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General introduction

Chapter 1

1.1 CHALLENGES DUE TO CHANGING DEMOGRAPHICS

Although the current economic crisis is camouflaging the implications, the labour market is about to undergo drastic demographic changes. The baby boom generation born between 1946 and 1970 is responsible for the strong increase in the number of people aged 65 years and up. In the Netherlands, the number of people aged 65 years and up is expected to be 4.5 million in 2040, whereas, presently (2013), that number is 2.4 million. The number of people in the potential workforce (aged 20 to 64 years) is forecasted to decrease with almost a million, to 9.2 million in 2040. When labour participation remains the same, this will lead a shortage on the labour market (1). In addition, a qualitative shortage is expected in which the qualifications requested do not match those available, adding to the reduction of those available for gainful employment. Anticipating on the reduction of those working versus those on retirement, and financial consequences, in 2012, the Dutch government has decided to gradually increase the official age for benefits according to the state old age pensions act, to 67 in the year 2021 (2). To be able to prolong labour participation, a good health of the workforce is essential. Worksite health promotion could be one of the strategies to sustain a good health of the workforce, and thereby prolonged labour participation.

1.2 CHALLENGES DUE TO CHANGES IN WORK

To sustain health of the workforce, work characteristics and its health consequences should be considered. Over the past decades, in most sectors in Western countries, the nature of work has changed in content, organization, management and intensity. For example, there has been an increase in non-routine work and knowledge work (3). These changes have taken place under the influence of increasing technological innovation, especially digitalisation. The labour market has also changed alongside. Due to globalisation, competition and flexibility have increased, for both employees and employers (3).

Mental health challenges

In many ways, the aforementioned changes in work and the labour market may have negative consequences for mental health. For example, the increase in efficiency and competition at work leads to an increase in work pace, job demands and job insecurity. High work pace, high job demands, and job insecurity are associated with impairment of mental health (4-6). However, in as many ways, work may also be good for mental health, as it provides psychological development, time structure, social contacts, a purpose in life and it increases self-esteem and quality of life (7;8).

Impaired mental health has serious consequences at the worksite. In the Netherlands, it is the leading cause of work disability (47% of all cases), and for women and certain age groups, it is the main cause of sickness absenteeism from work (9). These consequences are not limited to the Netherlands; it is the second most frequent cause of sickness absenteeism from work in Europe (8;10) and one of the main causes of work disability worldwide (8). In their turn, sickness absenteeism and work disability have negative economic consequences, for example for organisations due to associated productivity loss, and for the government and/or health insurance companies due to increased costs (11). Yet, it can also be reversely stated in a positive way; namely that because of the increasing importance of mental capabilities for work performance, good mental health has become one of the most important resources (i.e. 'mental capital') for organisations (3).

The concept of work engagement

The increased importance of good mental health for work, combined with a renewed focus on positive organisational psychology has led to the development of positive concepts in both research and practice (12-14). A key concept that has been developed is work engagement (15). Work engagement is defined as 'a positive, fulfilling, and work-related state of mind that is characterized by vigour, dedication, and absorption' (16). Although work characteristics, in terms of job resources and demands, are important factors for work engagement (16), personal resources explain why individuals respond differently to the same work characteristics (12;13;17).

Conceptually, work engagement can be compared to happiness or subjective well-being in the work domain (12;13). Work engagement has been found to be associated with numerous of positive (mental) health outcomes and work outcomes, such as work performance (see 18, for an overview). Altogether, promoting work engagement in employees could be considered beneficial, not only because promoting subjective well-being in the work domain is a goal in itself (19), but also because it is assumed to be profitable for employers and society.

Lifestyle challenges

Besides more mentally demanding, work has become less physically demanding, and more sedentary over the past decades. It has been shown that office workers sit for about 80% of the working day (20;21). Literature shows that physical inactivity and sedentary behaviour are (both joint and independently) related to the risk of obesity (e.g. 22;23) which means that the current nature of work can be considered an obvious risk factor for developing overweight and obesity (24). Presently (2013), about 41% of the entire Dutch population is estimated to be overweight, and about 10% is obese (25). Overweight and obesity are associated with an increased risk of morbidity and reduced life expectancy (26). Obesity also has serious consequences for the worksite. It is related to preterm exit from work, as it increases the risk of disability pension with 50% (27). In addition, obesity is related to increased sickness absenteeism and productivity loss (28;29).

The development of overweight and obesity is the result of a complex interaction of social, economic, environmental and behavioural factors, on a background of genetic susceptibility. Notwithstanding, overweight and obesity as a result of gradual body weight gain basically reflect an imbalance between energy intake (i.e. dietary behaviour) and expenditure (i.e. physical activity) (30). Therefore, in addition to physical (in) activity and sedentary behaviour, dietary behaviour should be considered when preventing further weight gain and overweight and obesity.

The aforementioned lifestyle behaviours are also independently (independent from weight status) related to public and occupational health outcomes. For example, physical inactivity and sedentary behaviour have shown to be directly associated with multiple adverse health outcomes and all-cause mortality (e.g. 31-33). In addition, healthy lifestyle behaviours such as physical activity and fruit and vegetable intake have been found to be associated independently with sickness absenteeism and productivity loss (28). Hence, addressing lifestyle behaviours in worksite health promotion is a promising strategy in the battle against the obesity epidemic, but because of the direct relation to public and occupational health outcomes, addressing lifestyle behaviours is also potentially beneficial in itself for companies and society.

1.3 OPPORTUNITIES IN WORKSITE HEALTH PROMOTION

Opportunities for worksite health promotion in general

Worksite health promotion has become more common over the past years and is expected to increase in importance in the near future. In addition, the WHO (8) has indicated that the worksite is one of the priority settings for health promotion in the 21st century. The potential reach and social network of the worksite result in high expectations of health promotion in this setting (8;34).

Opportunities for mental health in worksite health promotion

A systematic review of 15 studies concluded that worksite interventions aimed at positive mental health outcomes were promising (35). However, a meta-analysis of positive psychology interventions could include not more than one study that explored effectiveness of a worksite intervention in a high quality design (a randomised controlled trial) (36). Hence, studying positive mental health outcomes of worksite interventions in high quality designs is of relevance.

Opportunities for lifestyle behaviours in worksite health promotion

Worksite health promotion interventions targeting physical activity have been shown to increase physical activity levels (37;38). A recent review showed limited to moderate evidence for a favourable effect of worksite health promotion interventions

aimed at dietary behaviour (39). However, the majority of studies evaluating worksite health promotion interventions aimed at physical activity and dietary behaviour, lack methodological rigour (37;39). To date, evidence on worksite health promotion interventions aimed at reducing and breaking up sedentary behaviour is lacking (40). High quality randomised controlled trials on feasibility and effectiveness of worksite health promotions interventions aiming at physical activity, dietary and sedentary behaviour are thus needed.

1.4 ETHICAL CHALLENGES IN WORKSITE HEALTH PROMOTION

Next to these opportunities, the worksite is also a complicated setting for health promotion. Firstly, because the worksite is not primarily intended for promoting health of employees, but for working (41). Secondly, the relationship between employer and employee is a dependency-relationship. This relationship has been reported to be potentially problematic for obesity prevention, because of privacy and autonomy issues (42-44). Furthermore, it has been established that for employees, ethical considerations play a role in participation in worksite health promotion (34). Employer and employee are not the only stakeholders involved in worksite health promotion, there may be also a role for labour unions, occupational physicians, insurance companies, government, providers, and research institutes (45). Despite the increase in occurrence of worksite health promotion, little is known on its ethical issues. Insight in these issues could contribute to an ethically sound practice of worksite health promotion.

1.5 OBJECTIVES AND OUTLINE OF THIS THESIS

Addressing challenges and opportunities in worksite health promotion, arising from this introduction, this thesis has three main objectives:

- 1) developing a worksite health promotion intervention
- 2) evaluating a worksite health promotion intervention
- 3) exploring ethical considerations of worksite health promotion.

Objective 1

Chapter 2 describes the systematic development of a worksite health promotion intervention -named the Mindful VIP intervention-, targeted to the needs of the study population. The intervention was aimed at both mental health outcomes and lifestyle outcomes. Related to the development of the intervention, associations between physical activity and work engagement, and between physical activity and mental health were explored (Chapter 3).

Objective 2

The Mindful VIP intervention was evaluated on 4 different aspects:

- a) the process of implementation of the Mindful VIP intervention, by applying a mixed methods approach (Chapter 4),
- b) the effectiveness of the Mindful VIP intervention on work engagement and other mental health-related outcomes in a randomised controlled trial (Chapter 5),
- c) the effectiveness of the Mindful VIP intervention on lifestyle behaviours (such as physical activity) in a randomised controlled trial (Chapter 6),
- d) the economic evaluation of the Mindful VIP intervention, alongside the randomised controlled trial (Chapter 7).

Objective 3

Chapter 8 describes ethical considerations of worksite health promotion, which were explored in focus group discussions with stakeholders (employees, employers, labour unions, occupational physicians, health and income insurance companies,

research and knowledge institutes, providers of health promotion activities, and the government). Finally, in the general discussion (Chapter 9), Chapters 2 to 8 are recapitulated and findings are interpreted. In addition, methodological, practical and ethical considerations are discussed. Furthermore, implications and recommendations for research and practice are proposed. Chapter 9 concludes with an overview of what this thesis adds.

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