Restructuring of Organisations and Potential Implications for their Staff

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1 Introduction, Addressees and Objectives of this Paper

The changing world of work is not a new phenomenon. There has always been continuous, and at times drastic, change. What is new is the speed of this change, which has increased significantly over the last 30 years. During in the 1980s and 1990s, the focus was on new tools for self-monitoring and adapting quickly to market needs; today however the rate of change, which is set by the market, can often not be anticipated in organisations.

In the past the effects of change concerned rather blue collar occupations, today all areas of an organisation are affected by change and transformation. Change can mean extensive restructuring, transforming an organisation in its entirety. The requirement for organisations and their employees to adapt to new circumstances is normal and fundamentally not to be questioned. Reasons, beyond the developments in the market and the competition, also include changing customer expectations, or often politically induced impulses in the public sector.

Against this background of increasing globalisation and technological possibilities adaptation requirements are occurring more often, and organisations are responding more frequently and rapidly than several years ago with manifold and sometimes extensive restructuring measures (Roland Berger, 2009). Changes bring about the opportunity of a better organisation of processes and work situations that can support the prosperity of the company. However, a risk of malfunction and negative impact on workers is also connected with such upheavals. Employees in restructured organisations experience multiple and simultaneous changes in their work situation in terms of processes and products, personnel, organisation, tasks and work requirements. As well as opportunities for prosperity for the organisation and better-organised processes, major changes can also be associated with increased stress and work intensification, and in the long-term lead to health problems among employees.

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How specifically the additional burdens from the processes of change affect employee health and what factors and measures bring along effective preventive impacts has so far been studied inadequately. This raises the question of how to shape and attend to processes of restructuring, so that companies and their employees can cope with them. The challenge of dealing adequately with change concerns not only companies and their employees, but also politics and social partners in the shaping of favourable framework conditions, as well as science that must address the open research issues.

In this respect, this paper **addresses** all these parties involved in science, business and politics and pursues the following **goals**:

- To outline the current status of research and relevant data and facts in an overview and to identify research needs.
- To outline the current and planned activities of the BAuA (German Federal Institute for Occupational Safety and Health) and its position on restructuring.

The contributions will give the reader a broad overview and enable a 'quick start' on the subject. The paper is, in this respect, not a detailed treatise, and so, especially with regard to the scientific details, readers should refer to the relevant references.

To address the paper's objectives, it is **structured** as follows:

After an outline of the problem in Section 1, some quantitative information follows in Section 2 on the phenomenon of 'restructuring' in Germany. This is followed by a description of the research status and needs regarding the potential negative effects of restructuring processes on employees and their health as well as open research questions arising from these reflections. Section 5 covers general design guidelines for the monitoring of restructuring processes and a review of the current and planned activities of the BAuA on demonstrating the interfaces with other major trends in the changing world of work, such as demographic trends, the growing importance of psychological stress, and the question how despite of, or in these developments, the employability of employees may be preserved and improved.

2 Facts and Figures – Significance of the Phenomenon of 'Restructuring'

2.1 Differentiation of the Concept to Other Forms of Change

The term 'restructuring' is used altogether undifferentiated, and is a generic term for all kinds of significant changes in an organisation (Cross et al., 2004). Processes such as restructuring, reorganisation and change management are characterised by the fact that they question existing structures and routines and seek to change them through targeted and explicit interventions – this happens especially during periods of high organisational dynamics. Decisions are weighed with particularly high uncertainties due to the questioning of routines and structures. A characteristic feature of all forms of organisational change processes is the openness of outcomes. Although it is about intentionally designed interventions, the complexity is so great that a positive assessment of intended and unintended effects cannot be achieved solely by a cogent reform idea (Bohn, 2007).
Change processes confirm organisations, in the sense of (micro-) policy, as 'arenas' in which power relations and differences, as well as the tracking of individual and collective interests, play a central role (Willich, 2010). For the organisation's members, whether employees or decision makers, these transitional periods bring a heightened sense of insecurity: Will I lose my job? Will my responsibilities change? Will the division of duties change? Will I have to deal with a new boss or new colleagues? Will I lose the responsibility for certain customers? What career expectations are cut off by the change, what are the new options? Understandably, the primary concern of employees is directed to the potential consequences of restructuring in terms of their personal situation.

Literally, restructuring means the restoration of a structure. It is therefore clear that the survival of an existing structure, i.e. a company or a business unit, is up for negotiation. Measures are aimed primarily at the adaptation of the corporate structure to changing market conditions, and thus mostly at the economic outcome (Krystek & Moldenhauer, 2007). Crises, and the resulting need for restructuring, are inevitable from an economic perspective and thus recur periodically (Siegwart et al., 1990).

Change to an existing organisational structure is known as **reorganisation / restructuring**. Reasons for reorganisation are, e.g., shifts in the environment or in the production program of a company, and personnel changes through entry or exit of (important) agents (Gabler Wirtschaftslexikon, 2012). Literally, reorganisation refers to the (modified) reconstruction of a unit or the procedures and responsibilities within a unit. Unlike restructuring, reorganisation is also known as a neutral change measure, which may include staff reductions but does not have to (Bohn, 2007).

Another path of change is known as **organisational development (OD) or change management**. Organisational development is long-term and encompasses the entire company or most organisational units. In the purest sense, change management means management of change or management by change. Thus changes are not simply ordered and executed by pointing to an inherent necessity, but are rather a part of a management process. As with restructuring, organisational development not only pursues the change of organisational structure and activity of the company, but also focuses on the change of strategic direction and the basic attitudes and behaviours of employees (Vahs & Leiser, 2003). Organisational development was for decades the dominant paradigm of change management. The required consonance of the objectives of the company with the employee concerns is characteristic of the process (Gabler Wirtschaftslexikon, 2012). Thus, a typical feature of OD processes is their claim to act as a learning process and thereby not only to lead to behavioural changes

of individual members and organisational units, but also to change the organisational structures and processes (Sievers, 1977).

Table 1: Types of Organisational Change

	Restructuring	Organisational Development
Time perspective	Past	Future
Dynamics	Discontinuous, spontaneous	Planned, continuous
Time horizon	Short term	Long term
Control	Ad hoc	As project
Action perspective	Punctual	Strategic
Orientation	Pragmatic	As a learning process
Initialisation	Passive (driven)	Active
Owner Perspective	Rescue	Development

Restructurings are severe, incisive and often isolated interventions into the existing structure and processes as well as the method of service delivery, and are majorly focused on short-term efficacy. Organisational development on the other hand signifies a more continuous process that is medium to long term, where the management and employees therefore have a greater influence on its design. Existential organisational crises as opposed to continuous and planned adaption require decisions under time pressure, with high uncertainty of results, and are therefore an arena for special micro-political conflicts. These conflicts can be analysed as micro-political 'games' that follow certain rules and can contribute to the detailed consequences explained in Sections 2.4 and 2.5. The features of micro-political processes are firstly a social and rule-governed behaviour of agents in an organisation, secondly, the organisation defines a specific field with specific boundaries, structures, norms and rules, and thirdly, the manoeuvring scope of the participants is filled by different strategies and can and must be used (Neuberger, 1995, 2006; Ortmann et al., 1997). Power and power motives play a very important role in the behaviour of leaders during change processes (Strohm, 2008).

2.2 Prevalence of Restructuring

Literature on the implementation of restructuring is unsatisfactory. At a European level, the 'European Restructuring Monitor' regularly brings together restructuring events in member countries (Kieselbach et al., 2009; Storrie & Ward, 2007) and records changes such as:

- Relocation
- Offshoring, 'delocation'
- Outsourcing of individual functional units
- Bankruptcy / closure
- Merger / acquisition
- Internal restructuring
- Business expansion

In a majority of measures, the key targets are to reduce costs and / or to increase productivity by staff reductions (Kozlowski, 1993; Neves & Caetano, 2006; Roland & Berger, 2009). In addition, implementing measures are taken to adapt the business plan, to improve liquidity management and to promote the growth of the organisation (Roland Berger, 2009).

BAuA funded a project that brings together quantitative information for restructuring activities in Germany on the basis of various databases. Each database has different objectives and therefore will not result in a completely unified picture of the prevalence of reorganisation measures. Nevertheless, the information can be brought together into a single 'map', providing key insights into the importance of specific restructuring forms to affected industries or types of businesses.

The European Restructuring Monitor (ERM) (Storrie, 2006; Storrie & Ward, 2007), made available by the European Monitoring Centre on Change (2011), can be considered an important source of data for the inventory of restructuring taking place in Europe. It is the only source that provides continuous freely available current European data. However regarding detailed national information – i.e. for Germany – the ERM has its limits.

The ERM evaluates restructuring measures related to workforce reductions for EU newspaper articles; only restructurings with a staff reduction of more than 100 employees or more than 10% of employees in organisations over 250 people published in the press are taken into account. The information provided by this procedure is of limited value, and unsuitable for national comparisons. In particular, it can be assumed that the restructuring of small and medium businesses (SMBs), which are important for the German economic structure, is barely represented in this data collection. Nevertheless the main trends as well as some general statements on the importance of restructuring can be made on the basis of the ERM.

Concerning the types of restructuring, the most important restructing 'type' refers to internal restructuring measures (76% in Europe, 74% in Germany / 2011). In the course of these internal reorganisations strategies are adapted, and processes and structures are changed. After the financial crisis 2008/2009 and a peak of reported restructuring during this period (114 reported cases), the number of restructurings decreased in 2010 and 2011 (reported cases for Germany: 63 cases in 2010, 58 in 2011). Over the period from 2002 to 2011, 54.77% of the reported restructuring cases were based on internal restructuring including staff reduction in 79.5% of these cases. The second most important form (21.23%) was business expansion, which did not lead to job reduction, but to the creation of new jobs. However, these findings need to be scrutinised critically. Given that the ERM is based on newspaper reports, it can be assumed that companies will report more positive than negative events to the press. Thus role of business expansion compared to other restructuring is likely to be overestimated. Other important categories were insolvencies / closures (9.23%), acquisitions (5.13%) and relocation abroad (4.51%). In terms of industry differentiation, based on the ERM, manufacturing was the most affected sector. 57.3% of all reported cases in the most common category of 'internal restructuring' took place in this sector. In addition to manufacturing, financial services, companies in the transportation industry, and the civil service were also affected.

More detailed and specific information related to restructuring is included in the BiBB / BAuA survey. In this employee sur-

vey based on a representative sample of 20,000 respondents; information is gathered every 5-6 years with respect to the working world, including direct changes based on restructuring.[1] The data reveal that in a rough classification by industry, workers in manufacturing (53.2%) and the public service (53.1%) were particularly affected by restructuring.[2] Trade was affected by 40.5% and the craft trades by 26.8%. It is also apparent that restructuring particularly takes place in larger organisations. Direct changes based on restructuring were reported by 66.8% of employees in firms with over 1000 employees, but only 26.9% of employees in firms of up to 9 employees reported such measures of change. Therefore, the larger an organisation, the more likely changes in the work environment will occur. However, based on the BiBB / BAuA survey, the reduction in employment in medium-sized companies (250 to less than 1,000 employees) was not significantly different to large organisations with more than 1,000 employees. In addition, precarious employment in companies with 500 to less than 1,000 employees did not differ significantly from large enterprises. Restructuring is associated with changes regarding stress and work intensification and strengthens these (cf. in particular Section 2.4).

Since 2007, the German Trade Union Federation (DGB) has been conducting an annual representative survey regarding the quality of work. Since 2010, the DGB Index has also been surveying questions regarding restructuring. The results are consistent with those of the BiBB/BAuA survey:

- The majority of employees reported restructuring.
- This are usually associated with layoffs.
- Large enterprises experience more restructuring and layoffs than small companies.
- Restructuring takes place mainly in manufacturing.

The DGB Index also shows that significantly more workers with fixed-term contracts and by tendency more temporary workers are frequently affected by layoffs. (Rigotti & Otto, 2012). According to the DGB Index, the presence of a works council was not a conflictual factor with restructuring or layoffs. Restructuring and layoffs more frequently affected companies with works councils. This is probably due to the fact that more large enterprises are being restructured and these types of companies often have a works council.

The M&A Database of the University of St. Gallen is the most comprehensive database in which information about mergers and acquisitions (M&A), i.e. corporate takeovers, are captured. Compared to internal restructuring this form of major change is rather insignificant, although a vast amount of literature on restructuring refers to M&As. While in the ERM only 50 mergers were mentioned in the period 2002-2011 for Germany 16,500 transactions were mentioned in the M&A Database. This can again be interpreted as a clear indication that the information content of the ERM does not provide comprehensive information about restructuring and must be interpreted cautiously at the national level.

The trend in the number of mergers in Germany decreased after the financial crisis. In 2002, 1,734 takeovers were entered into the database; in the crisis year of 2009 there were 972 and in 2010 there were 979. Takeovers and mergers affected especially the financial services such as banking and insurance industry and the general service sectors. The service sector even more mergers occurred than in volatile industries (such as media, computers, chemicals/pharmaceuticals, and energy and waste management / Rigotti & Otto, 2012). The vast majority (63% on average over the years 2002 to 2011) of M&As took place in national transactions, without international buyers.

The previous evaluation results on the prevalence of restructuring in Germany can be summarised based on the consolidated database as follows:

Table 2:

Criterion	Results	Database that supports this
Type of restructuring	Internal restructuring as the most important form.	ERM, WSI
Size of enterprise	Corporate restructurings take place particularly in large enterprises. With regard to personnel reductions and the deployment of precariously employed workers, there is no difference with the larger SMEs.	ERM, BiBB/BAuA, DGB Index
Industry	The manufacturing sector, in particular, is 'affected'. Other sectors are public services, the financial industry and transport and traffic.	ERM, BiBB/BAuA
Downsizing	Restructuring is usually accompanied by job losses, probably because cost reduction is the primary goal of restructuring measures.	ERM, BiBB/BAuA, DGB Index
Stress, work pressure, increase of requirements	Stress, work pressure and demand diversity/increase in requirements, increase overall, and more so in restructured organisations. The more changes take place, the greater the increase of stress, work pressure and demands.	BiBB/BAuA (DGB Index, WSI)[3]

2.3 Success Versus Failure of Restructuring Measures

The objectives of reorganisation measures are mainly cost reduction programmes, changes in business planning, improvements in liquidity management, and sales / growth initiatives (Roland Berger, 2009). From the perspective of corporate management, restructuring will likely be successful, if a fast implementation of the action takes place, if the management is dedicated to support the measure, or to have them 'transported into' the company, and if there is a holistic and strategic coordinated concept of the restructuring process (ibid.).

The successful implementation of change processes is critical in moving markets and troubled times for the survival and prosperity of an organisation. The success of a reorganisation is determined by measurement of the goals defined at the beginning of the process. Some consolidated studies exist regarding the success or failure of change processes. Balogun & Hailey (2004) come to conclude that 70% of restructuring and change

[1] The questions relate to the period of 2 years prior to the survey date. The results presented here thus apply to the period from 2003 to 2005.
[2] The employees were asked whether they have experienced restructurings in the last two years before the survey date.
[3] DGB Index and WSI works council surveys confirm the general increase in stress and work intensification. They do not explicitly connect this with restructuring events.

processes fail. According to a study by Tomasko (1993) of more than 1,000 U.S. firms with regard to the success of restructuring, the following picture emerges:

- 90% of companies planned to reduce costs; only 50% achieved this.
- 75% planned to increase productivity; only 22% achieved this.
- 50% planned to improve internal processes; only 15% achieved this.

As an explanation, the authors claim that the focus on 'downsizing' and layoffs in restructuring might be inappropriate and in the long run unfavourable. Cascio (1993) sees 'downsizing' as having a clear emphasis on achieving short-term financial goals while neglecting the organisation's mid- and long-term sustainability. Productivity as an objective of most reorganisations is a nonspecific quotient of output, relative to the input. Productivity can be increased in the short term by the input, i.e., normally the cost as denominator of the quotient, is reduced. Resistance to change, stress and work intensification, reduced motivation or limitations in performance due to deteriorating health can, however, subsequently decrease the 'output' (numerator size of the target indicator productivity) so that such medium-term effects might thwart the achieved cost savings. Based on a systematic literature review Datta et al. (2010) found that staff reductions in particular – and this is a major cost-cutting measure in phases of reorganisation – have the most severe and unfavourable impacts on employees. Staff reductions can result in reduced commitment and job involvement, which leads to reduced confidence in management, which in turn leads to reduced perceived fairness, motivation and ultimately reduced performance. Reasons for non-realisation of the economic expectations are probably:

- Neglecting the reaction of employees (Brown & Hum phreys, 2003; Schweiger et al., 1987; Van Knippenberg & Van Leeuwen, 2001)
- Inadequate, non-transparent communication of the plan ned changes (Robertson et al., 1993; Rigotti & Otto, 2012)
- Lack of consideration of transaction costs, due to fluctu ation (Rigotti & Otto, 2012)

According to a survey of 22,000 employees (Heron, 2009), workers in the course of a merger specifically feared job insecurity and layoffs as well as work overload or underload, uncertainty about their future prospects or career stagnation, poor communication and information, little or no control in terms of the rate of change, lack of support and deterioration of the corporate culture as well as lack of recognition. These fears lead to uncertainty and resistance, which can bring about incalculable transmission costs (Weiss & Udris, 2001).

In mergers and acquisitions particularly, an additional problem to the resistance mentioned above is that formerly independent organisations bring with them specific and potentially very different cultures. These cultures are part of the self-conception of the employees and shape their expectations in terms of mutual employer-employee obligations. Due to the disregard of these issues between 50 and 80% of all M&As are seen as an economic failure (Buono et al., 2002; Cartwright & Schoenberg, 2006). Jansen and Grains (2000) note in a study on the success of 103 mergers that only 44% of the organisations had a positive sales development after the merger, and only 21.5% were able to increase their market value. Other major changes, especially staff reductions, often follow the formal merger of the joined companies. In this phase, mainly well-educated, younger employees leave the organisation (Iverson & Pullman, 2000). This trend can today also be observed in the public service: in a case study of a hospital merger, young and well-trained nursing staff in particular left the organisation, resulting in a nursing staff with an average age of 48 (Köper & Schauerte, 2011).

As mentioned at the beginning of this paper, change is normal and necessary. Hence preventing change or refusing to adapt to market- and competition-related adjustment needs is not an option in today's working environment. However, given the potential transaction costs related to the unwanted side effects describes above change should be planned carefully and supported in the course of the whole process. The existing respective approaches as well as further need for research and development, are discussed in Section 5.

2.4 Correlation of Restructuring with Stress and Demands – Especially with Psychological Stress

For years mental stress has steadily gained in importance and is the cause of many sick days among employees (BAuA, 2010). In this respect, the problem of psychological stress is increasingly considered in both public discussions and in the current political programmes (at an EU level and national level). Restructuring seemingly reinforces the prevalence and severity of psychological demands. The BiBB/BAuA survey (2006) assesses the extent of employees' exposure to mental stress. Table 3 shows to what percentage respondents indicate they were experiencing the mentioned stress in their workplace.

Work and time pressure is a problem that affects all workers to very high proportions: More than half of the labour force often faces heavy time and work pressure (53.5%) and workers often need to attend to different jobs simultaneously (58.6%). This applies especially to white-collar workers, where the proportion is even higher (65.2%). Coupled with the particular frequency of work disruptions within this group (54.4%), this can lead to highly subjective stress.

Table 3: Psychological Job Demands.
Source: BiBB/BAuA employment survey 2005/2006

Frequent Psychological Job Demands	%
Work tasks prescribed in detail	22,9
Stipulated quantity, performance or time	31,1
Recurring operations	51,4
Heavy schedule and work pressure	53,5
Attending to various jobs simultaneously	58,6
Work disturbance / interruptions	46,0
Not being educated / proficient in tasks required	8,8
Being faced with new tasks	39,1
Improving processes / trying out new things	27,8
Working at the limit of capacity	17,0
Small errors – large financial losses	15,4

Among the self-employed, the main sources of stress were: being faced with new tasks (46.5%), process improvement (38.3%), and an above-average heavy schedule and work pressure (58.4%).

Stress, work pressure, changing of tasks, increasing professional requirements and the need for changes in services and products have increased especially in organisations undergoing restructuring processes. Compared to non-restructured organisations, employees in restructured organisations mention significantly higher increases in psychosocial stress (BiBB/BAuA, 2005-2006). In organisations where restructuring measures were implemented, other changes were observed to a greater extent than in organisations without restructuring (Beermann & Rothe, 2011). Comparing restructuring with other changes in the field of work, statistically significant correlations ($p < .01$) were found with stress/work pressure ($r = .52$), variety of tasks ($r = .56$) and professional requirements ($r = .50$) (Rigotti & Otto, 2012). Stress was also significantly associated with layoffs ($r = .58$).

Employees who reported restructuring measures experienced additional stress as follows:

- Increase in the variety of tasks (68.2%)[4]
- Increase in job requirements (63.3%)
- Introduction of new computer software (62.7%)[5]
- Increase in stress and work pressure (60.8%)
- Staff reductions (55.0%)
- Introduction of new manufacturing processes and technologies (49.5%)
- Introduction of new machinery and equipment (48.9%)
- Use of freelancers, temporary workers, interns or temporary workers (46.2%)
- Developing new or significantly modified services (46.0%)
- New management (38.0%)
- Introduction of new products and materials (34.6%)

Only 9.8% of the respondents reported to have been affected by none of the changes, which means that more than 90% reported at least one of the changes in their work environment. The majority of respondents (over 60%) claimed to have been affected by at least three of the aforementioned changes. Aspects of work requirements (professional requirements, variety of tasks, stress and work pressure) have increased for the majority of workers, regardless of industry. People who reported job cuts in their area had almost twice the risk of stress and work pressure (Rigotti & Otto, 2012). The total number of changes significantly increased the risk of stress and work intensification. Employees who reported at least five of these changes, showed a 3.4-fold higher risk of stress. The extent of restructuring or the number of changes is therefore strongly associated with stress (ibid.).

The number of changes is also associated with the subjectively assessed health status of the employees. The more changes respondents reported, the worse they rated their health situation (Beermann & Rothe, 2011).

Interim Conclusions regarding the Prevalence and Potential Impacts of Restructuring:

- The use of the term and its differentiation from other phenomena of change, e.g. 'change' or 'organisational development', is not clear.
  The term 'restructuring' is used for a variety of change processes.
- The most important form of restructuring in Germany and Europe is internal restructuring with the aim of reducing costs, increasing productivity, and adaptation of business/liquidity planning.
- In Germany, manufacturing and the public sector are particularly affected, as well as 'financial services' and 'transportation and traffic' industries.
- Mainly large enterprises are affected.
- After a peak in 2009, the number of restructuring measures decreased in the following years.
- Acquisitions in the crisis year or afterwards did not particularly turn the scales. They were predominantly national in nature and primarily related to the service sector, in particular the financial sector. In comparison to internal restructuring they are rather insignificant.
- Restructurings usually go hand in hand with staff reduction.
- They are connected to various other changes or reinforce these.
- Work requirements, work intensification and stress in particular increase more in restructured organisations than in others.

3 State of Research on the Potential Impact of Restructuring

3.1 Linking Restructuring with Health

There is little yet growing evidence about the health effects on workers who due to restructuring do not lose their work, but remain within the organisation (the group of so-called 'survivors' / Noer, 1993), (Kieselbach et al., 2009).

The report by the European Expert Group on 'health in restructuring / HIRES)' (Henry et al., 2010; Kieselbach et al., 2009) summarizes the few existing studies that explicitly examine the context of 'survived' restructuring and health consequences and shows that the remaining employees in the organisations, partly due to quantitative and qualitative job insecurity, experience significant health problems such as:

- Poor sleep quality (Campbell-Jamison et al., 2001)
- Increased sensations of stress (Kivimäki et al., 2003)
- Cardiovascular damage and increased mortality due to cardiovascular impairments (Vahterra et al., 2004)
- Increased drug use (Kivimäki et al., 2007)

[4] The percentages represent X% of employees reporting this change, who have answered yes to the question of restructuring.
[5] Meaning new software, not introduction/modification/updates of software versions.

- Increased prescription/consumption of psychotropic drugs (Kivimäki et al., 2007)
- Heavy smoking and increased alcohol abuse (Weber et al., 2007; Frone, 2008)
- Intensification of musculoskeletal disorders, especially if the employees had health problems prior to the down sizing (Kivimäki et al., 2001a)
- A double increase of the number of disability pensions (Vahtera et al., 2004)
- Increased inability to recover (Richter et al., 2010)

In a review of 41 studies, Quinlan et al. (2001) report of negative correlations between restructuring and health in 36 of the 41 studies. Organisational changes are associated with higher mental strain (Wanberg & Banas, 2000).

Furthermore, far too little is so far known about which working conditions in detail exert significant influences on health problems. Reasons are probably:

- Increased work requirements (Kalimo et al., 2003),
- Loss of confidence in the company culture (Campbell-Jamison et al., 2001) and
- Increased feelings of helplessness and loss of control.

Increased work intensity – as demonstrated empirically in the BiBB/BAuA survey for Germany (see Section 2.2) – particularly when there is little room to manoeuvre, is a major source of stress, burnout and other threats to mental health (Kieselbach et al., 2009). All three factors ultimately lead towards steadily increasing job insecurity (Lee & Teo, 2005; Campbell-Jamison et al., 2001; Kivimäki et al., 2001b), entailing the above health consequences. The BiBB/BAuA survey likewise reveals that restructuring is related to poor self reported health.

3.2 Linking Restructuring with Motivation and Work Behaviour

Restructuring also has a potential impact on job satisfaction, motivation, and ultimately on the way people work. If employees experience the feeling of being over- or under-challenged, as by interference in their existing competencies, this can lead to insecurity, frustration and fear (Ashford, 1988). Exemplary studies on the effects of restructuring reveal the following impacts of restructuring:

- Less attachment to the organisation (Bennett & Durkin, 2000)
- Higher intentions to resign (Trevor & Nyberg, 2008)
- Declining identification with the activity (Allen et al., 2001)
- Reduced job satisfaction (Wanberg & Banas, 2000)
- Negative perception in terms of honesty and trustworthiness of the organisation (Schweiger & DeNisi, 1991)
- Increase of resignation and decrease of involvement and professional self-efficacy (Richter et al., 2010).

4 Research Requirements

Sections 3.1 and 3.2 make claim that a quite good level of knowledge already exists with respect to the relationships between restructuring and health and motivational effects. In particular the so-called '10-town study' from Finland provides information about the meaning of health effects from restructuring. Here, in a large-scale longitudinal study, employees were investigated by local authorities in 10 towns in terms of the effects of downsizing. However, by focusing on the narrow range of 'municipality', the findings lacking differentiating features. Effects of sector, industry, occupation, organisation of employment, etc. may play a role. Moreover, the type of restructuring could have a significant meaning in a sense that specific forms of restructuring are related to particular outcomes (Maertz et al., 2010).

To be able to 'push the right buttons' for the purpose of designing favourable working conditions and developing and recommending appropriate preventive measures, there is a lack of understanding of the specific mechanisms of action. Important research questions are therefore:

- Is it possible to assign specific health or motivational impacts to specific types of restructuring?
- What changes are critical to employees for dealing with motivation, behaviour and health (type of restructuring, local changes, changes in content, changes in the status quo, competence loss, pecuniary loss)?
- What information is important and helpful to employees and when should that information be provided?
- What factors can have compensating effects (money, prospects for development/promotion, recognition)?
- How can a perceived threat become a perceived challenge?
- What distinguishes successful transition (best practice accompanying research) and what are the factors in the failure of restructuring efforts?
- What are the personal and situational reasons for resistance to change?
- What spillover effects result (in terms of family, partner ship, children)?

The scope and depth of these questions make it clear that, with regard to the specific effects of restructuring measures and possible or meaningful accompanying processes, there is an extensive need for knowledge and understanding.

Interim Conclusions on the State of Research

- A number of findings reveal the impact of restructuring on health, satisfaction, motivation and behaviour.
- The role of specific conditions, such as the type of restructuring, industry, sector, aspect of employment, etc., needs to be examined more closely.
- The same applies to the effect on specific personal and situational aspects during/due to changes (What factors can have a compensating effect? What are the factors of a successful restructuring process? Etc.)

5 Recommendations

Major restructuring measures in organisations currently rarely proceed according to a diligently planned manner and seldom take into account the potential impacts on the workers. Rather, must it be assumed that short-term cost and productivity considerations are the guiding principles for restructuring measures.

The details, as to which the burdens of restructuring processes affect employee health, have so far been studied only insufficiently. To what extent can employees perceive the process of change as controllable and transparent? How does this take form in the various phases of the restructuring? Does the process of change open up opportunities for action that can actively be seized? What skills are needed for this on individual and organisational levels? Is it possible to obtain the necessary confidence in the organisation and its future even in difficult situations or during very comprehensive restructuring?

Although specific design recommendations have still to be developed, there are certain fundamental and guiding principles, such as fairness, transparent communication and social support, which have demonstrably been shown to be beneficial in transformation processes. The uncertainty of their future affects employees more than the changes per se (Schweiger & DeNisi, 1991; Henry et al., 2011; Kieselbach et al., 2009). Honest and timely communication during change leads to less uncertainty, more job satisfaction and more commitment (Larkin, 1994; Armgarth, 2009). Perceived social support from the organisation and supervisors also provides more commitment and represents a significant social resource, which employees can refer to in the process of change (Eisenberger et al., 1986; Kieselbach et al., 2009; Richter et al., 2010). This also applies to fairness and trust in the organisation (Elovainio et al., 2004, 2005).

In this respect restructuring does not 'happen', but is a deliberately conducted process that can be designed in the above sense. '(Restructuring is) not something that happens to an organisation but (...) something that organisation members undertake purposively (...).' (Freeman & Cameron, 1993, p. 12). To a certain extent, there is choice of the point in time, the method and the manner how the restructuring is performed (Maertz et al., 2010). The process of restructuring can be planned in order to be beneficial to health, or at least to protect health, and should be performed as such. Several case studies, which have been compiled by the HIRES expert group, report positive experiences with the consideration of the fundamental principles of fairness, transparency and social assistance (Armgarth, 2009; Kieselbach et al., 2009). It is known from research on reorganisation that aspects not only at the individual employee level, but also at the organisational process level, moderate the emergence of stress, reduced performance behaviour or damage to health. It remains to be clarified in detail which aspects of these prove to be useful and practical design approaches.

BAuA, in support of the BMAS, is as a specialised federal research institution for health and safety at work and one of the most important organisations in Germany when it comes to generating expertise for politics, the economy and the 'scientific community'. BAuA is committed to making this expertise available and transferring it to the target groups and networking with them.

Across national borders, the department is in close contact with similar organisations and is considered an important European partner. To meet national and international requirements, it is necessary to correctly seize the current challenges in the world of work in all their dimensions, to especially innovatively disseminate the relevant topics and network them, to formulate the implications for future action in politics, business and science, and to keep solutions sets available. Restructuring is one of the key developments in the changing world of work.

Due to the importance of the restructuring of organisations and employees, BAuA initiates various activities in research, development and implementation on issues and problems related to the topic of restructuring, especially at the interfaces with other important topics of change of work, mental stress, demographics or employability. These issues are also addressed at a political level. A recent announcement of the BMAS emphasizes:

'In light of the structural changes in the economy and labour world, increasingly fierce global competition and demographic change, companies are more than ever facing the challenge to ensure their competitiveness and innovative ability and actively shaping structural changes.
Companies are also increasingly asked to provide a healthy and stimulating work environment for their employees. It is all about attractive, competence promoting, varied, reliable, as well as motivating and health-sustaining working conditions and thus possible associated activities (...).'

The current and short-term planned measures based on the issue of organisational restructuring and its effects relate to:

- The compilation of reliable figures and information on the distribution and the health effects of restructuring for Germany
- Initiation of qualitative studies that are devoted to the above-mentioned research questions
- The identification of good practice examples
- Publications such as the special issue 'Restructuring' of the Journal of Industrial Science in cooperation with the National Institute for Occupational Safety
- Events where the main actors from academia, business, government and social partners come together to share information and arguments (e.g. BAuA, 2011, 2013).

6 Conclusion

Restructuring relates to a vast number of companies and employees in an accelerating sequence. Assuming that the German economy continues to change – moving away from the classic production of high quality goods, to service-oriented innovative products – one must assume that organisational forms will become even more fluid. Restructuring will continue to be ever more present on the agenda of everyday work. It represents (in addition to the actual stresses and demands of the work) a major

source of work intensification and stress and can severely affect the motivation, satisfaction and health of employees. Restructuring measures themselves, as well as concepts and interventions in social and behavioural prevention which are limited to the 'micro-level' and do not consider 'change from the outside' cannot be successful in the long run, since restructuring overlaps the already complex relationships of stress at work and their impact on the workforce and thwarts any appropriate interventions (Richter et al., 2010) or hinders their sustainable implementation.

The key questions:

- What restructurings in Germany are especially relevant and what specific impact will they have on the workforce?
- What is their impact on satisfaction, motivation, stress and illness?
- What other factors (legal and social framework conditions) have a significant influence on the impact of restructuring?

These questions have been insufficiently investigated. BAuA intends to close these knowledge gaps, to continue to develop accompanying concepts for restructuring, to test these concepts, and to disseminate the resulting knowledge. Thereby, a variety of activities are planned, including the promotion and strong content-related support of practical case studies, events, workshops and intensive discussions with stakeholders from government, business and academia, as well as participation in EU projects and publications.

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