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The compatibility between characteristics of employees at risk for sickness absence and components of a preventive coaching intervention

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Abstract

The aim of this study was to assess the compatibility between characteristics of employees 'at risk' for sickness absence and components of a preventive coaching intervention. Data from baseline questionnaires of the 'at risk' study population of a randomized trial, and of two reference groups of the Maastricht Cohort Study were used to compare (mental) health and work related characteristics. Details of the intervention were described. Similarities between characteristics of the study population and components of the coaching intervention were discussed. Substantial differences between characteristics of the 'at risk' study population and the 'not at risk' reference group were found, which were all addressed during the coaching intervention. The contrast with the 'sick leave' reference group was less obvious. The 'at risk' study population could be indicated as the most beneficial population for this preventive intervention. The results show that preventive coaching is an appropriate intervention for employees 'at risk' for sickness absence.

Key words: Sickness absence, preventive coaching, employees

Introduction

Psychosocial health complaints, such as depression, fatigue, stress or work-family conflicts, place an enormous burden on society and are a leading cause of sickness absence in the world (Luz & Green, 1997). A substantial number of employees are home on sick leave at any time, and it is estimated that 32% of these sick leaves can be attributed to psychosocial complaints. (ILO, 2000) Once on sick leave due to these complaints, employees may encounter difficulties in reintegrating. A better and more effective strategy would be early identification of employees at risk for sickness absence, and early intervention to prevent sickness absence as much as possible (Schröer, 1993). Over the past 20 years, the number of interventions in workplace settings to affect sickness absence has continued to grow (Mercer, 1999). Most of these interventions have a curative character, i.e. they are aimed at reintegration of employees already on sick leave. However, there are also interventions with a more preventive approach, aimed at for example reducing stress at work or improving overall physical activity, in order to reduce the risk for future sick leave (Wilson, 1996).

With respect to the target population for preventive interventions, there is little consensus on the characteristics of these employees. To our knowledge, the assessment of compatibility between features of a particular study population and components of a preventive intervention has not been done before. Currently, a randomized trial is in progress to determine the effectiveness of a preventive coaching intervention for employees 'at risk' for sickness absence due to psychosocial health complaints. For this trial, it is essential to identify early which employees are at increased risk, so as to include those who would probably benefit most from preventive coaching. An objective instrument (in Dutch: 'Werkwijzer'), developed with data from the Maastricht Cohort Study on 'Fatigue at Work', was used to screen employees for their risk of sickness absence due to psychosocial health complaints (Duijts, Kant, Landeweerd, & Swaen, 2006). Employees who were identified to be 'at risk' were selected to participate in the trial and a sample was invited for the preventive coaching intervention. The current study was designed to assess the appropriateness of preventive coaching as an early intervention for an 'at risk' study population. To clarify this association, clear understanding of features of 'at risk' employees, with regard to health, mental health and work related concepts was gained. Also, details of the preventive coaching intervention, its approach, structure and protocol, and recurring problems and objectives were described. Further, characteristics of two reference groups were inventoried to enable a comparison between these groups and the 'at risk' study population. The degree to which this preventive coaching intervention suits the characteristics of employees 'at risk' for sickness absence, in contrast with the reference groups, is discussed.

Methods

Study population

Employees of three companies situated in the south-eastern part of the Netherlands received the screening instrument 'Werkwijzer' at their home address. The responses to this screening instrument were the basis for the identification of 'at risk' employees (Duijts et al., 2006). These employees received a more extensive baseline questionnaire and were invited to participate in the randomized trial. A more detailed description of the design of the trial is given elsewhere (Duijts, Kant, & Swaen, 2007). For the current study, data from the baseline questionnaire on the 'at risk' study population were used.

Reference groups

The screening instrument for the identification of employees 'at risk' for sickness absence was developed using data from the Maastricht Cohort Study on 'Fatigue at Work'. The instrument was applied to the data of this study to identify employees 'not at risk' for sickness absence (N=5484) and employees 'on sick leave' (N=764), as only baseline characteristics of the 'at risk' employees in the randomized trial were available. Baseline data of both groups were used in the current study.

Measures

The baseline questionnaires from the randomized trial and the Maastricht Cohort Study included items on health, mental health and work related concepts. General health was assessed with one item from the Short Form Health Survey (SF-36) (Ware & Sherbourne, 1992) and with

a Dutch version of the 12 item General Health Questionnaire (GHQ-12) (Goldberg, 1995; Koeter & Ormel, 1991). Anxious mood was assessed with four items: shyness, excessive worrying, compulsive behavior and compulsive thinking (Huibers et al., 2004). Burnout was assessed with two subscales of the Dutch version of the Maslach Burnout Inventory-General Survey (MBI-GS) (Maslach & Jackson, 1986; Schaufeli & Dierendonck, 2000): exhaustion (five items) and professional efficacy (six items). Fatigue was assessed with the 20 item self-reported Checklist Individual Strength (CIS) (Vercoulen et al., 1996; Vercoulen et al., 1994). The CIS covers several aspects of fatigue, such as severity (eight items), concentration (five items), motivation (four items) and physical activity (three items). Work related characteristics were assessed with five subscales of a validated Dutch version of the Job Content Questionnaire (JCQ) (Houtman, 1995; Karasek, 1985): psychological job demands (five items), skill discretion (six items), decision authority (three items), co-worker social support (four items), and supervisor social support (four items). Additional data on perception of work, such as 'job security', 'commitment', 'role ambiguity', and information on 'need for recovery' were gathered with the Dutch Questionnaire on the Perception and Judgment of Work (VBBA) (Sluiter, Beek, & Frings-Dresen, 1999; Veldhoven & Meijmen, 1994). Participants were also asked to indicate whether they experienced conflicts with colleagues or conflicts with supervisors.

The preventive coaching intervention

The preventive coaching in question is an existing intervention, which consists of seven to nine one-hour sessions within the course of six months. The intervention has been written down in a coaching protocol. The participating coaches received extensive information on the trial and the protocol. A checklist was specifically developed to make an inventory of the main features of each session and the problems that were addressed. The coach completed a checklist after each coaching session. The first session was an introductory interview. Main goal of this session was to discuss practicable personal and coaching objectives and to formulate an overall problem. When phrasing this problem, several issues were examined, e.g. why is it a problem; for whom is it a problem; what causes the problem; and is it possible to solve the problem? At the end of this first session, the employee had to be committed to attend the whole preventive coaching intervention. The second session was a three-way consultation, involving the employee, the related supervisor and the coach. Before the start of the trial, all supervisors of the participating companies were informed about the screening, the coaching and their potential role in this intervention. When an employee completed the introductory session and declared to be committed to the whole program, the related supervisor received an informative letter in which an invitation for partaking in the three-way consultation was extended and the significance of this input was explained. In this first three-way consultation, the main objective was setting up a plan in which the coaching intervention was geared to the involved employee. After completing the coaching intervention, this plan could be used as a prompt for both employee and employer to adhere to, when additional issues arise. The next four to six sessions were individual meetings between employee and coach. Underlying behavioural characteristics of the employee were identified, objectives for the session were determined, and methodologies and instruments related to preventive coaching were applied to initiate behavioural changes. The program ended with a second three-way consultation, in which the coach, the related supervisor and the employee reassembled to evaluate the overall coaching program. Gained insights and experiences were discussed and future plans were made to support the continuation of the initiated alterations in the

workplace setting. Meetings to exchange experiences between coaches were organized every two months throughout the trial, under the supervision of the responsible researcher (SD).

Analyses

Descriptive analyses were used to compare the characteristics of the 'at risk' study population with the two reference groups. Identical concepts in the baseline questionnaires of the randomized trial and the Maastricht Cohort Study were inventoried, and response options were dichotomized. For each population, responses on the various items of the included concepts were explored and summary percentages for the aggregated response categories were calculated. As regards preventive coaching, information on the adherence to the structure and protocol of the intervention was gathered by means of checklists. Both conceptual issues, such as the possibility of defining a coaching problem, and organizational issues, such as the willingness of the supervisor to participate, were inventoried. Further, the identified problems and behavioural characteristics of employees, objectives and used coaching instruments were assessed. Concepts within the range of defined problems were identified. Similarities between characteristics of the study population and the components of the coaching program were described.

Results

Characteristics of study population and reference groups

To indicate the appropriateness of the preventive coaching intervention, characteristics of the 'at risk' study population (N=151), and the reference groups 'not at risk' (N=5484) and 'on sick leave' (N=764) were compared (Table 1a and 1b).

Identical concepts in the baseline questionnaires of the randomized trial and the Maastricht Cohort Study were 'general health', 'burnout', 'fatigue', 'work content', 'perception of work' and 'need for recovery'. Employees 'at risk' for sickness absence reported worse general health than employees 'not at risk' for sickness absence. Additionally, general health of employees 'on sick leave' was classified 'bad' by almost half of these subjects. There are considerable differences between the three populations as regards the scores on the General Health Questionnaire, e.g. 50% of the employees 'at risk' and 'on sick leave' are feeling stressed, in comparison with about 30% of the employees 'not at risk' for sickness absence, and more than half of the employees 'at risk' and 'on sick leave' are unhappy and depressed compared to barely 14% of the employees 'not at risk'. Regarding 'burnout' and 'fatigue', there is a recognizable trend between the 'not at risk', 'at risk' and the 'sick leave' populations. For example, almost 13% of the 'not at risk' population indicates that a whole day of work is a burden, as opposed to 30% of the 'at risk' population and nearly 45% of the employees 'on sick leave'. Also, 28% of the 'not at risk' group reveals to feel tired, as opposed to 60% of the 'at risk' group and 55% of the employees 'on sick leave' (Table 1a).

Regarding the work related characteristics, substantial differences between the three groups are present as well. For example, both the 'at risk' population and the employees 'on sick leave' reported to have less supervisor support than the employees 'not at risk' for sickness absence. Also, more conflicts with their superior and colleagues are indicated by the 'at risk' and 'sick leave' population. Further, the 'at risk' employees indicate to have indefinite responsibilities and to have more troubles recovering after work than the 'not at risk' population (Table 1b).

Table 1a Comparison of the 'at risk' study population with two reference groups on (mental) health related characteristics

Employee characteristics	Reference group * 'not at risk' (N=5484)	Study population † 'at risk' (N=151)	Reference group ‡ 'sick leave' (N=764)
(Mental) health related characteristics	Yes (%)	Yes (%)	Yes (%)
General health is (very) good	91.8	81.4	52.7
Lost much sleep	15.3	40.4	44.7
Under stress	29.3	51.0	48.7
Able to concentrate	88.3	67.5	49.4
Playing useful part	90.5	74.8	55.5
Face up to problems	95.2	90.7	72.1
Capable of making decisions	94.7	83.5	69.3
Could not overcome difficulties	89.5	64.8	56.8
Feeling reasonably happy	88.2	56.3	52.2
Enjoy normal activities	85.5	66.2	57.0
Feeling unhappy and depressed	13.8	57.6	47.7
Losing confidence in self	6.2	21.2	34.3
Thinking of self as worthless	4.0	10.6	27.9
Being shy amongst others	5.0	5.3	9.1
Extremely worried	7.3	15.3	20.5
Compulsive behaviour	5.6	6.0	18.6
Compulsive thinking	10.5	20.5	31.6
Burnout	Yes (%)	Yes (%)	Yes (%)
Mentally exhausted	29.3	39.1	44.0
Able to handle problems	92.7	91.3	79.5
Whole day work is a burden	12.7	27.8	43.9
Positive contribution to organisation	87.4	74.2	71.2
Burned out by work	12.9	31.8	41.1
Doing a good job at work	98.0	96.1	97.1
Empty feeling at the end of work day	23.9	44.4	50.1
Happy when finishing something at work	91.2	64.9	77.8
Tired facing another day	13.4	38.5	42.3
Accomplished valuable goals	67.3	70.1	47.9
Self confident at work	85.8	70.8	72.8
Fatigue	Yes (%)	Yes (%)	Yes (%)
I feel fit	74.7	59.6	28.9
I feel very active	70.9	59.6	31.7
Thinking requires effort	15.8	24.5	30.5
Physically I feel exhausted	17.5	50.4	46.7
I feel like doing all kind of nice things	73.7	69.6	50.1
I feel tired	28.6	60.2	55.0
I do quite a lot within a day	79.8	79.5	55.6
When I am doing something, I can concentrate very well	85.9	73.4	58.5
I feel weak	13.4	33.8	40.2
I don't do much during the day	8.5	21.2	26.8
I can concentrate well	84.4	75.5	53.6
I feel rested	57.9	35.0	25.8
I have trouble concentrating	15.5	28.5	36.3
Physically I am in a bad condition	17.3	42.4	52.1
I am full of plans	73.0	68.9	52.2
I am tired very quickly	19.0	53.0	54.1
I have a low output	8.9	16.5	30.6
I feel no desire to do anything	15.4	32.5	39.0
My thoughts easily wander	20.6	42.3	42.6
Physically I feel in a good shape	61.7	43.1	24.9

* The 'not at risk' group is identified by applying the screening instrument on data of the Maastricht Cohort Study;
† The study population is identified in the randomized trial; ‡ The 'sick leave' group is identified in the Maastricht Cohort Study.

Table 1b Comparison of the 'at risk' study population with two reference groups on work related characteristics

Employee characteristics	Reference group * 'not at risk' (N=5484)	Study population † 'at risk' (N=151)	Reference group ‡ 'sick leave' (N=764)
Work related characteristics	Agree (%)	Agree (%)	Agree (%)
My job requires that I learn new things	92.7	82.8	85.8
My job involves a lot of repetitive work	48.2	53.7	65.2
My job requires me to be creative	90.2	82.8	78.4
My job allows me to make a lot of decisions on my own	84.5	77.5	67.1
My job requires a high level of skill	90.8	80.2	85.6
I am not given a lot of freedom to decide how I do my work	24.4	14.6	30.8
I get to do a variety of things on my job	89.8	82.8	78.8
I have a lot to say about what happens on my job	72.9	67.6	53.9
I have an opportunity to develop my own special abilities	82.8	68.8	67.8
Job requires working very fast	70.8	74.2	76.2
Job requires working very hard	72.4	78.8	73.0
I am not asked to do an excessive amount of work	30.6	40.4	21.8
I have enough time to get the job done	46.0	47.7	40.7
I am free from conflicting demands others make	64.3	70.8	54.8
Job requires long and intense concentration	72.8	70.9	78.1
Tasks are frequently interrupted before I finish them	62.7	65.6	56.7
I have a hectic job	41.9	47.1	56.9
I frequently have to wait on others before I can finish my work	34.7	28.4	42.3
My supervisor is concerned about the welfare of those under him	71.8	63.5	56.4
My supervisor pays attention to what you are saying	78.9	72.8	61.4
My supervisor is helpful in getting the job done	47.9	46.4	37.5
My supervisor is successful in getting people to work together	64.6	51.0	54.8
People I work with are competent in doing their jobs	91.6	88.7	88.8
People I work with take a personal interest in me	84.9	85.5	77.7
People I work with are friendly	96.4	96.7	91.7
People I work with are helpful in getting the job done	78.8	74.5	72.2
Perception of work	Yes (%)	Yes (%)	Yes (%)
Enough career possibilities	57.5	38.4	41.1
Committed to the organisation	85.8	58.9	73.8
Committed to stay for a few years	45.1	78.1	45.0
Conflicts with colleagues	6.6	11.9	11.5
Conflicts with supervisor	8.3	15.9	19.2
Responsibilities are clear	85.3	73.5	83.0
Job specification is clear	75.7	74.8	76.2
Need for recovery	Yes (%)	Yes (%)	Yes (%)
I find it hard to relax at the end of a working day	20.1	49.0	47.3
At the end of a working day I am really feeling worn-out	33.3	62.3	62.2
My job causes me to feel rather exhausted at the end of a day	36.8	62.3	59.4
Generally speaking, I am still feeling fresh after supper	57.4	31.8	29.8
Generally speaking, I am able to relax only on a second day off	28.4	58.3	52.5
I have trouble concentrating in the hours off after a working day	17.6	43.0	40.6
I find it hard to show interest in other people after work	27.0	42.4	43.2
Generally, it takes me over an hour to feel recovered after work	37.6	62.3	60.9
When I get home, people should leave me alone for some time	41.7	58.3	60.3
After a working day, I am too tired to start other activities	31.0	62.3	58.0
During the last part of the working day, I can't optimally perform	16.3	26.5	38.4

* The 'not at risk' group is identified by applying the screening instrument on data of the Maastricht Cohort Study;
† The study population is identified in the randomized trial.‡ The 'sick leave' group is identified in the Maastricht Cohort Study.

Information from the checklists

Details on conceptual and organizational issues of the coaching protocol are described in table 2. Of the 76 employees in the intervention group, 51 employees agreed to start the program. Of these, 14 were not committed to continue after the first session, and 37 completed the whole coaching program. Only with regard to the first session, details are given on both the early dropouts and those who completed the whole intervention (Table 2).

Table 2 Details on conceptual and organizational issues of the preventive coaching protocol

	Whole program	Early dropouts
Number of employees	37	14
Mean number of sessions	8.5	1
First session	N (%)	N (%)
Employee's particulars inventoried	37 (100)	14 (100)
Details related supervisor inventoried	37 (100)	3 (21)
Employee surprised by invitation	6 (16)	4 (29)
Significant coaching problem existed beforehand	14 (38)	0 (0)
Answers on screening instrument resulted in defining problem	37 (100)	5 (36)
Significance of coaching intervention was recognized	37 (100)	4 (29)
Coaching objectives were clear	37 (100)	7 (50)
Acquainted with participation of related supervisor	37 (100)	14 (100)
Committed to attend the whole coaching intervention	37 (100)	0 (0)
Second session (first three way consultation)	Whole program	
Related supervisor is motivated to participate	34 (92)	
Supervisor is surprised that this specific employee is invited	7 (19)	
Experiences from first session are communicated to supervisor	37 (100)	
Personal and organizational objectives were geared to one another	33 (89)	
Consensus on the main coaching problem exists	37 (100)	
Division of roles between the three partakers was elucidated	33 (89)	
Agreements upon future communication were made	33 (89)	
A overall plan for the coaching intervention was made	33 (89)	
Individual sessions	Mean of 6 sessions	
Main coaching problems and subordinate issues were explored	32 (86)	
Behavioural characteristics of the employee were identified	25 (68)	
Objectives for the session were determined	28 (76)	
Methodologies and instruments related to coaching were applied	37 (100)	
Objective for individual session achieved (yes-in part-no)	12(33)-16(43)-9(24)	
Last session (second three way consultation)	Whole program	
Gained insights and experiences were discussed	23 (62)	
Future plans for continuation were made	23 (62)	

Next to the details on the coaching protocol, information on the defined problems, behavioural characteristics of the employees, objectives and applied coaching instruments was gathered. The most frequently reported problems by the employees can roughly be classified into three concepts, i.e. work related problems, personal issues and the combination of both. Regarding the work related category, too much workload, insufficient social support or feedback, indefinite responsibilities, and poor communication at work were important problems. As regards the personal issues, low self-esteem, low personal efficacy, disability to concentrate, feeling depressed or fatigued were points of interest. As far as the combination of both categories, an

imbalance between workload and capacity, poor combination of personal and organizational objectives and uncertainties upon functioning were significant issues. Subsequent to the determination of the main coaching problem, behavioural characteristics of the employee, linked to this problem, were inventoried. Frequently recurring features were uncertainty, inflexibility, vulnerability, restlessness, apathy, instability in emotions, nervousness and perfectionism. For each individual session, the coach and employee formulated a coaching objective to pursue in that specific meeting. When the objective was not achieved directly, various sessions were spent accomplishing the issue. Regarding the coaching problem 'too much workload', principal objectives were e.g. indicating limits, establishing priorities and coping. 'Insufficient social support and feedback' was tackled with e.g. taking initiative, improving communication and coping with negative criticism. As regards 'indefinite responsibilities', imperative objectives were e.g. requesting clarity and adhering to ones job specification, and 'poor communication at work' was handled with e.g. gaining insight in the cause of the problem, extending sincerity, coping with conflicts, promoting interactions and exchanging ideas. Coaching objectives for problems in the personal field were e.g. increasing self-awareness, appreciating personal capacities and qualities, avoiding distraction, improving structure, learning to make choices and time-management. With regard to the combination of work related problems and personal issues, objectives were e.g. recovering the energy balance, being aware of the personal position in the organization, asking for feedback and generating stability in the combination of work and family. Finally, the coaches registered information on the checklists about the applied coaching instruments. Useful instruments during the coaching intervention were e.g. self-analysis, exploring role patterns, time-management, role-playing, career planning, analysing the personal life line and relaxation exercises.

Discussion

Appropriateness of preventive coaching

This study presents a qualitative analysis of preventive coaching and it describes the appropriateness of this intervention for employees 'at risk' for sickness absence. Preventive coaching is described as an approach to enhance wellbeing and performance in personal life and work domains, and to improve functioning, achieve goals, and manage stress in non-clinical populations. The underlying principle of the intervention is to assist the individual, by enforcing strengths and reducing weaknesses, to gain a better understanding of underlying behaviour and to manage changes. The coach is not responsible for supplying solutions, but attempts to improve internal reflection. Since preventive coaching is directed at apparently healthy employees, who are not on sick leave, the coaching problems can be interpreted as relatively mild. Accordingly, coaching can be seen as a rather 'healthy' intervention. Further, the involvement of the related supervisor in the coaching program, and the fact that the coaching problems are mainly work-related or a combination of work and personal related issues, demonstrates the occupational nature of this intervention.

The preventive coaching intervention was offered to a specific non-clinical, but 'at risk', study population. Employees were identified as being 'at risk' for sickness absence if they scored above the cut-off point on the developed screening instrument. This instrument consists of predictive items for sickness absence, for both men and women, mostly related to health, mental

health and work related characteristics. Being 'at risk' for sickness absence implied that the employee in question was not on sick leave, but responded positively on several predictive items such as 'having conflicts at work', 'being tired', 'having a burnout', 'having a lack of supervisor support', and 'having troubles concentrating'. Herewith, the 'at risk' employees can be considered as rather healthy subjects with relatively mild work or personal related problems. On the strength of this description, one could say that the 'at risk' study population and the preventive coaching intervention were quite compatible.

Comparison with reference groups

To enable a broad assessment of the 'at risk' study population and both reference groups, concepts from baseline questionnaires of the randomized trial and the Maastricht Cohort Study were explored. When comparing the characteristics of the employees 'at risk' for sickness absence with those 'not at risk' for sickness absence, the health and mental health related concepts are reported more negatively by the former group. The differences in percentages of numerous characteristics, such as 'losing confidence in self', 'capable of making decisions', 'able to concentrate', 'feeling unhappy and depressed' and 'feeling tired', completely validated defined coaching problems, such as low self-esteem, low personal efficacy, disability to concentrate, feeling depressed or fatigued. Further, differences in percentages of work related characteristics, such as 'working very fast and hard', 'attention from supervisor', 'clear responsibilities' and 'conflicts at work', supported formulated coaching problems, such as too much workload, insufficient social support, indefinite responsibilities, and poor communication at work. Overall, hardly any differences in characteristics between 'at risk' and 'not at risk' employees were recognized that were not subject of discussion in the preventive coaching intervention.

The contrast between employees 'at risk' for sickness absence and employees 'on sick leave' was less obvious, i.e. the percentages of the latter group were equivalent or even worse than those of the former. Notwithstanding the main difference between these two groups, i.e. presence at work, the resemblances were significant. This supports the idea that the characteristics of the 'at risk' employees are potential aspects to deal with, through interventions, in the workplace setting. And, it confirms the appropriateness of coaching as an early intervention in 'at risk' employees to prevent sickness absence.

Recommendations and conclusions

The results of this study show that preventive coaching is an appropriate intervention for employees 'at risk' for sickness absence. That is, the characteristics of these employees are compatible with the components of the intervention. Differences in numerous (mental) health and work related characteristics, between the 'at risk' study population and employees from the reference groups, completely corresponded with defined coaching problems of the participating employees. Assessing the compatibility between features of the study population and components of the intervention contributes to the knowledge on suitability of preventive interventions in the occupational health field. For both employers and policymakers, this non-clinical approach provides leads to manage work and personal related problems of employees, to enhance their general wellbeing and to prevent sick leave.

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