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Occupational Medicine

Presenteeism in academic employees – the role of occupational and individual factors

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SCHOLARONE™ Manuscripts Presenteeism in academic employees – occupational and individual factors

Abstract

Background: There is growing evidence that presenteeism can be damaging for individuals

and organisations. It is therefore important to identify the prevalence of working while sick in

different working environments and the factors that contribute to such behaviour.

Aims: To examine the prevalence of self-reported presenteeism in academic staff working in

UK universities and colleges and the extent to which job demands, control, support and work

engagement are risk factors.

Methods: Scales from the Health and Safety Executive Management Standards Indicator

Tool were used to measure job demands, control and support from managers and co-workers.

Work engagement was assessed using a validated measure and the frequency of self-reported

presenteeism was measured. The effects of demands, control, support and engagement on

presenteeism were examined with ordinal regression analysis.

Results: The study sample comprised 6,874 people working in academic roles in UK colleges

and universities (59% female). Most respondents (88%) reported working while sick at least

sometimes. The risk factors for presenteeism were job demands, control, support from

managers and work engagement.

Conclusions: The findings of this study indicate that presenteeism is commonplace in UK

colleges and universities. Some of the features of the job that might encourage employees to

work while sick were highlighted, whereas engagement in work was an additional risk factor.

Key words: presenteeism, job demands, support, control, work engagement

Introduction

'Presenteeism' can be defined in several ways, but it most commonly refers to situations where people continue to work although they feel sufficiently unwell to take time off sick [1]. Estimates of the prevalence and financial implications of presenteeism vary, but it is believed to be considerably more frequent than sickness absence and almost twice as costly [2]. The findings of a recent survey of 600 UK businesses conducted by the Chartered Institute of Personnel and Development [3] indicate that presenteeism is growing, with more than one employer in three reporting an increased incidence among their staff in the previous 12 months.

Providing illness is not contagious or overly debilitating, the benefits of presenteeism may outweigh the costs. Working while sick is often considered an act of organisational citizenship and a sign of commitment and loyalty to employers and colleagues; it may also distract employees from minor symptoms [4,5]. Nonetheless, there is growing evidence that presenteeism can delay rather than expedite recovery, increase the risk of future health problems and absenteeism, impair productivity and result in errors, accidents and injury [6, 7].

A wide range of factors has been found to contribute to workplace presenteeism including limited entitlement to sick pay, strict absence management policies, job insecurity, the availability of replacement, a competitive workplace culture, limited promotion prospects and a high level of work-related stress [2,8,9,10]. Other organisational features, such as high workload, time pressure, conflicting demands and understaffing, can also encourage people to work while sick [2,11,12,]. Certain occupations, such as health and social care and education,

are thought to have a strong culture of presenteeism as they foster a strong sense of duty and responsibility for the welfare of others [13,14]. Nonetheless, as presenteeism can have serious implications for long-term health [11], it is important to identify the factors that encourage and discourage working while sick in occupational groups that may be at high risk.

This study considers three key aspects of work, demands, control and support, as predictors of presenteeism in academic staff working in further and higher education. A clear pathway between demands and presenteeism could be identified. As demands require sustained physical and/or psychological effort, they have strong potential to impair the health of employees. Moreover, working under conditions of high demand may discourage people from taking sick leave due to concerns that their work would remain undone. This may be a particular problem in universities and colleges where workloads can be high, jobs tend to be highly specialised and little cover is available for sickness absence [15]. Although previous studies have found positive relationships between job demands and presenteeism, a wide range of factors has been categorised as 'demands' such as time pressure, workplace bullying and work-life conflict [8,11,16]. The present study uses a well-validated measure of demands that encompasses workload, work patterns and the working environment.

There are reasons to believe that job control and support might encourage <u>or</u> discourage presenteeism. Employees with more autonomy may be more likely to work through sickness as they are better able to modify their tasks, reduce their cognitive or physical effort, or take more breaks to accommodate their limitations [3,17]. Conversely, high job control may mean that people feel better able to take time off to recover from illness. Support from colleagues and managers might also influence attitudes towards taking sick leave either positively or

negatively. Cooperation, loyalty and mutual respect between co-workers and fear of letting them down has been found to increase presenteeism propensity [18]. Supportive supervisors could encourage presenteeism for similar reasons. Nonetheless, there is some evidence that perceptions of support at work may encourage rather than discourage people from taking time off sick, even when work demands are high [8].

It has been argued that organisational features are more influential than personal factors in encouraging presenteeism [18], but the influence of individual differences has also been examined. Attitudes and orientations towards work, such as intrinsic motivation, feelings of fulfilment and satisfaction and job involvement and commitment, have been found to encourage people to work while sick [3,12]. Little is yet known, however, about the role played by work engagement. This is defined as "a positive, fulfilling work-related state of mind that is characterized by vigour, dedication, and absorption" [20, p.74]. An engaged employee is enthusiastic about their job, deeply immersed in their work tasks and experiences a strong sense of significance in what they do. Longitudinal research has found that employees who are more engaged are less likely to take long-term sickness absence [21], but little is known about how it affects working while sick. Consequently, this study examines work engagement, as well as job demands, control and support, as risk factors for presenteeism in academic employees.

Methods

Data were obtained by an online survey using convenience sampling. A link to the survey was sent by email to members of the University and College Union, which is the largest professional association for academic and academic-related staff working in higher and

further education institutions in the UK. Information on the aims and objectives of the survey were provided and assurances of anonymity and confidentiality of data given.

Job demands, control and support from managers and colleagues were measured using scales from the self-report Indicator Tool [22]. Demands (8 items) examined workload, pace of work and working hours; control (6 items) assessed autonomy over pacing, timing and working methods; support from managers (5 items) measured the availability of help with workload management, feedback and emotional support; and support from peers (4 items) examined the provision of help and assistance from co-workers. Each item was scored on a five-point response scale from 1 (never) to 5 (always). Mean scores were calculated across each of the categories, with higher scores on the demands sub-scale representing more demands and higher scores for control and support denoting more satisfaction.

Work engagement was assessed using a nine-item measure [23] that examines three aspects of engagement: vigour, absorption, and dedication. Participants rate the frequency with which they experience a range of feelings on a four-point scale ranging from 1 (strongly agree) to 4 (strongly disagree). Higher scores represent higher levels of engagement.

Presenteeism was measured by a single item that asked respondents to indicate how often (if at all) respondents had gone to work work despite feeling that they should have taken sick leave [24]. Responses were obtained on a five-point scale ranging from 1 (never) to 5 (always) with a higher score representing more frequent presenteeism.

Ordinal logistic regression was used to test the unique contribution made by the four work-related variables (demands, control and support from managers and colleagues) and work engagement to presenteeism, with the frequency of self-reported presenteeism as the dependent variable. VIF testing for multicollinearity were conducted prior to the analysis.

The study was approved by the ethics committee of the Research Centre for Applied Psychology at the University of Bedfordshire, UK.

Results

The survey was completed by 6,874 staff working in colleges and universities throughout the UK. Over half of respondents (59%) were female. The majority (67%) was over 45 years of age and 29% was 55 or older. It is not possible to calculate a response rate using online questionnaires where the number of potential participants is unknown [25]. Nonetheless, the gender balance and mean age of the sample broadly corresponded with the wider population of academic staff working in higher and further education institutions in the UK at the time the data were collected [26,27]. Mean scores and Cronbach alphas for each of the predictor variables are shown in Table 1.

TABLE 1 ABOUT HERE

The frequency of self-reported presenteeism is shown in Figure 1. Most respondents (88%) reported working while sick at least sometimes, with more than half doing so either often (28%) or always (28%).

FIGURE 1 ABOUT HERE

A cumulative odds ordinal logistic regression with proportional odds was calculated to identify the effects of job demands, control, support from managers and coworkers and work engagement on self-reported presenteeism. Details are provided in Table 2. There were proportional odds, as assessed by a full likelihood ratio test comparing the fitted model to one with varying location parameters, $\chi 2(15) = 21.444$, p = .123. The Pearson goodness-of-fit test indicated that the model was a good fit to the observed data, $\chi 2(27307) = 27591.203$, p = .112, but there were zero frequencies in 77.9% of cells. However, the final model predicted the dependent variable over and above the intercept-only model, $\chi 2(5) = 2385.878$, p < .001.

Job demands, control, support from managers and work engagement had statistically significant effects on the prediction of self-reported presenteeism. An increase in demands was associated with an increased risk of presenteeism, with an odds ratio of 2.770 (95% CI, 2.575 to 2.980), Wald χ 2(1) = 744.183, p < .001. An increase in control was associated with a decreased risk of presenteeism, with an odds ratio of 0.617 (95% CI, 0.576 to 0.661), Wald χ 2(1) = 191.302, p < .001. An increase in manager support was associated with a decreased risk of presenteeism, with an odds ratio of 0.787 (95% CI, 0.741 to 0.837), Wald χ 2(1) = 59.008, p < .001. Finally, an increase in work engagement was associated with an increased risk of presenteeism, with an odds ratio of 1.522 (95% CI, 1.372 to 1.688), Wald χ 2(1) = 63.035, p < .001. Peer support was not a significant risk factor.

TABLE 2 ABOUT HERE

Discussion

This study found that people working in UK colleges and universities work while sick on a frequent basis. Perceptions of high job demands increased the risk of self-reported presenteeism, whereas control over aspects of work and support from managers and colleagues tended to discourage it. Work engagement was also found to be a risk factor for presenteeism, in that respondents who were more absorbed in their work and more dedicated to it were less likely to take sick leave.

In line with the findings of earlier research [11], excessive job demands, characterised by high workload, fast working pace and long working hours, increased the risk of presenteeism. Contrary to previous findings, however, [17], job control and support reduced rather than increased the likelihood of working while sick. Although control can help people work within the limitations of their illness, these findings suggest that it may also enable them to take sick leave if required. As facets of control such as skill discretion, schedule flexibility and decision authority can influence workplace sickness behaviours in different ways [28], future research should use a multi-dimensional measure to identify the risk factors for presenteeism more precisely.

Perceptions of support from managers reduced the risk of presenteeism. Line managers have legitimate authority over workload and can provide reassurance that tasks would be

reallocated during periods of absence - therefore giving staff official 'permission' to go off sick. Nonetheless, academics who tended to receive more support from their manager were less rather than more likely to take time off sick when unwell. Although employees may be concerned that taking sick leave would add to the workloads of their colleagues, this did not appear to influence sickness absence. It should be recognised, however, that academic cultures tend to be highly individualistic and staff operate within a 'loosely coupled' system [15]. Support from co-workers may therefore have a greater influence over sickness behaviour in jobs that are more inter-dependent. Future research should examine the extent to which other features of the working environment are risk factors for presenteeism. As a growing proportion of academic staff working in UK universities and colleges is employed on temporary and hourly-paid contracts [26,27], the implications of job insecurity and lack of sick pay for sickness behaviour should be a priority.

This study has found that work engagement, as well as features of the working environment, increases the risk of self-reported presenteeism. Although it can enhance wellbeing and facilitate peak performance, engagement shares some features of maladaptive behavioural patterns such as workaholism [28]. It seems important to raise awareness that engagement in work can be a risk factor for presenteeism that may constrain opportunities to recover from illness with potentially serious consequences for wellbeing and professional functioning. As with job control discussed above, future research should identify the dimensions of engagement (such as absorption and dedication) that particularly encourage working while sick and identify the point at which 'healthy' engagement can become damaging overcommitment.

Organisations have an important role to play in reshaping attitudes towards taking sick leave, but few seem to take any action to reduce presenteeism [29]. Reducing 'unnecessary' absenteeism without encouraging people to work while sick is undoubtedly challenging, especially in organisational cultures, such as within education, that expect and reward long working hours and a deep commitment to the job. Taking sufficient time off sick to recover from genuinely debilitating illness should be considered responsible and healthy behaviour. More research is needed to help organisations in different sectors frame interventions to encourage staff to take time off sick when necessary. Qualitative methodology would allow a more in-depth examination of the reasons why people work while sick and their motivations for doing so. Longitudinal research could identify the mechanisms by which organisational and individual characteristics influence decisions to continue to work while unwell and highlight the long-term implications for health and job performance. The job demands-resources model may be a particularly useful framework to identify the pathways through which characteristics of the working environment and individual employees influence sickness behaviours.

This study has several limitations. The data obtained were self-report and causality cannot be established by the correlational design. It is plausible that sickness presenteeism may influence perceptions of demands, control and support rather than vice versa. The prevalence of self-reported presenteeism (i.e. 82%) seems high, but should be considered in the context of other studies that have estimated rates between 35% and 90% among various occupational groups and community samples (1,2,30). A single-item measure was used to assess the frequency of presenteeism. While this approach is commonplace in large-scale European studies and smaller-scale research [30], a multi-item scale would provide more in-depth information on the prevalence of presenteeism, the type of symptoms or diseases associated

with working while sick and the implications for health and job performance. There is evidence that the type of health conditions that predispose a person to work while sick may differ from those that encourage absenteeism [8]. The types of illness that are considered to be a more or less legitimate cause for sickness absence should be further explored.

Other limitations relate to the sampling strategy and the generalisability of the findings.

Although the sample was substantial and generally representative of the wider population of academic employees in the UK, the findings may not capture the views and experiences of the wider population. People who work during sickness more frequently might have been more motivated to respond in order to draw attention to their behaviour. Moreover, the experiences of academic employees working in universities and colleges may not translate well to other sectors. Previous research has found that both job demands and control are high in this sector and people tend to report being more over-committed to their job than people in many other types of work [15]. In the present study, the level of job engagement was fairly high. This might mean that academics, as well as other helping professionals who tend to be deeply involved in their work, would resist any interventions that encourage them to withdraw from their work, even during serious illness. Nonetheless, this study has highlighted some key factors that might underpin presenteeism in the sector and will help raise awareness of the risks of presenteeism for staff.

Key points

• Most academic employees who responded to this study (88%) reported working while sick at least sometimes, with more than half (56%) doing so either often or always.

- Job demands, control and support from managers increased the risk of self-reported presenteeism. No significant effects were found for support from colleagues.
- A tendency to be deeply engaged in work was a further risk factor for presenteeism.

References

- 1. Johns G. Presenteeism in the workplace: A review and research agenda. J Crim Behav (2010) May 1;31(4):519-42.
- Miraglia M, Kinman G. Presenteeism: the hidden costs of working while sick (2017).
 The Psychologist,
- 3. Schreuder JA, Roelen CA, van der Klink JJ, Groothoff JW. Characteristics of zeroabsenteeism in hospital care. Occup Med (2013) 63(4):266-73.
- 4. Giæver F, Lohmann-Lafrenz S, Løvseth LT. Why hospital physicians attend work while ill? The spiralling effect of positive and negative factors. BMC Health Serv Res (2016) 16(1):548.
- Bergström G, Bodin L, Hagberg J, Aronsson G, Josephson M. Sickness presenteeism today, sickness absenteeism tomorrow? A prospective study on sickness presenteeism and future sickness absenteeism. J Occup Environ Med (2009) 51(6):629-38.
- 6. Johns G. Attendance dynamics at work: the antecedents and correlates of presenteeism, absenteeism, and productivity loss. J Occup Health Psych (2011) 16(4):483.
- Niven K, Ciborowska N. The hidden dangers of attending work while unwell: A survey study of presenteeism among pharmacists. Int J Stress Manage (2015) 22(2):207.
- 8. Gosselin E, Lemyre L, Corneil W. Presenteeism and absenteeism: Differentiated understanding of related phenomena. J Occup Health Psych (2013) 18(1): 75-86

- 9. Miraglia M, Johns G. Going to work ill: A meta-analysis of the correlates of presenteeism and a dual-path model. J Occup Health Psych (2016) 21(3):261.
- Aronsson G, Gustafsson K. Sickness presenteeism: prevalence, attendance-pressure factors, and an outline of a model for research. J Occup Environ Med (2005) 47(9):958-66.
- 11. Demerouti E, Le Blanc PM, Bakker AB, Schaufeli WB, Hox J. Present but sick: a three-wave study on job demands, presenteeism and burnout. Career Dev Int (2009) 14(1):50-68.
- 12. Hansen CD, Andersen JH. Going ill to work–What personal circumstances, attitudes and work-related factors are associated with sickness presenteeism? Soc Sci Med (2008) 67(6):956-64.
- 13. Chambers C, Frampton C, Barclay M. Presenteeism in the New Zealand senior medical workforce—a mixed-methods analysis. New Zeal Med J (2017) 130(1449):10.
- 14. Panari C, Simbula S. Presenteeism "on the desk" The relationships with work responsibilities, work-to-family conflict and emotional exhaustion among Italian schoolteachers. Int J International Journal of Work Health Manage (2016) 9(1):84-95.
- 15. Kinman G. Doing more with less? Work and wellbeing in academics. Somatechnics. (2014) (2):219-35.
- 16. McGregor A, McGregor A, Magee CA, Magee CA, Caputi P, Caputi P, Iverson D, Iverson D. A job demands-resources approach to presenteeism. Career Dev Int (2016) 21(4):402-18.
- 17. Johansson G, Lundberg I. Adjustment latitude and attendance requirements as determinants of sickness absence or attendance. Empirical tests of the illness flexibility model. Soc Sci Med (2004) 58(10):1857-68.

- 18. Hansen CD, Andersen JH. Going ill to work–What personal circumstances, attitudes and work-related factors are associated with sickness presenteeism? Soc Sci Med (2008) 67(6):956-64.
- Jourdain G, Vezina M. How psychological stress in the workplace influences presenteeism propensity: A test of the Demand–Control–Support model. Eur J Work Org Psych (2014) 23(4):483-96.
- 20. Schaufeli WB, Salanova M, González-Romá V, Bakker AB. The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. Journal Happiness Studies (2002) 3(1):71-92.
- 21. Rongen A, Robroek SJ, Schaufeli W, Burdorf A. The contribution of work engagement to self-perceived health, work ability, and sickness absence beyond health behaviors and work-related factors. J Occ Environ Med (2014) 56(8):892-7.
- 22. MacKay CJ, Cousins R, Kelly PJ, Lee S, McCAIG RH. 'Management Standards' and work-related stress in the UK: Policy background and science. Work Stress (2004) 18(2):91-112.
- 23. Schaufeli WB, Bakker AB, Salanova M. The measurement of work engagement with a short questionnaire: A cross-national study. Educ Psychol Measure (2006) 66(4):701-16.
- 24. Schaufeli W, Bakker A, van der Heijden F, Prins J. Workaholism among medical residents: it is the combination of working excessively and compulsively that counts. Int J Stress Manage (2009) 16: 249–272
- 25. Sue, V., Ritter, L. Conducting Online Surveys (2012) London, Sage.
- 26. Higher Education Statistics Agency. (2016). Staffing statistics for 2014/15. Retrieved from https://www.hesa.ac.uk/

- 27. Education and Training Foundation (2016). Workforce data across the further education sector 2014/15. Retrieved from www.et-foundation.co.uk/
- 28. Biron C, Brun JP, Ivers H, Cooper C. At work but ill: psychosocial work environment and well-being determinants of presenteeism propensity. J Public Ment Health (2006) 5(4):26-37.
- 29. Chartered Institute of Personnel and Development, CIPD Absence Management: Annual Survey Report. (2015). London: CIPD. https://www.cipd.co.uk/binaries/absence-management 2015.pdf accessed 20.4.17
- 30. Garrow V. Presenteeism: A review of current thinking. Institute for Employment Studies (2016) http://www.employment-studies.co.uk/system/files/resources/files/507_0.pdf

Table 1: Descriptive data and internal consistency for each of the study variables

Variable	mean (SD)	Range	Cronbach alpha
Demands	3.61 (0.70)	1 – 5	0.87
Control	3.24 (0.79)	1 – 5	0.87
Manager support	2.71 (0.96)	1 – 5	0.90
Peer support	3.31 (0.82)	1 – 5	0.86
Work engagement	2.60 (0.53)	1 – 4	0.87

Table 2: Findings of the ordinal logistical regression model Ordinal regression results examining workplace factors as risks of self-reported presenteeism

Variable	Coefficient	OR	95% CI	<i>p</i> -value
Demands	1.02	2.77	2.58 - 2.98	0.001
Control	-0.48	0.62	0.58 - 0.66	0.003
Manager support	-0.24	0.79	0.74 - 0.84	0.010
Colleague support	-0.01	0.99	0.93 - 1.06	0.755
Job engagement	0.42	1.52	1.37 - 1.69	0.001
			R	
Pseudo R-Square = Nagelkerke = 31%				

FIGURE 1: Frequency of presenteeism reported by participants



