# A literature review on sick leave frequency determinants of the past decades

by

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## **Abstract**

Objectives: A literature review on relevant sick leave frequency determinants during the past decades was performed.

Methods: The literature review referred to national and international studies on sick leave frequency determinants.

Results: During the past decades, in research literature, a broad range of sick leave frequency determinants was mentioned in a highly consistent pattern.

Conclusion: Over the past decades sick leave frequency was influenced by a broad range of similar determinants.

Keywords: review, sick leave frequency, determinants

## Samenvatting

Doelstelling. Een literatuuronderzoek werd uitgevoerd naar determinanten van verzuimfrequentie die de afgelopen decennia van belang waren.

Methode. Het literatuuronderzoek betrof nationale en internationale studies over determinanten van verzuimfrequentie.

Resultaten. In de afgelopen decennia liet de onderzoeksliteratuur voor een breed spectrum van verzuimfrequentie determinanten een stabiel beeld zien.

Conclusie. In de afgelopen decennia werd verzuimfrequentie beïnvloed door een breed spectrum gelijkaardige determinanten.

Trefwoorden: literatuuronderzoek, verzuimfrequentie, determinanten

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### Introduction

Sick leave is associated with numerous determinants and over the years extensive research, either national or international, has been performed to establish the precise character of these determinants. Studies on sick leave often distinguish between frequency and duration of sick leave. In this review we focus on determinants that give rise to sick leave, i.e. sick leave frequency determinants.

The research question is: For the past decades, according to literature, which sick leave frequency determinants were relevant?

#### Methods

The aim of the present literature review was to find out which sick leave frequency determinants were relevant during the past decades. Sick leave frequency indicates the number of sickness spells an employee takes a year. This number is influenced by determinants that refer to attitude towards absenteeism, the relation between health and working conditions and working relations and motivation. To identify the relevant sick leave frequency determinants over the past decades, apart from (inter)national scientific journals and academic theses, Medline was consulted.

This literature review focussed on determinants with a general and not a specific character. For instance, the habit of smoking was not detailed to the level of the number of cigarettes a person smokes a day and the duration in months or years of temporary appointments was not specified.

Keywords for the literature review on relevant determinants of sick leave frequency were: absenteeism, sickness absence, sickness spells, sick leave and sick leave frequency. Keywords for determinants of the work situation focussed on the working conditions, the work contents, working relations and the working circumstances. Other keywords referred to lifestyle like smoking and drinking alcohol or to individual characteristics and circumstances like age and gender, marital state and level of education. Keywords referring to the health status were: medical consumption (more specific: visits to the family doctor and frequently taking medicines), health complaints and perception of own health or perceived physical and mental health and perceived physical and mental workload.

#### Results

The literature review referred to a number of earlier Dutch studies on sick leave frequency determinants (1-6).

As for studies that focus on sick leave frequency determinants, personal well-being (1;7-10), individual factors (8;2-3;11;12-16) and atmosphere at the workplace (2;11;17-26) are regarded as important factors for sick leave frequency.

Sick leave frequency is related to determinants of the work situation i.e. work characteristics, categorised as 'working conditions', 'work contents', 'working relations' and 'working circumstances'.

In 'working conditions' job satisfaction prevails (the less satisfying job, the higher the sick leave frequency) (1;27-31), as do support (lesser support means a higher frequency) (1;19-20;32-34), and type of appointment (in case of a temporary appointment, sick leave frequency can be higher and lower) (1;4-6;27-35). In 'work contents' autonomy prevails (more autonomy means a lower sick leave frequency) (1;5;28;36-37) as do pace and pressure (the higher the pace and pressure, the higher the sick leave frequency) (1;3;32;34;38-41). In 'working relations' the relations with colleagues and supervisors are important (the poorer the relations, the higher the sick leave frequency) (3;25;34;42-45) as are inconvenient 'working circumstances' that lead to a higher sick leave frequency (the poorer the working circumstances in terms of air pollution and climate, the higher the sick leave frequency) (1;3;46-49).

As for health status: health complaints through physical and psychic perceived workload, are an expression of a poor health (the more the physical and psychic perceived workload, the higher the sick leave frequency) (1;16;38;50-54) as are mental problems (the more the mental problems, the higher the sick leave frequency) (29;55-58). Taking medicines means a higher sick leave frequency (1;59). As for motivation: less affinity with one's work leads to a higher sick leave frequency (1), the same is seen in case of a low working morale (8;34). As for individual characteristics and circumstances: with an increasing age sick leave frequency reduces (1;34;60-61); for women, a higher sick leave frequency is observed (1;3;28;62-64); married people show a lower sick leave frequency (3;47;65-66); the same applies for higher educated people (3-5). A relation was found between a high sick leave frequency and little balance between education and level of functioning (47;67). Finally, drinking (68-70) and smoking (71-73) are associated with higher sick leave frequency.

Figure 1 provides the results classified in accordance with the literature review.

For the direction of the influence of the mentioned sick leave frequency determinants on the basis of the literature review see Table 1.

Results literature review 1984-2004 **Determinants** appreciation for one's working work; expectations for the future; satisfied with one's conditions work; positive about socialmedical support during sick leave; type of appointment autonomy; workload (more work to do in the same work \* job satisfaction amount of time); mental contents \* support workload; match between \* autonomy work and level of education atmosphere pace and presat the workplace sure relation with colleagues and opinion about supervisors; managers are well informed supervisors working about the workplace; good relations atmosphere at the worknlace working pollution at the workplace; circumair climate/pollution stances perceived physical workperceived load; perceived mental workload workload personal health status well-being questions about perceived health; mental balance; health burnout due to work; annual complaints number visits (family doctor); frequently taking medicines work-related factors; motivation home-related factors individual age; gender characteristics marital status; satisfied with individual individual factors private circumstances; circumstances level of education lifestyle alcohol consumption; smoking

FIGURE 1. Results of the literature review for sick leave frequency determinants (1984-2004)

TABLE 1. Sick leave frequency determinants: the direction of the influence

SICK LEAVE FREQUENCY DETERMINANTS	DIRECTION OF THE INFLUENCE <sup>1</sup>
WORKING CONDITIONS	
appreciation for one's work	more appreciation > IfsI
expectations for the future	better expectations > Ifsl
satisfied with one's work	more satisfaction > Ifsl
positive about social-medical support during sick leave	indifferent <sup>2</sup>
type of appointment (permanent or temporary)	indifferent
WORK CONTENTS	
autonomy	more autonomy > IfsI
workload (more work in the same amount of time)	more work in the same amount of time > hfsl
mental workload	heavier mental workload > hfsl
match between work and level of education	better match > Ifsl
WORKING RELATIONS	
opinion about supervisors	more positive opinion > IfsI
managers are well informed about the workplace	better informed > Ifsl
good atmosphere at the workplace	better atmosphere > Ifsl
WORKING CIRCUMSTANCES	
pollution at the workplace	more pollution > hfsl
air climate / pollution	bad air climate / more pollution > hfsl
HEALTH STATUS (perceived workload):	
perceived physical workload	perception of heavier physical workload > hfsl
perceived mental workload	perception of heavier mental workload > hfsl
HEALTH STATUS (health complaints):	
questions about perceived health	perception of a poorer health > hfsl
mental balance	the more out of balance > hfsl
burnout due to work	the more severe burnout > hfsl
annual number of visits (family doctor)	higher number of visits > hfsl
frequently taking medicines	more frequently taking medicines > hfsl
MOTIVATION	
work-related factors (working with pleasure)	working with more pleasure > Ifsl
home-related factors (more or less motivated)	more motivated for work > Ifsl
INDIVIDUAL CHARACTERISTICS AND CIRCUM- STANCES	
age	older > Ifsl
gender	female > hfsl
marital status	married > Ifsl
satisfied with private circumstances	more satisfied > IfsI
level of education (high or low)	higher level of education > Ifsl
alcohol consumption	drinking more > hfsl
smoking	smoking more > hfsl

<sup>&</sup>lt;sup>1</sup> Direction of the influence based on the literature review: the *assumed* effect on the frequency of sick leave (IfsI = lower frequency of sick leave; hfsI = higher frequency of sick leave).

<sup>&</sup>lt;sup>2</sup> Indifferent: literature is scarce or ambiguous.

#### Discussion and conclusion

A literature review on sick leave frequency determinants during the past decades was performed. The aim was to find sick leave frequency related determinants and not to evaluate the size of the effect of those determinants. As for future studies, it would be useful that the relative effect of determinants is also taken into consideration.

After reviewing the literature we concluded that, during the last decades, a broad spectrum of determinants of sick leave frequency was mentioned in a highly consistent pattern. This conclusion was based on the finding that studies on sick leave frequency during the years 1984-2004 apparently focused on similar determinants.

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