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Perceived organizational justice as a predictor of long-term sickness absence due to diagnosed mental disorders: Results from the prospective longitudinal Finnish Public Sector Study

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ABSTRACT

Organizational justice perceptions have been suggested to be associated with symptoms of mental health but the nature of the association is unknown due to reporting bias (measurement error related to response style and reversed causality). In this study, we used prospective design and long-term (>9 days) sickness absence with psychiatric diagnosis as the outcome measure. Participants were 21 221 Finnish public sector employees (the participation rate at baseline in 2000–2002 68%), who responded to repeated surveys of procedural and interactional justice in 2000–2004 along with register data on sickness absence with a diagnosis of depression or anxiety disorders (822 cases). Results from logistic regression analyses showed that a one-unit increase in self-reported and work-unit level co-worker assessed interactional justice was associated with a 25–32% lower odds of sickness absence due to anxiety disorders. These associations were robust to adjustments for a variety of potential individual-level confounders including chronic disease (adjusted OR for self-reported interactional justice 0.77, 95% CI 0.65–0.91) and were replicated using co-worker assessed justice. Only weak evidence of reversed causality was found. The results suggest that low organizational justice is a risk factor for sickness absence due to anxiety disorders.

Introduction

According to the World Health Organization (WHO), mental disorders and depressive disorders in particular are among the top five leading diseases deteriorating the quality of life in high-income countries (Demyttenaere et al., 2004; Mathers & Loncar, 2006). Mental disorders cause human suffering, affect families and communities, and are associated with substantial work impairment in terms of lost work days and reduced productivity (Stewart et al., 2003; Thomas & Morris, 2000). Benefits paid to individuals unable to work as a result of mental disorders have been rising in Europe and North America (Brown et al., 2009; OECD, 2003).

Mental disorders typically have multi-factorial etiology while work-related psychosocial stress factors have been suggested to be among the risk factors. It is obvious that other psychosocial factors such as for example unemployment may be just as important or even more important determinants of poor mental health in other parts of the general population than work-related risks. However, in those that are working the strongest evidence, to date, is from the 'job strain' model (Karasek, 1979; Karasek & Theorell, 1990) proposing that high demands, low control, and high strain (a combination of high demands and low control) are associated with increased risk of common mental disorders (Bonde, 2008; Netterstrom et al., 2009; Stansfeld & Candy, 2006). However, the evidence suggests an association between work-related psychosocial stress factors and symptoms of depression and psychological distress rather than a clinical disorder (Bonde, 2008, review).

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Recently, new psychosocial stress factors, such as organizational justice, have been examined in the context of mental health (Elovainio et al., 2001; Ferrie et al., 2006; Kivimaki et al., 2003a, 2003b).

Research on organizational justice as an individual's perception of fairness in an organization, has mainly focused on two things: (a) what individuals perceive as being fair in organizations and (b) what the consequences of such perceptions might be. It has been shown that the perception of organizational justice is affected by a combination of rules and norms related to decision-making principles (procedural justice component) and treatment practices (interactional justice component) that people in general experience as being fair or unfair. High organizational justice means that people within that organization perceive that they get what they deserve (their input and what they get back from the organization are in balance), that the rules treat them fairly (the decisions made follow fair rules) and that other people, especially their supervisors, treat them fairly (supervisors can be trusted and are respectful) (for a review see Cropanzano et al., 2001). The concept of organizational justice used in this study overlaps to concept of social capital (Putnam, 1993), especially the work place social capital including dimensions, such as trust and social belonging (Oksanen et al., 2008).

The justice researchers have long been interested in the consequences arising from organizational functioning (Heponiemi et al., 2007; McFarlin & Sweeney, 1992; Moorman, 1991; Phillips et al., 2001; Skarlicki & Folger, 1997), but only during the last two decades the scope of research on organizational justice has been expanded to health outcomes (Elovainio et al., 2001, 2002; Schmitt & Dorfel, 1999; Tepper, 2001). Prospective studies have found associations between low organizational justice perceptions and an increased risk of psychological distress symptoms, as indicated by general health questionnaire (GHQ) (Elovainio et al., 2003; Ferrie et al., 2006; Hayashi et al., 2011; Kivimaki et al., 2003b), self-reported depression diagnosis (Ylipaavalniemi et al., 2005) and unspecified sickness absenteeism (Elovainio et al., 2010; Head et al., 2006; Ybema & van den Bos, 2010). Because previous studies used either self-reported or composite mental health outcomes and thus potentially suffer from methodological problems such as misclassification, we used diagnosis-specific sickness absence as an outcome measure. For working populations, sickness absence records provide a valid measure of health, covering a range of illnesses (Kivimaki et al., 2003c; Vahtera et al., 1997), and in this study we were able for the first time to specify the psychiatric diagnosis for each sickness absence spell associated with organizational justice components. We used long-term sickness absenteeism due to mental health problems from the registers of National Health Insurance, including all long-term sickness absences based on clinical examinations and diagnoses given by physicians, as outcomes.

Despite the growing body of evidence supporting the association between work-related factors and mental health problems, previous studies have not been able to tease out whether the relation reflects causal characteristics of the working environment or just reporting bias. Recent findings indicate that reporting bias inflates associations between job strain and the occurrence of depression, if studies rely on individual self-reports (Kolstad et al., 2011). We sought to avoid this problem in three ways. First, in addition to individual measures, we used aggregated measures among co-workers with the same work unit where the respondent's own score was excluded. This way we were able to use measurement that are independent of appraisal of an individual worker. Second, we replicated our analyses in those participants free of any indication of baseline mental health problems. Third, as in any observational study, the potential association between perceived psychosocial work environment and mental health problems raises the question of reversed causality, that is, participants negative affectivity or subclinical mental disorder harmfully affecting the perception of the environment. It has been suggested that people being on sick leave or having emotional problems predicting a decline in justice perceptions (Lang et al., 2011). We therefore explicitly tested the reversed causality hypothesis between organizational justice and long-term sickness absence due to diagnosed mental disorders by assessing whether previous psychiatric absenteeism would predict a decline in justice perceptions. In epidemiological studies, the measures of mental health problems are often solely based on self-reports. In this study, we were able to obtain long-term sickness absenteeism due to mental health problems from the registers including all long-term sickness absences based on clinical examinations and diagnoses given by physicians, as outcomes.

We hypothesized that high perceived organizational justice predicts lower sickness absence due to psychiatric illness. Theoretically, mental health problems are supposed to be closely associated with low justice perceptions provoking negative emotional reactions, low self-esteem and social exclusion, that in turn are closely related to mental health problems, and even more so to than somatic health problems. Thus, mental health problems are the most "natural" or obvious health outcomes of justice perceptions.

Methods

Participants

The data were drawn from the ongoing Finnish Public Sector Study which examines psychosocial factors and health of employees in 10 towns and 21 public hospitals in Finland (for more information, see (Vahtera et al., 2004)). The Ethics Committees of the Finnish Institute of Occupational Health and the Hospital District of Helsinki and Uusimaa have approved the study. In 2000–2002, 48 598 employees responded to a survey (68% response rate/eligible population 71 705), and of them 29 180 were still employed in the target organizations and responded to a follow-up survey in 2004. The differences between the participants and the eligible population were small with 82%, and 76% being women, the mean ages being 48.3 and 47.7 years, and 17% and 21% being manual employees, respectively. Using unique personal identification codes, the survey data were linked to the national health registers of the Social Insurance Institution (SII) of Finland including records of purchases of medicine, diagnosed chronic disease and cancer, and medically certified sickness absence. The respondents were followed-up for onset of sickness absence due to mental disorders from January 1, 2005 through December 31, 2005. We excluded participants who were on pension or had died by the end of the follow-up ($N = 906$). We excluded also those whose psychiatric treatment was not compensated by the SII (in one town it is paid by the municipality) and thus not recorded to the SII registers ($N = 5014$) because for them, information on the history of previous psychiatric treatment between the surveys was missing. We further excluded 2039 participants who had missing data on organizational justice in either survey. As a result, the final sample size was 21 221 participants with two measures of organizational justice (a mean of two measures were used as exposure variable). Altogether 2640 work places were included in the final analyses, the work-unit sizes range between 3 and 215, and the mean was 30. The interquartile range of participation rate varied between work places from 57 to 87 (mean rate 71). There were only 14 percent of work places where the participation rate was under 50%.