

Siw Tone Innstrand

Work/home conflict and facilitation: COR(e) relations

A longitudinal study on work-home interaction
in different occupational groups in Norway

Thesis for the degree of Philosophiae Doctor

Trondheim, December 2009

Norwegian University of Science and Technology
Faculty of Social Sciences and Technology Management
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 **NTNU**
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To my mother

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Acknowledgements

The inspiration to this thesis came during the work on my master thesis about burnout that I finished in 2000. Burnout is assumed to be related to chronic stress at work. However, I felt that just narrowing precursors to burnout to the work life was too simplistic as the borders between work and home life seems to be more permeable than ever for most workers in contemporary societies. We are whole human beings, affected by both our home and work life. This became the starting point to an exiting journey in the science of work-home interaction and a four-year doctoral project in Health Science at the Norwegian University of Science and Technology (NTNU). I am very grateful to the University for providing financial support and giving me the opportunity to explore this phenomenon in depth.

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Summary

Changes in family structure, work context, and the composition of the work force mean a host of new challenges for both men and women as they struggle to cope with the often competing pressures of work demands and personal responsibilities. However, multiple roles might also provide arenas for joy and personal growth. In contemporary societies, work and home constitute two of the most important domains in life. Knowledge of how these domains interact has profound implications for individuals, organizations, and the society.

This thesis studies both the direction of this interaction (work-to-home vs. home-to-work) and type of effect (conflict vs. facilitation). Building upon Hobfoll's (1989) Conservation of Resources (COR) theory, it examines how individual,- (gender and job performance-based self-esteem), family,- (family structure), and organizational,- (workload and autonomy) factors, and health (burnout) relate to work-home interaction (WHI). Using a sample of employees from eight occupational groups in Norway, the thesis aims to explore the nature of WHI, who is affected, and what its consequences may be.

The findings support the four-factorial structure of WHI. Overall, being female, emotionally exhausted, having a strong sense of job performance-based self-esteem, experiencing excessive workload, and being a parent are characteristics associated with more conflict. Conversely, being female, perceiving high autonomy at work, and being part of a childless couple are characteristics associated with more facilitation. The longitudinal analysis indicates that some of these associations are reciprocally related. Thus, WHI can act as both precursor and outcome simultaneously. A particularly noticeable finding was the buffering effect of work-to-home facilitation on burnout. Similarly, although a problem in itself, disengagement seems to prevent work-to-home conflict. Methodological and theoretical implications of the findings are discussed. It is argued that as long as work and family/home are the two most important life domains in contemporary societies, a more profound understanding of the factors that affect health and well-being needs to be found in the relationship between work and home.

Abbreviations

CFA	= Confirmatory Factor Analyses
CFI	= Comparative Fit Index
COR	= Conservation of Resources
GFI	= Goodness-of-Fit Index
JPB-SE	= Job Performance-Based Self-Esteem
LISREL	= Linear Structural Relationship
N/n	= number of
NNFI	= Non-Normed Fit Index
OLBI	= Oldenburg Burnout Inventory
RMSEA	= Root Mean Square Error of Approximation
SEM	= Structural Equation Modelling
SN	= Statistics Norway
T1	= Time 1 (first wave)
T2	= Time 2 (second wave)
WFI	= Work-Family Interaction
WHI	= Work-Home Interaction

List of papers

This thesis is based on the following four papers, which will be referred to in the text by their Roman numerals.

I. Innstrand, S. T., Langballe, E. M., Falkum, E., Espnes, G. A., & Aasland, O. G. (2009). Gender specific perceptions of four dimensions of the work/family interaction. *Journal of Career Assessment*, Vol. 17(4), 402-416.

II. Innstrand, S. T., Langballe, E. M., Espnes, G. A., Falkum, E., & Aasland, O. G. (2008). Positive and negative work-family interaction and burnout: A longitudinal study of reciprocal relations. *Work & Stress*, 22, 1-15.

III. Innstrand, S. T., Langballe, E. M., Espnes, G. A., Aasland, O. G., & Falkum, E. Personal vulnerability and work-home interaction: The effect of job performance-based self-esteem on work/home conflict and facilitation. *Submitted*

IV. Innstrand, S. T., Langballe, E. M., Espnes, G. A., Aasland, O. G., & Falkum, E. Work/home conflict and facilitation across four different family structures in Norway. *Community, Work and Family*; accepted for publication.

Introduction

Health is not bought with a chemist's pill
Nor saved by the surgeon's knife
Health is not the absence of ill
But the fight for the fullness of life

Piet Hein.

This poem by Piet Hein coincides with the World Health Organization (WHO) definition of health: "*Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*" (Preamble to the Constitution of the World Health Organization, 1946). The WHO defines health not only in physical terms, as the absence of disease and infirmity, but includes mental and social dimensions as well. Work and family/home life constitute the dominant life roles for most employed adults in contemporary society. How people preserve these roles and handle the interaction between them may have several different impacts on health (for a review, see Allen, Herst, Bruck, & Sutton, 2000). A recent study among male and female physicians indicates that work-home interaction plays a role above and beyond both individual factors and work-related factors in determining the level of experienced burnout (Langballe, Innstrand, Aasland, & Falkum, 2009).

Work-home conflict is an important concern for individuals, organizations and society because it is related to negative consequences like impaired health, absenteeism, job turnover, and use of health services (Allen et al., 2000; Carr, Boyar, & Gregory, 2008; Duxbury & Higgins, 2001; Duxbury, Higgins, & Johnson, 1999; Frone, 2000; Väänänen et al., 2008), and even influence on partner well-being (Bakker, Demerouti, & Dollard, 2008; Dijkers, Geurts, Kinnunen, Kompier, & Taris, 2007). Conversely, researchers have begun to recognize the positive aspects of the interaction, as recent studies have found work-home facilitation to be related to favourable outcomes like improved well-being, affective commitment, less depression and turnover intentions, motivation and productivity (Allis & O'Driscoll, 2008; Hammer et al., 2005; Hill, et al., 2007; Wayne, Randel, & Stevens, 2006). However, to date, systematic research on potential outcomes of facilitation is still lacking (O'Driscoll, Brough, & Kalliath, 2009).

A cross-cultural study by Spector et al. (2004) showed that work/family conflict was universally reported among workers in Asian, Latin American, and Anglo countries. However, comparing work-family conflict in the Netherlands, Sweden and the UK, Cousins and Tang (2004) found that despite the establishment of gender equality and work-family reconciliation policies in Sweden, higher proportions of both mothers and fathers reported high levels of conflict between their work and family lives compared to the two other countries. Work-family issues are central in Sweden, and the majority of workers report work/non-work imbalance, rather than balance (Johansson, 2002). Research of work-home interaction in Norway is scarce. It is important to learn more about both the dysfunctional, negative consequences as well as the beneficial outcomes of the interrelationship between work and home life in a Norwegian setting.

Societal background and trends

The family, work context, and the composition of the work force have changed considerably during the last decades in Norway, as in the rest of the Western countries. These changes profoundly affect work-home interaction. One of the major changes in the post-war period has been the dramatic entry of women into the labour force (Roos, Trigg, & Hartman, 2006). In Norway, women account for 47% of the workforce (Kristiansen, Flatebø, & Modig, 2006). The increased number of employed women has contributed to a shift from a male-breadwinner to a dual-earner household, i.e. both men and women face responsibilities at work *and* at home. Another change in the composition of the workforce affecting work and family is the increased proportion of educated employees. Three times as many Norwegians now have a university or college degree, compared to the 1970 figure, and just as many women as men have a higher education (Kristiansen et al., 2006). Parallel to the growth in educational and career options, the average childbearing age has increased by approximately four years to 30.3 years since the early 1970s (Kristiansen & Sandnes, 2006).

Additionally, a rapidly growing segment of the workforce is that of the “knowledge worker,” operating in the areas of product development, business consultation, and information systems (Parker, Wall, & Cordery, 2001). Developments in information technology have had major implications for the way work is conducted and where. Norway, like the other Nordic countries, is at the forefront when it comes to access to and use of ICT equipment, e.g. internet access. This is also the case for the use of personal computers at home and for the use of mobile phones (Kristiansen et al., 2006). Workplace flexibility,

defined as “the ability of workers to make choices influencing when, where, and for how long they engage in work-related tasks” (Hill, Grzywacz et al., 2008, p. 152) has been related to both health (Grzywacz, Carlson, & Shulkin, 2008) and work/family issues (Hill, Jacob et al., 2008).

Whereas the post-war period was the great era of the nuclear family, there has been a shift in the family structure from the beginning of the 1970s, with fewer marriages and increasing divorce rates (Nielsen, 2008). This development has resulted in a doubling of the number of one-person households - 38% altogether (Kristiansen et al., 2006). A study by Jacobs and Gerson (2001) suggests that it is the composition of the family with more dual-earner couples and single-parent households, rather than changes in the length of the work-week per se, that has created concern for the work-family balance. Thus, it may be the decline in support from home that gives rise to the feeling of less time and hence, work-family conflict.

These trends indicate that the current frames of work/family interaction are quite different from the frames that prevailed when the major role theories were developed. For example, the classical hypothesis linking work and home life has been criticized for being gender biased, as it was derived from research on work conceived on the basis of men’s experiences and the notion of the male breadwinner (Lambert, 1990). A comprehensive review by Allen et al. (2000) indicates a greater desire for balance between work and family lives in contemporary societies. Quality of life seems to be more easily affected by violations of this balance. By investigating consequences of structural shifts in the family and work lives of managerial women, Roos et al. (2006) found that although the family remains highly important, women’s sense of self and personal worth today increasingly depend on work experiences, compared to previous generations. Thus, “work has become a source of social integration, recreation and especially friendship, in addition to economic security” (Roos et al., 2006, p. 209). This statement coincide with findings of nationwide studies in Norway (Lund & Skjåk, 1997) and Denmark (Hoppe, 1998), which indicated that work and leisure are of equal importance. Altogether, these trends suggest that the issue of work and home will be salient in the years to come. Thus, to acquire fullness of life or health, the interaction between these two domains has to be considered.

Empirical and theoretical background

Definitions

Work-family balance

The WHI literature contains two definitions of work-family balance (Frone, 2003). The first and most widely held of them is a “lack of conflict or interference between work and family roles”. In the literature, “conflict” and “interference” are used interchangeably. The most widely cited definition of work-family conflict describes it as

...a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role.

(Greenhaus & Beutell, 1985, p. 77)

As indicated by this definition, and largely supported empirically (e.g. Byron, 2005; Carlson & Frone, 2003), this interference may be bidirectional. Thus, work can interfere with family (work-to-family conflict) and family can interfere with work (family-to-work conflict).

However, consistent with the development of positive psychology (Seligman & Csikszentmihalyi, 2000; Seligman, Steen, Park, & Peterson, 2005), scholars have broadened the focus and started to examine how involvement in one role positively influences the other role. Work can have an independent, positive influence on family life, and family life can have an independent, positive influence on work life (Grzywacz & Marks, 2000). Thus, the second meaning of work-family balance suggests that it is more than lack of conflict, i.e. it may also indicate “the extent to which an individual is equally engaged in – and equally satisfied with- his or her work role and family role” (Greenhaus, Collins, & Shaw, 2003). For example, Greenhaus and Powell’s (2006) empirical study of work-family enrichment suggests that support and resources from one domain can enhance performance in the other domain through both instrumental (i.e. skills and money) and affective (i.e. positive moods and emotions) paths. In the recent literature, constructs representing the positive side of the work-family interface, such as positive spillover, enhancement, facilitation, and enrichment (Carlson, Kacmar, Wayne, & Grzywacz, 2006) are prevalent. In the present thesis, I use the term “facilitation”, which has been defined as

“...occurring when, by virtue of participation in one role (e.g. work), one’s performance or functioning in the other role (e.g. family) is enhanced.”

(Wayne, Musisca, & Fleeson, 2004, p.110).

Work-home interaction

In the literature, the term “work/non-work interface” is used as a global concept referring to the point where “work” and “non-work” meet each other, either in a negative or positive way (Geurts & Demerouti, 2003). Most research on this topic has focused on one specific element of the non-work domain, namely the family. The main reason is that, for many individuals, the family is the major arena of their off-the-job life (Brough & O’Driscoll, 2005). Because employees have a variety of needs and responsibilities beyond those in their nearest family, I have chosen to use the term “work/home” rather than “work/family” in the present thesis. However, in some of the papers that only include respondents with a family (Paper I and Paper II), the term “work/family” is used. Similarly, the term “work/family” is used when it refers to literature using this term. In order to focus on both conflict and facilitation and on the bidirectionality of effects, the term “work-home interaction” (WHI) is used. In this thesis the Demerouti and Geurts (2004) definition of WHI has been broadened by including the resource aspect. Thus, work-home interaction is defined as follows:

A process in which one’s functioning (and behaviour) in one domain (e.g. home) is influenced (positively or negatively) by quantitative or qualitative demands/resources from the other domain (e.g. work).

Linking mechanisms involved in WHI

A variety of linking mechanisms has been proposed to explain the nature of the relationship between work and home life (Edwards & Rothbard, 2000), the most classical of which are *segmentation*, *compensation*, and *spillover* (Lambert, 1990; Zedeck & Mosier, 1990). *Segmentation* refers to the active separation of work and family so that the two domains do not influence one another (Edwards & Rothbard, 2000). Although this separation may result from inherent independence of the spheres, a prevalent view is that it does not occur “naturally,” but through an active attempt by the worker to separate work and family life in order to deal with work-related stress, known as psychological disengagement (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964 in Lambert, 1990). Demerouti and Geurts (2004) found that segmentation was used in one-third of their sample, i.e. work and home were treated as

separate spheres of life. *Compensation* occurs when dissatisfaction in one domain makes a person increase involvement or seek rewards in the other domain (Edwards & Rothbard, 2000). Demerouti and Geurts (2004) found compensation to occur in a group experiencing both positive and negative interaction. The *spillover* concept refers to the effect of work and family on the other domain that makes the two domains similar or that generates similarities between them (e.g. affect, values, skills, or behaviors) (Edwards & Rothbard, 2000). The work/home literature contains empirical evidence that both positive and negative spillover occur (e.g. Byron, 2005; Demerouti & Geurts, 2004; Sumer & Knight, 2001).

Although empirical evidence suggests that all these linking mechanisms exist, they do not provide a conceptual basis for understanding the dynamics of WHI (Frone, 2003; Grandey & Cropanzano, 1999). These mechanisms are used to explain *how* the relationship between work and home life is linked, but they do not explain *why* interference or facilitation occurs. Without a comprehensive understanding of the processes which link work and family life, it is difficult to identify strategies that promote balance, or to adequately evaluate the effectiveness of existing workplace policies (Lambert, 1990). A more integrative and dynamic view of the interaction is needed. Whereas previous studies focused explicitly on the work-home interface (as did the classical hypotheses), more recent empirical studies have derived their conceptual models from more general sociological theories and from general stress models (Geurts & Demerouti, 2003).

However, many of the more prominent stress theories have been criticized for their lack of focus on the positive aspects of stress (Nelson & Simmons, 2003). One exception is the Conservation of Resources (COR) theory (Hobfoll, 1989, 2001) which encompasses several theories of stress, but extends these theories through a resource perspective. COR theory may serve as a heuristic model to WHI research as it addresses how the interaction between work and home comes about, what causes WHI, and the consequences of WHI. In this thesis I use insight from previous WHI research and COR theory to construct an integrative model of WHI and some of its core relations. The model is graphically depicted in Figure 1. It is an elaboration of Hobfoll and Shirom's (2001) COR model of the interplay between home and work stressors, and provides a theoretical framework for the relationships examined in the present thesis. In the following sections, I demonstrate how the model can be applied to WHI research. First, I outline the theory and its general application. Second, I turn to WHI literature and examine how COR theory illuminates this area of research. Hence, the literature presented is restricted to the model and the aim of the thesis.

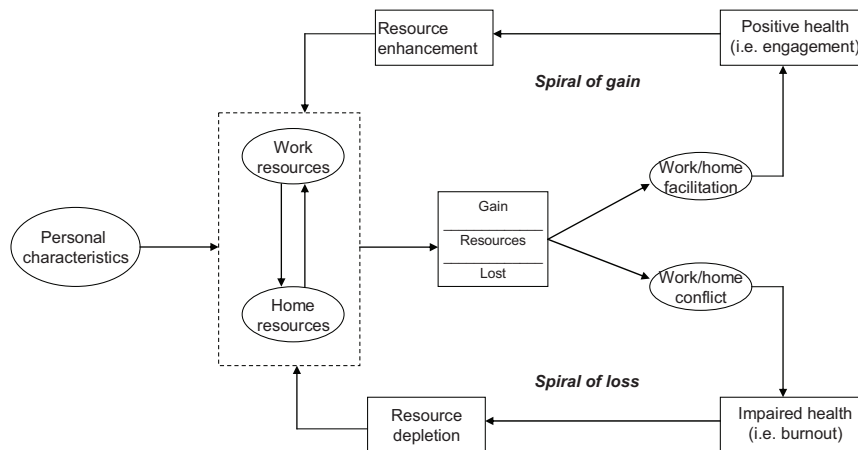


Figure 1. The conservation of resources model of work-home interaction.

Conservation of resources theory applied to WHI

The basic tenet of the COR theory is that people have a deeply-rooted motivation to obtain, retain, and protect what they value, labeled *resources*. Both work and home life comprise a range of resources which are valued and sought after (i.e. see Hobfoll, 2001). The COR theory integrates work and home life through the concept of resources that join these different domains in a common economy in which resources are exchanged (Hobfoll & Freedy, 1993). As indicated by the two separate arrows between work resources and home resources in Figure 1, empirical evidence shows that this exchange is bidirectional but unique in how it operates in each direction (Byron, 2005; Carlson, Kacmar, Wayne, & Grzywacz, 2006; Grzywacz & Marks, 2000; Kinnunen & Mauno, 1998; Montgomery, Peeters, Schaufeli, & Den Ouden, 2003; Peeters, Montgomery, Bakker, & Schaufeli, 2005). Stress or conflict occurs because resources are lost, threatened, or fail to give the anticipated return in the process of juggling both work and home life (Grandey & Cropanzano, 1999). On the other hand, facilitation follows when resources contribute to the exchange of gains between the domains (Hobfoll, 1989; Wayne, Grzywacz, Carlson, & Kacmar, 2007).

Resources are defined as "...those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies" (Hobfoll, 1989, p. 516). The three latter resources are especially relevant for the present thesis. *Objects* are valued through their physical nature or their ability to acquire a secondary status value (Hobfoll, 1989, 1998). *Personal characteristics* are those traits or skills that result from one's orientation to the world (Wayne et al., 2007) and which are regarded as resources to the extent that they aid stress resistance (Hobfoll, 1989). Examples of personal trait resources are self-esteem and self-efficacy, whereas personal skills might be occupational skills, social aplomb, or leadership ability (Hobfoll, 1998). *Conditions* are resources that are valued and sought after, such as marriage and tenure (Hobfoll, 1989), and that are regarded as important to the extent that they promote access to or possession of other resources (Hobfoll, 1998). *Energy* resources are typified in their value in aiding the acquisition of other resources, such as time for work and family and opportunities for advancement. Thus, energy resources can be invested or retained in order to enhance resource acquisition, protect against resource loss, or combat loss cycles once they begin (Hobfoll, 1998). In addition to these resources possessed directly by individuals, *social support* is seen as a resource in that it preserves other types of resources (Hobfoll, 1989).

These resources may be rooted both in the work domain and the home domain. In Figure 1 they are labeled "work resources" and "home resources". Hobfoll (1998, 2001) has identified 74 work-related and non-work-related resources. Examples of work-related resources are "time for work," "stable employment," and "support from co-workers". Non-work-related resources are, for example, "good marriage," "free time," or "time with loved ones". Losses and gains of these resources are important, because in addition to an instrumental value, they also have a symbolic value by defining social identity (Hobfoll, 1989).

The COR model expands upon previous stress models in that it not only describes what individuals do when confronted with stress,¹ but also in the absence of threats. Specifically, when confronted with stress, individuals are predicted by the model to strive to minimize net loss of resources. Significant and ongoing drain of resources may provide a state of chronic stress, such as burnout (Hobfoll & Shirom, 2001). Conversely, when not currently confronted with threats, people strive to develop resource surpluses to offset the possibility of

¹ By stress I mean "the uncomfortable cognitive state resulting from exposure to a stressor that can result in psychological and physiological strain" (Hendrix, Summer, Leap, & Steel, 1995, p. 75).

future loss. When people develop resource surpluses, they are likely to experience positive well-being and health.

Resources are not distributed equally, however, and the COR theory postulates that those with the most resources are less vulnerable to resource loss and more capable of resource gain. For example, a strong social network (partner, friends) provides social support and a safety net when strain occurs. This implies that those who lack strong resource pools are more likely to experience spirals of resource loss; initial loss begets further loss. Similarly, those with a strong resource pool are more likely to experience spirals of resource gain. Initial resource gain begets further resource gain (Hobfoll, 1998).

- **Personal characteristics and WHI**

Some researchers have changed the focus from asking “What is the relationship?” to “Do people experience the relationship in different ways?” People do not simply respond to work and family settings; rather, they bring unique qualities to the relationship. These personal factors include demographic variables (e.g. gender), basic personality characteristics, and work-related attitudes and values. For example, Carlson (1999) found that a type A personality and a personal tendency towards negative affectivity played a role above and beyond situational variables in determining the level of perceived work-family conflict. Other research on individual differences in relation to work and home interaction has investigated attachment style, extroversion, neuroticism, personal growth, and life role values (Aryee, Srinivas, & Tan, 2005; Carlson & Kacmar, 2000; Grzywacz & Butler, 2005; Sumer & Knight, 2001; Wayne et al., 2004). Recently, Bakker, Demerouti, and Burke (2009) found a positive relationship between workaholism and work-family conflict. Similarly, Wayne et al. (2006) found that work and family identities predicted enrichment (facilitation) above and beyond key situational factors, suggesting the importance of one’s self-concept to work and family experiences.

The COR theory proposes that threat or loss of highly valued personal characteristics may ensue in stress and work/home conflict. For example, prior research indicates that role identification is positively related to time investment in that role (Rothbard & Edwards, 2003), and that highly identified roles are related to more work-home conflict (Adams, King, & King, 1996; Byron, 2005; Frone, Russell, & Cooper, 1992; Olson-Buchanan & Boswell, 2006). However, as demonstrated by the COR theory, personal characteristics are also regarded as resources to the extent that they aid stress resistance (Hobfoll, 1989). Job self-

efficacy is considered to be such a resource (Bandura, 1997; Wood & Bandura, 1989). For example, the findings of Erdwins and colleagues (Erdwins, Buffardi, Casper, & O'Brien, 2001) indicate that a person's perception that he or she works for a supportive organization may enhance feelings of competency and effectiveness in his or her job which, in turn, may reduce conflict between work and family roles.

Another personal characteristic which may relate to one's resources is gender. Despite the increase of women in the work force, women still take on the main responsibilities at home (Kitterød, 2005; Kristiansen & Sandnes, 2006). Even though the gap between the genders in Norway is among the smallest in the world when it comes to economic participation and opportunities, educational attainments, and political empowerment (Hausmann, Tyson, & Zahidi, 2008), there is a gap between principles and practice when it comes to equal opportunities for combining employment and parenthood (Bø, 2008). In a comprehensive review of work and family research, Eby and colleagues (Eby, Casper, Lockwood, Boredeaux, & Brinley, 2005) concluded that gender differences and gender role issues are essential to fully understanding the work-family interface.

- **Job characteristics and WHI**

According to the COR model, as more strain is experienced in one domain, fewer resources are available to fulfill one's role in another domain. Thus, the experience of workload may leave fewer resources available for family demands. Conversely, the COR model posits that those with greater resources are less vulnerable to resource loss and more capable of resource gain (Hobfoll, 1989, 2001). This confers with findings suggesting that job flexibility both reduces work-family conflict and enhances work-family fit and facilitation (Grzywacz & Butler, 2005; Hill, Yang, Hawkins, & Ferris, 2004). Clark (2001) found that employees who reported high work control were more satisfied with both work and family life. Workload and autonomy are examples of energy resources that may aid the acquisition of other resources, such as time for work and family. Some of the most consistent findings in the work/non-work literature highlight a negative relationship between workload (working hours and job demands) and work-family balance, and a positive relationship between job autonomy and work-family balance (Byron, 2005; Geurts & Demerouti, 2003; Voydanoff, 2005).

- **Home characteristics and WHI**

There is convincing evidence that different home characteristics are related to WHI. For example, it has been demonstrated that marital status and the age and number of children living at home relate to conflicts between work and home (Byron, 2005; Erickson, Nichols, & Ritter, 2000; Grandey & Cropanzano, 1999; Gryzwacz & Marks, 2000; Kinnunen, Feldt, Geurts, & Pulkkinen, 2006; Kinnunen & Mauno, 1998; Mattingly & Sayer, 2006; Premeaux, Adkins, & Mossholder, 2007). Similarly, Bergman and colleagues (Bergmann, Ahmad, & Stewart, 2008) found that the more perceived responsibility at home, the higher the evening cortisol levels in both men and women.

In terms of COR theory, marriage and cohabitation are examples of condition resources that are valued and sought after by many people. It relates to conflict if this valued condition is threatened or lost in the juggling of work and home, or through a resource depletion associated with increased responsibility. However, people living with a partner may also have more resources to draw from (i.e. their spouse, more finances). For example, Wayne et al. (2006) found that having a supportive family culture was associated with greater work-family enrichment. Byron's (2005) meta-analysis indicates that married people experience less WHI compared to single parents. Thus, being married or cohabiting may also enable facilitation instrumentally (more resources to draw on or by) or affectively (i.e. positive moods and emotions), as suggested by Greenhaus and Powell (2006).

- **Impaired health (i.e. burnout) and WHI**

Work/family conflict has negative effects on work, home life, and general well-being and health (Allen et al., 2000). For example, Frone (2000) found that employees who report work/family conflict are more likely to experience mental health problems than employees who do not.

One corollary of the COR theory is that individuals must invest resources in order to limit loss of resources, to protect resources, or to gain resources. For example, individuals experiencing stress or conflict in their interaction between work and family may need to increase their investment of time, energy, and trust in those relationships. As illustrated in Figure 1, enduring investments of resources may promote burnout. The COR theory describes burnout as a state of extreme resource depletion (Hobfoll & Shirom, 2001), a conception that was recently supported empirically in a study by Neveu (2007). In the present thesis, burnout is conceptualized and measured by the Oldenburg Burnout Inventory (OLBI; Demerouti,

1999 in Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The OLBI includes two dimensions of burnout: *exhaustion* and *disengagement from work*. Exhaustion is defined as “a consequence of intensive physical, affective, and cognitive strain” (Demerouti et al., 2001, p. 500), resulting from prolonged exposure to certain demands (i.e. work-home conflict). Disengagement refers to “distancing oneself from one’s work, and experiencing negative attitudes toward the work object, work content, or one’s work in general” (Demerouti et al., 2001, p. 501).

Leiter (1990) found that loss of resources related to both work and family predicted burnout six months later. Similarly, Hallsten (2005) demonstrated that those who agreed with the statement that home assignments consumed a lot of energy had higher levels of burnout than those who did not. In a recent study of family involvement and burnout, ten Brummelhuis and colleagues (ten Brummelhuis, van der Lippe, Kluwer, & Flap, 2008) found family involvement to be both enriching and depleting. Thus, whereas family involvement tends to increase energy, resources, and self-esteem, it also requires time and energy.

In a study among police officers in Norway, burnout was a strong predictor of work-family conflict (Mikkelsen & Burke, 2004). This relates to another corollary of the COR theory, suggesting that those who lack resources are not only more vulnerable to resource loss, but initial loss also begets future loss, creating loss spirals (Hobfoll, 1989, 1998, 2001). This proposition has been supported by Demerouti, Bakker, and Bulters (2004), who found work-pressure, work/home conflict, and exhaustion to be reciprocally related in a loss spiral fashion.

- **Positive health (i.e. engagement) and WHI**

Seligman recently introduced the concept of positive health to underline the idea that health may be “a state beyond the mere absence of disease” (p. 3, 2008). The COR theory posits that people strive to develop resource surpluses to offset the possibility of future loss. According to the COR model, such resource surpluses are likely to provide experiences of positive well-being or eustress (Hobfoll, 1998). One of the primary indicators of the eustress response is engagement (Nelson & Simmons, 2003).

The research on job engagement, the positive antithesis of burnout, has taken two different but related paths (Maslach, Schaufeli, & Leiter, 2001). One approach regards engagement as the direct opposite of the three original burnout dimensions (Langballe, Falkum, Innstrand, & Aasland, 2006; Maslach, 1993): exhaustion, cynicism, and lack of professional efficacy. The other approach defines engagement in its own right,

operationalized as vigor, dedication, and absorption. In the OLBI, the exhaustion and disengagement subscales refer to vigor and dedication, respectively (Demerouti & Bakker, 2008). Burnout and engagement are different kinds of employee states which have different antecedents (Schaufeli, Taris, & van Rhenen, 2008). Whereas burnout is particularly related to job demands (Innstrand, Espnes, & Mykletun, 2002) engagement is more related to job resources (Maslach et al., 2001), and particularly, to social support (Schaufeli & Bakker, 2004).

The research focus on engagement is rather new, and studies examining the relationship between engagement and WHI are scarce. One exception is a longitudinal study among Finnish health care personnel which indicates that work-to-family conflicts predict low vigor (Mauno, Kinnunen, & Ruokolainen, 2007). Mauno et al.'s (2007) findings also indicate that balanced, multiple roles have positive effects, as employees with children at home felt more vigor and dedication at work than childless employees.

The COR theory further anticipates that positive experiences or resources are likely to accumulate, creating a positive spiral of resources, which, in turn, is likely to have positive health-promoting effects. Exploring positive gain spirals at work, Hakanen, Perhoniemi, and Toppinen-Tanner (2008) found support for both reciprocal gain spirals (between job resources and work engagement and between personal initiatives and work engagement) and resource caravans (from job resources through work engagement via personal initiatives to work-unit innovativeness). Similarly, Llorens et al. (2007) and Xanthopoulou et al. (2008) demonstrated positive gain spirals between resources and work engagement. Consequently, work/home facilitation may result in a positive spiral of resources as well as in positive health effects.

Aims and research questions

Aims

The aim of the present thesis was to expand our knowledge of work-home interaction (WHI) by examining specific hypotheses on the nature and consequences of WHI derived from the Conservation of Resources (COR) theory. The major objectives were to test the ability of this model to predict and explain the nature of WHI, to identify who is affected, and what the consequences of WHI may be.

Research questions

The research questions are expressed as hypotheses in the four papers enclosed in the thesis.

This thesis consists of four papers with the following research questions:

- 1- What is the factorial structure of WHI? (Paper I)
- 2- Are there gender differences in WHI factor scores? (Paper I)
- 3- How does WHI relate to burnout? (Paper II)
- 4- Are personal vulnerability factors related to WHI? (Paper III)
- 5- Do WHI factor scores differ by family structure? (Paper IV)
- 6- Do the effects of workload and autonomy on WHI differ by family structure? (Paper IV)

Methods

Sample and procedure

This thesis was conducted as part of a two-wave prospective Norwegian cohort study called “A study on burnout in different occupational groups in Norway”. The main aim of the project was to investigate a wide range of research questions related to work and health within and outside the human services. Representative national samples of eight different occupational groups (lawyers, physicians, nurses, teachers, church ministers, bus drivers, and people working in advertisement and information technology) were drawn by Statistics Norway. Descriptions of the different occupational groups are enclosed in Appendix I. For each occupation, a random sample of 1000 persons was drawn from the central Norwegian registers of employees and employment. Equal numbers of males and females were drawn from all occupations except for the population of church ministers, which contained 599 men and 401 women. The description of sampling procedures is enclosed in Appendix II (in Norwegian only).

A comprehensive questionnaire was distributed by mail in October/November 2003 and October/November 2005 (see Appendix III, in Norwegian). All respondents were offered participation in a small lottery for returning the questionnaire. Recent studies indicate that lottery incentives do not alter the selection of respondents (Aadahl & Jørgensen, 2004). Those who responded at Time 1 were asked to participate again at Time 2. Attached to each questionnaire was a cover letter that explained the objective of the survey and assured respondents of the confidentiality of their responses (see Appendices III and IV, in

Norwegian). The data collection was financed by the Research Institute of the Norwegian Medical Association.

Response rate

The overall response rate was 63 percent² in the first wave. The church ministers had the highest response rate (70%), whilst those employed in advertisement had the lowest one (52%). Overall, there was a lower response rate among men in the first wave.

Only those who responded in 2003 and were alive and not hospitalized in 2005 were asked to participate by answering the same questionnaire in the second round (N = 4969). Of these, 3475 (70%) responded. Response rates by gender and occupation are presented in Figure 2.

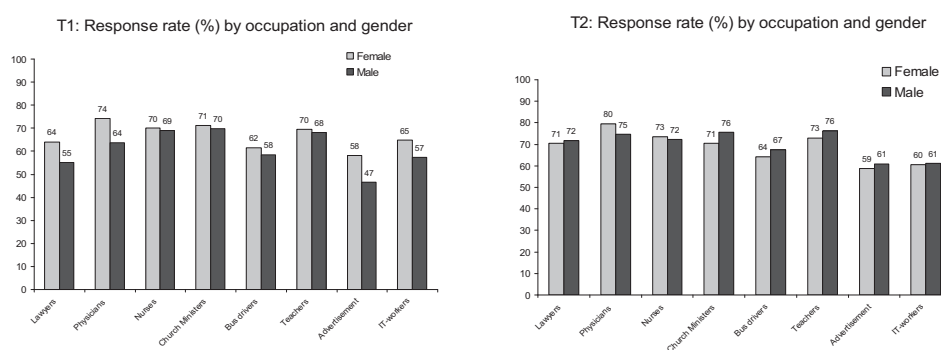


Figure 2. Response rates by gender and occupation.

Note: T1 = Time 1, T2 = Time 2.

Attrition rate

Given the potential impact of selective non-responses on the validity of a study, it is important to examine the non-responses with an eye for positional bias (Taris, 2000). The systematic evaluation of responses and attrition indicates that the sample is representative of the Norwegian populations in each occupation (Wedde, Holmøy, Skaare, & Villund, 2004). Moreover, inspection of the non-response patterns revealed that whereas the average non-

² In Paper II the response rate was reported to be 64%; this should be 63%.

response rate was 36 percent in the first survey, the corresponding figure for the second data collection was 30 percent (see Skaare, 2006). Attrition rates between 30 and 40 percent are quite common (Taris, 2000). A misprint of page 2 and 11 in some of the second round questionnaires may have led to a lower response rate than could be expected. Although information from these missing pages was not used in the present thesis, the non-response rates indicate that generalization should be performed with caution. Appendix V provides an English summary of Statistics Norway's evaluation of sample deviations in each occupation (Skaare, 2006; Wedde et al., 2004).

Measures

As different subsamples are used in the papers, the internal consistencies (Chronbach's alphas) are reported in each paper. The internal consistencies were acceptable in all papers (for a discussion of reliability, see Discussion section, page 33).

Work-home interaction

At the time of the first investigation in 2003, there was only one available measure that had taken the positive side of the work-home interaction into account (Kinnunen et al., 2006). This measure was used in publications (e.g. Aryee et al., 2005; Grzywacz & Bass, 2003; Grzywacz & Marks, 2000; Wayne et al., 2004) based on the National Survey of Midlife Development conducted in the United States (MIDUS) in 1995. It was acquired from a study by Wayne et al., 2004 and translated into Norwegian by the authors. The scale was tested on a small sample prior to the distribution of the questionnaire.

The items describe two directions of influence (work-to-home vs. home-to-work) and two types of effect (conflict vs. facilitation). Sample items are "My job reduces the effort I can give to activities at home" (work-to-home conflict); "Responsibilities at home reduce the effort I can devote to my job" (home-to-work conflict); "The things I do at work help me deal with personal and practical issues at home" (work-to-home facilitation); and "Talking with someone at home helps me deal with problems at work" (home-to-work facilitation).

Some minor changes in the original scale were made to adjust the instrument to Norwegian conditions, language, and the study. A five-point response scale, ranging from *totally disagree* to *totally agree*, was chosen to minimize error due to the application of many different scales. One of the original items describing home-to-work facilitation (item 14;

“Providing for what is needed at home makes you work harder at your job”) was replaced by an item used in a study by Kirchmeyer (1992) and Sumer & Knight (2001) (“My home life develops skills in me that are useful at work”). When the scale was tested prior to the distribution of the questionnaire, all respondents had some difficulties answering this original statement. In previous studies, this item failed to produce significant factor loadings (Aryee et al., 2005), and it has also been excluded by others due to loadings on multiple factors (Grzywacz & Bass, 2003; Grzywacz & Marks, 2000). The new statement from Kirchmeyer (1992) and Sumer & Knight (2001) also parallels one of the work-to-home facilitation statements used in the scale (“The skills I use in my job are useful for things I have to do at home”). The internal reliability (Cronbach’s alpha) of the home-to-work facilitation factor in the present study was higher than the internal reliability of the original scale obtained by Wayne et al. (2004) ($\alpha = .75$ vs. $\alpha = .68$).

In Paper I, the fit indices, factor loadings, and modification indices of the separate Confirmatory Factor Analyses (CFA) indicated that the model could be improved in several ways. Item 1 (“My job reduces the effort I can give to activities at home”) and item 3 (“The job makes me too tired to do the things that need my attention at home”) proved to have highly correlated error terms, meaning that the fit would improve if the error terms of these items were allowed to correlate. Unless there are clear theoretical or methodological reasons for allowing measurement errors to covary, it should be avoided (Diamantopoulos & Siguaw, 2000). Correlated error terms produce multidimensional factor scores that are difficult to interpret. In this case, the content similarity of items 1 and 3 indicate that they represent precise alternatives of the same subject. This is the most plausible explanation of the high amount of shared error variance. Hence, item 3 was omitted due to previous criticism of a related item; “After work, I come home too tired to do some of the things I’d like to do”. This item has been criticized for failure to discriminate between dimensions (Carlson, Kacmar, & Williams, 2000) and to confound with its possible consequence (Geurts et. al, 2005; Kinnunen et al., 2006).

Item 7 (“A good day at work makes me a better partner at home”) loaded weakly on work-to-home facilitation (the standardized loadings ranged from 0.31 to 0.46). Moreover, in some of the occupational groups (physicians and nurses) this item was suggested to load on the work-to-home conflict dimension. The item had also been eliminated in previous studies due to their loadings on multiple factors (Grzywacz & Bass, 2003; Grzywacz & Butler, 2003; Grzywacz & Marks, 2000). Item 14 (“My home life develops skills in me that are useful at work”) was the new item included by the authors to parallel the work-to-home facilitation

measure (“The skills I use in my job are useful for things I have to do at home”). However, the modification indices suggested loadings on multiple factors and correlated error terms with its parallel statement, indicating failure to discriminate between them.

Finally, the home-to-work facilitation item 16 (“my home life helps me relax and feel ready for the next day at work”) was suggested to load on both conflict dimensions, especially the home-to-work conflict dimension. A possible explanation of this relationship with the home-to-work conflict dimension may be that a busy home life, due to the needs of small children and/or other home responsibilities, would exhaust one’s resources and thereby load on the conflict measure instead. Hochschild (1997) found that for some of the respondents in her study, home was not a place to relax, but rather another workplace. The two worlds had been reversed in the sense that the only way to get relief from the “work” of being home was to go to the “home” of work. Thus, the scale was modified accordingly, resulting in a modified work-home interaction scale. See the appendix attached to Paper I for an overview of the original items and items omitted in the scale. The modified scale was chosen for the subsequent latent mean analysis in Paper I, and in all of the analyses in Paper II, Paper III, and Paper IV.

Burnout

In Paper II, burnout was measured by a Norwegian version of the 16-item Oldenburg Burnout Inventory (OLBI), translated by one of the authors, back translated by a bilingual German psychiatrist and compared with the English and Swedish versions of the instrument. The construct and convergent validity of the measure have been confirmed in previous validation studies in Germany (Demerouti et al., 2001), the Netherland (Demerouti & Bakker, 2008), Greece (Demerouti, Bakker, Vardakou, & Kantas, 2003), United States (Halbesleben & Demerouti, 2005) and Norway (Falkum, Langballe, Innstrand, Aasland, & Førde, unpublished paper).

The OLBI contains two burnout dimensions: exhaustion and disengagement from work (Halbesleben & Demerouti, 2005). It describes each dimension by both positively and negatively worded items, and includes emotional, cognitive, and physical components of exhaustion (Cox, Tisserand, & Taris, 2005). In the original version of the inventory, both the Exhaustion and the Disengagement subscales were described by eight items, of which four items in each scale were positively and negatively worded, respectively. In the present Norwegian version, one of the positively worded items of the Disengagement scale was given

the opposite sign (original item: “I always find new and interesting aspects in my work,” applied item: “I am less interested in my job now than in the beginning”). Sample items are “I feel emotionally depleted by work” (exhaustion), and “With time I have lost a deep interest in my job” (disengagement). The items were scored on a 5-point scale, ranging from *totally disagree* to *totally agree*.

Job performance-based self-esteem

Paper III examines a hypothetical individual determinant of work-home interaction, namely job performance-based self-esteem. The job performance-based self-esteem measure was developed for the present study. Job performance-based self-esteem is based on a concept developed by Hallsten (Hallsten, 1993; Hallsten, Josephson, & Torgén, 2005) and is a three-item latent variable describing self-worth generated at work (sample items: “If I fail in my job, I am a failure as a person”, “I must succeed in my work to have a sense of worth”, and “If I don’t do a really good job, I will lose the respect of others”). The respondents expressed their perceptions of a job performance-based self-esteem on a 5-point scale (1 = *totally disagree*, 5 = *totally agree*).

Autonomy

The extent to which employees have the freedom to schedule work and decide how it should be carried out was assessed in Paper IV by four items: How often do you think you have: (1) “sufficient possibilities to discuss the organization of your own work”; (2) “sufficient influence on decisions regarding your own working plan”; (3) “so much influence on your own work that you can delay issues that were planned, for example when you have too much to do”; and (4) “the possibility to take the day off or take compensatory time off, a half or a whole day, on a short notice”. The 5-point response scale ranged from *never* (scored 1) to *often* (scored 5). The autonomy scale has been used in a previous study among Norwegian physicians conducted by the Research Institute of the Norwegian Medical Association (i.e. see Aasland, Olff, Falkum, Schweder, & Ursin, 1997).

Workload

Workload was assessed by three items (in Paper IV): How often do you think you: (1) “work under unacceptable work pressure”; (2) “have so many job tasks that it prevents you from

working effectively”; and (3) “have problems doing special tasks without being interrupted”. The 5-point response scale ranged from *never* (scored 1) to *often* (scored 5). The workload scale has been used in a previous study among Norwegian physicians conducted by the Research Institute of the Norwegian Medical Association (i.e. see Aasland et al., 1997).

Statistical analysis

Descriptives, correlations, and multiple regressions were performed with the SPSS statistical package (version 13.0). Structural equation analyses were conducted using the LISREL 8.7 (LInear Structural RELationship) computer program (Jöreskog & Sörbom, 2004) with the covariance matrix of the indicators as input matrix and maximum likelihood as estimator. Missing values were handled using the listwise procedure.

Structural equation modelling (SEM) is a general statistical modelling technique, which can be viewed as a combination of factor analysis and regression or path analysis. SEM analyses test theoretical models using the scientific methods of hypothesis testing to advance our understanding of the complex relationships amongst constructs. SEM fits the aims of the present thesis. The focus in SEM is often on *theoretical constructs*, which are represented by latent factors. The relationships between the theoretical constructs are represented by regression or path coefficients between the factors (Hox & Bechger, 1998). The real strength of SEM is that we may specify and estimate more complicated path models with intervening variables between the independent and dependent variables and latent factors as well (Hox & Bechger, 1998). Moreover, measurement errors are corrected for when latent variables are included in SEM analyses (Mackenzie, 2001). A number of fit indices were employed in testing the fit of the proposed models to the empirical data: Chi-square statistics (χ^2), the Root mean square error of approximation (RMSEA), the Goodness-of-fit index (GFI), the Non-normed fit index (NNFI), and the Comparative fit index (CFI). The three first fit measures (χ^2 , RMSEA, and GFI) are measures of absolute fit and describe the degree to which the overall model predicts the observed covariance or correlation matrix (Hair, Anderson, Tatham, & Black, 1998). The two remaining fit measures (NNFI and CFI) are incremental fit measures and compare the proposed model to some baseline model (Hair et al., 1998), usually the independence model (Schumacker & Lomax, 2004; Jöreskog & Sörbom, 1993). Details of the various fit indices are reported in Box I.

Box I. Fit indices utilized in the SEM analyses.

MODEL FIT

Chi-square statistics

The most fundamental measure of overall fit is the likelihood-ratio chi-square (χ^2). A large value of chi-square relative to the degrees of freedom signifies that the observed and estimated matrices differ considerably, due to the fact that the researcher is looking for non-significant differences (Hair et al., 1998). A non-significant chi-square value indicates that the sample covariance matrix and the reproduced model-implied covariance matrix are similar (Schumacker & Lomax, 2004). However, chi-square statistics are sensitive to sample size, and it is recommended to complete this measure with other measures of fit (Diamantopoulos & Siguaw, 2000; Hair et al., 1998; Sharma, 1996).

Root mean square error of approximation

The RMSEA is generally regarded as one of the most informative fit indices and shows “how well would the model, with unknown but optimally chosen parameter values, fit the population covariance matrix if it were available” (Diamantopoulos & Siguaw, 2000). By convention, there is good model fit if RMSEA is less than or equal to .05 (Schumacker & Lomax, 2004). There is an adequate fit if RMSEA is less than or equal to .08 (Brown & Cudeck, 1993).

Goodness-of-fit index

GFI is an indicator of the relevant amount of variances and covariances accounted for by the model and thus shows how closely the model comes to perfectly reproducing the observed covariance matrix (Diamantopoulos & Siguaw, 2000). As GFI often runs high compared to other fit models, some suggest using .95 as the cut-off. By convention, GFI should be equal to or greater than .90 to accept the model (Diamantopoulos & Siguaw, 2000). Values close to .95 reflect a good fit (Schumacker & Lomax, 2004).

MODEL COMPARISON

Non-normed fit index

The Bentler-Bonett non-normed fit index (NNFI), also labelled the Tucker-Lewis index (TLI), is found to be relatively independent of sample size. An NNFI close to 1 indicates a good fit. The recommended level of acceptable fit is .90 (Hair et al., 1998) whereas values close to .95 reflect a good model fit (Schumacker & Lomax, 2004).

Comparative fit index

The comparative fit index (CFI) is, together with RMSEA, one of the most frequently reported fit indices (Tabachnick & Fidell, 2001). A CFI close to 1 indicates a very good fit. By convention, CFI should be equal to or greater than .90 to accept the model, indicating that 90% of the covariances in the data can be reproduced by the given model (Diamantopoulos & Siguaw, 2000).

Papers I and IV are based on the cross-sectional data from Time 1, whereas Papers II and III are longitudinal and utilize data from both survey rounds.

In Paper I, multigroup confirmatory factor analyses (CFA) were used to test the factorial structure of WHI. CFA is part of SEM and may be used to confirm that the indicators sort themselves into factors corresponding to how the researcher has linked the indicators to latent variables. Gender differences were explored by performing multigroup latent mean analyses. Since latent variables are not associated with measurement error, latent mean analysis is more sensitive than traditional statistical techniques and thereby more likely to detect between-group differences (Hancock, Lawrence, & Nevitt, 2000; Hong, Malik, & Lee, 2003; Little, 1997). Before testing between-group differences in latent means, we examined a series of measurement invariance tests as recommended by Cheung and Rensvold (2002), following the procedure suggested by Bollen (1989) and Millsap and Everson (1991). Testing for invariance involves specifying a model in which certain parameters are free to take any value across groups (the variant model), and then comparing that model with the more restrictive one in which these parameters are constrained to be equal across groups (the invariant model). A meaningful comparison can only be made if the measure is comparable across different groups (Chen, 2008). The results from the invariance tests across gender are enclosed in Appendix VI. Measurement invariance was supported as all models provided adequate fit to the data ($RMSEA \leq .08$ and $NNFI/CFI \geq .90$), and the change in CFI did not exceed the -0.01 threshold (Cheung & Rensvold, 2002; Vandenberg & Lance, 2000).

Both Papers II and Paper III test reciprocal relationships by means of cross-lagged SEM analyses. SEM has the advantage of determining causal priority and causal predominance when finding reciprocal relationships (De Lange, Taris, Kompier, Houtman, & Bongers, 2004). Cross-lagged techniques are particularly designed to test causal structures where measurements of the same variables have been made at two different times in the same sample (Edwards, Guppy, & Cockerton, 2007).

Although SEM contains a variety of powerful analytical techniques, it is too limited by the assumption of normality and large samples to provide confidence in the results (Hox & Bechger, 1998). These assumptions were not violated in Papers I, II, or III. However, due to the relatively few respondents compared to the number of parameters being analysed in some of the sub-samples in Paper IV (singles living alone, single parents, married/cohabiting respondents with and without children), multiple regression analyses with dummy variables and interaction effects were performed by SPSS 13. The use of dummy variables and interaction effects provides statistical power of the full sample and permits comparisons across family structure categories.

Summary of papers

Paper I

Title: *Gender specific perceptions of four dimensions of the work/family interaction.*

Published in *Journal of Career Assessment*, 2009, 17(4), 402-416.

Background: Although most work-family researchers acknowledge the bidirectional structure of work-family interaction (WFI) and that measurement should describe the components of both conflict and facilitation, there is a lack of validated scales that take this into consideration. This study aimed to test the factorial structure of a WFI instrument in terms of the direction of influence (work-to-family vs. family-to-work) and type of effect (conflict vs. facilitation) and examined gender differences along these four dimensions.

Methods: Multigroup confirmatory factor analyses (CFA) were used to test the factorial structure of WFI. Gender differences were explored by performing multigroup and separate latent mean analyses. All analyses were performed by means of LISREL (N = 3313).

Results: The hypothesized four-factor model had a clearly better fit than the alternative one-factor and two-factor models. However, separate CFAs in the eight different occupational groups revealed poor indicator properties of some of the items. Hence, a modified model was presented. Latent mean comparisons on the total sample revealed significant gender differences along all dimensions. Overall, women reported more conflict and facilitation in both directions compared to men.

Conclusion: The present study offers empirical evidence that the work-family balance is more than lack of conflict, and suggests that women are more sensitive to the interaction between work and family than are men.

Paper II

Title: *Positive and negative work-family interaction and burnout: A longitudinal study of reciprocal relations.*

Published in *Work & Stress*, 2008, 22 (1), 1-15.

Background: Some of the strongest and most consistent findings in the literature of work-family conflict support the relationships between work-family conflict and burnout. However, as previous findings are mainly based on cross-sectional data, they do not demonstrate causal relationships. This study examined the longitudinal relationship between work-family interaction (WFI) and burnout in representative samples of eight different occupational groups in Norway (N = 2235). Building upon Hobfoll's (1989) Conservation of Resources (COR) theory, it proposed three causal models: a normal (WFI → burnout), a reverse (WFI ← burnout), and a reciprocal (WFI ↔ burnout) relationship.

Methods: Data were collected at two points in time with a two-year interval.

The proposed causal models were tested by cross-lagged structural equation modeling (SEM), using LISREL.

Results: The results of the SEM analyses revealed evidence for a normal, reverse, and reciprocal relationship between WFI and burnout. In general, lagged positive effects were found between the conflict dimensions of WFI and burnout and lagged negative effects between the facilitation dimension of WFI and burnout. One exception was a significant lagged negative effect between the burnout dimension disengagement at Time 1 and work-to-family conflict at Time 2, suggesting that distancing oneself from the job may act as a coping strategy, causing lower levels of work-to-family conflict.

Conclusion: The findings of the present study indicate that work-family interaction and burnout may act as both a predictor and a consequence of each other. The study highlights the importance of examining reversed effects whenever possible. Knowledge of reciprocal relationships is important for preventive interventions at the work place, as well as for theory building and research.

Paper III

Title: *Personal vulnerability and work-home interaction: The effect of job performance-based self-esteem on work/home conflict and facilitation.*

Submitted

Background: Studies examining how certain individual differences may impact the perception of work-home interactions (WHI) are scarce. In the present study, the longitudinal relationship between work-home interaction and job performance-based self-esteem was examined (JPB-SE). A normal (JPB-SE → WHI), a reverse (JPB-SE ← WHI), and a reciprocal (JPB-SE ↔ WHI) relationship were hypothesized. WHI was conceptualized both according to the direction of the interaction (work-to-home vs. home-to-work) and the effect (conflict vs. facilitation).

Methods: Cross-lagged structural equation modeling (SEM) was performed by means of LISREL in a two-wave panel group (N=3475).

Results: The SEM analysis indicated a reciprocal relationship, meaning that job performance-based self-esteem may act as a precursor as well as an outcome of work-home interaction. Inspection of the parameter estimates suggested that job performance-based self-esteem was positively related to work/home conflict, but only weakly associated with work/home facilitation.

Conclusion: Self-esteem highly contingent on job performance may be seen as a vulnerability factor for work/home conflict. As people in Western societies generally tend to view identity as merited by one's own acts and accomplishments, a deeper understanding of how such motivational structures may impact individuals' health and well-being is highly warranted.

Paper IV

Title: *Work/home conflict and facilitation across four different family structures in Norway.*

Accepted for publication: *Community, Work and Family.*

Background: Current changes in gender and family roles have increased the need for studies of work-home interaction (WHI) across different family structures. The present paper examines four dimensions of WHI among employees in traditional two-parent families, childless couples, single parents, and single individuals (N=2414). Building upon Hobfoll's (1989, 2001) Conservation of Resources (COR) theory, more work/home conflict *and* facilitation were hypothesized among those who have acquired more roles (two-parent families), and that the effect of workload and autonomy on WHI would be stronger for this group.

Methods: Regression with dummy variables that distinguish between singles, single parents, and childless couples from two-parent families (reference category) was performed by SPSS 13.

Results: The study indicated that bidirectional work/home conflict is more profound among two-parent families and single parents than among childless couples and singles. Most home-to-work facilitation was reported among childless couples, whereas work-to-home facilitation did not seem to vary by family structure. With few exceptions, the effects of workload and autonomy on WHI did not differ by family structure.

Conclusion: The study highlights the need for further studies exploring the work-home interaction across different family structures, as the private lives of most employees interact significantly with their work lives and vice versa. The finding that the effects of workload and autonomy on WHI do not differ by family structure implies that reducing workload and increasing autonomy are likely to increase facilitation and reduce conflict between the two life domains for all employees.

General discussion

Despite a substantial increase in the literature on work-home interaction (WHI), the research concerning this issue remains limited both theoretically and methodologically. Proper theoretical frameworks have been lacking (Greenhaus, 2008). WHI research has been criticized for an almost exclusive focus on conflict, overreliance on cross-sectional designs, use of unsophisticated analytical techniques, and for leaving effects of individual differences largely unexamined (for reviews, see Allen et al., 2000; Byron, 2005; Eby et al., 2005). Another criticism concerns the samples used in WHI research, which have precluded specific studies of single parents or singles without children (Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007). The present thesis aims to overcome some of these limitations in the WHI literature by using a fourfold taxonomy of the work-home interaction, encompassing both the direction of influence (work-to-home vs. home-to-work) and type of effect (conflict vs. facilitation). Moreover, the data are based on large, nationally representative samples of both men and women measured at two points in time, mainly analysed by structural equation modelling (SEM). Different sub-samples (gender, family structure) as well as situational (workload and autonomy), individual (job performance-based self-esteem), and health (utbrenthet) factors are examined.

Building upon Conservation of Resources (COR) theory (Hobfoll, 1989, 2001), a major objective of this thesis has been to test the viability of a resource-based model of WHI and its ability to predict and explain the nature of WHI, to identify who is affected, and what the consequences of WHI may be. To answer these questions, four separate studies were conducted. As the research questions of these studies are discussed in detail in the included papers, the overarching aims are discussed with reference to these papers in the following section. The discussion will focus on main findings related to the general aims and their theoretical and practical implications.

The nature of WHI

Paper I supports the validity of Frone's (2003) fourfold taxonomy in terms of the direction of influence (work-to-home vs. home-to-work) and type of effect (conflict vs. facilitation).

With regard to the issue of how conflict and facilitation are related, Paper II and Paper III support Frone's (2003) conception that conflict and facilitation are independent constructs, as their correlations were small and in line with previous findings (for an

overview, see Greenhaus & Powell, 2006). Their independence is further supported by their relationships with different control variables. For example, Paper III indicates that whereas job performance-based self-esteem is positively related to work/home conflict, the analogous association with work/home facilitation is weak. Although more theoretical and empirical work is needed, findings from this thesis indicate that conflict and facilitation are conceptually distinct and orthogonal constructs, as suggested by Grzywacz and Butler (2005).

The respondents reported higher levels of conflict from work to home than the other way around (Papers I, II, III and IV). This is consistent with previous findings indicating that it is more “socially acceptable” to allow work to interfere with home functioning and to report this (Brotheridge & Lee, 2005; Rothbard & Edwards, 2003). Kinnunen et al., (2006) hold that this reflects the “male” model of work (e.g. full-time job, preferring work to family, overwork) – or, the central position of work in an individual’s life. They further indicate that as long as this remains the norm, home-to-work conflict is likely to be seldomly reported. Livingston and Judge (2008) state that this is most likely to happen in egalitarian societies like the Western ones.

Whereas work had a more negative impact on home life than home on work, the present study revealed, in line with other studies (e.g. Grzywacz & Marks, 2000), that facilitation from home to work tends to be more prevalent than the opposite (Papers I, II, III and IV). This indicates that the processes underlying work/home facilitation may be different from the processes underlying work/home conflict (Frone, 2003). The highest mean level of the four factors was reported on the home-to-work facilitation (Papers I, II, III and IV). The average facilitation score was higher than the corresponding conflict scores across gender, family structure, and occupational groups. The predominance of facilitation coincides with previous findings, as summarized by Greenhaus and Powell (2006), and highlights the need to include positive states in WHI research.

The process of WHI – who is affected and what are the consequences?

One central question frequently posed in WHI literature deals with the way WHI is embedded in the classical stressor-strain-relationship (Peeters, de Jonge, Janssen, & van der Linden, 2004). A number of antecedents as well as outcomes of WHI have been suggested (for reviews, see Allen et al., 2000; Byron, 2005). However, as these findings are mainly based on

cross-sectional data, they cannot identify causal relationships (Taris & Kompier, 2003). Recently, Steinmetz, Frese, and Schmidt (2008) located only 11 longitudinal studies on WHI and among these, only one (Demerouti et al., 2004) study which examined reversed causation with latent variable modeling. Both Demerouti et al., (2004) and Steinmetz et al. (2008) found support for a spiral model of stress, work/home conflict, and strain (e.g. depression, burnout). However, both studies are limited in that they restricted WHI to incompatibilities between work and home life. Building upon COR theory (Hobfoll, 1989, 2001), the present thesis aimed to test a resource-based model of work/home conflict *and* facilitation.

As indicated by the proposed model depicted in Figure 1 (page 7), there may be individual differences in the experience of WHI. As previously stated, the basic tenet of COR theory is that people have a deeply-rooted motivation to obtain, retain, and protect what they value, labeled *resources* (i.e. objects, personal characteristics, conditions, or energies). Paper III indicates that people whose self-esteem is strongly contingent on their performance at work are more vulnerable to work/home conflict. Thus, when self-esteem strongly depends upon performance at work, time and energy available for home life tend to be depleted, increasing the risk of work/home conflict. Moreover, in line with the COR theory, these variables are reciprocally related, thus ensuing in spirals of loss. As previously noted, work life is much more important to men and women in Western societies than is indicated by the mere financial aspects (Hoppe, 1998; Lund & Skjåk, 1997; Roos et al., 2006). If the feeling of personal worth is basically contingent upon accomplishments, appearance, and deeds (Crocker, 2002; Hallsten, 1993; Leary, 2007), job performance-based self-esteem may become a core variable in future WHI research. If its predictive value is further supported, conflict between the two domains is not likely to be reduced by mere statutory work-family arrangements. Further research should generally focus more on the meaning people attach to different domains and its implication for work-home interaction.

Gender is another personal characteristic which may relate to resources. In line with previous findings (i.e. Duxbury & Higgins, 2001; Duxbury et al., 1999) Paper I indicates that women in Norway find the juggling of work and home life less flexible than do men. Thus, even though the gap between genders in Norway is among the smallest in the world when it comes to economic participation and opportunity, educational attainment, and political empowerment (Hausmann et al., 2008), the present thesis indicates that gender differences in the experience of WHI are prevalent. As suggested in Paper I, these differences do not necessarily constitute an argument against the existence of gender equality, since they may be based on the very same equality as well. Schwatz and Ruel (2005) suggest that the increased

independence and equality of women in the labour force encourage them to express distinctive values rather than to accommodate their values to those of their husbands, resulting in strong gender differences in their self-construal consistent with gender stereotypes (Guimond et al., 2007). Whereas a strong work-related identity accords with the male-breadwinner role, it is not consistent with the female-homemaker role (Simon, 1995), thus possibly producing more guilt and conflict in women (Elvin-Nowak, 1999; Livingston & Judge, 2008). Inside the COR framework, this means that salient gender roles or social identities may be threatened in the juggling of work and home life.

Nevertheless, although women reported more conflict, they also reported more facilitation. A similar finding was recently reported by van Steenbergen, Ellemers, and Mooijaart (2007), who argue that combining the work role with other roles in life might have different psychological meanings for women and men. Simon (1997) demonstrated that parenthood simultaneously involved benefits and costs and was a source of positive and negative emotions, especially among mothers. Thus, it could be argued that despite the cost of juggling work and home life, multiple roles imply that more resources are disposed of, with positive consequences particularly for women.

However, resources are not distributed equally, and COR theory postulates that those who lack strong resource pools are more likely to experience spirals of resource loss; initial losses beget further losses. Papers II, III and IV support this conception. Whereas it has previously been assumed that work/home conflict may have adverse effects on health (for a review, see Allen et al., 2000), this thesis indicates that impaired health may also exacerbate work/home conflict (Paper II). The initial experience of emotional exhaustion is associated with increased work/home conflict two years later. Paper III indicates that work/home conflict and job performance-based self-esteem are reciprocally and positively related. Similarly, in Paper IV workload was positively related to work/home conflict, suggesting that initial losses beget further losses. Moreover, the effect of workload on work-to-home conflict was even stronger with singles, indicating that they may lack social support when stress occurs, as proposed by the COR theory. Conversely, the positive association between autonomy and work/home facilitation found in Paper IV support the COR proposition that those with a strong resource pool are more likely to experience spirals of resource gain (Hobfoll, 1998). This result is also in line with previous research findings (Byron, 2005; Geurts & Demerouti, 2003; Voydanoff, 2005). The effect of autonomy did not differ across family structures.

The COR model expands upon previous stress theories in that it not only states what individuals do when confronted with stress, but also in the absence of threats. Specifically,

when confronted with stress, individuals are predicted by the model to strive to minimize net loss of resources. Significant and ongoing drain of resources may produce a state of chronic strain, such as burnout (Hobfoll & Shirom, 2001). Conversely, when not currently confronted with threats, people strive to develop resource surpluses to offset the possibility of future loss. When people develop resource surpluses, they are likely to experience positive well-being and health. Paper II empirically supports these proposals; work/home conflict seems to be a resource depletion ensuing in burnout. Moreover, an initial loss seems to beget further losses as exhaustion seems to provide even more conflict between work and home, providing a spiral of resource loss as suggested by the COR theory. On the other hand, a positive interaction between work and home may in itself be regarded as a resource surplus, as a high initial level of work/home facilitation seems to buffer against burnout, providing spirals of resource gain. Moreover, Paper II indicates that a strong sense of disengagement predicts less work-to-home conflict. Psychological disengagement may be an active attempt to separate work and home life in order to deal with work-related stress (Kahn et al., 1964 in Lambert, 1990).

Altogether, this thesis suggests that the COR theory is a productive theoretical framework, particularly by its focus on the gain of resources in the exchange of resources between work and home. Thereby, the theory departs from classical perspectives that tend to downplay the positive aspect of the interaction. By explaining the motivational processes behind WHI, it suggests vulnerability and resilience factors of WHI. Specifically, having a strong sense of job performance-based self-esteem, being female, emotionally exhausted, experiencing excessive workload and being a parent are associated with more risk of work/home conflict. Conversely, being female, having a sense of work autonomy, and being married/cohabiting without children are associated with more work/home facilitation. Disengagement, although a problem in itself, may prevent work-to-home conflict. The findings of this thesis also empirically support the COR theory's propositions of spirals of resource gain and loss (Hobfoll, 1989, 2001) and suggest that WHI may be a precursor as well as an outcome variable. Clearly, if the findings of spirals of gain and loss in the present study are replicated in future empirical research, the practical utility for organizations would be significant.

Implications

This thesis supports a four-factorial structure of WHI comprising both the bi-directional dimension (work-to-home, home-to-work) and its effect (conflict and facilitation). Moreover, our findings suggest that different processes may underlie these components. This has both practical and theoretical implications.

In terms of theoretical implications, the findings highlight the importance of exploring the whole WHI nexus to understand the work-home balance. For example, our understanding of work-home interaction is incomplete without consideration of facilitation, since facilitation contributes to an understanding of work-home dynamics above and beyond conflict. As different processes seem to underlie the different components, it is unlikely that models of work/home conflict will effectively inform attempts to enhance work/home facilitation and vice versa.

In terms of practical implications, the results suggest that organizations cannot preserve or develop the health and well-being of employees without considering non-work influences. For example, approximately 20% of the variance of burnout was explained by the work-family interaction model. Thus, employers should, for instance, in the regular dialogues on employee development and job satisfaction, systematically evaluate the interaction between work and home, as conflict between the two life arenas negatively impacts the health and well-being of the employee. A facilitating relationship, however, may buffer against adverse organizational outcomes like burnout. Hence, increased attention needs to be given to how facilitation can be developed and cultivated. As demonstrated, the different WHI components have different antecedents, and may therefore require different interventions (i.e. see Innstrand, Espnes, & Mykletun, 2004). By examining both the pros and cons of work-home interface, empirical findings may emerge that are obvious targets of health promotion and risk prevention programs, respectively.

In sum, scholars and organizations must recognize that integrating work and home life is not simply a matter of reducing work/home conflict; taking proactive steps to encourage the beneficial effects of the home and work life on each other is also desirable.

Methodological considerations and future research

Reliability and validity

Reliability is inversely related to the amount of random error in the measurement process and has two main aspects: internal consistency and repeatability. The internal consistency of a measure can be estimated in a variety of ways. The most widely used coefficient is Cronbach's alpha (Henson, 2001), which is equal to the average of all possible split-half correlations for a composite scale, and which increases by the average correlations among the items and by the number of items (Nunnally & Bernstein, 1994). A Cronbach's alpha coefficient above .70 is normally considered an indication of acceptable internal consistency (Nunnally & Bernstein, 1994). All the scales used in this thesis had alphas $\geq .70$, except for the "family-to-work-facilitation" scale measured at Time 1 (reported in Paper II), the alpha of which was $\alpha = .69$. Overall, the psychometric properties (internal consistencies and scale inter-correlations) of the modified, Norwegian version of the work/home interaction scale are quite similar to those found in other studies (Aryee et al., 2005; Grzywacz & Butler, 2005; Grzywacz & Marks, 2000; Wayne et al., 2004).

Validity concerns how well a variable measures what it is supposed to measure (Nunnally & Bernstein, 1994). It thus primarily relates to the amount of non-random or systematic error in the measurement process, but also indirectly to the amount of random error, since to have a valid measure, one must have a reliable one. However, a reliable measure does not mean that it is valid as well, i.e. reliability is a necessary, but not sufficient, condition for validity. Although the four dimensions of the work-home interaction put forward in this thesis are consistent with theoretical and empirical discussions as well as everyday parlance, the results need to be re-examined. Even though the four-factorial structure of WHI was supported in Paper I, there is also a question of model-reality consistency (Bollen, 1989). We can reject a model, but we can never prove a model to be valid. A good model-to-data fit does not mean that we have identified the true model. Alternative models may capture the reality of work-home interaction better than the present model. Due to unexpected properties of some of the items in the original WHI instrument revealed in Paper I, a modified scale was used in the following analysis and papers. Although the modifications were substantively meaningful and in line with previous findings, the resulting model is in part data driven, and preferably should have been cross-validated against an independent sample, as suggested by MacCallum and Austin (2000). Instead, the WHI scale was validated by multi-group analysis and separate CFAs in different occupational

groups. Moreover, with only two items representing the home-to-work facilitation in the modified model of WHI, the construct validity may have been weakened (Messick, 1995). A suggestion for future research is to use a broader set of items to represent this dimension.

Limitations

Although the results of the present thesis provide new insight into the nature of WHI and its associations, the findings and conclusions should be considered with some methodological and theoretical issues in mind:

Methodological issues

Our design addresses the individual perceptions of WHI, as does most of the work-home research (Casper et al., 2007), i.e. it does not address the understanding of how WHI influences families or other members of the organization. Moreover, all data used were self-reported, which implies a certain risk that findings are based on common-method variance (Podsakoff, MacKenzie, Jeong-Yeon Lee, & Podsakoff, 2003). Parallel data from family members, peers, and supervisors are therefore warranted as recently noted by Bakker and colleagues (2009). Furthermore, all papers in this thesis are based on quantitative data. Qualitative, in-depth studies could contribute important information, especially because the area of facilitation is in its relative infancy, and there is a need for further hypotheses and theory building (Eby et al., 2005).

Although superior to cross-sectional studies, longitudinal designs have drawbacks as well (Taris & Kompier, 2003). There is an issue of selective attrition and testing effects. The former may be particularly related to Paper II, which examines the relationship between WHI and burnout. As only healthy workers remained in the analysis, the strength of the associations among these variables may have been underestimated. Also, testing effects (i.e. the respondents lose interest or are more sensitive the second time) may be present in the longitudinal studies (Paper II and Paper III).

Although we have not *proved* the existence of causal relationships (Taris & Kompier, 2003), the test of alternative models (normal, reversed, and reciprocal), the strength of some of the associations found, as well as the use of analyses (cross-lagged SEM analyses) which control for stability and error terms, indicate that such relationships are plausible. Nevertheless, the longitudinal associations found in the present thesis may still partly rely on possible unmeasured third variables.

Even though the evaluation of the demographic characteristics of the samples of each occupational group indicates that the deviations from population means do not constitute major threats to representativity (Wedde et al., 2004), generalization of findings and the conclusion is limited to the particular sample, variables, and the time frame represented by the design of the study (MacCallum & Austin, 2000). In Paper II and Paper III, the analyses were performed on the total sample, a fact that may have concealed effects of gender or occupation. Although Demerouti et al. (2004) did not demonstrate gender differences in the effect of WHI on burnout, plausible sub-group effects of gender should be considered. Selection effects may also result from the choice of variables in a given study. The elimination of some of the items in the modified model may have limited comparisons with other studies using the original scale.

Whereas the cross-sectional design in Paper I and Paper IV restricts any findings to the time of the analysis, the two-year interval of the longitudinal studies (Paper II and Paper III) imply that we can only generalize our results in relation to this measurement interval (Taris, 2000). Even though Dorman and Zapf (2002) found a two-year interval to be the most optimal time lag between social stressors and depression, we have little evidence regarding the corresponding interval between WHI and its associates. Ideally, in a study with different time lags, a more complete understanding of the nature of such effects could have been explored.

Strictly speaking, our findings can only be generalized in regards to the men and women in the eight occupational groups used in the present study, the latent variables, and scale measurement utilized, and the time frame represented by the design. Further research is needed to verify the findings.

Theoretical issues

Although the COR theory provides a heuristic framework of WHI, the empirical evidence of the model depicted in Figure 1 has to be considered with some limitations in mind. It should be noted that each part of this model is tested separately. In order to confirm the model, all relationships should be tested simultaneously. Moreover, in the COR theoretical framework, WHI is proposed to be caused by the exchange of valued resources. However, the exact values of these resources are only assumed. More research is needed on the value or meaning individuals attach to different roles. Similarly, as resource priorities are assumed to be largely culturally determined (Hobfoll, 1998), the generalizability of the analytical model studied in this thesis may be limited to Norway. It should be studied in other Western societies before

firm conclusions can be made. Nevertheless, the theoretical model is founded on empirical evidence established in a variety of countries supporting a broader, more general validity.

Finally, COR theory may in itself contain some limitations and biases (for a discussion, see Hobfoll, 2001). It has been argued that it underestimates the impact of resource gain (Freund & Riediger, 2001), that it contains semantic inconsistencies (Thompson & Cooper, 2001), and that it is old wine in new bottles (Lazarus, 2001). The COR theory should not be considered as the only theoretical framework, as several other theoretical frameworks linking work and home life have recently proved to be promising, i.e. the “work/family border theory” (Clark, 2000), the “ecological system theory” (Grzywacz & Marks, 2000), and the “job demands-resources model” (Demerouti et al., 2001). Nevertheless, COR theory is found to be a valid and robust contribution to the stream of stress scholarship (Quick & Gavin, 2001), providing a new standard in the field (Schwarzer, 2001) and enhancing contemporary understanding of stress and coping (Thompson & Cooper, 2001). COR theory is also found to be the best explanatory model of burnout (Lee & Ashforth, 1996), and recent studies have proved its applicability to work-home interaction as well (i.e. Grandey & Cropanzano, 1999; Premeaux et al., 2007).

Contribution to the understanding of work-home interaction

Regardless of the described limitations, this thesis contributes to the understanding of work-home interaction by

- corroborating previous findings (e.g. Aryee et al., 2005) and supporting the four-factorial structure of WHI
- demonstrating that work/home conflict and facilitation are likely to be orthogonal constructs
- demonstrating the importance of facilitation in work-home interaction
- providing empirical evidence of gender differences in the four dimensions of WHI
- demonstrating that WHI is predicted by both organizational and individual vulnerability factors
- demonstrating health (burnout) outcomes of WHI
- demonstrating the buffering effect of work/home facilitation on burnout
- examining the effect of WHI across different family structures
- demonstrating the applicability of COR theory to WHI

Conclusions

This thesis underscores the relevance and applicability of a resource-oriented framework in research on work-home interaction. By considering both negative and positive aspects of the interaction, a more complete picture of the balance between work and home life is described. In general, the findings indicate that it is important to examine the whole nexus of WHI to understand the dynamics of work and home life more deeply. Moreover, individual vulnerability and resilience factors should be taken into consideration more systematically, as should different family structures. The thesis also demonstrates the relevance of WHI in studies of work-related outcomes like burnout. As long as work and family/home are the two most important life domains in contemporary societies, a more profound understanding of the factors that affect health and well-being needs to be found in the interaction of work and home and its core relations.

We shall have to evolve
problem-solvers galore -
since each problem they solve
creates ten problems more.

Piet Hein

References

- Aadahl, M., & Jørgensen, T. (2004). The effect of conducting a lottery on questionnaire response rates: A randomised controlled trial. *European Journal of Epidemiology*, *18*, 941 – 944.
- Aasland, O. G., Olff, M., Falkum, E., Schweder, T., & Ursin, H. (1997). Health complaints and job stress in Norwegian physicians: The use of an overlapping questionnaire design. *Social Science, & Medicine*, *45*, 1615 – 1629.
- Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work-family conflict with job and life satisfaction. *Journal of Applied Psychology*, *81*, 411 - 420.
- Allen, T. D., Herst, D. E. L., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: a review and agenda for future research. *Journal of Occupational Health Psychology*, *5*, 278 - 308.
- Allis, P., & O’Driscoll, M. (2008). Positive effects of nonwork-to-work facilitation on well-being in work, family and personal domains. *Journal of Managerial Psychology*, *23*, 273 – 291.
- Aryee, S., Srinivas, E. S., & Tan, H. H. (2005). Rhythms of life: antecedents and outcomes of work-family balance in employed parents. *Journal of Applied Psychology*, *90*, 132 - 146.
- Bakker, A. B., Demerouti, E., & Burke, R. (2009). Workaholism and relationship quality: A spillover-crossover perspective. *Journal of Occupational Health Psychology*, *14*, 23 – 33.
- Bakker, A. B., Demerouti, E., & Dollard, M. F. (2008). How job demands affect partners’ experience of exhaustion: Integrating work-family conflict and crossover theory. *Journal of Applied Psychology*, *93*, 901 – 911.
- Bandura, A. (1997). *Self-efficacy. The exercise of control*. New York: W. H. Freeman and Company.
- Bergman, B., Ahmad, F., & Stewart, D. E. (2008). Work family balance, stress, and salivary cortisol in men and women academic physicians. *International Journal of Behavioral Medicine*, *15*, 54 - 61.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: John Wiley & Sons.

- Brotheridge, C. M., & Lee, R. T. (2005). Impact of work-family interference on general well-being: A replication and extension. *International Journal of Stress Management, 12*, 203 - 221.
- Brough, P., & O'Driscoll, M. (2005). Work-family conflict and stress. In A. Antoniou & C. Cooper (Eds.), *A research companion to organizational health psychology* (pp. 346 - 365). Cheltenham: Edward Elgar Publisher.
- Brown, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136 - 162). Newbury Park, California: Sage Publications
- Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior, 67*, 169 - 198.
- Bø, I. (2008). Equal gender opportunity: Couples in the gap between principles and practice. *Community, Work & Family, 11*, 439 – 455.
- Carlson, D. S. (1999). Personality and role variables as predictors of three forms of work-family conflict. *Journal of Vocational Behavior, 55*, 236 - 53.
- Carlson, D. S., & Frone, M. R. (2003). Relation of behavioral and psychological involvement to a new four-factor conceptualization of work-family interference. *Journal of Business and Psychology, 17*, 515 - 535.
- Carlson, D. S., & Kacmar, K. M. (2000). Work-life conflict in the organization: Do life role values make a difference? *Journal of Management, 26*, 1031 - 1054.
- Carlson, D. C., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). Measuring the positive side of the work-family interface: Development and validation of a work-family enrichment scale. *Journal of Vocational Behavior, 68*, 131 - 164.
- Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior, 56*, 249 - 276.
- Carr, J. C., Boyar, S. L., & Gregory, B. T. (2008). The moderating effect of work-family centrality on work-family conflict, organizational attitudes, and turnover behaviour. *Journal of Management, 34*, 244 - 262.
- Casper, W. J., Eby, L. T., Bordeaux, C., Lockwood, A., & Lambert, D. (2007). A review of research methods in IO/OB work-family research. *Journal of Applied Psychology, 92*, 28 - 43.

- Chen, F. F. (2008). What happens if we compare chopsticks with forks? The impact of making inappropriate comparisons in cross-cultural research. *Journal of Personality and Social Psychology, 95*, 1005 – 1018.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling, 9*, 233 – 255.
- Clark, S. C. (2000). Work/family border theory: A new theory of work/family balance. *Human Relations, 53*, 747 – 770.
- Clark, S. C. (2001). Work cultures and work/family balance. *Journal of Vocational Behavior, 58*, 348 - 365.
- Cousins, C. R., & Tang, N. (2004). Working time and work and family conflict in the Netherlands, Sweden and the UK. *Work, Employment and Society, 18*, 531 – 549.
- Cox, T., Tisserand, M., & Taris, T. (2005). The conceptualization and measurement of burnout: Questions and directions. *Work & Stress, 19*, 187 - 191.
- Crocker, J. (2002). The cost of seeking self-esteem. *Journal of Social Issues, 58*, 597 - 615.
- De Lange, A. H., Taris, T. W., Kompier, M. A. J., Houtman, I. L. D., & Bongers, P. M. (2004). The relationships between work characteristics and mental health: Examining normal, reversed and reciprocal relationships in a 4-wave study. *Work & Stress, 18*, 149 – 166.
- Demerouti, E., & Bakker, A. B. (2008). The Oldenburg Burnout Inventory: A good alternative to measure burnout and work engagement. In J. R. B. Halbesleben (Ed.), *Handbook of stress and burnout in health care*. Hauppauge, NY: Nova Science.
- Demerouti, E., Bakker, A. B., & Bulters, A. J. (2004). The loss spiral of work pressure, work-home interference and exhaustion: Reciprocal relations in a three-wave study. *Journal of Vocational Behavior, 64*, 131 - 149.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology, 86*, 499 – 512.
- Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, S. (2003). The convergent validity of two burnout instruments. A multitrait-multimethod analysis. *European Journal of Psychological Assessment, 19*, 12 - 23.
- Demerouti, E., & Geurts, S. (2004). Towards a typology of work-home interaction. *Community, Work & Family, 7*, 285 - 309.
- Diamatopoulos, A., & Siguaaw, J. A. (2000). *Introducing LISREL. A guide for the uninitiated*. London: SAGE Publications.
- Dijkers, J. S. E., Geurts, S. A. E., Kinnunen, U., Kompier, M. A. J., & Taris, T. W. (2007) .

- Crossover between work and home in dyadic partner relationships. *Scandinavian Journal of Psychology*, 48, 529 - 538.
- Dormann, C., & Zapf, D. (2002). Social stressors at work, irritation, and depressive symptoms: Accounting for unmeasured third variables in a multi-wave study. *Journal of Occupational and Organizational Psychology*, 75, 33 – 58.
- Duxbury, L., & Higgins, C. (2001). *Work-life balance in the new millennium: Where are we? Where do we need to go?* Ottawa: Canadian Policy Research Networks, Discussion Paper No. W-12 [www.cprn.org].
- Duxbury, L., Higgins, C., & Johnson, K. L. (1999). *An examination of the implications and costs of work-life conflict in Canada*. Ottawa, ON: Health Canada.
- Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980-2002). *Journal of Vocational Behavior*, 66, 124 - 197.
- Edwards, J. A., Guppy, A., & Cockerton, T. (2007). A longitudinal study exploring the relationship between occupational stressors, non-work stressors, and work-performance. *Work & Stress*, 21, 99 - 116.
- Edwards, J. R., & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *The Academy of Management Review*, 25, 178 – 199.
- Elvin-Nowak, Y. (1999). The meaning of guilt: A phenomenological description of employed mother's experiences of guilt. *Scandinavian Journal of Psychology*, 40, 73 - 83.
- Erdwins, C. J., Buffardi, L. C., Casper, W. J., & O'Brien, A. S. (2001). The relationship of women's role strain to social support, role satisfaction, and self-efficacy. *Family Relations*, 50, 230 - 238.
- Erickson, R. J., Nichols, L., & Ritter, C. (2000). Family influence on absenteeism: testing an expanded process model. *Journal of Vocational Behavior*, 57, 246 - 272.
- Falkum, E., Langballe, E. M., Innstrand, S. T., Aasland, O. G., & Førde, R. The factorial validity of the Oldenburg Burnout Inventory across occupations. *Unpublished paper*.
- Freund, A. M., & Riediger, M. (2001). What I have and what I do - The role of resource loss and gain through life. *Applied Psychology: An International Review*, 50, 370 - 380.
- Frone, M. R. (2000). Work-family conflict and employee psychiatric disorders: The national comorbidity survey. *Journal of Applied Psychology*, 85, 888 - 895.

- Frone, M. R. (2003). Work-family balance. In J. Campbel Quick & L. E. Tetrick (Eds.), *Occupational Health Psychology* (pp. 143 - 162). Washington, DC: American Psychological Association.
- Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology, 77*, 65 - 78.
- Geurts, S. A. E., & Demerouti, E. (2003). Work/non-work interface: A review of theories and findings. In M. J. Schabracq, J. A. M. Winnubst & C. L. Cooper (Eds.), *The handbook of work and health psychology* (pp. 279 - 312). New York: John Wiley & Sons.
- Geurts, S. A. E., Taris, T. W., Kompier, M. A. J., Dijkers, J. S. E., Van Hooff, M. L. M., & Kinnunen, U. M. (2005). Work-home interaction from a work psychological perspective: Development and validation of a new questionnaire, the SWING. *Work & Stress, 19*, 319 - 339.
- Grandey, A. A., & Cropanzano, R. (1999). The conservation of resources mode applied to work-family conflict and strain. *Journal of Vocational Behavior, 54*, 350 - 370.
- Greenhaus, J. H. (2008). Innovations in the study of the work-family interface: Introduction to the special section. *Journal of Occupational and Organizational Psychology, 81*, 343 - 348.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10*, 76 - 88.
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work-family balance and quality of life. *Journal of Vocational Behavior, 6*, 510 - 531.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review, 31*, 72 - 92.
- Grzywacz, J. G., & Bass, B. L. (2003). Work, family, and mental health: testing different models of work-family fit. *Journal of Marriage and Family, 65*, 248 - 262.
- Grzywacz, J. G., & Butler, A. B. (2005). The impact of job characteristics on work-to-family facilitation: testing a theory and distinguishing a construct. *Journal of Occupational Health Psychology, 10*, 97 - 109.
- Grzywacz, J. G., Carlson, D., & Shulkin, S. (2008). Schedule flexibility and stress. Linking formal flexible arrangements and perceived flexibility to employee health. *Community, Work & Family, 11*, 199 - 214
- Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualising the work-family interface: an

- ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5, 111 - 126.
- Guimond, S., Branscombe, N. R., Brunot, S., Buunk, A. P., Chatard, A., Désert, M., Garcia, D. M., Haque, S., Martinot, D., & Yzerbyt, V. (2007). Culture, gender, and the self: Variations and impact of social comparison processes. *Journal of Personality and Social Psychology*, 92, 1118 - 1134.
- Hair, JR. J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. New Jersey: Prentice-hall International.
- Hakanen, J. J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: from job resources to work engagement, personal initiatives and work-unit innovativeness. *Journal of Vocational Behavior*, 73, 78 - 91.
- Halbesleben, J. R. B., & Demerouti, E. (2005). The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg Burnout Inventory. *Work & Stress*, 19, 208 - 220.
- Hallsten, L. (1993). Burning out: a framework. In W. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout . Recent developments in theory and research* (pp.95 - 113). Washington: Taylor & Francis.
- Hallsten, L. (2005). Burnout and wornout: concepts and data from a national survey. In A.-S. G. Antoniou & C. L. Cooper. Cheltenham (Eds.), *Research companion to organizational health psychology* (pp. 516 - 536). Cheltenham: Elgar Publ.
- Hallsten, L., Josephson, M., & Torgén, M. (2005). Performance-based self-esteem. A driving force in burnout processes and its assessment. *Arbete och Hälsa*, 4, 1 - 35.
- Hammer, L. B., Cullen, J. C., Neal, M. B., Sinclair, R. R., & Shafiro, M. V. (2005). The longitudinal effects of work-family conflict and positive spillover on depressive symptoms among dual-earner couples. *Journal of Occupational Health Psychology*, 5, 138 - 154.
- Hancock, G. R., Lawrence, F. R., & Nevitt, J. (2000). Type I error and power of latent mean methods and MANOVA in factorially invariant and noninvariant latent variable systems. *Structural Equation Modelling*, 7, 534 - 556.
- Hausmann, R., Tyson, L. D., & Zahidi, S. (2008). *The global gender gap*. Geneva, Switzerland: World Economic Forum.
- Hendrix, W. H., Summers, T. P., Leap, T. L., & Steel, R. P. (1995). Antecedents and organizational effectiveness outcomes of employee stress and health. In R. Crandall &

- P. L. Perrewè (Eds.), *Occupational stress: A handbook* (pp. 73 - 92). Washington, DC: Taylor & Francis.
- Henson, R. K. (2001). Methods, plainly speaking. Understanding internal consistency reliability estimates: A conceptual primer on coefficient alpha. *Measurement and Evaluation in Counseling and Development*, *34*, 177 - 189.
- Hill, E. J., Allen, S., Jacob, J., Bair, A. F., Bikhazi, S. L., Van Langeveld, A., Martinengo, G., Parker, T. T., & Walker, E. (2007). Work-family facilitation: Expanding theoretical understanding through qualitative exploration. *Advances in Developing Human Resources*, *9*, 507 – 526.
- Hill, E. J., Grzywacz, J. G., Allen, S., Blanchard, V. L., Matz-Costa, C., Shulkin, S., & Pitt-Catsouphes, M. (2008). Defining and conceptualizing workplace flexibility. *Community, Work & Family*, *11*, 149 - 163.
- Hill, E. J., Jacob, J. I., Shannon, L., Brennan, R. T., Blanchard, V. L., & Martinengo, G. (2008). Exploring the relationship of workplace flexibility, gender, and life stage to family-to-work conflict, and stress and burnout. *Community, Work & Family*, *11*, 165 - 181.
- Hill, E. J., Yang, C., Hawkins, A. J., & Ferris, M. (2004). A cross-cultural test of the work-family interface in 48 countries. *Journal of Marriage and Family*, *66*, 1300 - 1316.
- Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *American Psychologist*, *44*, 513 - 524.
- Hobfoll, S. E. (1998). *Stress, culture, and community. The psychology and philosophy of stress*. New York: Plenum Press.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources. *Applied Psychology*, *50*, 337 - 421.
- Hobfoll, S. E., & Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout. In W. B. Schaufeli, M. Maslach & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 115 - 129). USA: Taylor & Francis.
- Hobfoll, S. E., & Shirom, A. (2001). Conservation of resources theory. Applications to stress and management in the workplace. In R. T. Golembiewski (Edt.), *Handbook of organizational behavior. Second edition, revised and expanded*. (pp. 57 - 80). New York: Marcel Dekker.
- Hochschild, A. R. (1997). *The time bind. When work becomes home and home becomes work*. New York: Henry Holt and Company.
- Hong, S., Malik, M. L., & Lee, M. (2003). Testing configural, metric, scalar, and latent mean

- invariance across genders in sociotropy and autonomy using a non-western sample. *Educational and Psychological Measurement*, 63, 636 - 654.
- Hoppe, M. T. (1998). Fremtidens arbeidsværdier er her allerede. [Work values for the future] *Fremtidsorienteringen*, 2.
- Hox, J. J., & Bechger, T. M. (1998). An introduction to structural equation modelling. *Family Science Review*, 11, 354 - 373.
- Innstrand, S. T., Espnes, G., & Mykletun, R. (2002). Burnout among people working with intellectually disabled: a theory update and an example. *Scandinavian Journal of Caring Science*, 16, 1 – 8.
- Innstrand, S. T., Espnes, G., & Mykletun, R. (2004). Job stress, burnout and job satisfaction: an intervention study for staff working with people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 17, 119 – 126.
- Jacobs, J. A., & Gerson, K. (2001). Overworked individuals or overworked families? Explaining trends in work, leisure, and family time. *Work and Occupations*, 28, 40 - 63.
- Johansson, G. (2002). Work-life balance: the case of Sweden in the 1990s. *Social Science Information*, 41, 303 – 317.
- Jöreskog, K., & Sörbom, D. (1993). *LISREL 8: Structural equation modelling with the SIMPLIS command language*. Chicago: Scientific Software International.
- Jöreskog, K., & Sörbom, D. (2004). *LISREL 8.7 for Windows* (Computer Software). Lincolnwood, IL: Scientific Software International.
- Kinnunen, U., Feldt, T., Geurts, S., & Pulkkinen, L. (2006). Types of work-family interface: Well-being correlates of negative and positive spillover between work and family. *Scandinavian Journal of Psychology*, 47, 149 - 162.
- Kinnunen, U., & Mauno, S. (1998). Antecedents and outcomes of work-family conflict among employed women and men in Finland. *Human Relations*, 51, 157 - 177.
- Kirchmeyer, C. (1992). Perceptions of nonwork-to-work spillover: Challenging the common view of conflict-ridden domain relationships. *Basic and Applied Social Psychology*, 13, 231 - 249.
- Kitterød, R. H. (2005). *Han jobber, hun jobber, de jobber. Arbeidstid blant par av småbarnsforeldre* [He works, she works, they works. Work hours among couples with small children] Oslo: Statistics Norway.
- Kristiansen, J. E., Flatebø, G., & Modig, I. (2006). *This is Norway. What the figures say*. Oslo: Statistics Norway.

- Kristiansen, J. E., & Sandnes, T. (2006). *Women and men in Norway. What the figures say*. Oslo: Statistics Norway.
- Langballe, E. M. (2008). *Burnout in modern work life: concept and consequences. Examined in different occupational groups in Norway*. Series of dissertations submitted and defended to the faculty of Social Science, University of Oslo, No.117.
- Langballe, E. M., Innstrand, S. T., Aasland, O. G., & Falkum, E. (2009). The predictive value of individual factors, work-related factors, and work-home interaction on burnout in female and male physicians: a longitudinal study. *Submitted*
- Langballe, E. M., Falkum, E., Innstrand, S. T., & Aasland, O. G. (2006). The factorial validity of the Maslach Burnout Inventory-General Survey in representative samples of eight occupational groups. *Journal of Career Assessment, 14*, 370 - 385.
- Lambert, S. J. (1990). Processes linking work and family: A critical review and research agenda. *Human Relations, 43*, 239 - 257.
- Lazarus, R. S. (2001). Conservation of resource theory (COR): Little more than words masquerading as a new theory. *Applied Psychology: An International Review, 50*, 381 - 391.
- Leary, M. (2007). Motivational and emotional aspects of the self. *Annual Review Psychology, 58*, 317 - 344.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology, 81*, 123 - 133.
- Leiter, M. P. (1990). The impact of family resources, control coping, and skill utilization on the development of burnout: A longitudinal study. *Human Relations, 43*, 1067 – 1083.
- Little, T. D. (1997). Mean and covariance structures (MACS) analyses of cross-cultural data: Practical and theoretical issues. *Multivariate Behavioral Research, 32*, 53 - 76.
- Livingston, B. A., & Judge, T. A. (2008). Emotional responses to work-family conflict: An examination of gender role orientation among working men and women. *Journal of Applied Psychology, 93*, 207 - 216.
- Llorens, S., Schaufeli, W., Bakker, A., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist? *Computers in Human Behaviour, 23*, 825 - 841.
- Lund, M., & Skjåk, K. K. (1997). *Arbeidsforhold og arbeidserfaringer 1997*. [Working conditions and work experience 1997] NSD. Rapport nr. 114.

- MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modelling in psychological research. *Annual Review Psychology*, 51, 201 - 226.
- Mackenzie, S. B. (2001). Reflections and reviews. Opportunities for improving consumer research through latent variable structural equation modelling. *Journal of Consumer Research*, 28, 159 – 166.
- Maslach, C. (1993). Burnout: A multidimensional perspective. In W. B. Schaufeli, C. Maslach & T. Marek (Eds.), *Professional burnout: recent developments in theory and research* (pp. 19 - 32). Washington, DC: Taylor & Francis.
- Maslach, C., Schaufeli, W. B., & Leiter, M. (2001). Job burnout. *Annual Review of Psychology*, 52, 397 - 422.
- Mattingly, M. J., & Sayer, L. C. (2006). Under pressure: gender differences in the relationship between free time and feeling rushed. *Journal of Marriage and Family*, 68, 205 - 221.
- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: a longitudinal study. *Journal of Vocational Behavior*, 70, 149 - 171.
- Messick, S. (1995). Validity of psychological assessment. Validation of inferences from persons' responses and performance as scientific inquiry into score meaning. *American Psychologist*, 50, 741 - 749.
- Mikkelsen, A., & Burke, R. J. (2004). Work-family concerns of Norwegian police officers: Antecedents and consequences. *International Journal of Stress Management*, 11, 429 - 444.
- Millsap, R. E., & Everson, H. (1991). Confirmatory measurement model comparisons using latent means. *Multivariate Behavioural Research*, 26, 479 - 497.
- Montgomery, A. J., Peeters, M. C. W., Schaufeli, W. B., & Den Ouden, M. (2003). Work-home interference among newspaper managers: its relationship with burnout and engagement. *Anxiety, Stress, and Coping*, 16, 195 - 211.
- Nelson, D. L., & Simmons, B. L. (2003). Health psychology and work stress: A more positive approach. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 97 - 119). Washington, DC: American Psychological Associations.
- Neveu, J-P. (2007). Jailed resources: Conservation of resources theory as applied to burnout among prison guards. *Journal of Organizational Behaviour*, 28, 21 - 42.
- Nielsen, G. (2008). *Minifakta om Norge [Facts about Norway]*. Oslo: Statistics Norway.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. New York: McGraw-Hill.

- O'Driscoll, M., Brough, P., & Kalliath, T. (2009). Work-Family Conflict and Facilitation. Chapter 6 prepared for F. Jones, R. Burke & M. Westman (Eds.), *Managing the work-home interface*. Hove, Sussex, UK: Psychology Press
- Olson-Buchanan, J. B., & Boswell, W. R. (2006). Blurring boundaries: Correlates of integration and segmentation between work and nonwork. *Journal of Vocational Behavior, 68*, 432 - 445.
- Parker, S. K., Wall, T. D., & Cordery, J. L. (2001). Future work design research and practice: Towards an elaborated model of work design. *Journal of Occupational and Organizational Psychology, 74*, 413 - 440.
- Peeters, M. C. W., de Jonge, J., Janssen, P. P. M., & van der Linden, S. (2004). Work-home interference, job stressors, and employee health in a longitudinal perspective. *International Journal of Stress Management, 11*, 305 - 322.
- Peeters, M. C. W., Montgomery, A. J., Bakker, A. B., & Schaufeli, W. B. (2005). Balancing work and home: How job and home demands are related to burnout. *International Journal of Stress Management, 12*, 43 - 61.
- Podsakoff, P. M., MacKenzie, S. B., Jeong-Yeon Lee, J-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research : A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879 - 903.
- Preamble to the Constitution of the World Health Organization (1946). *Official Records of the World Health Organization, 2*, 100.
- Premeaux, S. F., Adkins, C. L., & Mossholder, K. W. (2007). Balancing work and family: A field study of multi-dimensional, multi-role work-family conflict. *Journal of Organizational Behavior, 28*, 705 - 727.
- Quick, J. C., & Gavin, J. H. (2001). Four perspectives on conservation of resources theory: A commentary. *Applied Psychology: An International Review, 50*, 392 - 400.
- Roos, P. A., Trigg, M. K., & Hartman, M. S. (2006). Changing families/changing communities. Work, family and community in transition. *Community, Work and Family, 9*, 197 - 224.
- Rothbard, N. P., & Edwards, J. R. (2003). Investment in work and family roles: A test of identity and utilitarian motives, *Personnel Psychology, 56*, 699 - 730.
- Seligman, M. E. P. (2008). Positive health. *Applied Psychology: An International Review, 57*, 3 - 18.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology. An introduction. *American Psychologist, 55*, 5 - 14.

- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress. Empirical validation of intervention. *American Psychologist*, *60*, 410 - 421.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, *25*, 239 – 315.
- Schaufeli, W. B., Tairs, T. W., & van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review*, *57*, 173 - 203.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modelling*. London: Lawrence Erlbaum Associates.
- Schwartz, S. H., & Rubel, T. (2005). Sex differences in value priorities. Cross-cultural and multimethod studies. *Journal of Personality and Social Psychology*, *89*, 1010 - 1028.
- Schwarzer, R. (2001). Stress, resources, and proactive coping. *Applied Psychology: An International Review*, *50*, 400 - 407.
- Sharma, S. (1996). *Applied multivariate techniques*. Canada: John Wiley & Sons.
- Simon, R. W. (1995). Gender, multiple roles, role meaning, and mental health. *Journal of Health and Social Behavior*, *36*, 182 - 194.
- Simon, R. W. (1997). The meaning individuals attach to role identities and their implications for mental health. *Journal of Health and Social Behavior*, *38*, 256 - 274.
- Skaare, S. (2006). Undersøkelse om «Utbrenthet i enkelte yrker» 2005: dokumentasjonsrapport [A study on burnout in different occupational groups in Norway, 2005. In Norwegian] Oslo: Statistics Norway.
- Spector, P. E., Cooper, C. L., Poelmans, S., Allen, T. D., O'Driscoll, M., Sanchez, J. I., Siu, O. L., Dewe, P., Hart, P., & Lu, L. (2004). A cross-national comparative study of work-family stressors, working hours, and well-being: China and Latin American versus the Anglo World. *Personnel Psychology*, *57*, 119 - 142.
- Steinmetz, H., Frese, M., & Schmidt, P. (2008). A longitudinal panel study on antecedents and outcomes of work-home interference. *Journal of Vocational Behavior*, *73*, 231 – 241.
- Sumer, H. C., & Knight, P. A. (2001). How do people with different attachment styles balance work and family? A personality perspective on work-family linkage.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. London: Allyn and Bacon.

- Taris, T. W. (2000). *A primer in longitudinal data analysis*. London: SAGE Publications.
- Taris, T. W., Kompier, M. (2003). Challenges in longitudinal designs in occupational health psychology. *Scandinavian Journal of Work, Environment, & Health*, 29, 1 – 4.
- ten Brummelhuis, L. L., van der Lippe, T., Kluwer, E. S., & Flap, H. (2008). Positive and negative effect of family involvement on work-related burnout. *Journal of Vocational Behavior*, 73, 387 – 396.
- Thompson, M. S., & Cooper, C. L. (2001). A rose by another name...: A commentary on Hobfoll's conservation of resources theory. *Applied Psychology: An International Review*, 50, 408 - 418.
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practice, and recommendations for organizational research. *Organizational Research Methods*, 3, 4 – 70.
- van Steenbergen, E. F., Ellemers, N., & Mooijaart, A. (2007). How work and family can facilitate each other: Distinct types of work-family facilitation and outcomes for women and men. *Journal of Occupational Health Psychology*, 12, 279 – 300.
- Väänänen, A., Kumpulainen, R., Kevin, M. V., Ala-Mursula, L., Kouvonen, A., Kivimäki, M., Toivanen, M., Linna, A., & Vahtera, J. (2008). Work-family characteristics as determinants of sickness absence: A large-scale cohort study of three occupational grades. *Journal of Occupational Health Psychology*, 13, 181 - 196.
- Voydanoff, P. (2005). Toward a conceptualization of perceived work-family fit and balance: a demands and resources approach. *Journal of Marriage and Family*, 67, 822 - 836.
- Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, K. M. (2007). Work-family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review*, 17, 63 - 76.
- Wayne, J. H., Musisca, N., & Fleeson, W. (2004). Considering the role of personality in the work-family experience: Relationships of the big five to work-family conflict and facilitation. *Journal of Vocational Behavior*, 64, 108 - 130.
- Wayne, J. H., Randel, A. E., & Stevens, J. (2006). The role of identity and work-family support in work-family enrichment and its work-related consequences. *Journal of Vocational Behavior*, 69, 445 – 461.
- Wedde, E., Holmøy, A., Skaare, S., & Villund, O. (2004). Undersøkelse om "Utbrentet i enkelte yrker": dokumentasjonsrapport [A study on burnout in different occupational groups in Norway. In Norwegian] Oslo: Statistics Norway.
- Wood, R., & Bandura, A. (1989). Impact of conceptions of ability on self-regulatory

mechanisms and complex decision making. *Journal of Personality and Social Psychology*, 56, 407 - 415.

Zedeck, S., & Mosier, K. (1990). Work in the family and employing organization. *American Psychologist*, 45, 240 - 251.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior* (2008), doi:10.1016/j.jvb.2008.11.003

Paper I

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Paper II

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Paper III

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Paper IV

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Appendix I - VI

Appendix I: Descriptions of the different occupational groups

Appendix II: Description of sampling procedures

Appendix III: Letters to the respondents in the second survey and questionnaire

Appendix IV: Letters to the respondents in the second survey

Appendix V: Statistics Norway's evaluation of sample deviations in each occupation

Appendix VI: Tests for measurement invariance across gender.

APPENDIX I

Descriptions of the different occupational groups included in this thesis

Descriptions of the different occupational groups included in this thesis

Advertisement: The advertisement group consists of decorators, designers, art directors, distributors of commercial advertisement and others doing different work tasks within the advertisement industry. Because of the overlapping use of different titles, people having work tasks not necessarily associated with the advertisement business may have been included in this group.

Bus drivers: Included bus drivers and tram conductors. The work tasks included mainly the transport of passengers, but also of mail or cargo. The bus driver may be responsible for keeping the vehicle in approved form and selling/controlling tickets. Ambulance personnel and long distance transportation drivers of goods or passengers were not included in this group.

Church ministers: This group mainly consists of church ministers, but also includes other people employed in clergy positions, such as catechists and missionaries.

Information technology workers: This occupational group includes workers doing a wide variety of tasks such as programming, research, development of new data tools for administrative, communication and information purposes, testing of data programs, designing and implementing new systems, user assistance, installation of new programs and the like. Competence levels, work tasks and titles are diverse in this occupational group.

Lawyers: Lawyers in this investigation include people doing all kinds of work tasks within law such as giving advice, helping private and business clients in court, formulating contracts and deals, formulating wills and providing advice in the bank, industry and insurance businesses.

Nurses: This group includes ordinary nurses, midwives and nurses with some sort of specialization. Tasks are treatment, caring and guidance of sick or wounded individuals.

Physicians: Includes public and private practitioners (specialists and non-specialists) doing clinical, administrative or scientific work within the medical field.

Teachers: This occupational group consists of teachers working within the Norwegian school system, in both public and private schools, and with children between six and 19 years of age (from the first grade through high school).

(Langballe, 2008, p. 24.).

APPENDIX II:

Descriptive by Statistics Norway of the Norwegian registers of employees and employment used to select potential respondents for this survey

From: http://www.ssb.no/emner/06/90/notat_200448/notat_200448.pdf

Utvalgsdokumentasjon

14 Om Arbeidstakerregisteret og andre sysselsettingsregistre i forbindelse med trekking av utvalg til spørreundersøkelse for Den norske lægeforening

Redigert av Ole Villund, Seksjon for arbeidsmarked, Statistisk sentralbyrå, Oslo 29.10.2003.

14.1 Bakgrunn for Arbeidstakerregisterdata

Arbeidstakerstatistikken baserer seg på data fra Rikstrygdeverkets Arbeidsgiver-/arbeidstakerregisteret (A/A-registeret), og ble første gang publisert i 1983. Siden er statistikken utvidet med flere næringer og f.o.m. 1992 har den omfattet alle næringene unntatt primærnæringene (ekskl. fiskeoppdrett). I 1992 ble sjøfolk inkludert i datagrunnlaget og i 1994 gikk man over fra 2. kvartal til 4. kvartal som referansetidspunkt.

14.2 Omfang

Arbeidstakerstatistikken omfatter de arbeidstakere som står registrert med aktivt arbeidsforhold i Arbeidstakerregisteret ved et gitt tidspunkt. For arbeidstakere med flere registrerte arbeidsforhold, blir et av disse ("hovedarbeidsforholdet") valgt ut som tellende i statistikken. Se pkt. 4.2 for krav til arbeidsforhold for at det skal være meldepliktig til A/A-registeret. Vernepliktige og selvstendig næringsdrivende er ikke med i datagrunnlaget.

14.3 Datakilder

A/A-registeret danner grunnlaget for arbeidstakerstatistikken. I tillegg benyttes også Enhetsregisteret og Bedrifts- og Foretaksregisteret (BoF) i SSB for å bestemme næring. For enkelte grupper arbeidstakere som mangler data om relevant arbeidsstedskommune brukes bostedskommune fra Det sentrale personregisteret. Dette gir en mer korrekt geografisk fordeling av arbeidstakerne.

14.4 Kontroll og revisjon

Statistisk sentralbyrå (SSB) mottar fra Rikstrygdeverket (RTV) ukentlig filer over endringsmeldinger til A/A-registeret. I tillegg tas det årlig et totaluttak fra A/A-registeret.

RTV gjennomfører årlig en "årskontroll" av A/A-registeret. Arbeidsgivere med manuell innrapportering får tilsendt lister over alle personer de har stående innmeldt med aktivt arbeidsforhold. Nye avdelinger (bedrifter) skal også fanges opp i Årskontrollen.

Omfattende kontroll og revisjon av A/A-registeret. Feil som oppdages rettes i statistikken, samtidig som det sendes melding til RTV og Enhetsregisteret, for at feilen skal bli rettet opp i selve registeret også. Av typer feil kan en nevne næringskode, arbeidsstedskommune og mangelfull oppdeling av bedrifter. Korrigeringsene i statistikken gjøres på bedriftsnivå og ikke på person. Det er

derfor ikke mulig å gi konsistente tall som bygger på grupperinger etter personbaserte kjennemerker.

For sjøfolk, ansatte i forsvaret og avisbud settes arbeidsstedskommune lik bostedskommune. Bostedskommune hentes fra Det sentrale personregister.

14.5 Definisjon av arbeidstaker

En arbeidstaker er en person som arbeider i en annens tjeneste for lønn eller annen godtgjørelse. Det stilles krav om at arbeidsforholdet skal ha en forventet varighet på minst seks dager og gjennomsnittlig 4 timer eller mer pr. uke, for at det skal være meldepliktig til A/A-registeret. Det er også gjort unntak for visse typer arbeidsforhold hvor arbeidsgiver ikke har vanlig instruksjonsmyndighet overfor den som mottar lønn. Kommuneinndelingen som benyttes er pr. 1.1.1994. Næring er kodet etter Standard for næringsgruppering (SN94) (NOS C 182).

14.6 Feilkilder og usikkerhet

Erfaring viser at en del meldinger til arbeidstakerregisteret kommer for sent inn. Det gjør at den utviklingen statistikken viser, ligger noe etter den faktiske utviklingen (3-6 måneder). Av samme grunn gjøres datauttaket fra registeret først 16 uker etter referansedato for statistikken. Dette sikrer at de fleste meldinger som gjelder referansedatoen kommer med i statistikken. Under revisjonen av registeret rettes mangelfull fordeling av ansatte, feil arbeidsstedskommune og næring. Dette gir ingen garanti for at det blir riktig, men det er vår mening at det er mer korrekt enn utgangspunktet i registeret.

15 Bakgrunn for registerbasert sysselsettingsstatistikk

Den registerbaserte sysselsettingsstatistikken er en videreføring av arbeidstakerstatistikken, som første gang ble publisert i 1983 (www.ssb.no/emner/06/01/). I forbindelse med utarbeidelsen av FoB2001 ble arbeidstakerstatistikken utvidet til en fullstendig sysselsettingsstatistikk. Fra og med publiseringen av sysselsatte i tellingsuka 2001 inneholder statistikken både lønnstakere og selvstendige, som har utført arbeid av en times varighet på referansetidspunktet. Dette tilsvarer definisjonen av arbeid benyttet i Arbeidskraftundersøkelsen (AKU) og nasjonalregnskapet, noe som fører til at antall sysselsatte i alt på landsnivå vil være tilnærmet det samme i alle statistikkene. Den registerbaserte sysselsettingsstatistikken omfatter bosatte personer mellom 16 - 74 år som har utført arbeid av minst en times varighet i referanseuken, eller som var midlertidig fraværende fra slikt arbeid. Data til undersøkelsen er fra årgang 2002, og de sysselsatte er valgt ut etter utdanningskode og næringskode. Se tabeller for spesifikasjon av hvilke koder som ligger til grunn.

15.1 Datakilder

Data for den registerbaserte sysselsettingsstatistikken er basert på flere ulike registre. De viktigste er Rikstrygdeverkets (RTV) arbeidstakerregister, lønns- og trekkoppgaveregisteret og

selvangivelsesregisteret administrert av Skattedirektoratet, registeret over vernepliktige og sivilarbeidere fra henholdsvis Vernepliktsverket og Siviltjenesteadministrasjonen, og Enhetsregisteret/ Bedrifts- og foretaksregisteret. Arbeidstakerregisteret er hovedkilden til data om lønnstakere, men lønns- og trekkoppgaverregisteret utgjør et viktig supplement ved at det fanger opp lønnstakerforhold som ikke er meldepliktige til arbeidstakerregisteret. Begge registre har arbeidsforhold (jobber) som enhet. Selvangivelsesregisteret er hovedkilden til opplysninger om selvstendig næringsdrivende. Enhetsregisteret og Bedrifts- og foretaksregisteret gir opplysninger om bedriftene (arbeidsstedene). I tillegg nyttes supplerende data fra en rekke andre kilder: SOFA-søkerregisteret som gir data om arbeidsledige og personer på arbeidsmarkedstiltak, registre over ansatte i stat i kommune, lønnsstatistikk for ansatte i privat sektor, sykefraværsregisteret mv. Avgrensingen av sysselsatte er altså basert på en rekke ulike kilder, og det er bygget opp et system i SSB for en samlet utnyttning av disse. Systemene omfatter moduler for konsistensbehandling mellom ulike datakilder, valg av viktigste arbeidsforhold og klassifisering som sysselsatt. Opplysningene om befolkningens høyeste fullførte utdanning er per 1. oktober året før statistikkåret.

15.2 Datainnsamling

15.2.1 Arbeidstakerregisteret:

Statistisk sentralbyrå (SSB) mottar fra RTV ukentlig filer over endringsmeldinger til arbeidstakerregisteret. I tillegg tas det årlig et totaluttak.

15.2.2 Lønns og trekkoppgaverregisteret:

Når det gjelder opplysninger fra Skattedirektoratets lønns- og trekkoppgaverregister gjøres det to uttrekk; et foreløpig uttrekk i mars, og et uttrekk i mai/juni som danner grunnlaget for tallene i denne statistikken.

15.2.3 Selvangivelsesregisteret:

Alle likningskontorene gjør bruk av IT i behandlingen av likningen, og opplysninger fra den personlige selvangivelsen er tilgjengelig på elektronisk form. SSB innhenter årlig et uttrekk av datamaterialet fra Skattedirektoratet.

15.2.4 Registeret over sivilarbeidere og vernepliktige:

SSB mottar kvartalsvise filer fra Vernpliktsverket og Siviltjenesteadministrasjonen på Hustad og Dillingøy. Dataene bearbeides og settes sammen til et register med årlig informasjon.

15.2.5 Enhetsregisteret/ Bedrifts- og foretaksregisteret:

Bedriftsrelaterte variable som arbeidsstedskommune og næring innhentes fra SSB's Bedrifts- og foretaksregister.

15.3 Kontroll og revisjon

For de tre mest sentrale registrene som ligger til grunn for produksjonen, skjer kontroll og revisjon på følgende måte:

RTV gjennomfører årlig en "årskontroll" av arbeidstakerregisteret. Arbeidsgivere med manuell innrapportering får tilsendt lister over alle personer de har stående innmeldt med aktivt arbeidsforhold. Feil blir meldt trygdekontorene. SSB kontrollerer at flerbedriftsforetak har egne numre for hver bedrift, samt at arbeidstakerne knyttes til riktig bedrift. Feil som oppdages rettes i statistikken, samtidig som det sendes melding til arbeidsgiver via RTV for at opprettinger i selve registeret også blir utført. Dette er viktig for korrekt informasjon om næring og arbeidsstedskommune. I tillegg gjør SSB kontroll av arbeidstakerregisteret mot Enhetsregisteret, lønns- og trekkoppgaveregisteret, SOFA-søkerregisteret over arbeidsledige m.m. Kontroll av lønns- og trekkoppgaveregisteret blir utført i flere ledd. Arbeidsgiverne gjør den første kontrollen før materialet blir sendt skatteetaten. Deretter gjennomfører skatteetaten kontroll både lokalt ved kommunekassererkontorene og sentralt i Skattedirektoratet. Materialet blir også kontrollert av Statistisk sentralbyrå der kontroll og kvalitetssikring av institusjonell sektor og næring er den mest omfattende. Også for Selvangivelsesregisteret blir det utført en rekke maskinelle kontroller. For det første blir det kontrollert om summen av delposter stemmer med hovedpostene fra selvangivelsen. Det blir videre undersøkt om ekstreme verdier er logiske i forhold til resten av selvangivelsen. Interne konsistenskontroller blir også gjennomført, som for eksempel om inntekt av eget bosted i forhold til likningsverdien av bostedet stemmer. Eksterne konsistenskontroller blir gjort mot tilsvarende størrelser i SSBs skattestatistikk for personlige skattytere.

15.4 Definisjon av sysselsatte

Sysselsatte er definert som personer som utførte inntektsgivende arbeid av minst én times varighet i referanseuken, samt personer som har et slikt arbeid, men som var midlertidig fraværende pga. sykdom, ferie, lønnet permisjon e.l. Personer som er inne til førstegangs militær- eller siviltjeneste regnes som sysselsatte. Personer på sysselsettingstiltak med lønn fra arbeidsgiver klassifiseres også som sysselsatte. For sysselsatte med flere arbeidsforhold i referanseuken, fastsettes ett som det viktigste. Opplysninger om personenes jobb- og bedriftsrelaterte kjennemerker gjelder det viktigste arbeidsforholdet. Utdanning er arbeidstakernes høyeste fullførte utdanning, som er kodet etter Standard for utdanningsgruppering (NOS C 617).

15.5 Standard grupperinger

Standard for næringsgruppering (SN94) (NOS C 182).

Standard for utdanningsgruppering (NUS2000) (NOS C617)

15.6 Ikke-utvalgsfeil

For personer som er definert som sysselsatte og lønnstakere kun på grunnlag av opplysninger fra lønns- og trekkoppgaveregisteret (omkring 10 prosent av lønnstakerne), er arbeidsforholdet ikke

datert. For rundt halvparten av denne massen innhentes informasjon fra andre administrative kilder, som er med på å tidfeste arbeidsforholdet. For de resterende legges informasjon om lønn til grunn for om en person anses som sysselsatt. Det er dermed knyttet en viss usikkerhet om arbeidsforholdet faktisk var aktivt i referanseuken.

Selvstendig næringsdrivende identifiseres ved hjelp av informasjon fra Selvangivelsesregisteret. Grunnet lang produksjonstid ligger opplysninger om næringsvirksomhet fra året før til grunn for utarbeidelse av statistikken. Som følge av denne tidsforskyvningen kan personer dermed feilaktig bli klassifisert som sysselsatte, hvis de avsluttet virksomheten det foregående året.

For personer som er definert som sysselsatte og lønnstakere kun på grunnlag av opplysninger fra lønns- og trekkoppgaverregisteret er arbeidsforholdet knyttet til et foretak. Her er det utarbeidet en rutine for på best mulig måte å identifisere bedriften. I de tilfeller hvor personen er ansatt i et flerbedriftsforetak, kan det være usikkert om arbeidsforholdet faktisk blir knyttet til riktig bedrift, og dermed får korrekte opplysninger om næring og arbeidssted. For store foretak med mange bedrifter under seg, er fordelingen av ansatte i arbeidstakerregisteret til tider mangelfull. Det kan gi merkbare utslag på kommunenivå når slike feil oppstår og når de rettes.

APPENDIX III:

Letters to the samples in the first survey and the questionnaire

From: http://www.ssb.no/emner/06/90/notat_200448/notat_200448.pdf



Statistisk sentralbyrå
Statistics Norway

Seksjon for intervjuundersøkelser
Postboks 8131 Dep., 0033 Oslo
Telefon: 21 09 00 00, Telefaks: 21 09 49 73

Undersøkelse om

belastninger, mestring og helse innenfor utsatte yrker

De fleste spørsmålene i dette skjemaet besvarer du ved å sette ett kryss i ruten ved det svaret du vil gi. **Når du sender inn ferdig utfylt spørreskjema er du med i trekningen av et gavekort på 10 000 kroner,- og ti gavekort på 1 000 kroner.** Gavekortene kan brukes i et utvalg butikker.

Lykke til med utfyllingen!

YRKE OG ARBEIDSTID

Utvalget i denne undersøkelsen er trukket fra Statistisk sentralbyrås yrkesregister, men fordi registeret kan inneholde feil, ønsker vi likevel å spørre deg om yrket ditt.

1. Hvilket yrke har du: _____

2. Hva går arbeidet ditt i hovedsak ut på: _____

3. Arbeider du i privat eller offentlig virksomhet?

- 1 Privat
2 Offentlig

4. Hva er din avtalte arbeidstid i gjennomsnitt per uke? _____ timer

5. Hva er din faktiske arbeidstid i gjennomsnitt per uke? _____ timer

6. Dersom du har mindre enn 100% stilling, skyldes det:

- 1 Omsorgsoppgaver
2 For stor arbeidsbyrde ved full stilling
3 Helsemessige årsaker
4 Kombinasjon med uføretrygd
5 Annet

TIDSPRESS OG DIN INNFLYTELSE PÅ DIN ARBEIDSSITUASJON

7. Hender det at du har så mye å gjøre at arbeidssituasjonen din blir oppjaget og masete, og i tilfelle hvor ofte?

- 1 Sjelden eller aldri
2 I perioder, men ikke daglig
3 Daglig, mindre enn halvparten av arbeidstiden
4 Daglig, mer enn halvparten av arbeidstiden

8. I hvilken grad kan du selv bestemme ditt arbeidstempo?

- 1 I høy grad
2 I noen grad
3 I liten grad

9. I hvilken grad kan du vanligvis selv bestemme eller planlegge rekkefølgen i dine arbeidsoppgaver i løpet av dagen?

- 1 I høy grad
2 I noen grad
3 I liten grad

Spørsmål om **TILKNYTNING TIL ARBEIDET** fortsetter:

I hvilken grad stemmer beskrivelsene nedenfor med dine egne opplevelser den siste måneden?

Sett ett kryss på hver linje

	Stemmer ikke 1	Stemmer ganske dårlig 2	Stemmer delvis 3	Stemmer ganske godt 4	Stemmer helt 5	Uaktuelt 6
28 Det hender stadig oftere at jeg snakker nedsettende om jobben.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29 Jeg trenger mer tid nå enn tidligere for å hente meg inn etter jobben.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30 Jeg klarer belastninger i arbeidet mitt bra.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31 I det siste har jeg arbeidet stadig mer mekanisk og tenkt mindre gjennom oppgavene.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32 Jeg ser på jobben min som en utfordring.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33 Med tiden har jeg mistet den dype interessen for arbeidet mitt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34 Av og til byr arbeidsoppgavene meg rett og slett i mot.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35 Jeg kan ikke tenke meg noe annet yrke enn mitt eget.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36 Jeg har glede av arbeidet jeg gjør.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37 Jobben min engasjerer meg.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SOSIAL DELTAKELSE

14. Hvor ofte har du kontakt med slekt eller venner som du ikke bor sammen med?

Sett ett kryss

- 1 Sjeldnere enn en gang i året
- 2 En eller flere ganger i året, men ikke hver måned
- 3 Omtrent hver måned, men ikke hver uke
- 4 Omtrent hver uke, men ikke daglig
- 5 Flere ganger i uka eller daglig

15. Har du noen personer du kan snakke helt fortrolig med?

- 1 Nei
- 2 Ja, en
- 3 Ja, flere

ULIKE HELSEPLAGER

16. Har du i løpet av den siste måneden vært plaget av:

Sett ett kryss på hver linje

	Ikke plaget 0	Litt plaget 1	Ganske mye plaget 2	Veldig mye plaget 3
1 Nakkesmerter.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Smerter øverst i ryggen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Smerter i korsrygg.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Smerter i armene.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Smerter i skuldre.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Smerter i føttene.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Fordøyelsesproblemer.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Brystsmerter.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Andre plager.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. Nedenfor finner du en liste med plager og problemer som man av og til kan ha

Angi hvor mye hvert enkelt problem har plaget deg eller vært til besvær i løpet av den siste måneden.

Sett ett kryss på hver linje

		Ikke plaget	Litt plaget	Ganske mye plaget	Veldig mye plaget
		1	2	3	4
1	Hodepine.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Skjelving.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Matthet eller svimmelhet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Nervøsitet, indre uro.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Plutselig frykt uten grunn.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Stadig redd eller engstelig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Hjertebank, hjerteslag som løper av gårde.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Følelse av å være anspent, oppjaget.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Anfall av angst eller panikk.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Så rastløs at det er vanskelig å sitte stille.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Mangel på energi, alt går langsommere enn vanlig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Lett for å klandre deg selv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Lett for å gråte.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Tanker om å ta ditt liv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Dårlig matlyst.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Søvnproblemer.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Følelse av håpløshet med tanke på fremtiden.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Nedtrykt, tungsindig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Følelse av ensomhet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Tap av seksuell lyst og interesse.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	Følelse av å være lur i en felle eller fanget.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Mye bekymret eller urolig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	Uten interesse for noe.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	Følelse av at alt er et slit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	Følelse av å være unyttig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. Hvor mange dager har du vært borte fra jobb de siste 6 måneder grunnet egen sykdom?

Antall dager: _____

Dersom du ikke har hatt sykefravær de siste 6 måneder, gå direkte videre til spørsmål 20

19. Hvis du har hatt sykefravær de siste 6 månedene, i hvilken grad skyldes det

Sett ett kryss på a) og ett på b)

a) fysisk arbeidspress?

- 1 I høy grad
- 2 I noen grad
- 3 I liten grad
- 4 Ikke i det hele tatt

b) psykisk arbeidspress?

- 1 I høy grad
- 2 I noen grad
- 3 I liten grad
- 4 Ikke i det hele tatt

20. Føler du at du får nok søvn?

- 1 Ja
- 2 Nei

21. Hvor mange timer antar du at du i gjennomsnitt har sovet per natt den siste måneden?

Antall timer: _____ per natt

PERSONLIGE KJENNETEGN OG INNSTILLINGER

22. Nedenfor følger noen utsagn om personlige kjennetegn og innstillinger

Marker for hvert av utsagnene om du synes disse stemmer eller ikke stemmer for deg.

	Stemmer ikke 0	Stemmer 1
1 Jeg er svært var for hva andre mennesker tenker og mener om meg.....	<input type="checkbox"/>	<input type="checkbox"/>
2 Tiltro til meg selv mangler jeg heldigvis ikke.....	<input type="checkbox"/>	<input type="checkbox"/>
3 Ofte synes det som om andre gjør allting mye bedre enn jeg selv.....	<input type="checkbox"/>	<input type="checkbox"/>
4 Jeg er svært nærtagende for kritikk.....	<input type="checkbox"/>	<input type="checkbox"/>
5 Jeg mister lett motet når tingene går galt.....	<input type="checkbox"/>	<input type="checkbox"/>
6 Skjer det brått uventede ting, kan jeg bli fullstendig forvirret.....	<input type="checkbox"/>	<input type="checkbox"/>
7 Min sinnsstemning forandrer seg lett alt etter hva som skjer rundt meg.....	<input type="checkbox"/>	<input type="checkbox"/>
8 Min mangel på selvtillit kan av og til være en plage for meg.....	<input type="checkbox"/>	<input type="checkbox"/>
9 Folk kan skjelle meg ut ganske kraftig før det går særlig inn på meg.....	<input type="checkbox"/>	<input type="checkbox"/>
10 Jeg kunne sannsynligvis oppnå mer enn jeg gjør, men jeg ser ikke poenget med å presse meg hardere enn nødvendig for å henge med.....	<input type="checkbox"/>	<input type="checkbox"/>
11 Jeg er vanligvis så målbevisst at jeg fortsetter å arbeide lenge etter at andre har gitt opp.....	<input type="checkbox"/>	<input type="checkbox"/>
12 Jeg arbeider hardere enn de fleste.....	<input type="checkbox"/>	<input type="checkbox"/>
13 Vanligvis driver jeg meg hardere enn de fleste fordi jeg vil gjøre det så bra som mulig.....	<input type="checkbox"/>	<input type="checkbox"/>
14 Jeg driver ofte meg selv til jeg stuper eller prøver å gjøre mer enn jeg virkelig makter.....	<input type="checkbox"/>	<input type="checkbox"/>

23. Hvordan stemmer disse påstandene for deg?

Sett ett kryss på hver linje

	Stemmer ikke 1	Stemmer ganske dårlig 2	Stemmer delvis 3	Stemmer ganske godt 4	Stemmer helt 5
1 Det er svært viktig for meg å yte mitt aller beste i jobben.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Jeg jobber først og fremst for å tjene penger.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Hvis jeg mislykkes i jobben, er jeg en mislykket person.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Hvis jeg ikke gjør det virkelig bra i jobben, vil jeg miste andres respekt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Forpliktelsene i jobben må gå foran andre forpliktelser og behov.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Jeg er nødt til å lykkes i arbeidet for å føle meg verdifull.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Med mine ressurser vil jeg lett kunne påvirke verdier og strategier i en arbeidsorganisasjon.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Jeg har vanligvis hatt store ambisjoner i arbeidet mitt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Jeg setter meg vanligvis høye og langsiktige mål, i arbeidet og ellers.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Jeg har alltid hatt tro på egne krefter.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Hva jeg selv gjør til enhver tid, betyr ikke så mye for hva som skjer.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Spørsmål 23. fortsetter:**Hvordan stemmer disse påstandene for deg?***Sett ett kryss på hver linje*

	Stemmer ikke 1	Stemmer ganske dårlig 2	Stemmer delvis 3	Stemmer ganske godt 4	Stemmer helt 5
12 Det er godt samsvar mellom mine egne yrkesverdier og verdiene i arbeidsorganisasjonen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Jeg identifiserer meg sterkt med organisasjonens mål og rammer for arbeidet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 Jeg føler ofte at jeg må gå på akkord med mine verdier for å mestre kravene i arbeidet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 Samsvaret mellom organisasjonens og mine egne mål gir en god følelse av fellesskap.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16 Organiseringen av arbeidet tillater meg ikke å bruke mine kunnskaper og ressurser på en effektiv måte.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24. Hvilke av følgende situasjoner/faktorer på jobb har du opplevd som belastende det siste året?

Med belastende mener vi opplevelse av stress og negative følelser, for eksempel i form av usikkerhet, irritasjon og anspenthet

Sett ett kryss på hver linje

	Ikke belastende 1	Litt belastende 2	En del belastende 3	Ganske belastende 4	Svært belastende 5
1 Ansvaret jeg har i jobben.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Konflikter med kolleger/medarbeidere.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Urettferdig fordeling av stillinger, oppgaver, lønn eller fordeler.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Andres urealistiske forventninger til meg i min rolle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Krav om effektivisering.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Krav om å holde meg faglig à jour.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Stadige forandringer i jobbets rammevilkår (reformer, lovendringer, etc).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Konflikt mellom yrkesetiske verdier og krav om produksjon og effektivitet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Kontakt med mennesker (pasienter, elever, klienter, kunder).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Uregelmessig arbeidstid.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Å få til balanse mellom arbeid og privatliv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 Å stadig måtte ta med seg arbeidsoppgaver hjem.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Jobben går ut over sosialt liv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 Mangel på støtte hjemmefra, særlig fra ektefelle/samboer.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 Bekymring for egen økonomi.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MESTRINGSSTRATEGIER

25. Nedenfor står en rekke utsagn som beskriver hvordan man kan mestre situasjoner når det røyner på og man virkelig opplever stress eller påkjenning. Hvor godt passer hvert av disse utsagnene for ditt vedkommende?

Sett ett kryss på hver linje

	Passer ikke 1	Passer mindre godt 2	Både og 3	Passer ganske godt 4	Passer svært godt 5
1 Jeg prøver å inngå en slags avtale eller en overenskomst for å få noe positivt ut av situasjonen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Jeg klandrer meg selv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Jeg håper det vil skje et under.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Jeg prøver å se det positive i det hele; aldri så galt at det ikke er godt for noe.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Jeg skulle ønske jeg var sterkere, mer optimistisk og hadde mer krefter.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Jeg forsøker å ikke brenne alle broer, men lar flere muligheter stå åpne.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Jeg forsøker å holde følelsene mine for meg selv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Jeg forandrer meg eller vokser som menneske på en god måte.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Jeg ønsker jeg kunne forandre måten min å føle på.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Jeg legger en handlingsplan og følger den.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Jeg får hjelp av fagfolk.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Passer ikke 1	Passer mindre godt 2	Både og 3	Passer ganske godt 4	Passer svært godt 5
12 Jeg kritiserer eller sier til meg selv hva jeg burde ha gjort.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Jeg godtar det som er det nest beste i forhold til det jeg egentlig hadde ønsket.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 Jeg dagdrømmer eller tenker meg inn i en bedre tid eller et bedre sted enn den/der du er nå.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 Jeg tenker at jeg kommer sterkere og bedre rustet ut av hendelsen enn jeg gikk inn i den.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16 Jeg sover mer enn vanlig.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17 Jeg har fantasier eller ønsker om hvordan det skal gå til slutt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18 Jeg forsøker å la være å handle overilt eller følge min første innskyttelse.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19 Jeg snakker med noen som kan gjøre noe med problemet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20 Jeg gjør en forandring slik at det vil gå bra til slutt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21 Jeg spør en slektning eller en venn jeg respekterer om råd.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22 Jeg forsøker å få det bedre ved å spise, drikke, røyke, ta medisiner e.l.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23 Jeg innser at jeg selv har skapt problemer.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Spørsmål 25 fortsetter:

Hvor godt passer hvert av disse utsagnene for ditt vedkommende?

Sett ett kryss på hver linje

	Passer ikke	Passer mindre godt	Både og	Passer ganske godt	Passer svært godt
	1	2	3	4	5
24 Jeg unngår å være sammen med andre mennesker.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25 Jeg godtar følelsene mine, men forsøker å unngå at de virker for mye inne på andre ting.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26 Jeg ønsker at situasjonen skulle bli borte eller på et eller annet vis gå over av seg selv.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27 Jeg lar ikke andre få vite hvor ille det er.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28 Jeg forandrer noe ved meg selv så jeg takler situasjonen bedre.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29 Jeg snakker med noen om hvordan jeg har det.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30 Jeg nekter å tro at det har hendt.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ARBEID OG FRITID

26. I hvilken grad opplever du at følgende utsagn stemmer for deg?

Sett ett kryss på hver linje

	Stemmer ikke	Stemmer ganske dårlig	Stemmer delvis	Stemmer ganske godt	Stemmer helt
	1	2	3	4	5
1 Min jobb gjør at jeg bidrar mindre hjemme.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Stress på jobben gjør meg irritabel hjemme.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Jobben gjør meg for trøtt til å gjøre ting som trenger min oppmerksomhet hjemme.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Bekymringer eller problemer på jobben distraherer meg hjemme.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Mine oppgaver på jobb gjør det lettere å takle personlige og praktiske problemer hjemme.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Mine oppgaver på jobb gjør meg til en mer interessant person hjemme.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Å ha en god dag på jobb gjør meg til en bedre partner når jeg kommer hjem.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Ferdigheter jeg utvikler på jobb kommer til nytte hjemme.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Forpliktelser hjemme reduserer min kapasitet på jobb.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Personlige og familiære problemer/bekymringer distraherer meg på jobb.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Forpliktelser hjemme hindrer meg i å få tilstrekkelig med søvn som jeg behøver for å kunne gjøre en god jobb.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 Stress hjemme gjør meg irritabel på jobb.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Det å snakke med noen hjemme hjelper meg å takle problemer på jobb.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 Ferdigheter jeg utvikler hjemme, er nyttige på jobb.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 Kjærlighet og respekt som jeg får hjemme, gjør meg sikker på meg selv når jeg er på jobb.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16 Livet hjemme hjelper meg å slappe av og lade opp for neste dags jobb.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

UTFORDRINGER I KONTAKT MED ANDRE MENNESKER

27. Her er en liste med problemer folk angir å ha i omgang med andre mennesker. Vennligst les listen under og marker i hvilken grad disse situasjonene oppleves som vanskelige for deg

Sett ett kryss på hver linje

	Ikke vanskelig 0	Litt vanskelig 1	Både og 2	Ganske vanskelig 3	Veldig vanskelig 4
I. Det er vanskelig for meg å					
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Stemmer ikke 1	Stemmer ganske dårlig 2	Stemmer delvis 3	Stemmer ganske godt 4	Stemmer helt 5
II Følgende er ting du gjør mye:					
21	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

LIVSHENDELSER

28a. Nedenfor følger en liste over hendelser en kan oppleve i løpet av livet.

Hvis du har erfart noe av dette, sett kryss i ruten

- 1 Partners død
- 2 Barns død
- 3 Andre nære personers død
- 4 Alvorlig sykdom hos et nærstående familiemedlem
- 5 Store økonomiske problemer
- 6 En opprivende separasjon/skilsnisje
- 7 Alvorlig fysisk sykdom (egen)
- 8 Vært utsatt for en alvorlig ulykke (trafikkulykke, brann, osv.)
- 9 Langvarige samlivsproblemer/familieproblemer

28b. Har du eventuelt hatt noen du kunne dele dine tanker med, søke råd hos og få støtte og oppmuntring hos i disse situasjonene?

- 1 Ja
- 2 Nei

29. Omtrent hvor ofte drikker du alkohol?

- 0 Hver dag eller nesten hver dag
- 1 2-4 ganger i uken
- 2 Omtrent en gang i uken
- 3 2-3 ganger i måneden
- 4 Omtrent en gang i måneden
- 5 Sjeldnere enn en gang i måneden
- 6 Aldri i løpet av siste år

30. Hvilke røykevaner har du?

- 1 Røyker daglig
- 2 Røyker av og til
- 3 Har røykt, men sluttet for mer enn 6 måneder siden
- 4 Røyker ikke

31. Driver du vanligvis med noen form for mosjon eller trening?

- 1 Drev regelmessig med mosjon/trening før, men sluttet for mindre enn 2 år siden
- 2 Nei, driver ingen form for mosjon eller trening
- 3 Ja, 1-2 ganger i uken
- 4 Ja, 3-4 ganger i uken
- 5 Ja, 5-7 ganger i uken

32. Hva er din sivilstand?

- 1 Gift/registrert partner
- 2 Samboende
- 3 Separert
- 4 Skilt
- 5 Enke/enkemann
- 6 Ugift

33. Har du barn?

- 1 Ja Hvor mange? _____ Hvor gammelt er ditt yngste barn? _____ år
Hvor gammelt er ditt eldste barn? _____ år
- 2 Nei

Takk for at du tok deg tid til å delta i denne spørreundersøkelsen!

IO-brev

Oslo, oktober 2003
Saksbehandlere: Sven Skaare og Elise Wedde
Seksjon for intervjuundersøkelser

9 Undersøkelse om belastninger, mestring og helse innenfor utsatte yrker

Statistisk sentralbyrå gjennomfører i høst en undersøkelse om belastninger, mestring og helse i åtte utvalgte yrkesgrupper, der i blant [*navn på gruppe*]. Formålet med undersøkelsen er å belyse hvordan personer i antatt utsatte yrkesgrupper opplever forholdet mellom utfordringer og belastninger i arbeidet og sin egen fysiske, og særlig psykiske helse. Hensikten er blant annet å få bedre forståelse for den såkalte utbrenningsprosessen, som de senere årene har vært mye omtalt i media. Undersøkelsen gjennomføres på oppdrag fra Den norske lægeförening. Vi tar sikte på å følge opp med et nytt intervju om to år.

Du er en av 1 000 [*navn på gruppe*] som er trukket ut fra Statistisk sentralbyrås sysselsettingsregister. Til sammen er 8 000 personer trukket ut. **Alle som deltar i årets undersøkelse blir med i trekkingen av ett gavekort til en verdi av 10 000 kroner og ti gavekort til en verdi av 1000 kroner.** Det er frivillig å delta, men for at vi skal få så gode resultater som mulig, er det viktig at alle som er trukket ut blir med. **Vi kan ikke erstatte deg med en annen.** Du kan når som helst trekke deg fra undersøkelsen og kreve opplysningene slettet.

Alle som arbeider i Statistisk sentralbyrå har taushetsplikt. Undersøkelsen gjennomføres etter lovpålagte regler og Statistisk sentralbyrå er underlagt kontroll både fra Datatilsynet og vårt eget personvernombud. Det vil aldri bli kjent utenfor Statistisk sentralbyrå hva enkeltpersoner har svart på undersøkelsen. For å få bedre utbytte av informasjonen vi samler inn, vil vi hente inn opplysninger fra Statistisk sentralbyrås inntekts- og utdanningsregister. Innen utgangen av 2006 vil vi anonymisere datamaterialet slik at identifisering av den enkelte ikke er mulig. Den norske lægeförening vil kun få tilgang til anonymiserte data.

Vi ber deg vennligst svare på spørsmålene i spørreskjemaet og returnere det til Statistisk sentralbyrå i den vedlagt frankerte svarkonvolutten så snart som mulig. Har du spørsmål om undersøkelsen kan du gjerne ringe oss **gratis på telefonnummer 800 83 028**, eller sende en e-post til sven.skaare@ssb.no eller elise.wedde@ssb.no. Spørsmål vedrørende personvern kan rettes til Statistisk sentralbyrås personvernombud, tel 21 09 00 00 eller e-post personvernombud@ssb.no.

På forhånd takk!
Vennlig hilsen

Svein Longva
administrerende direktør

Ole Sandvik
seksjonssjef

Oslo, oktober 2003
Saksbehandlarar: Sven Skaare og Elise Wedde
Seksjon for intervjuundersøkingar

10 Undersøking om belastningar, meistring og helse innanfor utsette yrke

Statistisk sentralbyrå gjennomfører i haust ei undersøking om belastningar, meistring og helse i åtte utvalde yrkesgrupper, mellom anna [*navn på gruppe*]. Formålet med undersøkinga er å sjå nærare på korleis personar i sannsynleg utsette yrkesgrupper opplever forholdet mellom utfordringar og belastningar i arbeidet og si eiga fysiske, og særleg psykiske helse. Formålet er mellom anna å få betre forståing for den såkalla utbrenningsprosessen, som dei seinare åra har vore mykje omtala i media. Undersøkinga blir gjennomført på oppdrag frå Den norske lægeforening. Vi tek sikte på å følgje opp med eit nytt intervju om to år.

Du er ein av 1 000 [*navn på gruppe*] som er trekt ut frå sysselsetjingsregisteret i Statistisk sentralbyrå. Til saman er 8 000 personar trekte ut. **Alle som er med i undersøkinga i år blir med i trekninga av eitt gåvekort til ein verdi av 10 000 kroner og ti gåvekort til ein verdi av 1 000 kroner.** Det er frivillig å vere med, men for at vi skal få så gode resultat som råd er, er det viktig at alle som er trekte ut blir med. **Vi kan ikkje erstatte deg med ein annan.** Du kan når som helst trekkje deg frå undersøkinga og krevje opplysningane sletta.

Alle som arbeider i Statistisk sentralbyrå har teieplikt. Undersøkinga blir gjennomført etter lovpålagde reglar og Statistisk sentralbyrå er underordna kontroll både frå Datatilsynet og vårt eige personvernombod. Det vil aldri bli kjent utanfor Statistisk sentralbyrå kva enkeltpersonar har svart på undersøkinga. For å få betre utbytte av informasjonen vi samlar inn, vil vi hente inn opplysningar frå inntekts- og utdanningsregisteret i Statistisk sentralbyrå. Innan utgangen av 2006 vil vi anonymisere datamaterialet slik at identifisering av den enkelte ikkje er mogeleg. Vi vil aldri offentliggjere eller formidle vidare opplysningar om kva den enkelte har svart. Den norske lægeforening vil berre få tilgang til anonymiserte data.

Vi ber deg vere vennleg å svare på spørsmåla i spørjeskjemaet og returnere det til Statistisk sentralbyrå i den frankerte svarconvolutten som ligg ved så snart som mogleg. Har du spørsmål om undersøkinga kan du gjerne ringe oss **gratis på telefonnummer 800 83 028**, eller sende ein e-post til sven.skaare@ssb.no eller elise.wedde@ssb.no. Spørsmål som gjeld personvern kan rettast til personvernombodet i Statistisk sentralbyrå, tlf. 21 09 00 00 eller e-post: personvernombud@ssb.no.

På førehand takk!
Vennleg helsing

Svein Longva
administrerande direktør

Ole Sandvik
seksjonssjef

Takkebrev

Oslo, november 2003
Saksbehandler: Elise Wedde
Seksjon for intervjuundersøkelser

11 Takk for hjelpen!

Vi ønsker å takke alle som har sendt inn svar på skjemaet til undersøkelsen om belastninger, mestring og helse innenfor utsatte yrker. Til nå har vi fått inn mange svar.

Dersom du ennå ikke har rukket å fylle ut skjemaet, vil vi sette stor pris på om du tok deg tid til det i nærmeste fremtid. Det er selvfølgelig frivillig å delta, men det er svært viktig at så mange som mulig deltar. Da blir resultatene bedre og mer pålitelige.

Alle som fyller ut og returnerer skjemaet er med i trekkingen av en premie til en verdi av 10 000,- kroner og ti premier til en verdi av 1 000,- kroner.

Som vi har nevnt tidligere har alle som arbeider i Statistisk sentralbyrå taushetsplikt, og undersøkelsen er i tråd med retningslinjer gitt av Datatilsynet. Ingen opplysninger om hva enkeltpersoner har svart på undersøkelsen vil noensinne bli offentliggjort.

Skulle du ha spørsmål om undersøkelsen, eller dersom du trenger et nytt spørreskjema (bokmål eller nynorsk), kan du ringe oss gratis på telefon 800 83 028, eller sende en e-post til wed@ssb.no eller svs@ssb.no.

Med vennlig hilsen,

Ole Sandvik
seksjonssjef

Purrebrev

Oslo, november 2003
Saksbehandler: Elise Wedde
Seksjon for intervjuundersøkelser

B

12 Har du sendt inn spørreskjemaet?

For en tid tilbake fikk du tilsendt et spørreskjema i forbindelse med en undersøkelse om belastning, mestring og helse innenfor utsatte yrker. Da vi ikke kan se å ha mottatt noe skjema fra deg, tillater vi oss å minne om undersøkelsen. Det er frivillig å delta, men resultatet av undersøkelsen avhenger av at så mange som mulig av de som ble trukket ut deltar.

Har du allerede sendt inn skjemaet, ber vi deg se bort fra denne henvendelsen og takker for et verdifullt bidrag til undersøkelsen.

Dersom du ennå ikke har svart, vil vi være veldig takknemlige om du kunne fylle ut skjemaet og returnere det til oss i den frankerte svarkonvolutten så snart som mulig.

Alle som besvarer og returnerer spørreskjemaet er med i trekkingen av et gavekort på kr 10 000,- og ti gavekort til en verdi av kr 1 000,-.

Undersøkelsen gjennomføres etter lovpålagte regler, og SSB er underlagt kontroll både fra Datatilsynet og vårt eget personvernombud. Det vil aldri bli kjent utenfor Statistisk sentralbyrå hva enkeltpersoner har svart på undersøkelsen.

Har du spørsmål om selve undersøkelsen kan du gjerne ringe oss gratis på telefonnummer **800 83 028**, eller sende en e-post til wed@ssb.no eller svs@ssb.no. Vi viser også til informasjon i tidligere brev. Ta kontakt dersom du ønsker spørreskjema på nynorsk.

Generelle spørsmål vedrørende personvern i SSB kan rettes til SSBs personvernombud, telefonnummer 21 09 00 00 eller e-post personvernombud@ssb.no.

Vi ser fram til å motta ditt skjema!

Med vennlig hilsen

Ole Sandvik
seksjonssjef

Oslo, november 2003
Sakshandsamar: Elise Wedde
Seksjon for intervjuundersøkelser

NN

13 Har du sendt inn spørjeskjemaet?

For ei tid sidan fekk du tilsendt eit spørjeskjema i samband med ei undersøking om belastning, meistring og helse innanfor utsette yrker. Då vi ikkje kan sjå at vi har motteke skjema frå deg, tillet vi oss å minne om undersøkinga. Det er frivillig å delta, men resultatet av undersøkinga avhenger av at så mange som mogleg av dei som vart trekt ut deltek.

Har du allereie sendt inn skjemaet, ber vi deg om å sjå vekk frå dette brevet og takker for eit verdifullt bidrag til undersøkinga.

Dersom du ennå ikkje har svart, vil vi vere svært takksame om du kunne fylle ut skjemaet og returnere det til oss i den frankerte svarkonvolutten snarast.

Alle som svarer på og returnerer spørjeskjemaet er med i trekkinga av eit gåvekort på kr 10 000,- og ti gåvekort til ein verdi av kr 1 000,-.

Undersøkinga vert gjennomført etter lovpålagde reglar, og SSB er underlagt kontroll både frå Datatilsynet og vårt eige personvernombod. Det vil aldri verte kjent utanfor Statistisk sentralbyrå kva enkeltpersonar har svart på undersøkinga. Vi viser også til informasjon i tidlegare brev. Ta kontakt dersom du ønskjer spørjeskjema på nynorsk.

Har du spørsmål om sjølve undersøkinga kan du ringje oss gratis på telefonnummer **800 83 028**, eller sende ein e-post til wed@ssb.no eller svs@ssb.no. Vi viser også til informasjon i tidlegare brev. Ta kontakt dersom du ønskjer spørjeskjema på nynorsk.

Generelle spørsmål om personvern i SSB kan rettast til SSB sitt personvernombod, telefonnummer 21 09 00 00 eller e-post personvernombud@ssb.no.

Vi ser fram til å motta skjemaet ditt!

Med venleg helsing

Ole Sandvik
seksjonssjef

APPENDIX IV:

Letters to the samples in the second survey

From: http://www.ssb.no/emner/06/90/notat_200636/notat_200636.pdf



Statistisk sentralbyrå
Statistics Norway

Oslo, september 2005
Saksbehandler: Sven Skaare
Seksjon for intervjuundersøkelser

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Fax: +47-21 09 49 73

Internet: www.ssb.no
E-post/E-mail: ssb@ssb.no

Bankkonto/Bank account
7694.05 02663

Undersøkelse om belastninger, mestring og helse innenfor utsatte yrker

Statistisk sentralbyrå gjennomfører i høst en ny runde av undersøkelsen om belastninger, mestring og helse i åtte utvalgte yrkesgrupper. Du deltok for to år siden, og vi kontakter deg nå for å oppdatere opplysningene. Vi er svært takknemlige for at du deltok sist, og håper du også blir med denne gangen. Formålet med undersøkelsen er å belyse hvordan personer i antatt utsatte yrkesgrupper opplever forholdet mellom utfordringer og belastninger i arbeidet og sin egen fysiske, og særlig psykiske helse. Hensikten er blant annet å få bedre forståelse for den såkalte utbrenningsprosessen som de senere årene har vært mye omtalt i media. Undersøkelsen gjennomføres på oppdrag fra Den norske lægeforening. Det kan bli aktuelt med enda en oppfølging av denne undersøkelsen. Vi vil i så fall kontakte deg i løpet av de neste tre årene.

Du er en av rundt 600 [yrke] som opprinnelig er trukket ut fra Statistisk sentralbyrås sysselsettingsregister. Til sammen er rundt 5000 personer trukket ut. **Alle som deltar i årets undersøkelse blir med i trekkingen av ett gavekort til en verdi av 10 000 kroner og ti gavekort til en verdi av 1000 kroner.** Det er frivillig å delta, men for at vi skal få så gode resultater som mulig, er det viktig at alle som er trukket ut blir med. **Vi kan ikke erstatte deg med en annen.** Du kan når som helst trekke deg fra undersøkelsen og kreve opplysningene slettet.

Alle som arbeider i Statistisk sentralbyrå har taushetsplikt. Undersøkelsen gjennomføres etter lovpålagte regler og Statistisk sentralbyrå er underlagt kontroll både fra Datatilsynet og vårt eget personvernombud. Det vil aldri bli kjent utenfor Statistisk sentralbyrå hva enkeltpersoner har svart på undersøkelsen. For å få bedre utbytte av informasjonen vi samler inn, vil vi hente inn opplysninger om pensjonsforhold, uførhet, rehabilitering og fødeland fra Statistisk sentralbyrås registre. Innen utgangen av 2009 vil vi anonymisere datamaterialet slik at identifisering av den enkelte ikke er mulig. Den norske lægeforening vil kun få tilgang til anonymiserte data.

Vi ber deg vennligst svare på spørsmålene i spørreskjemaet og returnere det til Statistisk sentralbyrå i den vedlagt frankerte svarkonvolutten så snart som mulig. Har du spørsmål om undersøkelsen kan du gjerne ringe oss **gratis på telefonnummer 800 83 028**, eller sende en e-post til sven.skaare@ssb.no. Spørsmål vedrørende personvern kan rettes til Statistisk sentralbyrås personvernombud, tel 21 09 00 00 eller e-post personvernombud@ssb.no.

På forhånd takk!
Vennlig hilsen

Øystein Olsen
administrerende direktør

Ole Sandvik
seksjonssjef



Statistisk sentralbyrå
Statistics Norway

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Oslo, 20.10.2005

Saksbehandler: Sven Skaare
Seksjon for intervjuundersøkelser, Telefon: 800 83 028

Undersøkelse om belastninger, mestring og helse innenfor utsatte yrker

Vi beklager trykkfeil i spørreskjema


Du mottok for kort tid siden et spørreskjema fra Statistisk sentralbyrå i forbindelse med *Undersøkelse om belastninger, mestring og helse innenfor utsatte yrker*. I enkelte spørreskjema har det beklageligvis oppstått en trykkfeil, slik at side 2 og 11 i skjemaet mangler, mens side 1 og 12 opptrer to steder.

Vedlagt finner du derfor et nytt skjema. Dette ber vi deg fylle ut og returnere til oss, dersom du tidligere mottok et skjema med trykkfeil. Hvis du allerede har sendt inn skjemaet, ber vi deg fylle ut og sende inn vedlagte ark med side 2 og side 11 i skjemaet. Vi beklager nok en gang det merarbeidet denne glippen vil medføre for deg, og håper du fremdeles ønsker å delta. På den måten er du med å fremme forskningen på arbeidslivsspørsmål, spesielt innen ditt yrke. Forøvrig vil vi gjerne få uttrykt vår takknemlighet overfor dere som allerede har sendt inn skjema.

På forhånd takk!

Med vennlig hilsen


Ole Sandvik
seksjonssjef


Sven O. Skaare
planlegger



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Oslo, 7. november 2005
Saksbehandler: Sven Skaare
Seksjon for intervjuundersøkelser

Takk for hjelpen!

Vi ønsker å takke alle som har sendt inn svar på skjemaet til undersøkelsen om belastninger, mestring og helse innenfor utsatte yrker. Til nå har vi fått inn mange svar. Vi vil nok en gang beklage det bryderiet dere har fått som følge av trykkfeil i enkelte skjema, men håper dere likevel vil besvare undersøkelsen.

Dersom du ennå ikke har rukket å fylle ut skjemaet, vil vi sette stor pris på om du tok deg tid til det i nærmeste fremtid. Det er selvfølgelig frivillig å delta, men det er svært viktig at så mange som mulig deltar. Da blir resultatene bedre og mer pålitelige.

Alle som fyller ut og returnerer skjemaet er med i trekkingen av en premie til en verdi av 10 000 kroner og ti premier til en verdi av 1 000 kroner.

Som vi har nevnt tidligere har alle som arbeider i Statistisk sentralbyrå taushetsplikt, og undersøkelsen er i tråd med retningslinjer gitt av Datatilsynet. Ingen opplysninger om hva enkeltpersoner har svart på undersøkelsen vil noensinne bli offentliggjort.

Skulle du ha spørsmål om undersøkelsen, eller dersom du trenger et nytt spørreskjema (bokmål eller nynorsk), kan du ringe oss gratis på telefon 800 83 028, eller sende en e-post til svs@ssb.no.

Med vennlig hilsen,

Ole Sandvik
seksjonssjef



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Oslo, november 2005
Saksbehandler: Sven Skaare
Seksjon for intervjuundersøkelser

B

Har du sendt inn spørreskjemaet?

For en tid tilbake fikk du tilsendt et spørreskjema i forbindelse med en undersøkelse om belastning, mestrings- og helse innenfor utsatte yrker. Da vi ikke kan se å ha mottatt noe skjema fra deg, tillater vi oss å minne om undersøkelsen. Det er frivillig å delta, men resultatet av undersøkelsen avhenger av at så mange som mulig av de som ble trukket ut deltar.

Har du allerede sendt inn skjemaet, ber vi deg se bort fra denne henvendelsen og takker for et verdifullt bidrag til undersøkelsen.

Dersom du ennå ikke har svart, vil vi være veldig takknemlige om du kunne fylle ut skjemaet og returnere det til oss i den frankerte svarvolvetten så snart som mulig.

Alle som besvarer og returnerer spørreskjemaet er med i trekkingen av et gavekort på kr 10 000,- og ti gavekort til en verdi av kr 1 000,-.

Undersøkelsen gjennomføres etter lovpålagte regler, og SSB er underlagt kontroll både fra Datatilsynet og vårt eget personvernombud. Det vil aldri bli kjent utenfor Statistisk sentralbyrå hva enkeltpersoner har svart på undersøkelsen.

Har du spørsmål om selve undersøkelsen kan du gjerne ringe oss gratis på telefonnummer **800 83 028**, eller sende en e-post til svs@ssb.no. Vi viser også til informasjon i tidligere brev. Ta kontakt dersom du ønsker spørreskjema på nynorsk.

Generelle spørsmål vedrørende personvern i SSB kan rettes til SSBs personvernombud, telefonnummer 21 09 00 00 eller e-post personvernombud@ssb.no.

Vi ser fram til å motta ditt skjema!

Med vennlig hilsen

Ole Sandvik
seksjonssjef

APPENDIX V:

English summary of Statistics Norway's evaluation of sample deviations in each occupation.

From: http://www.ssb.no/emner/06/90/notat_200448/notat_200448.pdf

Response deviations.

First wave	Second wave	Overall
<u>Lawyers</u>		
Females are overrepresented with 3.7 pp. and the age group 40 - 49 underrepresented with 2.0 pp.	Only small deviations that are not considered to influence the estimates	Females are overrepresented with 3.1 pp. and the age group 40 - 49 underrepresented with 1.9 pp. People from Oslo and Akershus are underrepresented by 3.2 pp.
<u>Bus drivers</u>		
The age group 50 - 59 overrepresented with 3.3 pp.	The age group 50 - 59 overrepresented with 2 pp. and the age group 30 - 39 are underrepresented with 1.8 pp.	The age groups under 30 and 30 - 39 are underrepresented with 3.3 pp. and 4.7 pp. The age group 40 - 49 and 50 - 59 overrepresented with 3.7 pp. and 4.7 pp. Oslo and Akershus are underrepresented with 3.5 pp.
<u>IT workers</u>		
Females are overrepresented with 3 pp., the age group under 30 is underrepresented with 3.5 pp. and the age group 40 - 49 is overrepresented with 2.1 pp.	The age group 30 - 39 is underrepresented with 1.8 pp. and the age group 40 - 49 is overrepresented with 2.7 pp.	Females are overrepresented with 2.4 pp. The age group under 30 is underrepresented with 6.3 pp. The age group 40-49 is overrepresented with 4.9 pp.
<u>Teachers</u>		
The age group under 30 is underrepresented with 2.1 pp.	The age group under 30 - 39 is underrepresented with 2.5 pp.	The age group under 30 and 30-39 is underrepresented with 3.4 and 1.9 pp. The age group 40 - 49 and 50 - 59 overrepresented with 1.9 and 3.3 pp. Nord-Norge is underrepresented with 1.5 pp. Vestlandet is overrepresented with 1,5 pp.

Note: pp, percentage points.

Deviations in the responses of the randomly selected samples in the first and second wave, and totally.

First wave	Second wave	Overall
<u>Physicians</u>		
Females are overrepresented with 3.8 pp.	Females are overrepresented with 2.5 pp.	Females are overrepresented with 9.8 pp. Agder and Rogaland are overrepresented with 1.9 pp. and Nord-Norge is underrepresented with 3.8 pp.
<u>Church ministers</u>		
Only small deviations that are not considered to influence the estimates.	Males are overrepresented with 1.6 pp. Oslo and Akershus county are overrepresented with 1.5 pp. Hedemark, Oppland, Østfold, Agder and Rogaland are underrepresented with 1.5 – 1.9 pp.	Trøndelag county is overrepresented with 2.1 pp. and Østlandet is underrepresented with 2.2 pp.
<u>Advertisement</u>		
Females are overrepresented with 5.5 pp. The age group under 30 is underrepresented with 2.2 pp. The age groups 30 - 39 and 40 – 49 are overrepresented with 2.3 pp. and 2.1 pp.	The age group 30 - 39 is underrepresented with 2.2 pp. and the age group 40 - 49 is overrepresented with 2.7 pp. Oslo and Akershus county are overrepresented with 1.8 pp.	Females are overrepresented with 4.4 pp. The age groups under 30, 50 – 59, and over 60 are underrepresented with 5 pp., 1.8 pp., and 1.5 pp. respectively. The age group 30 - 39 and 40 - 49 is overrepresented with 2.9 pp. and 5.4 pp.
<u>Nurses</u>		
Only small deviations that are not considered to influence the estimates.	Only small deviations that are not considered to influence the estimates.	Females are overrepresented with 6.2 pp. The age group under 30 is underrepresented with 1.9 pp. Hedmark and Oppland are overrepresented with 2.2 pp. whereas Oslo and Akershus are underrepresented with 1.8 pp.

Note: pp, percentage points.

APPENDIX VI:

Tests for measurement invariance across gender.

Table A. Tests for measurement invariance across gender.

	χ^2	df	RMSEA (90%CI)	NNFI	CFI
No common parameters	613.45	96	.058 (.054 - .063)	.95	.96
Invariant factor loadings	624.59	104	.056 (.052 - .061)	.95	.96
Invariant indicator intercepts	834.38	104	.067 (.062 - .071)	.93	.95
Invariant factor loadings and indicator intercepts	863.09	112	.065 (.061 - .069)	.94	.94

Note: χ^2 , Chi-square; df, degrees of freedom; RMSEA, Root Mean Square Error of Approximation; the Non-Normed Fit Index (NNFI) and the Comparative Fit Index (CFI).