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"The effect of downsizing on affective organisational commitment: a contextual proximity perspective."

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Summary

Two assumptions constrain the literature on the effects of downsizing: that all survivors are affected to a similar extent and that the effect of layoffs can be extended to all workforce reductions. Furthermore, there is inconclusive evidence on the long-term effects of downsizing. I address these issues with two empirical studies on a multinational pharmaceutical company analysing the differential effect of four downsizing methods on affective commitment depending on the contextual proximity of employees. Study 1 shows decreasing levels of affective commitment among employees exposed to layoffs and closure of units (lower commitment corresponds to greater exposure) but the opposite was observed in voluntary redundancies and divestment. Study 2 indicates that downsizing has long-term negative effects which are worse for those exposed a second time.

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The economic downturn in the second half of the 2000s as well as the legitimisation and normalisation of downsizing as an efficiency-enhancement strategy (Lester at al., 2003) led companies all over the world to reduce their workforce, often more than once. The impact of such an extensive practice is hard to gauge. Cascio (2010) estimates that laying off technology workers in the US, Europe and Japan involves direct costs of around USD100,000 per employee but the indirect cost and non-financial impact is nearly impossible to calculate. Large scale downsizing has implications for the employees directly affected and their families but also for remaining employees, communities, the national economy and the social fabric in general.

Understanding the consequences of downsizing is thus a priority for organisational scholars and a pressing need for practitioners as evidenced by the vast literature on the subject (see Datta et al., 2010 for example). However, organisational theory on the effect of downsizing has fallen somewhat behind business practices due to a number of unwarranted assumptions. This research challenges two of the most common assumptions in the downsizing literature. Firstly, that downsizing has negative effects, which assumes that different downsizing methods are similar, and secondly, that downsizing survivors are a homogeneous group. Furthermore, this research sheds light on the complex effects of repeated exposure to downsizing.

The general purpose of this research is to analyse the effect of downsizing on affective organisational commitment. Two empirical studies were conducted to fulfil this goal whilst also addressing several gaps in the downsizing literature. Both studies contribute to the downsizing literature in several ways. First we distinguish among different downsizing methods which have significantly different effects on affective organisational commitment. Second, we provide evidence that there is a direct relationship between the level of exposure to downsizing and its effects on survivors. And finally, we explore the interaction between previous and recent exposure to downsizing showing that both are relevant in different ways.

This paper offers the theoretical foundations, methods and results of each empirical study separately and then presents a combined analysis of the findings followed by the theoretical and managerial implications and limitations of the research.

Study 1

Studies on downsizing have analysed manufacturing and service providing companies (e.g. Mishra and Mishra, 1994; Luthans and Sommer, 1999) but knowledge-centred organisations have been neglected, probably because until recently it was not common for those organisations to implement large-scale downsizing. This research examines downsizing in one of the most knowledge-intensive sectors, the pharmaceutical industry.

The global economic downturn as well as internal vulnerabilities forced pharmaceutical companies into drastic workforce reductions. In the late 2000s, R&D investments plummeted for the first time, units were closed by the dozens and thousands of employees lost their jobs. Between 2007 and 2009 the top 5 Big Pharma targeted 99800 positions for downsizing (www.fiercepharma.com). At the end of 2009 most of them had reduced their workforce between 7 and 15%.

Workforce downsizing in knowledge-intensive industries has additional challenges because by their very nature they rely on the knowledge produced by its people. Employees are the main assets in a business model that is built around the successful generation of innovative products and services. For that reason, affective commitment among knowledge workers is considered a priority. Committed employees are more satisfied with their job, express less turnover intentions, are more motivated and are willing to put more effort to contribute to organisational goals (Klein et al., 2010; Meyer et al., 2002).

Pharmaceuticals was the choice of industry for this research because it is important to understand the effect of downsizing on knowledge-intensive industries which are increasingly relevant in the global economy. This sector depends on their human capital and therefore is concerned with keeping employees committed to their purpose. It is also one of the latest industries to embrace downsizing into the organisational strategy and thus recent mass downsizing events are both frequent and varied in nature.

Thus far, most studies on downsizing concentrate on a single national context which is limiting because the results obtained could be reflection of circumstances specific to the country under scrutiny. But, most importantly, it misses out on relevant complex interactions between countries and functions within modern organisational structures which could make a difference to how employees are affected by downsizing.

To address that issue, this research involves downsizing events in 10 countries (from Europe and North America) within a large multinational pharmaceutical company, PharmaTech. It was chosen for this study because it was the setting of dramatic changes in the last few years which gave this researcher a unique opportunity to study two waves of large scale downsizing involving several workforce reduction methods. This contributes to redress the balance in favour of multinational perspectives on downsizing among knowledge workers.

Of all the socio-emotional outcomes that are affected by downsizing, this research concentrates on affective organisational commitment because of its link to desirable work behaviours or behavioural intentions such as motivation, performance and permanence (Klein et al., 2012; Meyer, 1989). Although other forms of commitment have been identified, e.g. continuance and normative commitment (Allen and Meyer, 1990) and occupational commitment, also known as work engagement (Salanova et al., 2005), the affective dimension of commitment relates to work outcomes positively to a significantly greater extent that other forms of commitment (Paillé et al., 2012; Meyer, 1989).

We consider affective organisational commitment as an attitude reflecting one's affective reactions to the employing organisation. "It is concerned with feelings of attachment to the goals and values of the organization, one's role in relation to this, and attachment to the organisation for its own sake rather than for its strictly instrumental value" (Cook and Wall, 1980, p. 40).

As stated in the introduction, this study makes two important theoretical contributions which stem from two widespread assumptions in the downsizing literature. Both will be analysed below.

1. Downsizing has negative effects.

Cascio (2009) defines employment downsizing as the "reduction in a firm's use of human assets. It is an intentional, proactive management strategy to reduce the size of an organization's workforce" (p. 3). It is widely assumed that its effects are negative for individuals, organisations and the social fabric of countries/regions.

At an individual level, job loss is often life-changing as it affects nearly every aspect of life, from family relations, self-esteem and health to social status and personal networks (Dekker and Schaufeli, 1995; Keim et al., 2014). For organisations, downsizing often means losing important capabilities and organisational memory (Littler and Innes, 2003), damaging reputation (Goins and Gruca, 2008) and keeping a workforce with less trust in the organisation (Mishra and Spreitzer, 1998); higher levels of stress (Shaw and Barrett-Power, 1997); lower levels of job satisfaction and staff morale (Davy et al., 1991); lower organisational commitment (Armstrong-Stassen, 1997) and increased job insecurity (Waters, 2007).

At a macro level, downsizing tends to increase general unemployment and dependency on national support mechanisms which increases country expenditure (Lavén and Bergström, 2014). It has been repeatedly shown that supporting industries and services are collateral damage of mass downsizing events which also increase social dissatisfaction (Richbell and Watts, 2000).

We do not contest these results. We argue that they may be a reflection of the overwhelming use of layoffs as a downsizing method and limited understanding of the potential benefits of other downsizing methods. Our argument is that this underrepresentation of other methods has led to the assumption that downsizing has negative effects without considering that downsizing is not a homogeneous phenomenon, it is an umbrella under which several methods of workforce reductions coexist and that if analysed in more detail its diversity and different socioemotional effects could become more apparent.

We base this argument on the tenets of Social Exchange Theory (SET) which is commonly used as an explanatory mechanism for the effect of downsizing (Charissa, 2011; De Meuse and Marks, 2003b). The rationale until now was that downsizing is a perceived violation of employees' psychological contract which leads to withdrawal of affective commitment. Withdrawing commitment is seen as an attempt to restore balance to a relationship perceived to favour one of the parties (Lester et al., 2002).

If we analyse SET under the prism of affective events theory (AET, Weiss and Cropanzano, 1996) we see that employees' internal influences such as dispositions, past experiences and expectations, as well as properties of the events generated in the work environment, in this case the method through which downsizing is implemented, combine into subjective assessments of the experience (Kahneman and Tversky, 1972) which leads to differentiable emotional reactions.

In other words, work events, e.g. downsizing, are assessed subjectively by employees which leads to emotional reactions, ranging from positive to negative, that are evidenced through performance or commitment outcomes. Because the characteristics of the specific work event that triggered the emotional reaction has a bearing on the way it is perceived, we

argue that the effect of different downsizing methods on commitment will vary as the unique characteristics of each downsizing method are likely to affect the outcomes.

Stevens (1997) suggests that some downsizing methods are more detrimental for commitment than others. Buono (2003) adds that if implemented correctly, downsizing can improve affective commitment but there has not been empirical evidence to substantiate that claim. This study analyses four downsizing methods in the hope to unveil important differences on affective commitment outcomes depending on the way downsizing is implemented. The four methods are described and compared below.

a) Closure of units.

Closure of units is the cessation of all activity and employment in a given plant, site or unit. The decision to close a unit is usually an attempt to level production and market demands (Kirkham et al., 1998). The selective closure of a unit is informed by financial data, but other elements such as size, range of activities on-site, difficulties of access or expansion, labour problems, old equipment and buildings and distance from the head office are considered as well (Kirkham et al., 1998). Announcing the closure of a plant is assumed to signal that the plant is worthless (Tsetsekos and Gombola, 1992, p. 2) which is why said announcements frequently have negative stock price reactions.

Closing plants is also said to encourage rivalry and resentment among employees of the closing plant and the rest (Richbell and Watts, 2000). Closures in areas with high unemployment receive worse reactions, which are also contingent on the timing of the announcement, for example if it is made in the context of political elections or economic crises (Richbell and Watts, 2000).

There is some evidence that plant or unit closure leads to lower internal attribution (Stevens, 1997) and family pressure (Brand et al., 2008) than layoffs due to the non-selective nature of the former. Neither victims nor their families attributed job loss to personal factors; it is instead perceived as an external decision upon which the employee has little or no control (Gibbons and Katz, 1991).

However, in healthcare-related industries, occupational identity tends to suffer due to the ethical and professional commitment that healthcare professionals have towards their job. In other words, these employees worry not only about their individual fate but also about their patients or those in their care (Vesala et al., 2014).

b) Layoffs.

Downsizing is sometimes reduced to one of its methods, layoffs (Freeman and Cameron, 1993; Schmitt et al., 2011), but there are fundamental differences between both. Downsizing is an organisational-level phenomenon whereas layoffs are an individual phenomenon. Downsizing is the overarching strategy of which layoffs are a manifestation, an implementation mechanism (Schmitt et al., 2011).

There is some debate on the time-frame and implications of the term layoff. For some, it indicates "a temporary cessation of employment with an expectation of recall" (Sommer, 2003, p. 255) while others see it as a permanent termination of employment, also known as redundancy (Cascio, 2010b). We will use the latter definition. Layoffs belongs to

involuntary turnover but it should not be confused with firing which is a dismissal by reason of poor performance or poor fit with the organisation/group (Hu and Taber, 2005).

Layoffs are characterised by an element of (de)selection that has profound effects for those who are laid-off (Brand et al., 2008). Feelings of psychological contract breach are often found among victims (Parzefall, 2012), but they are not the only ones affected. Symptoms of psychological withdrawal have been reported among victims and survivors of layoffs (Davy et al., 1991) while feeling overloaded at work due to having fewer colleagues to share the workload has a negative impact on survivors' work-life balance and reduces their job and life satisfaction (Virick et al., 2007).

Demographic characteristics are relevant in the (de)selection process and have a bearing on its outcome. More tenured employees tend to feel more contract breach than less tenured ones (Parzefall, 2012) while older employees tend to show less self-efficacy than younger employees which worsens their reaction to layoffs (Mone, 1994). Women tend to perceive unfairness in the context of layoffs more acutely than men (Armstrong-Stassen, 1998) while managers also tend to perceive more unfairness than non-managers, presumably because they are more committed to the organisation (Wiesenfield et al., 2000).

c) Divestment.

Divestment is the "sale of part of the assets, product lines, subsidiaries or divisions of a company for cash or securities or some combination thereof" (Kong Chow and Hamilton, 1993, p.9). High product diversification leads to greater divestment intensity which has been related to inadequate governance and loss of strategic control, more debt and worse financial performance (Hoskisson et al., 1994). A product lifecycle perspective puts downsizing in the declining phase. However, the perception of divestment as a sign of failed corporate strategies can be misguided (Kong Chow and Hamilton, 1993).

Divestment can be successfully integrated to the corporate strategy as part of long-term portfolio management. A study by Peel (1995) shows favourable stock market reactions to divestment which is seen as a response to financial distress —either at an organisational level or at a unit level- but is also linked to value creation by concentrating on core competences (Peel, 1995). The same study reveals that divestment rates in the UK between 1980 and 1992 were not significantly correlated to corporate failure rates. In fact, another study of divestment in the European Union found that the stock price of divesting firms improved for 60 days after the announcement (Kaiser and Stouraitis, 1995). Greater positive effects were observed for larger units.

There is very little research on the socioemotional impact of divestment. One theory posits that "divestitures represent the sale of the entire organisation or a portion of it. Consequently, they often have a greater impact on employees than do mass layoffs or plant closings due to the protracted nature of most divestitures and the uncertainty they generate on all levels" (Sommer, 2003, p. 249).

d) Voluntary redundancies.

Voluntary redundancies is a form of job loss "in which 'the employees themselves volunteer to be the ones retrenched' (Clack and Seward, 2000, p.448)" (Clarke, 2005, p. 246). It should not be confused with resignation which is the choice to cease employment initiated by the employee but not as a result of a company's offer in the context of workforce reductions.

There are three features of voluntary redundancies that differentiate them from other downsizing methods: (a) they usually offer incentives, financial and/or benefits, beyond the severance package to attract employees, (b) there is a degree of choice as employees are the ones putting themselves forward for job loss and (c) although the offer is made by the company, they reserve the right to rescind the offer if the employees who volunteer are key for the organisation (Clarke, 2005; Iverson and Pullman, 2000).

Those characteristics pose a number of issues when implementing voluntary redundancies. Firstly it can be more costly for the organisation that other kinds of downsizing and also reinforce increased financial expectations. Secondly, there is a greater risk of dysfunctional turnover as high-performing employees are likely to volunteer because their skills and abilities are highly marketable. And finally, it is said to mask problems of morale, job satisfaction and commitment that may be the real reasons why people wish to leave in the first place (Iverson and Pullman, 2000; Clarke, 2005).

A study by Clarke (2005) raised another issue with voluntary redundancies which is the degree of real choice employees are offered. Over 30 employees who took voluntary redundancies reflected on their role on accepting the offer of redundancy and although most considered the choice was genuinely theirs, others felt that there was a degree of coercion from the company, so that in some cases they had no choice but to accept.

Despite those problems, voluntary redundancies are among the least harmful downsizing methods. They are likely to cause less stress than layoffs (Fineman, 1978) and to be quicker to implement than any other downsizing form as they usually do not prompt the intervention of regulators or other government bodies (Lewis, 1986). Iverson and Pullman (2000) showed that younger employees are more likely to opt for voluntary redundancies than older employees, which is related to career stage and employability. Also, employees who have expressed intentions to leave the company before the downsizing programme and who have a positive reaction to change are more likely to take voluntary redundancy (Iverson and Pullman, 2000). Conversely, in the units offered voluntary redundancies less people leave via natural attrition as employees wait for the next wave of voluntary redundancies because of the financial incentives (Clarke, 2005).

The unique features of each downsizing method are likely to affect the psychological outcomes. Closures and divestments, for example, affect knowledge transfer and retention at the unit level thus, endangering routines, processes and culture (Littler and Innes, 2003). But the loss of knowledge due to layoffs is experienced at an individual level. The organisation loses the terminated employees' "direct experience, observations and knowledge" (Schmitt et al., 2011, p. 5). Voluntary redundancies and early retirements provide a sense of control over the own employment situation that is missing from compulsory terminations (Cascio, 2009).

Chalos and Chen (2002) analysed market reactions (cumulative abnormal returns) and post-announcement performance in cases of revenue refocusing, cost-cutting and plant closures. Revenue refocusing is one solution to suboptimal diversification. It is defined as an attempt to refocus on core competences and is linked to downsizing via divestment. Cost-cutting is a strategy of achieving optimal efficiency, mainly through layoffs. Plant closing is understood as capacity downscaling where assets are sacrificed to align supply with demand.

Results showed that firms that embark in workforce reductions in the context of revenue refocusing had consistent positive market reactions whereas cost-cutting and plant closing received negative reactions. Contrary to market expectations, cost-cutting strategies showed improved financial performance, but to a lesser extent than revenue refocusing. Plant closures were not linked to significant financial improvement.

These results are attributable to the perception that closing plants signal poor management, future reduced sales, unprofitability, fewer growth opportunities and excess capacity not recoverable in the near future (Chalos and Chen, 2002). They are perceived as reactive strategies as opposed to revenue refocusing that is perceived as proactive strategic withdrawal. This study shows that "the market selectively reacts to downsizing announcements information" (Chalos and Chen, 2002, p. 867) taking into account differences in the downsizing strategy chosen by firms.

Differences in attitudinal and behavioural outcomes have also been linked to the choice of downsizing method. Maertz et al. (2010) showed that layoffs lead to greater turnover intentions than offshoring and outsourcing. They attribute their results to a higher perception of future threat in the case of layoffs, i.e. they are perceived as more likely to reoccur than outsourcing or offshoring. Layoffs are also seen as an indication of poor management and are more accredited to management volition than to external circumstances (Maertz et al., 2010). However, affective attachment to the organisation was not worse among employees exposed to layoffs than among those exposed to offshoring.

Waters (2007) found that employees affected by involuntary redundancy showed greater depression and engaged in less job-seeking behaviour during unemployment than employees affected by voluntary redundancies. Once re-employed, the ones who experienced voluntary redundancy recovered from depression in the following three months unlike the ones exposed to involuntary redundancy. The latter also exhibited higher job insecurity in the new job and were less committed to the new organisation. However, lower organisational commitment among the employees previously laid-off was not associated to higher job insecurity but to a change of priorities, e.g. family life over work life.

The legacy effect of downsizing depended on the kind of job loss experienced. Involuntary redundancies affected high-performing employees as well as poorly-performing ones, thus increasing both the perception that outcomes did not follow from the input and the likelihood of learned helplessness (Waters, 2007). Employees who chose to exit the organisation after being offered voluntary redundancy were active actors in the process, whereas the ones laid off were passive recipients of someone else's decisions and experienced more unpredictability, which can further heighten the perception of helplessness.

Some empirical studies comparing layoffs and closure of units show that layoffs seem to have worse outcomes than closures (e.g. Brand et al., 2008; Miller and Hoppe, 1994). This is because of a greater stigmatisation of layoffs in which employees' performance or behaviour are assumed to play a role, as opposed to closures that do not involve individual deselection and therefore are evaluated as an organisational decision beyond individual control. Moreover, greater internal attributions lead to more stress and depression among layoff victims than among victims of closures (Miller and Hoppe, 1994).

Despite that evidence, I argue that closures will be more detrimental to affective commitment because victims of closing units face a greater shock to their human capital (Hu and Taber, 2005). Not only are the ties to co-workers, team and organisation severed, those employees often see how their workplace is sold, dismantled or demolished which affects the emotional link to facilities and places.

When the entire unit is affected, individual employees have additional stress because their friends and co-workers are affected too. With so many targets of commitment affected (i.e. supervisors, colleagues, workgroup, organisation, etc.) there may be a cumulative effect of negative affects further accentuated by the negative feelings from the rest of employees displaced. The community where the closing unit is located is also affected due to the loss of business and increased unemployment, which has an effect on other parts of the individual social network such as family, neighbours and professional contacts. There is further inconvenience in having to change industry or having to look for work in a different location, in the case of pharmaceutical units because they are highly specialised and there are not many around the world.

Knowledge workers tend to hold their profession on high esteem and often feel more committed to it than to the employing organisation (Wayne et al., 2007). Therefore, it is likely that seeing their profession relative devalued affects their sense of role-esteem and prospects of employability because new employers may be reluctant to invest in positions that others in the industry are eliminating.

The business model and professional ethics in the pharmaceutical industry revolve around the needs of patients for whom they produce medicines. Therefore, for pharmaceutical employees there is a greater risk for occupational identity crisis when a unit closes because of the potential harm to patients' welfare who would, arguably, be better off if the unit remained open producing the drugs they need or researching and developing new treatments.

Closure of units involve the mass deinstitutionalisation of employees (Oliver, 1992); which requires that employees unlearn practices, break routines and detach from the workplace culture (Lavén and Bergström, 2014). My argument, in short, is that there are significant differences among downsizing methods. Voluntary redundancies and divestment are likely to be received less negatively than layoffs and closures. And between the latter two, closure of units is likely to have more negative attitudinal outcomes.

- Closures of units will result in lower organisational commitment than layoffs, voluntary redundancies and divestments (**Proposition 1**).

2. Downsizing survivors are a homogeneous group.

The literature on the effect of downsizing can be split into three approaches: the effect on victims, e.g. Wanberg et al. (1999), Jackson (1997); the effect on survivors, e.g. Armstrong-Stassen (1994), Brockner et al. (1988) or a comparison of the effect of downsizing on victims and survivors, e.g. Devine et al. (2003), van Dierendonck and Jacobs (2012). All three approaches agree that both, victims and survivors, are negatively affected by downsizing and that organisations should address the needs of both groups if downsizing is to succeed.

Survivors are "those who remain in the downsized organisation" (Devine et al., 2003, p. 110) while victims are those who lose their jobs due to downsizing. Both definitions assume homogeneity of a sort among victims and survivors. Despite some attempts to differentiate among survivors taking into account gender (Armstrong-Stassen, 1998), job level (Armstrong-Stassen, 1993), or personality traits (De Vries and Balazs, 1997), survivors are largely treated as a homogeneous group.

Van Dierendonck and Jacobs (2012) highlight the need for a multi-stakeholder perspective when analysing downsizing to widen the focus of downsizing studies from the dyads organisation-victims or organisation-survivors. Those authors contend that the impact of downsizing goes beyond both groups, and even transcends the organisation because downsizing affects communities, employees' families and customers.

I believe a stakeholder's perspective should include further segmentation among the employees of a downsizing organisation. My view, like that of Grunberg and colleagues (2000, 2001), is that survivors are far from a homogenous group whose reaction to downsizing follows a similar pattern.

Findings from the handful of studies that do not assume homogeneity among downsizing survivors show that the employees directly affected by downsizing had stronger negative reactions than those not involved (Armstrong-Stassen, 2002). One explanation is that outcomes are linked to the degree of change experienced by the workgroup; therefore more change leads to more stress, depression, worry and feelings of guilt as well as less risk-taking behaviour and focus (Armstrong-Stassen et al., 2004; Amabile and Conti, 1999).

Employees designated redundant but who remained in the organisation showed higher levels of job satisfaction, commitment and organisational trust post-downsizing than those not designated redundant (Armstrong-Stassen, 2002), suggesting that intact survivors may need as much attention as the directly or indirectly affected.

Grunberg et al. (2000, 2001) separated layoff survivors into three groups: those who had been laid off and later rehired and those who were designated candidates for redundancy in the next round were the "direct contact group"; the ones who had friends or colleagues laid off were the "indirect contact group" and the ones with no layoff contact where in the "no contact group". They found that survivors with any kind of personal contact with layoffs (directly or indirectly) experienced more job insecurity, depression and had worse health and eating habits than survivors with no contact at all. Similarly, survivors in direct contact with layoffs were worse off than those with indirect contact.

All three approaches, (a) considering different groups depending on how much change they experienced; and splitting employees (b) by their redundancy designation or (c) by their

closeness to the layoff experience, contribute to improve current understanding on the effect of layoffs. However, there are still problems with these segmentation variables. Firstly, the fact that some rely on perceptual data (e.g. categorising oneself based on friends or colleagues) raises questions on whether the results tell "more about the context or about the respondent" (Mowday and Sutton, 1993, p. 197). Secondly, in most cases these classifications depended on employees knowing their individual fate within the downsizing process which restricts classification to the implementation phase of downsizing which does not account for the significant effect that announcements of layoffs (pre-implementation) have on employees.

I propose a classification based on contextual properties within the framework of field theory (Lewin, 1943) which refers to the interrelation between individuals, surroundings and conditions that influence behaviour at any given time (Neumann, 2005). I acknowledge the importance of organisational context and psychological proximity for those involved in downsizing and propose that the degree of similarity between the space (country), functional specialism (e.g. R&D) and time (year) features of the environment described in downsizing announcements and the same features of any individual employee leads to different degrees of downsizing exposure. I call that combination of features 'contextual proximity' and deliberately exclude from it any kind of perceptual data.

Following the analysis of contextual proximity among employees in PharmaTech, I define three groups of employees:

- a) The group **directly exposed** is the one identified, at a group level, in the downsizing announcement (in terms of country, functional specialism and time) as targeted for workforce reductions (e.g. employees from the Clinical Research Department, in country X targeted for layoffs in 2009).
- b) The group **indirectly exposed** is for employees who are in the same country at the same time as those directly exposed but who have not been targeted for reductions.
- c) The group **not exposed** consists of employees who do not fall in either of the previous categories.

Conceptually, this represents an addition to the SET framework. By including contextual proximity to SET, as a property or condition relevant to understand different effects of downsizing on employees, it gains in complexity and accuracy. Contextual proximity has implications for the way we understand exchange relationships which are more heterogeneous in the context of downsizing than was previously understood. I believe that my proposed segmentation adds further value because it relies on objective data (i.e. country and year) which overcomes the issues with perceptual and self-report measures (i.e. whether the assessment of the environment is a reflection of the context or of the individual, and the risk of common method bias).

Although in this case country and functional specialism were the properties of the context chosen to classify employees' contextual proximity, this is a concept that can be adapted to different scenarios where other features are more relevant. The reasons for choosing those two in this case are that national context has a bearing on firm decision-making processes

(Dankbaar, 2004) given that companies consider factors such as labour conditions, market, regulatory framework and industry development to plan and implement strategic decisions. In the case of PharmaTech, the downsizing process was based on country presence and functional specialism. The company either chose to leave a market (i.e. country) or they decided to stop investing on functions, e.g. ovarian cancer, which are grouped geographically. In either case, by targeting specialism or country, employees in the same country are more likely to have a greater sense of threat than those in countries where no reductions were planned.

Proximity is relevant because individuals use heuristics such as representativeness and availability to assess the likelihood of certain event and to make decisions (Kahneman and Tversky, 1972). Representativeness refers to the similarity between a situation and a prototype, and we propose that employees comparing themselves to victims of downsizing will feel more threatened if they share characteristics of the group/person they are using as reference, in this case being in the same country. Availability is the easiness with which people recognise situations based on previous experiences or familiarity, for example identifying downsizing victims by their names (Kahneman and Tversky, 1972).

Following from that, I contend that more similarity between an employee's context and that described by the downsizing announcement will lead to more negative outcomes. Based on the tenets of contextual proximity explained above, I expect that exposure to one of four downsizing methods (closures of sites, layoffs, divestment and voluntary redundancies) will effect commitment differently depending on the degree of exposure of the employees:

- The employees directly or indirectly exposed will show lower organisational commitment than the employees not exposed (**Proposition 2a**).
- The employees directly exposed will have lower organisational commitment than the employees indirectly exposed (**Proposition 2b**).

Method

Research setting.

PharmaTech is a pharmaceutical multinational with over 60,000 employees in more than 100 countries. Between 2007 and 2010 PharmaTech experienced a dramatic transformation. A combination of market pressures, patent expiry and tougher regulation led them to adopt a global downsizing programme. A variety of workforce reduction methods were used: closure and divestment of units, voluntary redundancies and layoffs of thousands of employees within the retained areas.

Layoffs were implemented in three stages: an initial consultation process involving both unions and employees, followed by an offer of voluntary redundancies in selected areas of the business and finally compulsory terminations of contracts in those areas. However, the areas targeted for voluntary redundancies from the start were not subject to compulsive terminations afterwards. A small number of the employees in the closing units were offered redeployment to other areas; though for most employees, closure meant compulsory redundancy. By contrast, at least 80% of the workforce from the unit divested kept their jobs thanks to an agreement between PharmaTech and the buyer. Outplacement support

and competitive severance packages were offered to all employees who were leaving the company. Layoffs and closures were planned to span over three years approximately.

Access to secondary data (employee survey and internal documents) was granted to this researcher under a confidentiality agreement. No primary data collection was allowed, although the company offered an internal liaison to help make sense of the data.

Research design and sample.

This research adapts the event-study methodology (Peterson, 1989; Boehmer et al. 1991; Frooman, 1997) used by finance literature to non-financial measures (i.e. affective commitment). We use naturalistic "observations" in which people are assigned to conditions based on a match between their location and specialism and the ones identified in the downsizing announcements. In order to test the robustness of the results we conducted the same analyses using subsamples on a country basis. The results yielded were consistent with those of the main analyses. All cases with missing data were deleted.

Affective commitment was measured between September and October in both 2008 and 2010. Therefore, only the events occurred between January 2007, when the downsizing initiatives begun, and September 2008 were analysed in the 2008 survey data. Similarly, events that took place between November 2008 and September 2010 were analysed in the 2010 data.

The sample characteristics were almost identical for the two surveys. The majority of the sample (70%) was employees, while the remainder were managers, and the sample was equally divided between males and females. In terms of organisational tenure, 39% had been with the organisation for less than five years, and 35% had been with the organisation for ten years of more. The majority of the sample (55%) reported themselves to be less than forty years of age, and 14% reported being in the 50+ group. There was a broad spread of geographical locations: 58% were in Europe, 23% in Asia Pacific, 9% in North America, 8% in Latin America, and 2% in the Middle East and Africa.

Sources and measures.

Affective organisational commitment: our source for data on individual affective commitment was an employee opinion survey conducted by a well-known HR consultancy on behalf of PharmaTech in 2008 and 2010. The survey was distributed via email to every employee and completed online, or printed and completed by hand. The questionnaire was developed by the consultants in partnership with PharmaTech's HR team. In 2008 the response rate was 80.85% (N=52,555) and 81.31% (N=49680) in 2010.

Affective commitment is a four-item scale following Allen and Meyer's (1990) affective commitment scale and the OCQ (Mowday et al., 1979). Sample items include: "I would recommend PharmaTech as a good place to work" and "I am personally motivated to help PharmaTech be successful". Responses were recorded on a 5-point scale from "Disagree" (1) to "Agree" (5). The measurement model for affective organisational commitment was assessed using CFA. It produced an acceptable fit of the data in both years: χ^2 (2)=105.93, p=.000; CFI=.999; RMSEA=.032 90% confidence interval .027, .038; AGFI=.995 for 2008 and χ^2 (2)=435.14, p=.000; CFI=.999; RMSEA=.068 90% confidence interval .063, .074; AGFI=.977 for 2010. [α (2008)=.87; α (2010)=.88]

Control variables: data on respondents' gender, age, tenure and job level (senior leader, middle manager and employee) were collected from the opinion surveys and were controlled for in the analyses.

Downsizing method: we used internal company documents, media and analysts' reports to identify downsizing events and the areas affected (both in terms of their location and functional specialism) between 2007 and 2010. Factiva, Thomson Research and PharmaTech's intranet were used to find these reports which were condensed on a timeline of downsizing events. A total of 3060 reports were analysed and 29 relevant downsizing events with identifiable locations and specialism were found. We classified the downsizing events into four methods: closure of units (9 events threatening 2107 employees), layoffs (16 events threatening 6760 employees), voluntary redundancies (3 events threatening 3881 employees) and divestment (1 event threatening 57 employees). In total, over 12,000 positions were threatened by downsizing during the study period, all of them in Europe and North America. We created a variable for each of the four downsizing methods, and we scored employees according to their degree of exposure to the specific downsizing event. The directly exposed group (coded 3) are the employees in units directly identified in the downsizing announcement (e.g. layoffs in the finance department, city X). The indirectly exposed (coded 2) consists of the employees working in units in the same country as those directly exposed. The final group consists of those employees in units not exposed to a downsizing event (coded 1). The variable 'downsizing' was created combining the groups directly exposed into divestment (code 1), voluntary redundancies (2), layoffs (3) and closure of units (4).

Results

Table 1 presents the correlations, mean and standard deviations of the variables in study 1. The upper quadrant corresponds to the 2008 sample and the lower quadrant corresponds to the 2010 sample. Mean values and standard deviations —in parentheses— are in the diagonal, the top line —in bold— corresponds to 2008 and the bottom line corresponds to 2010.

(Table 1 about here)

In 2008 all variables are significantly correlated to commitment -which is high (M=4.30 out of 5) - except voluntary redundancies. As degree of exposure to divestment increases, so does commitment; but exposure to layoffs and closures is inversely related to commitment. Younger employees, women and managers have higher levels of commitment. Affective commitment is also high in 2010 (M=4.36 out of 5) and is significantly correlated with all the other variables. Greater exposure to voluntary redundancies corresponds to higher commitment, but the opposite is true in the cases of layoffs and closures. Older employees, women and managers have higher commitment. Correlations among the downsizing methods reflect the organisational reality of targeting units within the same countries and specialisms, such that a country affected by one kind of downsizing method was also frequently affected by others.

Proposition 1 stated that closures of units would have a worse effect on commitment than layoffs, divestment and voluntary redundancies. The overall effect of direct exposure to downsizing is significant but small in 2008 F(3, 6073)=6.06, p=.000, partial η 2=.003 and large

in 2010, F(2, 6713)=1002.08, p =.000, partial η 2=.230. The effect of direct exposure to closure was compared to the effect of direct exposure to the other downsizing methods using pairwise comparisons with a Bonferroni adjustment (Table 2).

(Table 2 about here)

The proposition was confirmed in 2010, where the groups directly exposed to closure had significantly lower commitment than those directly exposed to layoffs and voluntary redundancies. But it was not supported in 2008 where affective commitment is not significantly different between the directly exposed to closures and (a) the directly exposed to layoffs and (b) the directly exposed to voluntary redundancies. The covariates had the expected effects on commitment.

The second proposition concerns the impact of degree of exposure to each downsizing method on employee affective organisational commitment. We carried out preliminary overall tests, which included the demographic covariates, before testing each part of the proposition using planned comparison for the four downsizing methods independently. For the 2008 survey, three of the four downsizing methods showed significant exposure effects: (a) closure of units, F (2, 50698)=41.80, p <.001, partial η 2=0.002; (b) layoffs, F (2, 50698)=803.29, p < .001, partial η 2=0.031; (c) voluntary redundancies, F (2, 50698)=1.47, p = ns; and (d) unit divestment, F (2, 50698)=5.53, p < .01, partial η 2=0.00. There were no unit divestment events to be tested in the 2010 survey data, and all three downsizing methods showed significant exposure effects: (a) closure of units, F (2, 45380)=1330.97, p <.001, partial η 2=0.055; (b) layoffs, F (2, 45380)=67.12, p < .001, partial η 2=0.003; and (c) voluntary redundancies, F (2, 45380)=318.44, p < .001, partial η 2=0.014.

(Table 3 about here)

Table 3 shows the summary statistics for degree of exposure to each downsizing method, together with results of the planned comparison tests. Proposition 2a stated that being exposed to any downsizing method would result in lower commitment than not being exposed. Planned contrasts show that in all cases, except for voluntary redundancies in 2008, the difference between being exposed (directly or indirectly) to a downsizing method and not being exposed is significant but the direction of the effect is not always as anticipated. While closures and layoffs have a significant negative effect on the commitment of those exposed to them, divestment and voluntary redundancies have a positive effect. Proposition 2a thus received partial support.

Proposition 2b stated that the groups directly exposed to downsizing would have lower commitment than the groups indirectly exposed. This proposition was supported for closures and layoffs but not for voluntary redundancies and divestment. The groups directly exposed to closures and layoffs in both years had significantly lower commitment than the indirectly exposed. However, the directly exposed to voluntary redundancies in 2010 had significantly higher commitment than the indirectly exposed and in the case of divestment the difference in commitment between the directly and indirectly exposed is not significant.

Study 1 showed that employees' affective commitment differs significantly depending on the downsizing method they are exposed to and on the proximity to the downsizing event. Contrary to our expectations, voluntary redundancies and divestment effect commitment

positively. Closure of units has a worse effect on commitment than the other downsizing methods in 2010 but not in 2008. Both propositions received partial support.

Study 2

Existing literature is contradictory and gives little guidance as to whether one should expect positive or negative effects of prior exposure to downsizing. Armstrong-Stassen (2002) found that commitment among survivors not designated redundant remained stable over a three year period. However, commitment decreased among survivors designated redundant who finally remained in the organisation between T1 and T2, but then increased steadily afterwards and at T4 was higher than among survivors not designated redundant. Grunberg et al. (2000) reported significant negative effects of layoffs on commitment two years after the events.

There are two theories on the long term effect of downsizing (Moore et al., 2004). One is that people become accustomed to the experience, they adapt and gain resilience. That effect is accentuated if the kind of stressor experienced is similar, e.g. two direct contacts with layoffs. The other theory is that the cumulative effect of several shocks weakens individuals' tolerance of change and ability to adapt.

Moore et al. (2004) found support for the second perspective. They observed that repeated contact with downsizing led to 'chronic job insecurity' (p.248). Two downsizing contacts of the same kind (direct contact or indirect contact as defined by Grunberg et al. 2000, 2001) had worse health, attitudinal and behavioural outcomes than a single contact of either kind, especially if both contacts had been direct. Mixed contact, direct and indirect, was worse than two indirect contacts.

They obtained anecdotal evidence that the first contact, of either kind, was much more traumatic than the second one. They concluded that the kind of downsizing contact (direct or indirect) may not be qualitatively different but just different degrees of the same trauma. The number of contacts, on the other hand, made significant differences to the outcomes of layoffs.

Armstrong-Stassen (1997) also confirmed the vulnerability perspective. She analysed managers' responses to several layoff experiences and found that managers with more layoff contact had less affective commitment and more continuance commitment than managers with less layoff contact. In other words, the more layoff experiences, the less managers wanted to stay in the organisation but felt they could not leave. However, she found that the number of times managers experienced layoffs made little difference to the effects, which she attributed to an irreparable damage of the psychological contract, that could have happened from the very first experience, and thus subsequent experiences had a small impact after the initial effect.

Another study by Moore et al. (2006) investigated the degree to which recent layoff experience affected reactions and health compared to past experiences. They analysed if past experiences had an effect regardless of current experiences and if more recent experiences influenced perceptions of job security, depression and intention to leave regardless of the past. They concentrated on the duration of the effect of layoffs, the recency effect and the impact of the order in which employees experienced different kinds

of layoff contact (direct or indirect). Their data were collected at three different times, two and four years apart.

Again, their findings support that direct contact produces worse outcomes than indirect contact and show that job security was affected in the long term. Leave intent and depression were more influenced by recent than past experiences. The responses of the same individuals at three points in time show that both the kind of contact (direct or indirect) and their ordering were relevant, for employees who first experienced layoffs indirectly and then directly were worse off than those with two direct layoff contact. The authors argue that the first experience did not prepare employees for the second, more stressful one. They conclude that resiliency is related to the similarity between the prior and recent layoff experiences.

However, there is also evidence that repeated layoff contact increases adaptability and resiliency (Armstrong-Stassen, 1998) as employees with the larger number of layoff contacts showed more action coping and positive thinking than those with less exposure because they were readier to face a similar challenge again.

Given the fragmented and contradictory literature on the effects of prior exposure to downsizing, study two is exploratory in nature, and therefore I do not offer specific propositions. The study is guided by the following objectives:

- 1. To analyse whether previous exposure to downsizing has a significant impact on commitment among the directly exposed to downsizing in 2010 (legacy effect).
- 2. To determine whether the effect of being directly exposed to downsizing in 2010 varies depending on the kind of downsizing and level of exposure in 2008.
- 3. To explore if previous exposure to downsizing has a homogenising effect upon the most recent downsizing experience.

Method

Research Setting.

PharmaTech began their downsizing programme in 2007 and it continued in different forms over the next three years. As a result, there were many internal units which were the subject of more than one downsizing announcement, for example, some units were targeted for layoffs on more than one occasion. This gave us the opportunity to examine the role of prior exposure to downsizing events in shaping employees' reactions to a more recent downsizing event.

Sample.

For the second study we used a subsample of the 2010 population consisting only of those directly exposed to any downsizing method and who had over two years of organisational tenure (n = 6326). This is because a) we wanted to eliminate some of the variance in the dataset and opted for a single degree of exposure (directly exposed) to different downsizing methods; and b) we wanted to deselect the employees who did not live the first wave of downsizing first-hand (those under two years of organisational membership).

Measures.

Previous downsizing exposure: in 2010 we considered units which were directly exposed to a downsizing method. For each 2010 downsizing method group, we looked back at the 2008 survey data and identified what kind of downsizing method and degree of exposure they experienced back then. Four groups were identified: (1) not exposed to downsizing in 2008, (2) indirectly exposed to layoffs in 2008, (3) directly exposed to layoffs in 2008 and (4) directly exposed to closure of units in 2008.

Recent downsizing exposure: the variable 'downsizing' was created with three levels corresponding to the groups directly exposed to voluntary redundancies in 2010 (1), directly exposed to layoffs in 2010 (2) and directly exposed to closure of units in 2010 (3).

The dependent variable and covariates are the same as in Study 1.

Results

Table 4 shows the sample size for each combination of current and previous downsizing experience. Two features of the table merit particular comment. First, almost all (over 99%) of those directly exposed to downsizing methods in 2010 had previous direct or indirect exposure in 2008, reflecting the prolonged nature of PharmaTech's restructuring programme. Second, the commonest combination (n=3510) is indirect exposure to layoffs in 2008 followed by direct exposure to voluntary redundancies in 2010.

(Table 4 about here)

The first aim of study 2 was to analyse the legacy effect of downsizing on affective commitment. For that, I examined the effect of previous exposure to downsizing among the directly exposed to closures, layoffs and voluntary redundancies in 2010. I found that the combined effect of previous exposure (defined as (a) not exposed to downsizing, (b) indirectly exposed to layoffs, (c) directly exposed to layoffs or (d) directly exposed to closures in 2008) was significant but small: F(3, 6318) = 9.017, p = .000, partial $p^2 = .004$.

The second aim of study 2 was to determine whether the effect of the most recent exposure to downsizing (2010) varied as a function of differential prior exposure in 2008. I considered employees with the same direct exposure to downsizing in 2010, but different prior exposure in 2008. As can be seen in Table 4, only the group exposed to layoffs in 2010 (row 2; n=1374) can be split into more than one kind of previous exposure in 2008. Results show that although they were all directly exposed to layoffs in 2010, there are significant differences in their commitment levels (Figure 1) contingent on their previous downsizing experience. Those who were directly exposed to layoffs in 2008 show significantly lower commitment than any other group except for the previously directly exposed to closures, where the difference in commitment is not significant.

(Figure 1 about here)

The third aim was to explore if the effect of previous exposure to downsizing carried over to the most recent downsizing experience. I considered the employees with the same prior exposure to downsizing (2008) but different exposure to downsizing in 2010 (group indirectly exposed to layoffs in 2008, column 2 in Table 3; n=5809; directly exposed to

voluntary redundancies, layoffs and closures in 2010). Despite their similar experience in 2008, commitment among the three groups is significantly different, (Figure 2). Affective commitment in 2010 follows the same pattern as downsizing in 2010, i.e. the group with the highest commitment is the one exposed to voluntary redundancies, followed by those exposed to layoffs and the exposed to closures have the lowest level of commitment.

(Figure 2 about here)

Study 2 showed that prior exposure to downsizing has a legacy effect on affective commitment (measured two years after the first downsizing experience). The interaction between prior and recent exposure is so that people with a double direct exposure to layoffs have the lowest affective commitment. But the effect of prior exposure disappears when employees are exposed to different kinds of downsizing methods the second time round since the most recent exposure prevails over the legacy effect.

Discussion

This investigation presents the differences in the effects of four downsizing methods on commitment, measured in 2008 and 2010. It shows that the effects of divestment and voluntary redundancies to be significantly different from the effect of layoffs and closures. Moreover, I have found that the effect of the downsizing methods examined is contingent on the employees' degree of exposure to the events, therefore providing evidence that there are significant differences among survivors of downsizing. And finally, I have demonstrated that previous exposure to downsizing has a significant negative effect on the commitment of employees targeted for reductions which is worse among those directly exposed to layoffs for a second time but that effect is washed out when employees are exposed again to different kinds of downsizing. I elaborate on these results below.

Downsizing method

All four methods have significant effects on commitment on both years, except for voluntary redundancies in 2008. This could be related to the small sample size ($n_{exposed}$ =120) and the fact that only two small departments were offered that choice in 2008 as opposed to the large group of employees offered voluntary redundancies in 2010. In any case, I cannot draw inferences on the effect of voluntary redundancies in 2008 as its effect was not strong enough to be detected by the analysis.

The unanticipated positive impact of divestment and voluntary redundancies could be related to a lack of perception of violation in the psychological contract. The adverse external situation and internal weaknesses are plausible reasons behind the decision to downsize. Therefore, if the company provided clear social accounts, the attribution employees make is not of reneging but rather of disruption, which has been linked to more positive reactions to contract breach (Robinson et al., 1994; Morrison and Robinson, 1997).

The choice of voluntary redundancies and divestment, both less aggressive forms of workforce reductions (Datta et al., 2010), have the potential to signal genuine concern for the employees and thus the company can be perceived as caring and compassionate for the way they tried to minimise the negative repercussions for employees.

In the case of voluntary redundancies, employees are given a choice, which presumably enhances their sense of control over the own employment situation (Cascio, 2009) and represents a higher degree of involvement and participation in the downsizing process (Buono, 2003).

The employees of the divested unit, most of whom kept their jobs thanks to PharmaTech's agreement with the buyer, could perceive that their individual and group fates were guaranteed to a certain extent and thus felt the company acted fairly and sympathetically towards them. Of course, there is also the alternative explanation that divested employees were just happy to be leaving what they could see as a 'sinking ship' for what they perceived to be a 'better' company.

With regards of the magnitude of the negative effect, it is clear that downsizing can be split into two kinds of phenomena. On the one hand, divestment and voluntary redundancies affect commitment positively and on the other hand closures and layoffs have a negative effect. Of those two, closures had indeed a worse impact on commitment in 2010, but it was not significantly different from layoffs in 2008.

This may be due to the shock experienced by the workforce between 2007 and 2008 when, for the first time in the organisational history, there were mass headcount reductions. Therefore, both methods could have been perceived as bad a breach of the psychological contract the first time around. This similitude is despite both kinds of events involving significantly different portions of the workforce: 1047 employees were exposed to closures (directly or indirectly) and 21,462 were exposed to layoffs in 2008. But, as time went by and closures and layoffs became more frequent and routine, the differences between both methods could have become apparent.

Closure of units and layoffs seemed to bring a greater level of cognitive dissonance among employees probably because their perception of the organisation was not aligned to that kind of behaviour, whereas in the case of divestment and voluntary redundancies, which are kinder to employees, the dissonance is smaller if at all.

My results lend some support to Weiss and Cropanzano's (1996) theory that negative work events are felt more intensely than positive work events. Although a greater proportion of employees were directly exposed to voluntary redundancies (n= 3779) than to closure of units (n= 1486) in 2010, the effect size of voluntary redundancies (partial $\eta 2$ = 0.03) is smaller than the effect of closure of units (partial $\eta 2$ = 0.06). This is consistent with the empirical work of Miner et al. (2005) that showed that positive events have a mild influence on employees whereas negative events capture their attention and change their mood because they require more resources to be dealt with. Also, people have unrealistic conceptions and unfounded optimism about themselves and their control of different situations which magnify the shock experienced with negative events.

In short, the four downsizing methods are different kinds of work events whose unique characteristics; e.g. the degree of choice, the social implications, the kind of downsizing within which they are embedded, etc.; lead to different kinds of affective events and thus to different affective commitment outcomes. I found two distinctive 'families' of work events: the one that closure of units and layoffs belong to, which has a negative impact on commitment, and the other of divestment and voluntary redundancies that have a positive

effect. But in all cases, the influence of the four work events, i.e. downsizing methods, is significantly different depending on the level of exposure of the employees.

The different effects of voluntary redundancies and divestment compared to closure of units and layoffs suggest that they are different kinds of work events. For the theory in the field, this means that assuming that downsizing is a uniform phenomenon that is detrimental to commitment is inaccurate. Firstly, the characteristics of the downsizing methods lead to significantly different outcomes, i.e. the effect of downsizing methods is not homogeneous. And secondly, affective commitment can actually improve in the context of downsizing.

Between the two downsizing methods with negative effects, I have shown that closure of units is as bad as or worse than layoffs, contrary to most of the empirical literature on the subject. I believe this has implications for researchers on the psychological contract and social exchange theory who could move forward the literature on downsizing by analysing why those downsizing methods seem to be different kinds of breaches to the psychological contract.

The implications for managers are threefold. Firstly, there are downsizing methods that do not necessarily lead to negative affective outcomes, and closure of units is generally perceived more negatively than layoffs, therefore downsizing methods could be used strategically to minimise unfavourable outcomes. Secondly, if managed properly, downsizing can actually improve affective commitment among those who stay in the organisation.

Finally, if the offering of voluntary redundancies is coupled with a better-than-average incentive package, there is an opportunity for companies to turn downsizing into a more positive experience. This can be done by considering both the country's legislation and the standard of provision in the industry so that organisations that outperform other companies in the sector in their offerings to those who take voluntary redundancies, are benefited as a result. I believe that the reputational gains and the positive impact on those who remain in the organisation are worth the investment.

Contextual proximity

Both studies showed that the level of exposure of employees to a downsizing event results in different affective commitment outcomes. Unlike Grunberg et al. (2000), I found that closer contact with downsizing heightens its effect. On the one hand, employees in the same country of those targeted for layoffs or closures in 2008 and 2010 (indirectly exposed) had lower commitment than the employees not exposed to either method, but higher than the employees directly exposed. On the other hand, the groups indirectly exposed to divestment and voluntary redundancies had significantly higher commitment than the ones not exposed.

In the divestment event, the employees indirectly and directly exposed have similar (high) levels of commitment, something that I believe reflects the fact that surviving employees are the only ones in the same country and specialism left behind to the job that the divested unit used to do. And in the case of voluntary redundancies, indirectly exposed employees

have only slightly lower commitment than the directly exposed which could also be due to an enhanced sense of job security since they will be needed to do the job of those leaving.

Contextual proximity –in this study defined as country or country and specialism- seems especially relevant in the context of downsizing. I believe that being close to downsizing events make employees react on the basis of subjective probabilities, therefore, increasing the perception of threat among those proximal to the target population (Kahneman and Tversky, 1972). Even though employees exposed to divestment and voluntary redundancies do not seem to feel threatened by them, given the positive influence of both, the effect of contextual proximity is also clear.

Contextual proximity is relevant for both theory and practice. From a theoretical point of view, the time may have come to redefine the way we approach employees in a downsizing organisation and move from analysing victims and/or survivors to analysing employees depending on their closeness to the downsizing experience. Exposure group is a meaningful and useful way to separate employees and one that breaks apart with the assumption of homogeneity of survivors that limit some of the existing research on downsizing.

From a practical point of view there are clear advantages for companies who consider differences among employees based on the context they work in. For example, when offering support to the employees left behind, employees in the same country, even if not in the same unit of those targeted for downsizing, should be considered because they are likely to experience negative effects.

This research shows that non-perceptual features of the context are useful to understand the effect of downsizing. By using a less time-constrained approach to segmenting employees of a downsizing organisation I have shown that both the period post-announcement but pre-implementation and the implementation period can be easily accommodated. This is a view that departs from the traditional dyad victims-survivors. My perspective offers a broader assessment of the effect of downsizing because it includes anticipation as well as reactions to the actual implementation, unlike some studies that concentrate on the post-implementation period only.

Legacy effect, sensitisation and recency effect.

Previous exposure to downsizing had a significant negative, albeit small, impact on commitment. This supports the idea that past affective events remain in the psychological field of the individual (Lewin, 1943) for a long period of time if the shock was significant enough, e.g. in the case of downsizing. There is thus evidence of a legacy effect of downsizing events.

Only the group directly exposed to layoffs in 2010 differed on their previous downsizing experiences, therefore, these results are not conclusive. However, the evidence suggests that double direct exposure —to layoffs in this case- leads to sensitisation and not to immunisation. This means that those who received the highest 'dose' of downsizing twice were more affected the second time than any other group. These results contradicts some studies suggesting a 'numbing effect', that causes employees who have previously lived through downsizing to become more detached —and therefore less receptive-, or more accepting of downsizing (De Vries and Balazs, 1997; Sronce and McKinley, 2006).

Although direct exposure to downsizing in 2010 does differ depending on the 2008 downsizing experience, the effect disappears when employees are exposed to different downsizing methods in 2010. Again, these results are inconclusive because only one group of previous exposure (indirectly exposed to layoffs in 2008) was exposed to more than one downsizing method in 2010. These findings indicate that the most recent exposure overrides the effect of past experiences (recency effect). However, this could be because the previous exposure was an indirect one. Perhaps these results would differ had the previous experience been a direct one.

My findings coincide with Moore et al.'s (2006) who found that leave intent and depression were more influenced by recent than by past experiences. I believe this is to do with the salience of the most recent exposure that prompts individuals into action and therefore memories from the past are relegated to the background. The immediacy of the most recent downsizing contact seems thus more relevant to commitment outcomes than the trauma of past downsizing exposure. But caution must be taken when making inferences because I did not have instances of prior direct exposure to downsizing which can be more influential than a previous indirect one.

This is relevant for the literature on downsizing because it corroborates that downsizing has a long term effect on employees while contradicting existing theories that anticipate greater resilience among those with several exposures to downsizing. Conditioning and extinction mechanisms in my view play a more important role than has been commonly acknowledged. The role of anticipation is much more relevant when it is based upon past negative experiences. To an extent, having lived through closure of units or layoffs generates conditioned responses which are reinforced with each similar experience. This may be to do with the stronger effect that negative events have compared to positive events, so that their legacy effect remains vivid to a larger degree and for longer periods.

Negative events overwhelm positive events (Miner et al., 2005), so even if the employees overcame the trauma from the previous downsizing exposure and experienced positive work events, the prospect of negative events such as layoffs and closure of units is likely to feed into their affective memory of the prior event and reinforce a learned behaviour. Like with confirmation bias, employees selectively take in the new information that fits into their conceptions which are the result of past experiences.

Conclusions, limitations and further research.

The three relationships anticipated at the onset of the research were confirmed. The effect of downsizing on affective commitment varies depending on the kind of downsizing method, the degree of exposure of employees to the downsizing event and past downsizing experiences.

Of the relationships described above, the most interesting ones, in my view, are (a) the positive effect of divestment and voluntary redundancies, which was not predicted by me or by existing theory; (b) the relationship between exposure and outcome for its novelty in the context of downsizing research and (c) the significant role of past experiences in recent downsizing exposure.

My study reveals that affective commitment can be improved in the context of downsizing. With an adequate choice of downsizing methods, I believe that downsizing needs not imply withdrawal. It is instead an opportunity to show employees the better side of the company. The implications are relevant for managers, who could make better informed choices when deciding how to downsize their workforce, and could affect the way downsizing is implemented based on more comprehensive cost-benefit analyses of the outcome.

This study shows that people, surroundings and conditions are indeed interdependent and that the time perspective of employees in the context of downsizing includes the past to a significant extent. I demonstrated that non-perceptual measures of the environment influence work attitudes. I found that different features of downsizing methods —seen as work events that cause emotional reactions—relate to different outcomes. Field theory and affective events theory proved useful frameworks to understand these relationships.

Combining the results of both studies, my thesis is that the way downsizing effects employees' affective commitment depends on the kind of downsizing method experienced, on how contextually close employees are to the downsizing event and on employees' past downsizing experiences. Therefore, in my view, downsizing events' effect on commitment is filtered through contextual factors, i.e. the characteristics of the event in itself, contextual proximity and subjective probabilities in the shape of previous downsizing contact (Figure 3 about here).

This study represents a departure from the existing literature on downsizing in a number of ways. Firstly, it is the first one to analyse the distinctive effects of closure of units, layoffs, voluntary redundancies and divestment on affective commitment and to account for different degrees of exposure to all four downsizing methods. Secondly, it is also the first research to explore the effect of past downsizing exposure and the interaction between prior and recent experience considering different kinds of downsizing methods and degrees of exposure. And thirdly, it is placed in a multinational context, unlike most research on downsizing which is done at the country level.

There are several limitations to this investigation. All the downsizing events took place either in Western Europe or North America; also, the research is based on a single organisation within a very distinctive industry, therefore the representativeness of the results is questionable. We were concerned with the size and meaningfulness of the groups, therefore some groups were merged and in the process some information was lost. Despite our concern with sample distribution, some groups are very small, for instance the not previously exposed to downsizing in 2010, but were kept as they are a meaningful unit within the analysis.

Some important details of the implementation process that could potentially affect the commitment outcomes could not be accounted for, for example, the way voluntary redundancies were executed. The nature of the downsizing process as it happened made it impossible to identify more than one instance of divestment, therefore, the results should be interpreted with caution as we could not account for country-level or specialism-related factors that could bear some significance. And finally, the definition of the groups of exposure, despite our best efforts, remains an approximation to real life and complete accuracy cannot be guaranteed. Despite the above, the size, breath and scope of the workforce hereby analysed provides some reassurance that our findings are robust.

Further theoretical developments to support the generalizability and transferability of these findings could include different operationalizations of proximity. For example, historical proximity which could analyse the role of previous events, not necessarily related to downsizing, such as former ownership or changes in leadership; or organisational proximity to account for the organisational structure, i.e. department level, team level. I expect outcomes other than affective commitment to be conditioned by proximity. Innovation or work stress, to mention a few, could be influenced by the closeness to the event. In the case of innovation, whether those closer to highly innovative units perceive any effect and similarly, in the case of work stress whether closeness to high-stress areas evidence a 'contagion' effect.

This study shows that downsizing is a heterogeneous phenomenon whose effects depend on the method used. It highlights the relevance of considering the context in which people interact to explain their reactions to downsizing and demonstrate that downsizing has long term effects and that repeated waves of downsizing have complex and significant interactions. We open new avenues for the field in considering the role of proximity as important conditions to better understand exchange relationships in the context of downsizing.

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Tables and figures

Table 1. Means, standard deviations and correlations among study variables for the 2008 and 2010 surveys.

		1	2	3	4	5	6	7	8	9	10
1	Affective commitment	4.30 (0.82) 4.36 (0.81)	05**	20**	01	.02**	21**	17**	05**	03**	.09**
2	Closures of units	24**	0.03 (0.24) 0.32 (0.53)	11**	01	01	.34**	.05**	00	.02**	02**
3	Layoffs	07**	17**	0.53 (0.68) 0.12 (0.41)	04**	04**	.83**	.24**	02**	.20**	.02**
4	Voluntary redundancies	.10**	21**	10**	0.00 (0.09) 0.20 (0.57)	00	.08**	0.1*	01	.02*	.00
5	Divestment				_	0.01 (0.12)	.03**	02**	00	.01	01
6	Downsizing	20**	.54**	.40**	.40**		0.81 (1.29) 0.74 (0.97)	.22**	00	.15**	03**
7	Tenure	20**	.30**	.11**	.07**		.30**	4.60 (1.40) 4.73 (1.58)	.05**	.51**	.14**
8	Gender	04**	04**	.01	04**		04**	.03**	1.50 (0.50) 1.51 (0.50)	.06**	.13**
9	Age	.07**	.27**	.09**	.09**		.29**	.58**	.05**	2.44 (0.93) 3.44 (0.96)	.19**
10	Job level	.09**	.06**	02**	05**		00	.12**	.12**	.20**	1.31 (0.49) 1.35 (0.57)

Note: Mean values and standard deviations for each variable are in the diagonal, the values in bold correspond to 2008. Values above the diagonal are for the 2008 employees (N=50705). Values below the diagonal are for the 2010 employees (N=45387).

^{**} *p* < .001, * *p* < .01.

Table 2. Mean value of affective commitment (standard deviations in parentheses) as a function of downsizing method and degree of exposure, with results of planned comparisons by degree of exposure

	2008					2010				
	Group means				contrasts estimate)	r			d contrasts st estimate)	
	Not exposed	Indirectly exposed	Directly exposed	Not exposed versus exposed	Indirectly versus directly exposed	Not exposed	Indirectly exposed	Directly exposed	Not exposed versus exposed	Indirectly versus directly exposed
Downsizing method				(1 vs 2, 3)	(2 vs 3)				(1 vs 2, 3)	(2 vs 3)
Closure	4.31 (0.81) N=49658	4.31 (0.73) N=430	3.92 (1.05) n=617	.32 **	26 **	4.48 (0.71) N=32568	4.23 (0.86) n=11333	3.41 (1.18) n=1486	1.190 **	80 **
Layoffs	4.42 (0.74) n=29243	4.23 (0.83) n=16157	3.90 (0.98) n=5305	.63 **	27 **	4.40 (0.79) n=41456	4.32 (0.76) n=2476	4.07 (0.93) N=1455	.26 **	22 **
Voluntary redundancies	4.31 (0.81) N=50585	4.42 (0.73) N=18	4.18 (0.86) N=102	09	30	4.35 (0.81) N=39980	4.62 (0.63) N=1628	4.59 (0.64) N=3779	54 **	.057 *
Divestment	4.31 (0.81) n=50583	4.69 (0.39) N=65	4.54 (0.73) N=57	46 *	112	-	-	-		

Note: * p < .01; ** p < .001.

Table 3. Pairwise comparisons of downsizing methods (dependent variable: affective commitment)

(I) Downsizing		Mean Difference	Std. Error	Sig. ^b	99% Confidence Interval for Difference ^b		
		(I-J)			Lower Bound	Upper Bound	
Closures	Divestment 2008	42	.13	.01	83	00	
2008	Voluntary redundancies 2008	12	.10	1.00	44	.20	
	Layoffs 2008	.06	.04	1.00	07	.18	
	Voluntary redundancies 2010	-1.18*	.03	.00	-1.26	-1.10	
2010	Layoffs 2010	68*	.03	.00	77	59	

Based on estimated marginal means

^{*.} The mean difference is significant at the .01 level.

b. Adjustment for multiple comparisons: Bonferroni.

Table 4. Mean value of affective commitment (standard deviations in parentheses) and cell sizes for those directly exposure to different methods of downsizing in 2010 and degree of exposure to downsizing methods in 2008.

	2008									
2010 (directly exposed)	Not exposed	Indirectly exposed layoffs	Directly exposed layoffs	Directly exposed closure of units	F ratio					
Voluntary redundancies	-	4.57 (0.66) n = 3510	-	-						
Layoffs	4.46 (0.56) n = 18	4.14 (0.86) n = 857	3.84 (1.05) n = 412	4.01 (1.02) n = 87	$F(3, 1366) = 4.93*$ partial $\eta^2 = 0.011$					
Closure of units	-	3.39 (1.18) n = 1442	-	-						
F ratio		$F(2, 5802) = 970.87**$ partial $\eta^2 = 0.251$								

Note: * p < .01; ** p < .001.

Figure 1. Mean affective commitment of the directly exposed to layoffs in 2010, depending on the type of prior exposure (2008).*

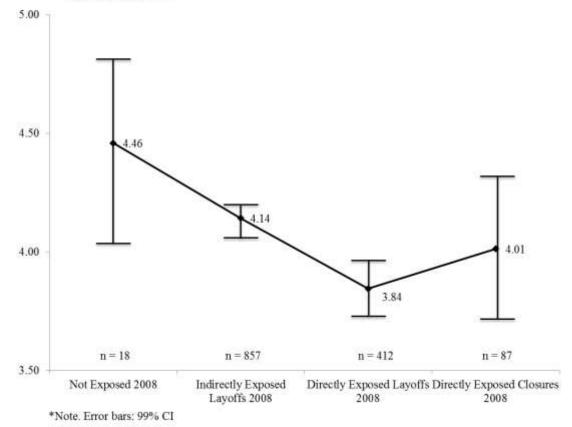


Figure 2. Mean affective commitment of the indirectly exposed to layoffs in 2008, depending on recent exposure (2010).* 5.00 4.57 4.50 4.14 4.00 3.50 n = 857n = 1442n = 35103.00 Directly Exposed Voluntary Redundancies 2010 Directly Exposed Layoffs 2010 Directly Exposed Closures 2010 *Note, Error bars: 99% CI

Figure 3. Impact of downsizing on affective commitment.

