms of stress statements.)

Exhausted at the end of the day

Headaches or migraines

Able to sleep through the night (reversed in coding)

Felt like crying

Energized on the job (reversed in coding)

Burnt out

Like yelling at people

Like there is nothing more to give

Difficulty concentrating

Angry

Helpless

In control of your life (reversed in coding)

Irritable and tense

Dizzy

---



---

**Staff shortages**

Each of the following statements is something a person might use to describe changes in the home care field since 1997. Comparing the present time to 1997, please tell me if you agree or disagree with each statement. (Responses are coded as 1=strongly disagree to 5=strongly agree.)

There are more staff shortages at your agency (organization)

There is more staff turnover in your agency

There are more staff shortages in the home care field

**Work intensification**

Each of the following statements is something a person might use to describe how their job has changed in the last 5 years. Comparing your job now to your job in 1997, please tell me if you agree or disagree with each statement. (Responses are coded as 1=strongly disagree to 5=strongly agree.)

My workload is heavier.

There is pressure to do more with less time.

I work more evenings and weekends.

The amount of unpaid work I do has increased.

The skills required to do my job have increased

My job is more complex

**Job insecurity**

Please tell me if you agree or disagree with each statement about your future at this agency [organization]. (Responses are coded as 1=strongly disagree to 5=strongly agree.)

I am presently safe from dismissal at this agency (reversed in coding)

I feel I am likely to be laid off at this agency

I am worried about my future with this agency

I feel uneasy about the security in my present job

I am worried about my job security

I am concerned about losing my job due to overall changes in the long-term care sector

I am concerned about losing my job due to the potential of this agency losing their contract or not being successful with the next contract

**Organizational support**

Please tell me if you disagree or agree with each statement:

(Strongly disagree = 1...Strongly agree = 5)

Your organization supports you in times of personal crisis, illness, or needing time off to help care for other family members

It is difficult to voice your ideas or opinions in this organization (reversed in coding)

Your ideas and opinions are not heard in this organization (reversed in coding)

Your supervisor is interested in you and your well-being

Your supervisor appreciates your work

Your supervisor supports you in difficult work situations

You have sufficient personal contact with your supervisor

You have the opportunity to talk openly with your supervisor about work-related problems

Your supervisor is helpful in getting the job done

---

**Peer support**

---

Please tell me if you disagree or agree with each statement

(Strongly disagree = 1...Strongly agree = 5)

The people you work with are helpful in getting the job done

There is opportunity to share experiences and feeling with other co-workers

The people you work with take a personal interest in you

Your co-workers are supportive in time of personal crisis, illness, or needing time off to help care for other family members

---