
**ORGANIZATIONAL CHANGES, EMPLOYEE STRESS,
AND CUSTOMER SATISFACTION:
EMERGENCE OF THE FLEXIHEALTH CONCEPT**

SUMMARY

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Flexihealth

The Flexihealth project was purported to identify the effects of flexibility practices and of changes in the work environment on indicators of employee well-being, health and quality of life, as well as indicators of customer satisfaction. At the end of four years of research, the Flexihealth network has collected data from over 7 500 Belgian workers pertaining to a variety of companies having encountered major changes. These data allow us a better understanding of the mechanisms by which changes in work environments affect occupational stress, well-being and quality of life among employees as well as customer satisfaction.

The surveys were conducted using a measurement instrument specifically designed to assess the quality of life of employees during changing times. To know the prevalence of changes encountered we asked respondents to report the type and number of changes encountered as well as the flexibility practices experienced during the *last six months* at work.

Table 1. Prevalence of changes and flexibility practices

	Number (%)
Flexibility in:	
<i>work schedules</i> (variable, year-based computation of work time, etc.)	3048 (61.4%)
<i>tasks</i> (rotation, polyvalence, job enlargement, job enrichment, etc.)	2022 (40.8%)
<i>work time</i> (part-time, shiftwork, nightwork, etc.)	1463 (29.5%)
<i>geographic location</i> (telework, homeworking, etc.)	448 (9%)
<i>labor contract</i> (fixed term contract, temporary employment, etc.)	133 (2.7%)
Changes in:	
<i>Colleagues</i>	2760 (55.6%)
<i>Supervisor</i>	2364 (47.7%)
<i>Tasks</i>	2069 (41.7%)
<i>Schedules</i>	1287 (25.9%)
<i>Location</i>	1134 (22.9%)

Table 1 reports the prevalence of changes and flexibility practices calculated on a database of 4 961 employees representative of the secondary and tertiary sectors in Belgium as obtained from our research work. As can be seen, the flexibility of work schedules and change among colleagues are the practices most often experienced by employees during the last six months of work. Changes of supervisor and among tasks are at the second rank in terms of frequency.

Changes, flexibility, and well-being

In general, flexibility practices exert some positive effects on worker well-being since workers exposed to flexibility report more positive stimulation and less job insecurity. However, these effects are counterbalanced by negative ones, such as less control at work, more negative stress, more medical complaints, and poorer quality of life. Differences were found however across flexibility practices, with flexibility in task assignments having the most detrimental effects.

The effects of changes on employee well-being are generally negative. In particular, more changes is associated with lower perceived support and job satisfaction, higher negative stress, lower positive stimulation, poorer mental quality of life, and more frequent medical complaints. Changing supervisors and task assignments has the most deleterious effects on well-being.

A look at differences across demographic groups reveals that blue-collar workers and employees aged between 36 and 55 are more at risk in terms of well-being worsening while workers aged 55 or more report higher levels of well-being than young employees.

Our research program also yielded interesting findings with respect to the effect of potential moderators. We found that the number of changes increases the perception of *threat* when employees are low on positive affectivity and self-esteem, or perceive little support from the organization or the supervisor. It also appears from the findings that individuals who think they are important at work, hence are high on self-esteem, do not feel threatened by increasing changes in the workplace. The same phenomenon occurs for employees who feel supported by the organization or the supervisor. Finally, control at work alleviates the effect of changes and their negative appraisal on negative stress. It thus contributes to improve employees' resistance to stressful events.

Changes, health and quality of life

The medical section of the Flexihealth survey addressed the medical antecedents and complaints of employees, and their quality of life and health-related behaviors. Of primary interest, we found that the prevalence of medical complaints such as fatigue, distress, dorsolumbar pain, and headaches was quite high among Flexihealth respondents as compared to national norms (ISSP, 2001). This is surprising since our sample was supposed to be in a more healthy condition than the general population, due to the well-known *healthy worker effect* (those who work are supposed to be healthier than the general population). However, the prevalence of other medical complaints (e.g., mental health affections) was quite close to the norms for the general population. A gender comparison reveals that women tend to report more headaches, dorsolumbar pain, and sleeping problems while men report more cardiovascular complaints. The prevalence of somatic complaints is significantly higher among blue-collar and white-collar workers than among managers and upper-level management, except for cardiovascular complaints which are reported in equal proportions across occupational groups.

One interesting finding regarding work-life habits is that 20% of Flexihealth respondents report having recently increased their level of alcohol consumption and 20.4% having recently begun to drink alcohol. These proportions are significantly higher than the norms for the general population (ISSP, 2001). This trend affects significantly more men and isolated individuals (e.g., widowed, divorced, single, etc.) than women or married people. If one looks at smoking habits among respondents, data show that 38% of them report having increased their level of smoking recently

while 17% report having begun to smoke recently. These proportions are also higher than in the general population (ISSP, 2001).

On average, Flexihealth respondents perceived their physical quality of life as reasonably good but were less positive about their mental quality of life. One notes that 31% of respondents perceived their quality of life as good or high, 48% reported a poor score on either physical or mental quality of life, and 21% rated negatively their overall quality of life. A comparison across industries shows that the quality of life is particularly low in the health care industry: 65% of employees report a poor mental quality of life and 29.75% report a poor physical quality of life.

There was a high association between perceived stress and the scores for medical complaints and mental quality of life. Multivariate analyses conducted on the data showed that the mental component of quality of life was affected by changes and stress. Moreover, the number of changes was associated with recent increases of smoking.

Changes, employee quality of life and customer satisfaction

The main research question addressed within the customer section of the Flexihealth project focused on the effects of changes on the organizations' ability to deliver high-quality products and services and satisfy its customers. We found a moderate correspondence between indicators of customer satisfaction provided by customers and the ratings given by employees. In general, employees tend to rate all aspects of satisfaction slightly lower than customers do.

Considering the relationships between employee characteristics, work conditions and well-being, we found that on average these explained only a limited amount of the variance in employees' perceptions of customer satisfaction indicators (Sample 1 = 13%, Sample 2 = 19%, and Sample 3 = 17%). However, Perceived Organizational Support was consistently associated with customer satisfaction indicators. Negative stress was also a consistent negative predictor of customer satisfaction indicators in samples 1 and 3, even after employee characteristics such as negative affectivity were controlled for.

Furthermore, there were differences between language samples (French vs. Dutch) for nearly all customer satisfaction indicators. However, it is difficult to interpret these as stemming either from differences in meaning assigned to individual items or to actual existing differences in perceived customer satisfaction. Employee characteristics such as positive or negative affectivity and external locus of control explained only a small amount of variance in customer satisfaction indicators, indicating that aspects related to the emotional state of employees as they estimated customer satisfaction was not a critical determinant of their perceptions of customer satisfaction. Job insecurity was not consistently related to employees' perceptions of customer satisfaction. This could possibly be explained by the fact that job insecurity is an extremely important issue before or during change processes, while most Flexihealth studies were being conducted after changes had taken place.

Control over the work situation included both control over scheduling and control over methods. Control over methods was only weakly associated with customer satisfaction indicators, whereas we found some contra-intuitive results for control over scheduling. For several customer satisfaction indicators, we found significant negative effects of perceived control over scheduling, especially in Sample 1. This mirrors results reported by Dormann and Kaiser (2002) who found that employee time control led to lower customer satisfaction. They argued that control over time on the side of the employees makes service less predictable and reliable for time-related aspects and promptness from the point of view of the customer. Given that the strongest relationship was found with Responsiveness of service, which gives an indication of “the willingness to help customers and provide prompt service”, we might argue for a similar explanation here.

Employee well-being was conceptualized as job satisfaction, positive stimulation and the lack of negative stress. In general, results show that customer satisfaction indicators as perceived by employees are the lowest when employee stress is high.

To answer the question as to whether changes in organizations impacted customer satisfaction, we examined the degree to which differences between organizations in customer satisfaction indicators could – at least partly – be explained by the number of changes experienced. The variation in perceived customer satisfaction between organizations was considerably smaller than the variation between employees within organizations. Nevertheless, a small portion of this variance was due to the number of changes encountered in organizations. This was particularly true for the more interaction-related aspects of customer satisfaction and service quality, and less for tangible aspects and product quality. The number of changes in the work environment encountered by employees had an indirect effect on customer satisfaction indicators via its impact through perceived working conditions and employee well-being.

In summary, though the direct effects of changes on customer satisfaction indicators were limited in magnitude, their indirect effects through perceptions of support and work conditions were more important. In fact, support as perceived by employees seems a central determinant of customer satisfaction. During turbulent times, when organizations are restructuring, merging or otherwise changing, maintaining good internal communication, conveying trust and care and making employees feel appreciated by the organization are central to the maintenance of enduring customer satisfaction.