Methods Chapter 4: A closer look at downsizing

In this document we describe the methods used for two studies described in chapter 4. Both studies make use of the Cohort-study Social Innovation (CSI).

Study 1

Participants

We made use of one wave of the CSI, 2009. We selected those employees who: (a) were employee and (b) did not change employer, in the year before and after the measurement, which implies that the group is homogeneous in this respect (N=2,146)¹. All participants were asked whether any of the listed organisational changes (see methods chapter 2) took place within their current organisation (workplace/location), in the last 12 months. Multiple answers were possible. One answer option was 'Downsizing of the number of employees'. We selected those employees who experienced downsizing in the last 12 months (N=555). Table 1 gives an overview of the number of employees.

Table 1: Overview of number of employees experiencing downsizing in the last year (2009 wave)

Downsizing ²	2009
Yes	555 (26%)
No	1,560 (73%)
Missing	31 (1%)
Total	2,146

Measures

In the CSI-study employees who indicated they experienced downsizing during the last 12 months, were also asked to indicate whether they were at *risk to loose their job due to organisational changes*; whether, at the time of the organisational change(s), there was a rumour/risk that their job/task bundle would change, and, if this was the case, whether their job/task bundle changed significantly (*risk and actual change of job/task bundle*). Employees who were actually confronted with changes in their job or maintenance of their job during the last 12 months, were asked to

 $^{^{1}}$ At wave 3, in 2010, there were 2,571 respondents in total. The majority (N=2,513) was still employee, in 2010.

 $^{^{\}rm 2}$ Employees experiencing downsizing in the last 12 months could also have indicated other types of restructuring.

indicate how they were *personally involved in decisions related to these changes* (answer categories: I took part in deciding, I took part in the negotiation, I was asked for advice, I was informed, I was not involved). We examined the relationships of these variables with *emotional exhaustion* and *dedication* as outcomes.

Analyses

We conducted cross-sectional analyses using ANCOVA (including post-hoc test) to test for group differences. Separate analyses on the outcome measures were performed for: - the risk to loose the job (2 groups: yes or no),

- (risk of) changes in job/task bundlle (3 groups: (1) no perceived risk/changes, (2) perceived risk of changes but no actual change and (3) perceived risk of changes and actual change) and
- degree of participation (3 groups: not involved, informed, participated). We corrected for age, gender and educational attainment.

Limitations

In addition to the general limitations we described in the methods section of chapter 2, for this particular analysis we lack information on the duration of the period between the perceived risk of changes in the job and actual changes, which hinders to draw clear conclusions.

Study 2

Participants

In this study, we used all three waves of the CSI (2008, 2009, 2010). We selected those participants who were employee in all three waves and did not change employer during the entire survey period (N=2,146). We focused again on the employees experiencing downsizing. To examine the effects of downsizing, we compared groups of employees who had experienced downsizing with a group of employees that had not experienced any downsizing in the whole period (see group 0 in Figure 1). Those employees who did experience downsizing in the period between June 2007 and June 2010, can be divided in different groups (see table 2 and group 1 to 7 in Figure 1), based on the year(s) they experienced downsizing.

		Number of employees
0	no-no-no	1,219
1	no-yes-no	145
2	no-no-yes	238
3	no-yes-yes	195
4	yes-yes-yes	127
5	yes-yes-no	65
6	yes-no-no	110
7	yes-no-yes	47
	Total	2,146

Table 2: Overview of number of employees per group

Since it is our aim is to distinguish pre-, direct and post-effects of downsizing, employees in group 7 (see Figure 1) were excluded from further analyses (for it is unclear, for instance, whether potential effects measured in the second wave should be interpreted as post-effects of the downsizing process that took place more than a year ago, or as pre-effects of the upcoming downsizing). The remaining groups (group 1 to 6), can be further be grouped in two groups, based on the duration of the downsizing process (see Figure 1), with group 1 experiencing a brief/single event of downsizing while group 2 to 6 possibly experiencing a prolonged event.



Figure 1: Groups used for analyses

Note: "yes" [or "no"] indicates [no] experience with downsizing in that period.

Analyses

In all waves, several work characteristics (*supervisory social support, quantitative task demands*) and indicators of well-being (*dedication, emotional exhaustion*) were measured. Earlier regression analyses showed that these work characteristics and well-being indicators were affected by prolonged organisational restructuring. Therefore, these variables were used as outcome variables in the current analyses.

We used one between-subjects factor (i.e. *downsizing: no downsizing; downsizing*) and one withinsubjects factor (i.e. *Time: Time 1 (T1) (2008) and Time 2 (T2) (2009)*³).

Furthermore, we adjusted the analyses for *gender*, *age* and *educational attainment*, since these factors could possibly bias our results.

In order to examine the effects of restructuring, we compared each group (1 up to 6) with the 0group, which experienced no downsizing. First, we tested for group differences at the different points in time, adjusted for age, gender and education. If the compared groups differed (at T1 or T2) on work characteristics and/or well-being, we further analysed those variables on which we found (some) differences, by conducting a repeated measures ANCOVA with Downsizing (downsizing vs. no

³ The outcome variables on Time 3 were not used for the current analyses – while, with regard to Time 1 and Time 2, we know whether downsizing took place, or not, for at least one year before and one year after. With regard to Time 3, we do not know whether further downsizing takes place shortly after Time 3, which could have significant pre-effects on the outcome variables at Time 3.

downsizing) as a between-subjects factor, Time (T1 and T2) as a within-subject factor, and gender, education and age as covariates.

Limitations

For this specific study it is important to note that most of our conclusions concerning the effects of downsizing and the differences between "pre-", direct, and "post-" effects are based on comparisons between groups, rather than within-group effects. Although we controlled for age, gender and educational attainment and contract size, the different groups may differ on other factors that explain the found differences. For instance, due to the financial crisis, organisations experiencing downsizing in 2008 are partly found in in other sectors than organisations experiencing downsizing in 2010. Found differences between pre- and post-effect might therefore also be attributed to sector differences.

A further limitation of this study is that the group that experienced no downsizing is rather heterogeneous. It includes employees in very stable work situations, as well as employees experiencing all kinds of influential, organisational changes (though not characterised by downsizing). Since there was no possibility for a comparison of the "downsizing"-groups to exclusively stable control-groups, we, therefore, possibly found relatively few and small significant group differences. Similarly, what the different "downsizing"-groups experienced in the periods with no experienced downsizing, also ranges from very stable work situations to influential, organisational changes. Since it is likely that downsizing does not occur in very stable work situations, we therefore possibly found relatively few changes over time within the downsizing groups, compared to the no-downsizing group.

References

Kraan, K.O, Hooftman, W.E. & Jong, T. de (2009). Cohortstudie Sociale Innovatie (CSI) 2008-2010; Methodologie en beschrijving tweede meting. [Cohort Study Social Innovation 2008-2010; Methodology and description of second wave]. Hoofddorp: TNO.

Kraan, K.O., Hooftman, W.E., Jong, T. de & Dhondt, S. (2011). Cohortstudie Sociale Innovatie (CSI) 2008-2010; Beschrijving steekproeven 1e, 1e, 2e en 3e meting. [Cohort Study Social Innovation 2008-2010; Description samples first, second and third measurement]. Hoofddorp: TNO.

More detailed information about the results is available upon request from the authors. The results are described in:

Wiezer, N., Nielsen, K., Pahkin, K., Widerszal-Bazyl, M., De Jong, T., Mattila-Holappa, P., Mockałło Z. (2011). *Exploring the link between restructuring and employee well-being*. CIOP-PIB, Warsaw.