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Fixed-Term Work and Violence at Work

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Objectives. *This study investigated the effect of a fixed-term job contract on encounters of violence at work. We assumed that fixed-term employees encountered more violence or threats of violence at their work than permanent employees.* ***Methods.*** *This study is based on 3 large statistical data sets: (a) the Work and Health surveys carried out by the Finnish Institute of Occupational Health in 1997–2006 (*n = *7519); (b) the so-called Victim study carried out by Statistics Finland in 2006, where 4088 working people were interviewed about victimization resulting in injuries and violence; and (c) another study from Statistics Finland, which interviewed 4392 wage-earners about their working conditions in 2008.* ***Results.*** *One of the 3 data sets showed that fixed-term employees encountered more violence at work than permanent employees, whereas the other 2 did not show any difference between different contract groups.* ***Conclusions.*** *Our hypothesis concerning greater violence encounters among fixed-term employees was not confirmed.*

occupational violence temporary workers job contract Finland

1. INTRODUCTION

Violence is a growing problem in European workplaces: 9% of employees have been victims of bullying and 6% victims of physical violence [1]. However, there are large differences in workplace violence between countries [2] and between industries [3].

In the USA, homicides were the third leading cause of workplace traumatic deaths after highway crashes and contact with objects [4]. Approximately 900 employees were killed at their workplaces [5]. However, results are mixed in terms of gender: some studies give evidence of higher violent deaths among women [6, 7], whereas others show that homicide rates are higher among males [8, 9, 10]. All in all, workplace violence is characterized more by gender differences than by gender similarities [11].

Only a few studies of workplace violence have focused on temporary workers. Increase in violence at an English hospital was related to an increase of temporary nurses [12]. Mayhew found connections between young age, precarious employment and violence at work [13]. The most hazardous occupations for workplace violence in Finland were prison guards, police officers and health care occupations [14], all branches being characterized by a high proportion of fixed-term contracts.

The aim of this study is to examine whether the instances of violence at work are linked with the type of employment contract. On the basis of previous studies on workplace violence and occupational injuries of fixed-term employees, we assumed that fixed-term employees encountered more violence or threats of violence at the workplace than permanent employees.

2. MATERIAL AND METHODS

The first data sets are from work and health surveys carried out by the Finnish Institute of

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Occupational Health in 1997–2006 [15]. A computer-assisted telephone system was used to interview 2156 employees aged 25–64 in 1997 (response rate 71%), 2053 in 2000 (58%), 2335 in 2003 (65%), and 2229 in 2006 (63%).

Statistics Finland carried out an interview study on victimization through injuries and violence (the so-called victim study) in 2006 [16]. A representative sample (n = 8290) of Finns aged 15 years or over were interviewed either at home or by telephone, with a response rate of 76%. A total of 4088 working people participated in the study.

In the third data set, Statistics Finland interviewed 4392 wage-earners aged 15–64 about their working conditions in 2008 [17]. The interviews were carried out by visiting the interviewees. The response rate was 66%.

In all three data sets, we asked respondents whether their job contract was permanent or fixed-term. We elicited possible involvement in violence at work with the question "Have you encountered violence or threats of violence at work during the past 12 months?" In the quality of working life survey, the threat of violence was explored with the question: "When at work, have you been subjected to, or threatened by, physical violence (incl. from customers)?" [17]. The alternatives were 1—*at least once a week,* 2—*a couple of times a month,* 3—*less often* and 4—*never.*

3. RESULTS

About 14% of the respondents of the Work and Health surveys had a fixed-term contract [15]. They encountered violence or threats of violence at work more often than permanent workers (Table 1). At its highest, the difference between permanent and temporary workers was double. The difference was statistically significant on the first and fourth panels and when all four panels were calculated together.

In the victim study, 15% of the respondents had a fixed-term contract, and 13.6% had encountered violence or threats of violence at work, which was slightly but not significantly more often than among permanent workers (11.1%, $\chi^2 = 3.00$, $df = 1$, *ns*) [16].

According to the quality of working life survey, 12% (n = 533) of the respondents had a fixed-term contract [17]. Every fifth (20%) employee has encountered violence or threats of violence at work almost some degree (alternatives 1–3 in section 2). In men, there were no employment-contract differences: 13% of both fixed-term and permanent employees reported violence experiences. Among women, violence at work was in general more common: 27% of them had confronted violence or threats of violence in her work. Among fixed-term employees the proportion was 22% and among permanent employees 28%. The difference was statistically significant ($\chi^2 = 5.40$, $p = .02$).

We continued the analysis by using logistic regression. In the analyses we used age, socioeconomic status, the branch of industry and the years in the current workplace. Age was divided into three groups (≤29, 30–49 and ≥50), economic status also into three groups (upper white-collar workers, lower white-collar workers and workers). Industry was divided into manufacturing (including mining and construction), private services (including traffic) and public services. Time in the current work place was a binary variable: ≤1 or >1 year. The analyses were made separately for men and women.

Table 2 presents the results of a logistic regression analysis for men. Model 1 compares

TABLE 1. Proportion of Those Who Had Encountered Violence or Threats of Violence at Work by Type of Job Contract in the Work and Health Studies 1997–2006 (%) [15]

Year	Permanent	Fixed-Term	*N*	χ^2
1997	3.6	7.5	1811	7.45, $p < .01$
2000	5.2	7.4	1763	1.59, *ns*
2003	3.5	5.8	2031	3.03, *ns*
2006	5.1	9.3	1914	6.79, $p < .01$
total	4.3	7.5	7519	19.10, $p < .001$

TABLE 2. Effect of Type of Job Contract on Occupational Violence (OR and 95% CI) for Men

Men	*n*	Model 1	Model 2	Model 3
Type of employment				
permanent	1854	1	1	1
fixed-term	157	1.02 (0.62–1.66)	0.60 (0.35–1.04)	0.65 (0.37–1.16)
Age				
≤ 29	392		1	1
30–49	1016		1.09 (0.71–1.62)	1.05 (0.69–1.60)
≥ 50	603		0.83 (0.53–1.30)	0.80 (0.50–1.28)
Socioeconomic status				
upper white-collar	660		1	1
lower white-collar	415		**2.00 (1.39–2.89)**	**2.02 (1.40–2.91)**
worker	920		**1.87 (1.29–2.72)**	**1.83 (1.26–2.67)**
Industry				
manufacturing	823		1	1
private services	739		**3.80 (2.52–5.75)**	**3.74 (2.47–5.65)**
public services	347		**12.04 (7.63–19.00)**	**11.72 (7.43–18.49)**
Years in workplace				
≤ 1	515			1
> 1	1483			1.17 (0.80–1.72)

Notes. Model 1—crude OR (odds ratios); model 2—adjusted for age, socioeconomic status and industry; model 3—adjusted for age, socioeconomic status, industry and years in the current workplace. Statistically significant odds ratios are shown in bold.

TABLE 3. Effect of Type of Job Contract on Occupational Violence (OR and 95% CI) for Women

Women	*n*	Model 1	Model 2	Model 3
Type of employment				
permanent	2005	1	1	1
fixed-term	376	**0.73 (0.56–0.95)**	**0.52 (0.39–0.70)**	**0.58 (0.42–0.80)**
Age				
≤ 29	422		1	1
30–49	1129		0.93 (0.71–1.23)	0.88 (0.66–1.18)
≥ 50	830		**0.62 (0.46–0.84)**	**0.57 (0.41–0.79)**
Socioeconomic status				
upper white-collar	611		1	1
lower white-collar	1340		**2.21 (1.74–2.81)**	**2.21 (0.85–1.71)**
worker	424		1.21 (0.85–1.71)	1.21 (0.85–1.71)
Industry				
manufacturing	260		1	1
private services	1001		**5.22 (2.86–9.55)**	**5.22 (2.85–9.56)**
public services	1064		**12.75 (6.98–23.29)**	**12.49 (6.83–22.83)**
Years in workplace				
≤ 1	669			1
> 1	1695			1.24 (0.94–1.62)

Notes. Model 1—crude OR (odds ratios); model 2—adjusted for age, socioeconomic status and industry; model 3—adjusted for age, socioeconomic status, industry and years in the current workplace. Statistically significant odds ratios are shown in bold.

the change in the odds ratio for violence at work between employees under different types of contracts. In men, there was no statistically significant difference in odds. The situation remained equal also after adjusting age, socioeconomic status and industry (model 2). Among women, fixed-term employees encountered violence at work significantly less often than permanent workers also after age, socioeconomic status and industry were included in the model (model 2) (Table 3).

Work experience and the duration of exposure to violence encounters is generally shorter among fixed-term employees. For this reason we also adjusted (model 3) the length of the spell in the present work place. Both among men and women adding this variable to the model left the basic effects between violence and the employment contract unchanged. Moreover, the interactions between the type of employment and the background variables were in every case nonsignificant.

The last step of the analyses was to concentrate on the occupational groups which most often had fixed-term contracts: health care and education are the sectors, where the proportion of fixed employees was the highest in Finland. Teachers and (assistant and registered) nurses together composed 36% of the all fixed-term employees. Among teachers (n = 344), experience of violence was common (47%), but the differences between permanent and fixed-term staff was not significant (permanent 49%, fixed-term 41%). Among nurses (n = 510), violence was even more common: half of them (50%, n = 257) reported work related violence or its threat. The phenomenon was more common among permanent (53%, n = 203) than fixed-term (43%, n = 54) nurses ($\chi^2 = 4.19$, $p = .04$). The χ^2 test was used because of the small number of observations.

4. DISCUSSION

This study is the first to analyze the relationship between fixed-term contract and experience of violence at work using statistically representative data sets. The results, however, turned out to be mixed: one out of the three independent data sets showed that fixed-term workers encountered more violence at work than permanent workers, whereas according to the other two data sets there was no difference between different contract types, or the relationship was even reverse. The conclusion is that our hypothesis regarding higher violence encounters among fixed-term workers was not confirmed.

The results showed that women in permanent positions in occupations with a lot of fixed-term contracts experienced more violence at work than fixed-term employees, e.g., teachers and nurses. It seems that permanent workers were in these occupations often in face-to-face contacts with clients (students or patients) and, therefore, often encountered violence at work.

Women encountered more violence at work than men in this study. This result is in line with previous studies, which showed, e.g., that homicides were the leading manner of traumatic workplace deaths among women in the USA [6]. On the other hand, we can conclude that the aggressors selected their victims on the basis of gender rather than contract type. Violence against women was not a form of sexual aggression in these studies; which was asked about separately in these studies.

Training is the most often mentioned method for preventing workplace violence. Thailand's experience confirmed its effectiveness; training decreased the risk of being a victim of violence by as much as 40% [18]. A training package for controlling violence in primary health care was developed in the UK [19]. By and large, the important role of training highlights the need to pay special attention to fixed-term employees' access to training; unequal possibilities for on-the-job-training have been identified as an important difference between permanent and fixed-term employees [20]. In an international survey, 83% of nurses said that photo identification badges were used at their workplace to prevent violence [21].

Design and evaluation of the environment is another suggested method to prevent workplace violence in healthcare and social services, i.e., access control, safety of the premises, ability

to observe patients, and activity support [22]. However, there is only preliminary evidence regarding the effectiveness of environmental evaluation in violence prevention.

Encountering violence at work has long-term effects on the victims. In Denmark, employees exposed to violence at work had extended levels of depression and stress symptoms [23]. On the other hand, it is possible to hypothesize that exposition to a stressor will increase the probability of there being a violence encounter at work. Debriefing is essential for victims of workplace violence.

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