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The effect of employees' expectations about downsizing on performance outcomes

A quantitative study on non-management employees in manufacturing firms

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Abstract

This study examines how non-management employees' expectations about downsizing affect individual and team performance. While prior research primarily focused on organizational-level performance or managerial expectations, this study addresses the individual and team-level performance and the impact of non-management employees' expectations rather than management employees' expectations. Grounded in Cognitive Dissonance Theory, an experiment was conducted with 90 participants from different manufacturing organizations whereby participants had to solve a list of anagrams in teams of five. Expectations were manipulated via vignettes and primes into positive, neutral, or negative expectations. Individual performance was measured through self-evaluation, while team-level performance was measured based on completion time. The results suggest that downsizing significantly decreases team performance in a linear way, while no significant effect was found for individual performance. Neither positive nor negative expectations of the non-management employees did give significant differences in individual or team performance outputs. These findings suggest that non-management employees' expectations are not determinants of the post-downsizing performance of non-management employees.

Table of contents

- Abstract 2
- 1. Introduction 5
 - Research question..... 6
 - Contributions 7
 - Outline 7
- 2. Literature review 8
 - Performance 8
 - Downsizing..... 9
 - Employees’ expectations..... 9
 - Cognitive Dissonance Theory 11
 - Hypotheses development..... 12
 - Downsizing and performance..... 12
 - The moderating role of employees’ expectations about downsizing on performance 14
 - Conceptual model..... 16
- 3. Methods 16
 - Research setting..... 16
 - Data collection..... 17
 - Measures..... 21
 - Analytical approach..... 21
 - Ethical considerations 23
- 4. Results 24
 - Descriptive statistics..... 24
 - Multiple Regression Analysis 29
 - Robustness..... 32
- 5. Discussion and Conclusion 37
 - Theoretical contributions..... 37
 - Practical contributions..... 38
 - Limitations & further research 38
 - Conclusion..... 39

References	41
Appendices	51
Appendix 1: Questionnaire during experiment	51
Appendix 2: Calculation SBF scores	52
Appendix 3: List of anagrams and words.....	53
Appendix 4: Introductory text and vignettes.....	55
Appendix 5: Questionnaire after experiment	59
Appendix 6: Assumptions Regression analysis	61
Appendix 7: Robustness checks	63

1. Introduction

A commonly used type of strategic change is the downsizing of an organization (Norman et al., 2012). General Motors (GM) announced the layoff of 15,000 employees in 2018, after already having announced the layoff of 47,000 employees in 2009 (Mujtaba & Senathip, 2020). Volkswagen announced in 2006 that 4,000 employees would be laid off (De Munck & Ferreras, 2013) and Intel announced laying off 15,000 employees in 2024, this was a part of the over 150,000 employees being laid off in the technology sector in 2024 (Rak, 2025). Despite the extensive use in organizations, the performance outcomes after downsizing still differ in academic literature; for instance, Sitlington and Marshall (2011) found that downsizing can negatively impact the organizational performance, as it reduces the organizational knowledge. Espahbodi et al. (2000) found that downsizing can lead to significant improvements in organizational performance, particularly for firms that were underperforming prior to downsizing. Cascio et al. (1997) found differing results, stating that downsizing does not consistently improve nor decrease firm performance. These conflicting results leave the relationship between downsizing and organizational performance unclear in the literature. (Cascio et al., 1997; Espahbodi et al., 2000; Sitlington & Marshall, 2011). To understand the relationship between downsizing and organizational performance, it is important to understand performance at the individual and team level, as organizational performance is often shaped by team dynamics, which in turn depend on how individuals interact and perform (Gavetti et al., 2012). These dynamics are often neglected when only organizational performance is measured, missing a potentially important relationship between downsizing and individual and team-level performance (Walton & Gilbert, 2021). Downsizing is defined as: “reducing the scale of a firm’s operations by laying off employees” (Espahbodi et al., 2000, p.107). To find out whether downsizing is successful, the performance before and after the downsizing needs to be studied (De Meuse et al., 2004). Performance in this study is defined as: the productivity of the researched subject, in a given time (Adam, 1994). The researched subjects will be individual employees and employee teams.

Research has shown that employees’ expectations influence the performance output of employees (Cao et al., 2024; Keil et al., 2022). Expectations are defined in the literature as “a momentary belief concerning the likelihood that a particular act will be followed by a particular outcome” (Vroom, 1964, p.17). There are various types of expectations a human can have (Panitz et al., 2021). However, for reasons of simplicity and given the limited timeframe of this

study, expectations will be categorized in three types: positive, negative, and neutral (Fischer & Mueller, 2025). Positive expectations indicate employees' beliefs that their performance will improve, following the downsizing, "meaning that a positive outcome is anticipated" (Kube & Herzog, 2022, P.765). Negative expectations indicate employees' beliefs that their performance will decrease after the implementation of downsizing, "a negative outcome is anticipated" (Kube & Herzog, 2022, P.765). Neutral expectations represent both, the indifference between positive or negative expectations, and the absence of expectations (Fishbein & Ajzen, 2009). The different studies that researched expectations in the past, had their focus on the expectations of the management; for example, Ford et al. (2008) confirmed that expectations influence the outcome for change agents, because those expectations guide their behaviour. Piercy et al. (2002) stated that shopfloor employees are aware that the management beliefs are important to the company, and Holbrook et al. (2000) found that differences in firm performance stem, partially, from differences in firm's top executives and their choices. The research on expectations about non-management employees appears to be limited (Frone & Blais, 2020). It is important that the expectations of non-management employees are studied because when those employees are resisting the change, and thus underperforming, this will likely result in a decrease in the output and in the revenue of the firm (Sonenshein & Dholakia, 2012). The employees' expectations in this study are defined as: What the non-management employees believe will happen, after the implementation of downsizing (Vroom, 1964).

Research question

The aim of this study is to explore whether positive or negative expectations by non-management employees about downsizing can influence the performance outcomes of individuals and teams post-downsizing. Currently, this is mainly studied for the management level, missing the non-management employees' expectations (Frone & Blais, 2020). Furthermore, there is a lack of research on individual and team-level performance, as previous studies mainly focused on the organizational level performance (Walton & Gilbert, 2021). It is important to investigate this gap, as individuals and teams are the ones directly impacted by downsizing initiatives (Sonenshein & Dholakia, 2012). To address these gaps, this study poses the following research question:

What is the impact of expectations by non-management employees regarding downsizing, on the individual and team-level performance?

Contributions

This study addresses two significant gaps in the downsizing literature. Firstly, prior research has examined the relationship between downsizing and organizational performance (e.g., Cascio et al., 1997; Espahbodi et al., 2000; Sitlington & Marshall, 2011), meaning that these studies have largely focused on organizational-level outcomes. This thesis will add to the literature by shifting the analytical lens to the individual and team levels, which are crucial for understanding the effects of downsizing but have been underexplored (Walton & Gilbert, 2021). Secondly, although prior research has shown that expectations influence performance outcomes, existing studies have primarily investigated managerial expectations (e.g., Cao et al., 2024; Keil et al., 2022). This study aims to expand the scope by investigating expectations among non-management employees, filling an important gap in the current literature (Ford et al., 2008; Frone & Blais, 2020; Sonenshein & Dholakia, 2012).

This study also holds significant practical importance for organizations interested in using downsizing as a strategic tool. Downsizing is a widespread and recurring phenomenon across industries. For instance, General Motors' layoffs in 2018 and 2009 (Mujtaba & Senathip, 2020), Volkswagen's layoffs in 2006 (De Munck & Ferreras, 2013), and Intel's layoffs in 2024 (Rak, 2025). Given that organizations undergo strategic change on average every 2 to 2.43 years (Li & Chen, 2019), understanding the consequences of such decisions is critical. This research will provide organizations insights into how employees' expectations influence performance outcomes post-downsizing. If organizations can proactively shape or manage expectations at the employee level, they may be able to mitigate productivity losses.

Outline

This study is organized as follows. In the next chapter, the literature review is provided, which explains the key concepts: performance, downsizing, and employees' expectations. Next, the hypotheses are formulated, and the conceptual model is presented. After this, the methodological section will show how the data was collected, and the research was conducted. After the methodological section, the results will be shown and analysed, leading to the discussion, showing the theoretical and practical contributions, together with the limitations of this study. Finally, the conclusion is presented, where an answer to the research question is provided.

2. Literature review

This chapter elaborates further on the key concepts of this research, which are performance, downsizing, and employees' expectations. Those key concepts are viewed from the cognitive dissonance theory, which will also be explained in this chapter. Furthermore, based on the literature review, theoretical gaps are explained, which will be filled by testing hypotheses, which are formed in this chapter. At the end of this chapter, the conceptual model for this research can be found.

Performance

Recent studies on performance drivers mainly focused on the overall operational performance (Leppänen et al., 2023; Rent et al., 2009; Serenko et al., 2023). However, to assess the role of expectations on performance, it is important to understand what drives performance at lower hierarchical levels, such as the individual and the team-level (Walton & Gilbert, 2021). Cross and Cummings (2004) found that high individual performance depends on access to a network of colleagues. Similarly, Randel and Jaussi (2003) emphasized the role of an individual's identity and team composition as the most important driver for individual performance. As both studies underline the importance of the surrounding team for individual performance, it becomes relevant to study how individuals perform when exposed to downsizing, an area which is still underexplored.

As performance in this study is defined as productivity of individual employees and employee teams, it is important to understand what drives that productivity. Cai et al. (2018) found that interruptions can reduce individual productivity for up to three days. Hossain and List (2012) found that bonus incentives increase productivity for both individuals and teams. However, the way bonuses are framed – specifically as potential losses rather than gains – only enhances productivity among teams, this is because team settings activate social pressure, motivating team members to improve performance. Pierce et al. (2015) found that monitoring systems increase productivity, especially in teams, as it enhances perceived managerial oversight and fairness. These findings show that productivity is shaped by different psychological and contextual factors, which could differ between individuals and teams. While incentives and monitoring can enhance performance (Hossain and List, 2012; Pierce et al., 2015), their impact depends on how they are implemented or perceived by employees. Understanding these

differing drivers is essential for interpreting how expectations may influence productivity after downsizing.

Downsizing

Previous studies have shown mixed effects of downsizing on firm performance; Cascio et al. (1997) found no improvement when downsizing was solely used as a performance tool due to a reduced morale, lack of structural changes, and minimal cost savings relative to the disruption caused. In contrast, Espahbodi et al. (2000) reported significant performance gains after downsizing, stemming from an increased focus. Sitlington and Marshall (2011) emphasized that outcomes depend on how downsizing is managed, transparency and employee support appeared to be key for high firm performance. Moore et al. (2024) found that downsizing harms team performance by destroying social networks, but this can be mitigated if survivors actively rebuild social ties, especially during the immediate aftermath of layoffs (Aalbers, 2020; Moore et al., 2024). Given the mixed findings in the existing literature, the impact of downsizing on performance remains inconclusive, indicating that extensive study is necessary (Cascio et al., 2021; Kim et al., 2024; Koivunen et al., 2024).

Employees' expectations

Management literature shows that expectations about downsizing influence downsizing decisions and performance outcomes; Schulz and Wiersema (2018) found that managers' expectations can drive downsizing decision, as managers often downsize in anticipation of poor financial results or investor reactions in order to reduce costs. Liang et al. (2025) showed that optimistic managerial expectations reduce the likelihood of downsizing, and when realistic, improve firm performance, though unrealistic managerial expectations may reduce performance. Although these studies did not assess performance outcomes after downsizing, it highlights that expectations play an important role in the relationship between downsizing and performance.

Koivunen et al. (2024) state that managers' expectations strongly influence how downsizing is executed and perceived. When expectations are unmet, it can reduce effectiveness and harm future organizational performance by fostering mistrust and decreasing motivation among both managers and remaining employees (Koivunen et al., 2024). Similarly, Tourish et al. (2004) found that mismanaged employee expectations during downsizing undermine trust, increase uncertainty, and damage morale, ultimately reducing organizational performance.

Helfat and Martin (2015) found that managerial expectations significantly influence the performance outcomes of an organization after a strategic change. The researchers' conclusion is based on consistent empirical evidence across various strategic change contexts – one of which is downsizing – showing that differences in managerial cognitions lead to differences in organizational performance. Similarly, Holbrook et al. (2000) documented that differences in firm performance stem partially from individual differences among top executives and their decisions, confirming that expectations of top executives influence both individual and team performance.

Beyond management literature, psychological and physiological studies confirm that expectations about change are likely to influence the actual outcomes of changes (e.g., Mühl & Korunka, 2024; Noshari et al., 2023; Ostojčić et al., 2016). Mothes et al. (2016) confirmed that expectations affect the psychological and neurophysiological level, shaping individual's perceptions. However, it remains uncertain whether these changed individuals' perceptions also influence actual performance outcome.

An expectation is defined in the literature as "a momentary belief concerning the likelihood that a particular act will be followed by a particular outcome" (Vroom, 1964, p.17). Those expectations are formed, "based on prior experience, current circumstances, or other sources of information" (Tyron, 1994, p.313). In this study, expectations are held by the non-management employees, who are subject to a strategic change: downsizing. The non-management employees will have a belief about how the performance will change, after the implementation of downsizing.

While managerial expectations have been widely studied in relation to downsizing decisions and performance outcomes (e.g., Schulz & Wiersema, 2018; Liang et al., 2025; Helfat & Martin, 2015), little is known about how non-management employees' expectations influence these outcomes (Frone & Blais, 2020). While Tourish et al. (2004) and Koivunen et al. (2024) recognize the impact of unmet employee expectations – such as reduced trust, decreased motivation, increased uncertainty, and reduced morale – their focus was primarily on the responses of employees rather than on their expectations as predictive drivers of post-downsizing performance.

It is important to study this gap, as employees have a different point of view compared to the managers (Ford et al., 2008) and are often the ones who are highly influenced by downsizing (Sonenshein & Dholakia, 2012). When employees resist the change, the production may fall

still, resulting in decreased output and ultimately lower revenue for the firm (Sonenshein & Dholakia, 2012). Non-management employees are expected to react differently with different expectations about downsizing compared to how management employees react; this is because non-management employees often have weaker organizational attachment and less involvement in decision-making; managers are typically more invested in organizational goals and benefit from stronger perceived support and job security, which makes them more motivated to achieve or sustain higher performance (Ashforth & Mael, 1989; Eisenberger et al., 1990; Tourish et al., 2004).

Cognitive Dissonance Theory

This research uses the cognitive dissonance theory (CDT) to explain how expectations influence the relationship between downsizing and performance. CDT is a theory originating from the psychological literature. First published by Festinger (1957), CDT states that when individuals hold two or more contradicting cognitions, they will feel an unpleasant state – the dissonance – until they are able to resolve from this state by changing their cognition. Festinger (1957) states that people will be motivated to resolve this dissonance by adjusting either their cognitions, or their behaviour. Festinger and Carlsmith (1959) found that individuals will adjust their attitude to favour a past behaviour, because the memory of the past behaviour is given, and the attitude towards that behaviour can be changed. Apart from changing their attitude or adjusting their behaviour, individuals have other ways to reduce the cognitive dissonance, as they could develop new attitudes towards their specific behaviour (Festinger, 1957).

The CDT is apart from the psychological literature, also highly popular in management studies (e.g., Bhawe & Glomb, 2013; Ambos & Birkinshaw, 2010). Hinojosa et al. (2017) found that the use of CDT in top tier management journals is steadily increasing since 2000, reflecting the growing importance of CDT in management studies. Avey et al. (2011) found that individuals with positive expectations, in line with the strategic change, are likely to have higher performance. Rao and Mattarelli (2023) use CDT to state that an individual's cognitive process can significantly impact their behaviour, actions, and performance within teams.

Building on Avey et al. (2011) and Rao and Mattarelli (2023), expectations may be argued to moderate the relationship between downsizing and performance. Yet, empirical support remains limited (Avey et al., 2011). To address this gap, this study aims to extend CDT with empirical evidence, thereby enabling stronger theoretical claims in future research.

Hypotheses development

Downsizing and performance

While previous research has primarily studied the relationship between downsizing and firm performance (Aalbers, 2020; Cascio et al., 1997; Espahbodi et al., 2000; Moore et al., 2024; Sitlington & Marshall, 2011), much less is known about how downsizing affects individual and team-level performance. As substantiated before, it is important to investigate this gap, as individuals and teams are the ones directly impacted by downsizing initiatives (Sonenshein & Dholakia, 2012). In this section, the hypotheses are developed for the relationship between downsizing, and individual and team-level performance.

Downsizing and individual performance

The first hypothesis focuses on the relationship between downsizing and individual performance, which is expected to follow an inverted U-shape. This expectation is based on existing research and the cognitive dissonance theory.

At small to moderate downsizing levels, employees experience a pressure to adapt by forming new routines and relationships, as established structures are disrupted (Brauer & Laamanen, 2013). According to CDT, this disruption creates a dissonance, which individuals are motivated to reduce by increasing their effort, leading to improved individual performance (Festinger, 1957). Additionally, fewer employees give the surviving employees a possibility to develop new skills, leading to a higher individual performance (Appelbaum et al., 1999) and an increased feeling of responsibility, also leading to a higher individual performance (Brockner, 1992). However, as downsizing increases, the disruption can become overwhelming. Too many layoffs may lead to a cognitive overload, where employees struggle to cope with the increased demands (Dlouhy & Casper, 2020). In such cases, individuals will no longer try to resolve the dissonance but instead they will accept it, resulting in declining performance (Cooper and Fazio 1984). High levels of downsizing can increase job insecurity, absenteeism, and reduced perceived organizational support, both leading to decreased individual performance (Armstrong-Stassen & Schlosser, 2008; Ifeoma et al., 2019).

Thus, individual performance tends to increase at small to moderate downsizing levels due to a motivational pressure to reduce dissonance (Festinger, 1957), adapt new routines (Brauer & Laamanen, 2013), learn new skills (Appelbaum et al., 1999), and an increased feeling of responsibility (Brockner, 1992). At higher levels of downsizing, performance declines because

of a cognitive overload (Cooper & Fazio, 1984), higher job insecurity and absenteeism (Ifeoma et al., 2019), and lower perceptions of organizational support (Armstrong-Stassen & Schlosser, 2008). This initial increase, followed by decreasing performance, creates an inverted U-shaped relationship. The tipping point likely varies based on disruption level and the employee's capacity to cope with change (Brauer & Laamanen, 2013). Based on this reasoning, the following hypothesis is developed:

Hypothesis 1: *The relationship between downsizing and individual performance is an inverted U-shape; individual performance improves at small to moderate levels of downsizing, but decreases when downsizing increases.*

Downsizing and team performance

The second hypothesis concerns the relationship between downsizing and team performance, which is also expected to follow an inverted U-shape. This expectation is also based on existing research and the cognitive dissonance theory.

At small to moderate downsizing initiatives, teams often experience a renewed focus and clearer division of responsibilities, improving efficiency and performance of teams (De Meuse et al., 2004; Parker et al., 2017). Smaller teams may foster direct communication and stronger collaboration (De Meuse et al., 2004; Parker et al., 2017). CDT explains this by an internal motivation to restore group balance after disruption of teams (Festinger, 1957). The discomfort of losing colleagues can motivate teams to rebuild cohesion, and thus increase performance (Aronson & Mills, 1959). However, at higher downsizing levels, teams can experience significant disruptions (Patton et al., 2024). According to CDT (Festinger, 1957), team members might experience a dissonance as team members are confronted with unexpected organizational changes which contradicts their expectations of job security, fairness, and team stability (Mellahi & Wilkinson, 2009). Instead of resolving this dissonance, team members withdraw their effort, decrease the sharing of information, or become self-protective (Mellahi & Wilkinson, 2009), which ultimately will decrease team performance.

Thus, team performance tends to increase after small to moderate downsizing, as team members are internally motivated to restore group balance and rebuild cohesion (Aronson & Mills, 1959; De Meuse et al., 2004; Festinger, 1957). At higher downsizing levels, team performance is expected to decline as members reduce effort, share less information, or become self-protective (Mellahi & Wilkinson, 2009). Based on this reasoning the following hypothesis is developed:

***Hypothesis 2:** The relationship between downsizing and a team's performance is an inverted U-shape; team performance improves at small to moderate levels of downsizing, but decreases when downsizing increases.*

The moderating role of employees' expectations about downsizing on performance

Different studies confirmed that individuals' expectations influence performance outcomes (Mühl & Korunka, 2024; Noshari et al., 2023; Ostojić et al., 2016). Mothes et al. (2016) found that expectations affect psychological and neurophysiological level, meaning that the body will react according to one's own expectations. However, management literature mostly focuses on managerial expectations, rather than the non-managerial employee level (Ford et al., 2008; Helfat & Martin, 2015). In this section, the hypotheses are developed of the moderating role of non-management employees' expectations about downsizing on performance.

Positive expectations

Fugate et al. (2012) found that employees' perceptions of downsizing influence performance outcomes, with positive expectations increasing commitment and reducing resistance. This suggests that expectations act as cognitive frames, shaping how employees interpret and respond to downsizing, reflected by their performance (Fugate et al., 2012; Weick, 1995).

CDT offers a useful lens to explain this mechanism. When expectations and experiences conflict, individuals experience a dissonance, which they are motivated to reduce (Festinger, 1957). In the downsizing context, employees with positive expectations about the change are more likely to act in ways that support their expectations, reducing their dissonance (Avey et al., 2011; DeRue et al., 2008; Van Ginkel & Van Knippenberg, 2008). This behaviour reinforces a positive attitude towards the downsizing, resulting in increased efforts to make the downsizing a success (Mishra & Spreitzer, 1998). These increased efforts are expected to lead to an improved performance outcome.

Importantly, these individuals' expectations are not expected to eliminate the original disruptions from downsizing. The inverted U-shape pattern of H1 and H2 is expected to remain intact (Brauer & Laamanen, 2013; De Meuse et al., 2004; Mellahi & Wilkinson, 2009). Instead, positive expectations are expected to increase performance across all levels of downsizing, without changing the original shape of the relationship between downsizing and performance. Based on this reasoning, hypothesis 3a and hypothesis 4a are developed:

Hypothesis 3a: Positive expectations of individuals about downsizing moderate the inverted U-shaped relationship between downsizing and individual performance, such that performance is higher across all levels of downsizing compared to when expectations are not positive.

Hypothesis 4a: Positive expectations of individuals about downsizing moderate the inverted U-shaped relationship between downsizing and team performance, such that performance is higher across all levels of downsizing compared to when expectations are not positive.

Negative expectations

Tourish et al. (2004) found that negative expectations among non-management employees – caused by uncertainty and poor communication – can reduce trust, increase uncertainty, and damage morale, ultimately leading to a decreased organizational performance.

This mechanism can be explained, similar to the positive expectations, by CDT. The CDT states that when individuals hold expectations that are different from what they actually experience, they experience a dissonance, which they will be motivated to reduce (Festinger, 1957). This means that, if employees hold negative expectations, dissonance can appear when the downsizing is implemented. Instead of working to increase the performance, employees may reduce their efforts in order to resolve the dissonance between their expectations and the outcome after the downsizing (Festinger, 1957; Rastogi et al., 2018; Tian et al., 2022). These reduced efforts are expected to result in a decreased performance outcome.

As with the positive expectations, these individuals' expectations are not expected to eliminate the original disruption from downsizing. The inverted U-shape pattern of H1 and H2 is expected to remain intact (Brauer & Laamanen, 2013; De Meuse et al., 2004; Mellahi & Wilkinson, 2009). Instead, negative expectations are expected to decrease performance across all levels of downsizing, without changing the original shape of the relationship between downsizing and performance. Based on this reasoning, hypothesis 3b and hypothesis 4b are developed:

Hypothesis 3b: Negative expectations of individuals about downsizing moderate the inverted U-shaped relationship between downsizing and individual performance, such that performance is lower across all levels of downsizing compared to when expectations are not negative.

Hypothesis 4b: Negative expectations of individuals about downsizing moderate the inverted U-shaped relationship between downsizing and team performance, such that performance is lower across all levels of downsizing compared to when expectations are not negative.

Conceptual model

Figure 1 shows the conceptual model of this research; this model integrates all the different hypotheses to test the relationships. As discussed in the hypothesis development, the polarities of H1 and H2 indicate an inverted U-shape. The polarities of H3a and H4a indicate a + sign, reflecting an expected improvement in performance, while the polarities of H3b and H4b indicate a – sign, reflecting an expected decrease in performance.

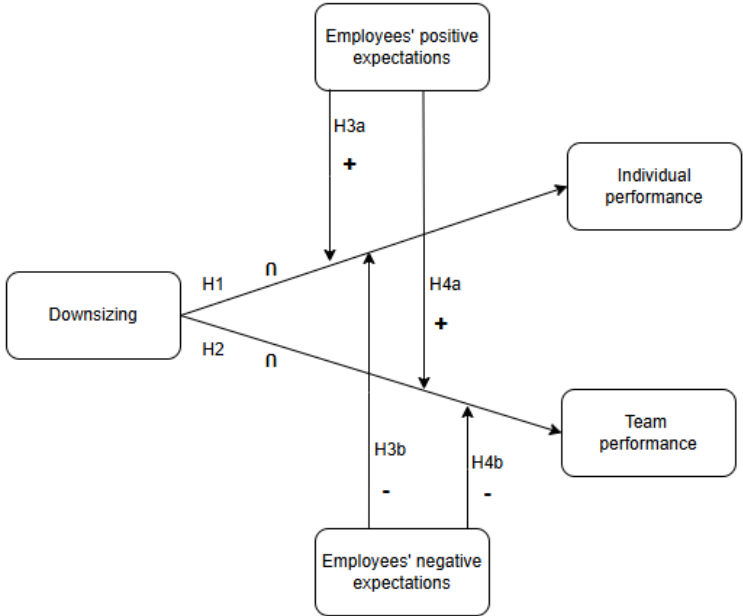


Figure 1: Conceptual model

3. Methods

This chapter elaborates on the methodology of this study. Firstly, the research setting will be discussed, after that will be elaborated on the data collection method, after which the different variables will be elaborated in an operationalization table. Finally, the analytical approach will be discussed, giving the different regression formulas to be tested.

Research setting

The research question is addressed via an experimental setting. As the base relationships (H1 and H2) are a direct causal relationship, and those can best be tested via a traditional experimental design (Shadish et al., 2002). Schabram et al. (2024) distinguish between two types of experimental design: treatments and primes. “Treatments are manipulations in which researchers intentionally expose participants to different types or levels of an objectively

demonstrable stimuli (i.e., different conditions) that are of central theoretical interest” (Schabram et al., 2024, p 4). In this research, the direct causal relationship between downsizing and individual (H1) or team-level (H2) performance represents this objectively demonstrable stimulus. Lowering the number of employees is an objectively observable different condition. Given this information, the causal relations of H1 and H2 are tested via a treatment experiment.

The other experimental design suggested by Schabram et al. (2024) are primes. “In prime designs, the manipulation functions as a tool to generate variance in a particular state of interest (attitudes, emotions, behaviours, etc.) in order to understand the impact of that state on an outcome” (Schabram et al., 2024, p.5). This design suits hypotheses H3a, H3b, H4a, and H4b, as primes can generate variance in expectations. By handing participants different vignettes, their expectations can be shaped in different ways.

The prime experiment should “expose participants to different types or levels of a stimulus [...] to induce variation in participants’ emotion, cognition, behaviour, or other state, which is measured and used as the independent variable to test its association with an outcome of interest” (Schabram et al., 2024, p.6). In this study, primes are used to shape participants’ expectations via three vignettes, giving a negative, neutral, or positive expectation (Fischer & Mueller, 2025). These manipulated, differing expectations, allow for testing whether negative expectations lower performance, and positive expectations increase performance after downsizing.

Data collection

As mentioned above, data was collected through an experimental setting, inspired by the performance measurement approach by Gilhooly and Johnson (1978). In their experiment, Gilhooly and Johnson (1978) studied the anagram solving performance of a group of 45 student subjects. The students were given anagrams and asked to find a correctly spelled word with that anagram (e.g. TNOMH to MONTH). Gilhooly and Johnson (1978) discussed performance in this anagram solving experiment via a solution rate.

This study builds on the procedure of Gilhooly and Johnson (1978), extended with manipulated expectations for the participants. To test H1 and H2, participants were split into teams of 5 people, that team is then given 15 anagrams, with time measured up until completion. A maximum completion time of 15 seconds per anagram is used (225 seconds in total), similar the experiment by Gilhooly and Johnson (1978). Team performance is assessed via solution

rate and completion time. Individual performance was examined via self-evaluation through a questionnaire, which can be found in appendix 1.

To minimize the influence of anagram difficulty determining the outcomes, a Dutch list of anagrams was developed, as it is the native language of the participants. This anagram development was done using the SUBTLEX-NL document, which contains all words, and its frequency in Dutch subtitles (Keuleers et al., 2010). This list is used to make sure that the participants are familiar with the words used for the anagrams. The 30 most frequently occurring 5-letter words with no other anagram solutions were used. Difficulty was determined using the summed bigram frequency (SBF) (Novick and Sherman 2004). The calculation of the SBF scores can be found in Appendix 2. Apart from the SBF score, the number of letter moves is an important determinant of the solution times, the more letters are moved from their original place, the more difficult it will be to solve the anagram (Gilhooly & Johnson, 1978; Meldelsohn & O'Brien, 1974).

Of the 30 different words, 10 were designed to be easy, those are the ones with the highest SBF score and only 2 letter moves in their anagram. Another 10 anagrams with medium difficulty were created, those had medium SBF scores and have 3 letter moves in their anagram. Finally, the last 10 anagrams have a hard difficulty, as they have the lowest SBF scores and 4 letter moves each. The anagrams can be found in appendix 3, with the corresponding SBF-score of the solution, and the number of letter moves per anagram.

After the first round, downsizing was implemented. To test hypotheses 1 and 2 – which predict that performance improves at small to moderate levels of downsizing but decreases when downsizing increases further – three different sizes of downsizing were implemented. Teams were reduced to 4 (small downsizing), 3 (moderate downsizing) or 2 (big downsizing) members. The average difficulty per anagram stayed the same as in the starting round, as difficulty significantly influences the completion time of anagrams (Mayzner & Tresselt, 1958). To ensure that the difficulty is the same, there were 5 easy anagrams, 5 medium anagrams, and 5 hard anagrams used in both rounds.

Before the experiment, participants received an introductory text. According to APA guidelines, standard 8.02, participants need to be “(1) informed about the purpose of the research, expected duration, and procedures; (2) their right to decline to participate and to withdraw from the research once participation has begun; (3) the foreseeable consequences of declining or withdrawing; (4) reasonably foreseeable factors that may be expected to influence

their willingness to participate such as potential risks, discomfort, or adverse effects; (5) any prospective research benefits; (6) limits of confidentiality; (7) incentives for participation; and (8) whom to contact for questions about the research and research participants' rights.” (American Psychological Association, 2017, pp.10-11). The introductory text adhering to these guidelines can be found in appendix 4.

To test H3 and H4, employees’ expectations were manipulated using primes. Three vignettes – negative, neutral, and positive – were presented to the participants before the downsizing was implemented, after the first round. To be able to measure employees’ expectations on individual performance and team-level performance, the same vignettes will be given to the entire team, shaping the expectations of every individual the same way.

To create the vignettes, it is firstly determined what factors influence the expectations of employees. Coch and French (1948) concluded that it is important to openly communicate, as employees will then be more likely to adjust their expectations positively. Sitlington and Marshall (2011) found that positive expectations can be explained because open communication increases trust. Furthermore, employees often form negative expectations when they lack information, as this reduces trust (Tourish et al., 2004). According to Gioia and Chittipeddi (1991), the framing of the message is also an important tool to shape the expectations, leaders can help employees make sense of what is happening by guiding the message in a certain way. This means that a message explaining the positive outcomes of the downsizing, will lead to positive expectations for the employees, and triggers of fear should be avoided, as they lead to negative expectations (Schulz-Knappe et al., 2019). According to Bartunek et al. (2006), prior experiences are an important determinant for the expectations of a new downsizing initiative; the researchers found that expectations are often shaped proactively – even before the details of a new project are communicated – based on previous experiences on similar change initiatives. The positive vignette needs to have open communication, a positive framing, and should talk about positive past initiatives. The negative vignette should be the exact opposite, no or bad communication about the goal of the downsizing, a negative framing, and talk about negative past downsizing initiatives. The neutral vignette should be in between both, not indicating a positive experience, nor a negative experience.

To increase external validity, the vignettes are based on real-world examples. As a positive example, Airbnb is used because its CEO communicated the downsizing with transparency and a clear rationale, while offering strong support for the affected employees (Airbnb, 2022); this

approach reflects open communication, a positive framing, and organizational care. For the neutral vignette, Southwest Airlines is used because it communicated the downsizing with merely basic transparency. Although it used a clear business rationale, it was without notable employee support or emotional framing (Southwest Newsroom, 2025). For the negative vignette, Microsoft is used because its message lacked open communication about the purpose of the downsizing, it used vague and non-personal language, and they offered no supportive framing or referencing to past initiatives (Microsoft News Center, 2022). The different vignettes can be found in appendix 4, after the introductory text.

To determine the required sample size, G*Power was used, which requires the effect size, alpha level, and statistical power. The model includes three predictors – expectations, downsizing, and their interaction. A medium effect size (f^2 of 0.15) is used, in line with Cohen's (1988) guidelines for a meaningful real-world interpretation. An alpha level of 0.05 is used, as it is the most accepted threshold (Hair et al., 2021). A power level of 0.80 is used, as it is the suggested minimal power level (Hair et al., 2021). Placing those statistics in the G*Power tool, gives a required sample size of minimal 77 participants. To ensure equal group sizes, 90 participants were used, giving 30 participants per group.

The participants of the experiment were non-management employees from five family-owned manufacturing companies in the east of the Netherlands. Company sizes ranged from 20 to 1,500 employees, with annual turnovers varying between €5 million and €300 million. All companies are operating in B2B markets, focused on customized product solutions. The companies were selected based on convenience sampling because of a limited timeframe of the research and the difficulty of gaining access to organizations. Without being able to offer financial incentives, convenience sampling made it possible to collect data from a population that was otherwise difficult to reach within the available time and resources (Saunders et al., 2012).

For selection of the employees within the different companies, a simple random sample is used to reduce biases and improve generalizability of the results (Field, 2017; Saunders et al., 2012). The participants were non-management employees with different functions; assembly workers, supply chain coordinators, marketing, sales, and service employees. Information about the participants, such as age, gender, and employment status are elaborated in the descriptives section in the following chapter. To ensure that a random sample is used in both rounds, the reduction of the group is also implemented in a random way; the researcher randomly selected

1 to 3 people to leave the group, simulating the downsizing. After completion of the experiment, another questionnaire is used to assess whether the vignettes effectively shaped participants' expectations and to collect demographic information of the participants. This questionnaire can be found in appendix 5.

Measures

Table 1 provides an overview of the variables used in this research. Including the variables, its definition, operationalization, unit of measurement and the source for the data.

Table 1: Operationalization table

Variable	Definition	Operationalization	Measurement	Datasource
Downsizing	"reducing the scale of a firm's operations by laying off employees" (Espahbodi et al., 2000, p. 107).	"Reducing the scale of a firm's operations by laying off employees" (Espahbodi et al., 2000, p. 107).	Small, moderate and big downsizing will be implemented	Experiment
Individual performance	"An organization's ability to derive resources from its environment" (Seashore & Yuchtman, 1967, p. 394).	The productivity of an individual employee, in a given time (Adam, 1994).	Self-evaluation by the individuals	Questionnaire during the experiment
Team performance	"An organization's ability to derive resources from its environment" (Seashore & Yuchtman, 1967, p. 394).	The productivity of a team of employees, in a given time (Adam, 1994).	Time to complete the round of the experiment, Solution rate	Experiment
Employees' expectations	"A momentary belief concerning the likelihood that a particular act will be followed by a particular outcome" (Vroom, 1964, p. 17).	What the non-management employees belief will happen, after the implementation of downsizing (Vroom, 1964).	Shape the expectations by giving out different vignettes and asking via a questionnaire	Experiment and questionnaire

Analytical approach

According to Hair et al. (2021), the appropriate regression method for hypothesis 1 and hypothesis 2 is the multiple regression analysis (MRA), as there needs to be tested for two predictors – the downsizing level and the downsizing level squared (X^2) – because of the hypothesised inverted U-shape. Ordinary Least Squares (OLS) is used as it is suitable as an estimation method for theory testing in multiple linear regression (Hair et al., 2021).

The first formula will test hypothesis 1, testing whether downsizing has a significant inverted U-shaped effect on the individual performance level:

$$\text{Formula 1: } IPR\ 2 = \beta_0 + \beta_1 * IPR\ 1 + \beta_2 * DL_C + \beta_3 * DL_C_SQ + \beta_k * Control + \varepsilon$$

The Individual Performance in round 2 (IPR2) is determined by using the Individual Performance in round 1 (IPR1) as the baselevel performance before the downsizing. The Centred Downsizing Level (DL_C) captures the overall direction of the relationship between downsizing and individual performance, it indicates whether individual performance tends to increase or decrease as downsizing increases. The squared version of this Centred Downsizing Level (DL_C_SQ) shows whether there is an inversed U-shape relationship. A negative, significant value for β_3 indicates that hypothesis 1 can be confirmed. Control variables are added to ensure that the observed relationship is not confounded by different demographic factors.

For hypothesis 2, a similar formula is used, with a change from Individual Performance Rating (IPR1/IPR2) to Team Performance Rating (TPR1/TPR2). This results in the following formula:

Formula 2: $TPR\ 2 = \beta_0 + \beta_1 * TPR\ 1 + \beta_2 * DL_C + \beta_3 * DL_C_SQ + \beta_k * Control + \varepsilon$

Formula 2 is similar to formula 1, whereby this time the Team Performance Rating in round 1 (TPR 1) is the control variable, being the baselevel performance before downsizing. The squared version of the Centred Downsizing Level (DL_C_SQ) shows whether there is an inversed U-shape relationship. β_3 should be negative and significant to confirm hypothesis 2.

For hypothesis 3a it is tested whether positive expectations about an individual's performance, increases the individual's performance significantly more than compared to individuals with non-positive expectations. For hypothesis 4a it is tested whether an individual's positive expectations about a team's performance will increase the team performance significantly more than compared to individuals with non-positive expectations. The following formulas are estimated:

Formula 3: $IPR\ 2 = \beta_0 + \beta_1 * IPR\ 1 + \beta_2 * DL_C + \beta_3 * DL_C_SQ + \beta_4 * Dummy_PE + \beta_5 (DL_C * Dummy_PE) + \beta_6 * (DL_C_SQ * Dummy_PE) + \beta_k * Control + \varepsilon$

Formula 4: $TPR\ 2 = \beta_0 + \beta_1 * TPR\ 1 + \beta_2 * DL_C + \beta_3 * DL_C_SQ + \beta_4 * Dummy_PE + \beta_5 (DL_C * Dummy_PE) + \beta_6 * (DL_C_SQ * Dummy_PE) + \beta_k * Control + \varepsilon$

Initially, the formulas are the same as formula 1 and 2. However, the addition of the dummies with positive expectations (Dummy_PE) introduces a moderation structure to test whether the effect of downsizing on performance differs depending on an individuals' expectations. In both formula 3 (individual-level) and formula 4 (team-level), the main effect of the dummy (Dummy_PE) should be analysed to assess whether the overall performance improved. In order

to confirm the hypotheses, β_4 should have a positive significant effect, showing that at all downsizing levels, positive expectations improve performance compared to non-positive expectations. To test whether the curvature changes, the interaction terms between downsizing and the dummies with positive expectations ($DL_C * Dummy_PE$ and $DL_C_SQ * Dummy_PE$) are added, these should be non-significant to confirm the second part of the hypotheses.

For hypothesis 3b it is tested whether negative expectations about an individual's performance, decreases the individual's performance significantly more than compared to individuals with non-negative expectations. For hypothesis 4b it will be tested whether an individual's negative expectations about a team's performance will decrease the team performance significantly more than compared to individuals with non-negative expectations. The following formulas are estimated:

Formula 5: $IPR\ 2 = \beta_0 + \beta_1 * IPR\ 1 + \beta_2 * DL_C + \beta_3 * DL_C_SQ + \beta_4 * Dummy_NE + \beta_5 (DL_C * Dummy_NE) + \beta_6 * (DL_C_SQ * Dummy_NE) + \beta_k * Control + \varepsilon$

Formula 6: $TPR\ 2 = \beta_0 + \beta_1 * TPR\ 1 + \beta_2 * DL_C + \beta_3 * DL_C_SQ + \beta_4 * Dummy_NE + \beta_5 (DL_C * Dummy_NE) + \beta_6 * (DL_C_SQ * Dummy_NE) + \beta_k * Control + \varepsilon$

Formulas 5 and 6 are similar to formula 3 and 4, the only difference is that now the negative expectations will be investigated instead of positive ones. These formulas include a dummy variable for negative expectations ($Dummy_NE$) and its interaction with both the linear and quadratic terms of downsizing ($DL_C * Dummy_NE$ and $DL_C_SQ * Dummy_NE$). To confirm the hypotheses, β_4 should have a negative significant effect, showing that at all downsizing levels, negative expectations decrease performance compared to non-negative expectations. To test whether the curvature changes, the interaction terms ($DL_C * Dummy_NE$ and $DL_C_SQ * Dummy_NE$) are added, these should be non-significant to confirm the second part of the hypotheses.

Ethical considerations

This study adhered to the APA ethical principles (American Psychological Association, 2017) and established procedures for experimentation (Shadish et al., 2002). Informed consent was obtained prior to participation via an introductory text (appendix 4), ensuring that all participants were aware of the experiment's purpose, duration, procedures, and withdrawal rights. Ethical manipulation standards were adhered to by using real-world vignettes (Schabram et al., 2024). Anonymity and confidentiality were maintained, and no personal identifiers were

collected. A post-experiment debriefing ensured transparency (American Psychological Association, 2017).

4. Results

This chapter presents the results of the regression analysis. Firstly, the descriptive statistics are presented, including the assumptions and multicollinearity tests. In this descriptives section, an ANOVA is also conducted in order to inspect mean differences between different expectations groups. After that, the findings of the regression analysis are presented.

Descriptive statistics

Before the use of MRA, the following assumptions need to be tested: normality, homoscedasticity, linearity, multicollinearity, and independence of errors (Hair et al., 2021). The tests for the assumptions can be found in appendix 6. To reduce the multicollinearity between the independent variable and the squared independent variable, Downsizing Level is mean centred (Hair et al., 2021). After this, all assumptions were met, and the data is suitable for analysis.

After collecting and preparing the data for the analysis, and testing the assumptions, the descriptive statistics are presented in table 2, showing the number of observations (N), the minimum and maximum scores, the mean scores and the standard deviation. The average individual performance in round 2 (5.037) seems to be lower than in round 1 (5.311). The team performance also seems to be worse in round 2, as the mean time to complete the anagrams in round 2 (87.074) is longer than in round 1 (81.555). As every experiment had a completion rate of 100%, team performance is measured based only on the completion time.

Table 2: Descriptive statistics

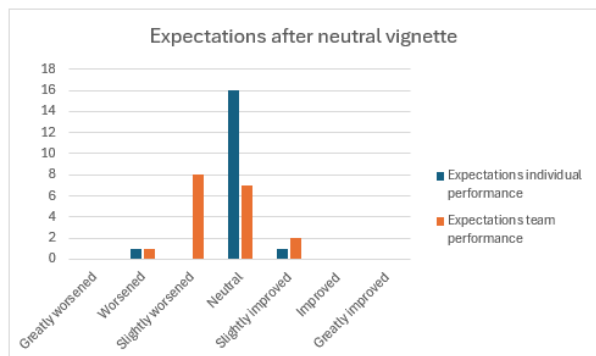
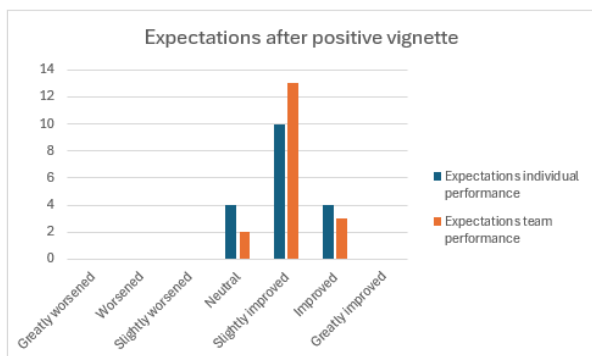
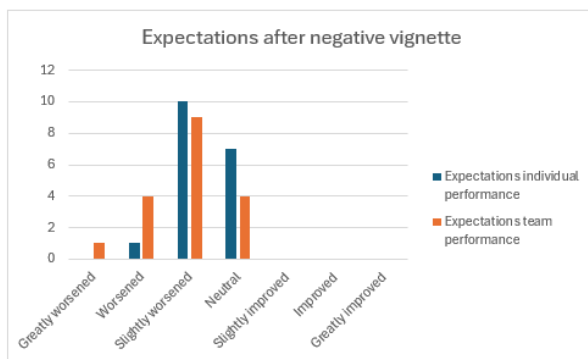
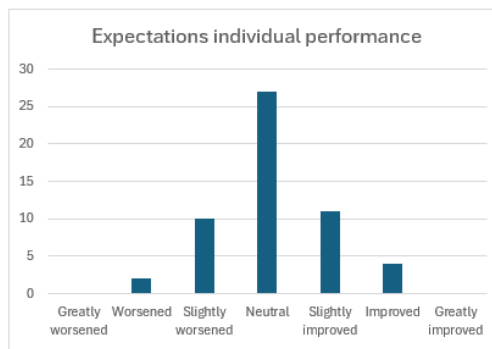
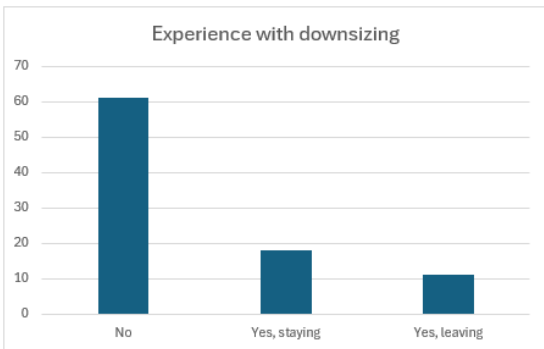
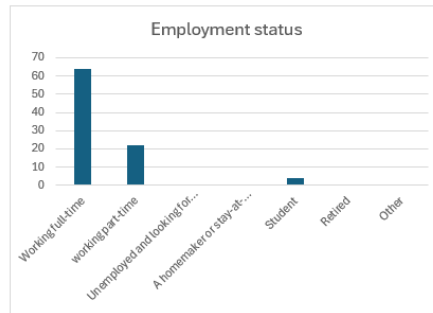
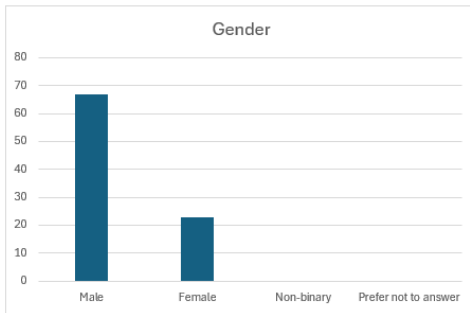
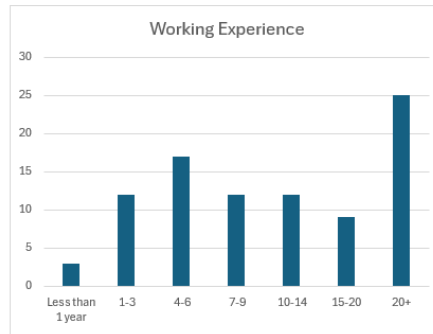
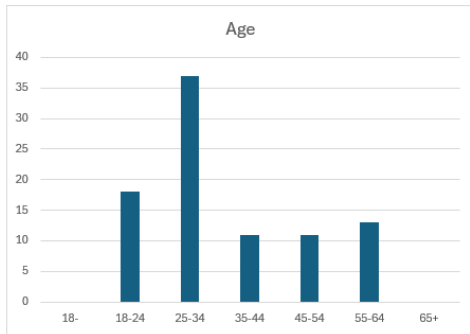
	N	Minimum	Maximum	Mean	Std. Deviation
Individual performance round 1	90	3	7	5.311	0.956
Individual performance round 2	54	2	7	5.037	1.018
Team performance round 1	90	46	151	81.555	27.348
Team performance round 2	54	42	212	87.074	45.170
Completion rate round 1	90	100	100	100.000	0.000
Completion rate round 2	54	100	100	100.000	0.000
Age	90	18	64	36.200	12.995
Working experience	90	1	42	13.641	10.390

The participants had an average age of 36.20 years, with an average working experience of 13.64 years, indicating a relatively experienced group of participants (Centraal Bureau voor de

Statistiek, 2025). 74.4% of the participants were male, which is typical for the manufacturing sector (U.S. BUREAU OF LABOR STATISTICS, 2015). Regarding educational levels, 33.3% of participants had completed a vocational education or similar, 27.8% completed a university bachelor's degree, and 21.1% completed solely secondary school. The other 3 educational levels together represented 17.8% of the sample.

71.1% of the participants worked full-time, 24.4% part-time, and 4.4% were interns, indicating that most of the participants were actively engaged in regular work. Experience with downsizing differed among the participants, although most of the participants (67.8%) had never experienced downsizing, 20% stayed, and the other 12.2% had left during a previous downsizing initiative. Furthermore, expectations were equally divided in negative (greatly worsened, worsened, slightly worsened), neutral, and positive (greatly improved, improved, slightly improved). Because of this equal division, it is possible to analyse and interpret the different types of expectations with greater certainty, as they are equally associated with either level of performance.

To assess the effectiveness of the vignette manipulation, a manipulation check was conducted. For the manipulation check, originally, a post-experiment questionnaire was designed and conducted, asking what the participants think about the overall effect of downsizing on performance. However, to ensure that performance outcomes in the second round did not influence or readjust participants' expectations, which would weaken the internal validity of the manipulation check (Shadish et al., 2002), the data of the questionnaire directly after introducing the vignette to the participants was used. In this questionnaire, participants were asked to report their expected individual, and team performance in the second round, after the implementation of the downsizing. Descriptive results appeared to align well with the vignettes. For the negative vignette, 61% expected lower individual performance and 78% expected lower team performance. For the positive vignette, 78% expected higher individual performance, and 89% expected higher team performance. For the neutral vignette, 89% expected unchanged individual performance, and 39% expected unchanged team performance. As the hypotheses focus on negative and positive expectations, compared to non-positive and non-negative expectations, the low neutral team performance score does not affect the analysis. In figure 2, different visual charts of the descriptives can be found.



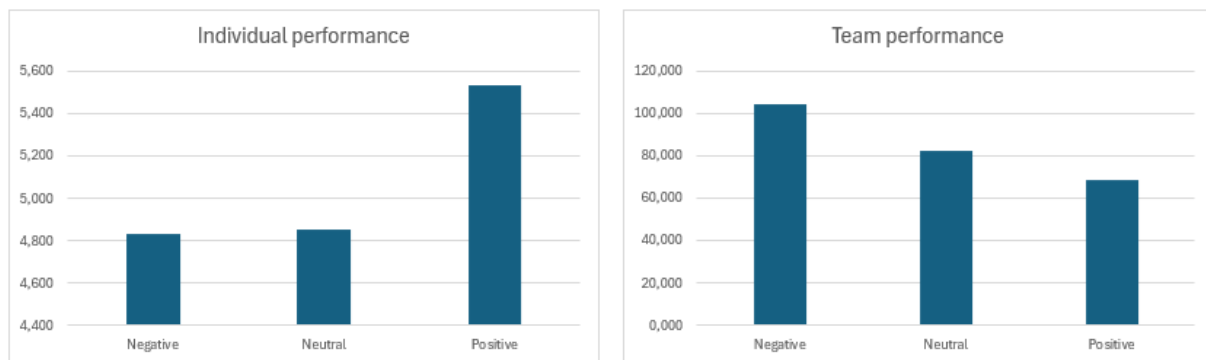


Figure 2: Visual charts descriptive statistics

Following the guidance of Tabachnick and Fidell (2007), firstly two one-way ANOVAs were conducted to assess mean differences in individual and team performance between different expectation groups. The results of the ANOVA can be found in table 3. Participants were grouped into three categories – positive, neutral, or negative expectations – based on their self-reported expectations. For individual performance, results indicated no significant differences between the three groups ($F(2,53)=2.298$, $p=0.111$). Descriptively, participants with positive expectations reported the highest individual performance ($M=5.533$, $SD=1.187$), followed by neutral ($M=4.852$, $SD=0.949$) and negative ($M=4.833$, $SD=1.115$) expectations. Similarly, for team performance, the ANOVA showed no significant differences between the expectation groups ($F(2,53)=3.181$, $p=0.050$). Although this p-value borders significance (Hair et al., 2021), the post hoc test – for which Games-Howell was used because of heterogeneity between groups (Field, 2017) – did not reveal statistically significant differences in pairwise comparisons, the largest difference was between negative and neutral expectation groups (Mean Difference=31.425, $p=0.086$). Descriptive results showed that teams in negative expectation groups performed worse ($M=104.348$, $SD=59.902$) than those of groups with neutral ($M=82.259$, $SD=24.787$) and positive ($M=68.071$, $SD=24.043$) expectations, as a lower completion time indicates better performance. Although the results were not statistically significant, the direction of the effects align with theoretical expectations that positive expectations improve performance, while negative expectations decrease performance. Given the limitations of ANOVA in accounting for baseline performance, interaction effects, and other control variables, further analysis will be conducted using multiple regression models to provide a more rigorous test of the hypotheses (Field, 2017; Hair et al., 2021; Tabachnick & Fidell, 2007).

Table 3: ANOVA results

Measure	Positive		Neutral		Negative		F(2,53)	Sig.	η^2
	M	SD	M	SD	M	SD			
Individual performance	5.533	1.187	4.852	0.949	4.833	1.115	2.298	0.111	0.083
Team performance	68.071	24.043	82.259	24.787	104.348	59.902	3.181	0.050	0.111

Note. Higher scores indicate better individual performance; lower scores indicate better team performance (completion time in seconds).

η^2 = eta squared

Before conducting the MRA, Pearson correlations were computed in order to assess the relationships between the variables and to evaluate potential issues of multicollinearity. Table 4 presents the Pearson correlations for all the variables included in formula 1, 3, and 5. Table 5 presents the same for all the variables included in formula 2, 4, and 6. According to Hair et al. (2021), correlations of .50 or higher indicate a strong relationship and values above .80 indicate multicollinearity. Among the variables, a strong correlation was found between age and working experience ($r=0.836$). To avoid multicollinearity, only working experience was included as a control variable in the regression models as it is more theoretically relevant in downsizing and performance research than age (Memon et al., 2024). Apart from this, no correlations above .30 were found, indicating no further concerns regarding multicollinearity.

Table 4: Correlation matrix formula 1,3,5

Variables	1	2	3	4	5	6	7	8
1 Individual performance	1							
2 Individual performance baselevel	.202 [.143]	1						
3 Downsizing level	-.056 [.686]	.029 [.789]	1					
4 Downsizing level squared	-.012 [.930]	.231 [.028]	.000 [1.000]	1				
5 Age	.085 [.543]	.037 [.728]	.165 [.121]	-.071 [.505]	1			
6 Working experience	.066 [.637]	.152 [.154]	.177 [.095]	-.020 [.848]	.836 [<.001]	1		
7 Positive expectations	.287 [.035]	.010 [.922]	-.110 [.304]	-.063 [.554]	-.090 [.398]	-.111 [.296]	1	
8 Negative expectations	-.102 [.464]	-.094 [.378]	.040 [.708]	-.069 [.516]	.044 [.677]	.079 [.456]	-.175 [.098]	1

Note. Pearson correlations for the individual performance, corresponding to formula 1, 3, and 5.

Pearson correlations noted in 3 decimals, with the corresponding significance in square brackets [].

Table 5: Correlation matrix formula 2,4,6

Variables	1	2	3	4	5	6	7	8
1 Team performance	1							
2 Team performance baselevel	.288 [.035]	1						
3 Downsizing level	.387 [.004]	.095 [.373]	1					
4 Downsizing level squared	-.152 [.274]	-.133 [.212]	.000 [1.000]	1				
5 Age	.274 [.045]	.089 [.406]	.165 [.121]	-.071 [.505]	1			
6 Working experience	.254 [.063]	.151 [.155]	.177 [.095]	-.020 [.848]	.836 [<.001]	1		
7 Positive expectations	-.243 [.077]	-.136 [.200]	-.110 [.304]	-.063 [.554]	-.090 [.398]	-.111 [.296]	1	
8 Negative expectations	.391 [.003]	.093 [.384]	.040 [.708]	-.069 [.516]	.044 [.677]	.079 [.456]	-.175 [.098]	1

Note. Pearson correlations for the team performance, corresponding to formula 2, 4, and 6. Pearson correlations noted in 3 decimals, with the corresponding significance in square brackets [].

Multiple Regression Analysis

Following the descriptive analysis, this section presents the results of the multiple regression analysis for the 6 different proposed regression formulas. The outcomes of hypothesis 1 and 3 – corresponding to formulas 1, 3, and 5 – are presented in table 6. The outcomes of hypothesis 2 and 4 – corresponding to formulas 2, 4, and 6 – are presented in table 7.

Hypothesis 1 proposed an inverted U-shaped relationship between downsizing and individual performance. Model 1 presents the base model with individual performance as the dependent variable, and the control variables. The regression models were based on a sample of N=53 participants. Model 1 was not significant $F(5,48)=1.296$, $p=0.282$), with an adjusted R^2 of 0.027, indicating that the model explains 2.7% of the variance. None of the control variables were significant, suggesting that they did not have a meaningful effect on the individual performance outcomes. In model 2, the baseline individual performance and linear downsizing variable were added. The model remained insignificant ($F(7,46)=1.252$, $p=0.295$), as was the linear downsizing effect ($\beta=0.187$, $p=0.195$). The model explained 3.2% of the variance. In model 3, the quadratic downsizing term was added to test the hypothesized inverted U-shaped relationship. Again, the model was not significant ($F(8,45)=1.078$, $p=0.395$), with an adjusted R^2 of 0.012, explaining only 1.2% of the variance. The quadratic term was negative – as hypothesized – but insignificant ($\beta=-0.033$, $p=0.833$). Because of those non-significant findings, no evidence was found for an inverted U-shaped relationship between downsizing and individual performance. Hypothesis 1 is not supported.

Hypothesis 2 proposed an inverted U-shaped relationship between downsizing and team performance. Model 8 represents the base model with team performance as the dependent variable, and the control variables. The regression models were based on a sample of $N=53$ participants. Model 8 was not significant ($F(5,48)=1.678, p=0.158$), with an adjusted R^2 of 0.060, indicating that the model explains 6.0% of the variance. None of the control variables were significant, suggesting that they did not have a meaningful effect on team performance outcomes. In model 9, the baseline team performance and linear downsizing variable were added. This model was significant ($F(7,46)=3.166, p=0.008$) with an adjusted R^2 of 0.222, explaining 22.2% of the variance, this level of explained variance is considered meaningful (Hair et al., 2021). The linear downsizing effect was significant and positive ($\beta=0.356, p=0.008$), indicating that teams needed more time to complete round 2, reflecting worse performance. In model 10, the quadratic downsizing term was added to test the hypothesised inverted U-shape. The model remained significant ($F(8,45)=2.722, p=0.015$) with an adjusted R^2 of 0.206, explaining 20.6% of the variance. However, the quadratic term was not significant ($\beta=-0.032, p=0.804$). Thus, no support was found for an inverted U-shaped relationship between downsizing and team performance. Hypothesis 2 is not supported. Instead, results indicate a linear negative effect on team performance as downsizing increases.

Hypothesis 3a proposed that positive expectations moderate the inverted U-shaped relationship between downsizing and individual performance, such that performance is higher across all levels of downsizing, this test continued on models 1, 2, and 3. In model 4, positive expectations were added to test for a main effect. The overall model was not significant ($F(9,44)=1.591, p=0.148$). The model had an adjusted R^2 of 0.091, explaining 9.1% of the variance. The main effect of positive expectations was significant ($\beta=0.307, p=0.031$), indicating that individuals with positive expectations perform better than those without. However, as the overall model is not significant, this effect cannot be interpreted as conclusive (Hair et al., 2021). In model 5, interaction terms were added. The model remained insignificant ($F(11,42)=1.558, p=0.147$), and the addition of interaction terms did not significantly improve model fit ($p=0.281$). Neither the linear ($\beta=0.261, p=0.133$), nor the quadratic interaction term ($\beta=-0.053, p=0.821$) was significant, indicating that the original relationship between downsizing and individual performance did not change. As the conventional statistical guidelines (Field, 2017; Hair et al., 2021) emphasize that individual effects cannot be interpreted when the overall model is non-significant, hypothesis 3a is not supported.

Hypothesis 3b proposed that negative expectations moderate the inverted U-shaped relationship between downsizing and individual performance, such that performance is lower across all levels of downsizing, this test continued on models 1, 2, and 3. In model 6, negative expectations were added to test for a main effect. The model was not significant ($F(9,44)=0.953$, $p=0.491$), had an adjusted R^2 of -0.008 , meaning that it led to a decrease in explained variance. Furthermore, adding negative expectations did not significantly improve model fit ($p=0.729$). The main effect of negative expectations was not significant ($\beta=-0.056$, $p=0.729$), for those given reasons, hypothesis 3b is not supported. In model 7, interaction terms were added. The model remained insignificant ($F(11,42)=1.288$, $p=0.264$), and adding the interaction terms did not significantly improve model fit ($p=0.094$). The quadratic interaction term was significant ($\beta=0.522$, $p=0.035$), indicating that negative expectations significantly moderate the curvature of the relationship between downsizing and performance. However, the non-significant overall model indicates that this effect cannot be interpreted as conclusive (Hair et al., 2021). The linear interaction was not significant ($\beta=-0.069$, $p=0.663$). Hypothesis 3b is not supported, the main effect was not significant and due to non-significance of the overall model, it cannot be stated that the original relationship between downsizing and individual performance is changed.

Hypothesis 4a proposed that positive expectations moderate the inverted U-shaped relationship between downsizing and team performance, such that performance is higher across all levels of downsizing, this test continued on models 8, 9, and 10. In model 11, positive expectations were added to test for a main effect of expectations. The model remained significant ($F(9,44)=2.947$, $p=0.008$), and had an adjusted R^2 of 0.248 , explaining 24.8% of the variance. The main effect of positive expectations was negative ($\beta=-0.240$, $p=0.067$), suggesting better performance, as it indicates faster completion time, but this effect was not significant, and thus does not support hypothesis 4a. In model 12, interaction terms were added. The overall model was no longer significant ($F(11,42)=2.273$, $p=0.115$), and neither the linear ($\beta=-0.279$, $p=0.072$), nor the quadratic interaction term ($\beta=0.146$, $p=0.486$) was significant. Thus, hypothesis 4a is not supported, the main effect of positive expectations on team performance is not significant. The absence of significant interaction effects does confirm that the original relationship between downsizing and team performance is not changed.

Hypothesis 4b proposed that negative expectations moderate the inverted U-shaped relationship between downsizing and team performance, such that performance is lower across all levels of downsizing, this test continued on models 8, 9, and 10. In model 13, negative expectations were added. The model remained significant ($F(9,44)=2.812$, $p=0.011$), with an adjusted R^2 of 0.235 ,

indicating an explained variance of 23.5% for this model. The main effect of negative expectations was not significant ($\beta=0.228$, $p=0.107$), indicating that teams with negative expectations did not perform significantly worse, offering no support for hypothesis 4b. In model 14, interaction terms were added. The model remained significant ($F(11,42)=2.867$, $p=0.007$) with an adjusted R^2 of 0.279, explaining 27.9% of the variance. Neither the linear ($\beta=0.256$, $p=0.086$), nor quadratic interaction term ($\beta=-0.255$, $p=0.229$) was significant. Thus, hypothesis 4b is not supported, the main effect of negative expectations on team performance is not significant. The absence of significant interaction effects confirms that the original relationship between downsizing and team performance is not changed.

Robustness

To check whether the analysis is robust under differing circumstances, a series of additional tests was conducted. These analyses examine whether findings hold under different model specifications. The results of the models can be found in appendix 7.

Age

As a first test, age was used instead of working experience as a control variable. This was done to assess whether the results are sensitive to the choice of control variable, given the high correlation between those two variables ($r=0.836$). Across all models, the patterns of significance remained consistent with the original findings, indicating that the findings are robust to the choice of this control variable.

Downsizing level

As a second test, downsizing level was tested using dummy variables instead of the mean-centred linear and quadratic terms, allowing for testing whether the main patterns were sensitive to the original quadratic term. For individual performance, results remained largely consistent. No overall model reached significance; therefore, no significant relationships were identified.

For team performance, the pattern was also largely robust. There was a significant effect only for the big ($\beta=0.377$ $p=0.008$) downsizing level. For the medium downsizing level, no such effect was found ($\beta=0.246$, $p=0.081$). All other results aligned with the initial models. Thus, this robustness check indicated that only when the majority of the team is dismissed, team performance significantly decreases.

Table 6: Regression results hypothesis 1 and 3

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
1 Constant	4.389 (0.916) [<.001]	3.457 (1.126) [0.004]	3.476 (1.141) [0.004]	2.908 (1.124) [0.013]	2.703 (1.126) [0.021]	3.456 (1.154) [0.005]	3.731 (1.123) [0.002]
2 Individual performance baselevel		0.187 (0.169) [0.195]	0.198 (0.183) [0.203]	0.147 (0.177) [0.331]	0.166 (0.177) [0.272]	0.188 (0.188) [0.241]	0.212 (0.183) [0.176]
3 Downsizing level		-0.100 (0.188) [0.474]	-0.106 (0.194) [0.462]	-0.111 (0.186) [0.421]	-0.236 (0.216) [0.144]	-0.096 (0.200) [0.517]	-0.131 (0.229) [0.440]
4 Downsizing level squared Hypothesis 1			-0.033 (0.349) [0.833]	0.017 (0.338) [0.911]	0.034 (0.390) [0.845]	-0.030 (0.353) [0.849]	-0.217 (0.403) [0.228]
5 Gender	0.198 (0.334) [0.162]	0.127 (0.336) [0.226]	0.168 (0.343) [0.247]	0.140 (0.330) [0.317]	0.118 (0.330) [0.396]	0.154 (0.360) [0.313]	0.107 (0.354) [0.473]
6 Education	0.231 (0.119) [0.130]	0.221 (0.121) [0.154]	0.217 (0.123) [0.169]	0.297 (0.121) [0.059]	0.300 (0.120) [0.056]	0.224 (0.125) [0.163]	0.255 (0.122) [0.105]
7 Employment status	-0.189 (0.269) [0.212]	-0.236 (0.274) [0.127]	-0.237 (0.277) [0.130]	-0.179 (0.270) [0.238]	-0.142 (0.271) [0.350]	-0.224 (0.289) [0.169]	-0.305 (0.293) [0.068]
8 Working experience	0.071 (0.092) [0.663]	0.060 (0.092) [0.714]	0.057 (0.094) [0.734]	0.137 (0.092) [0.404]	0.070 (0.095) [0.485]	0.067 (0.096) [0.695]	0.080 (0.093) [0.631]
9 Experience with downsizing	0.074 (0.221) [0.616]	0.042 (0.225) [0.780]	0.034 (0.234) [0.828]	0.058 (0.225) [0.697]	0.106 (0.228) [0.485]	0.055 (0.254) [0.743]	0.042 (0.248) [0.800]
10 Positive expectations Hypothesis 3a				0.307 (0.331) [0.031]	0.405 (0.524) [0.072]		
11 Interaction Downsizing level with Positive expectations					0.261 (0.450) [0.133]		
12 Interaction Downsizing level squared with Positive expectations					-0.053 (0.667) [0.821]		
13 Negative Expectations Hypothesis 3b						-0.056 (0.414) [0.729]	-0.442 (0.603) [0.066]
14 Interaction Downsizing level with Negative expectations						-0.069 (0.470) [0.663]	
15 Interaction Downsizing level squared with Negative expectations						0.522 (0.765) [0.035]	
N	53	53	53	53	53	53	53
DF	48	46	45	44	42	44	42
Adjusted R-square	0.027	0.032	0.012	0.091	0.104	-0.008	0.056
F-statistic	1.296	1.252	1.078	1.591	1.558	0.953	1.288
Significance	0.282	0.295	0.395	0.148	0.147	0.491	0.264

Note. Regression results on individual performance as dependent variable.

The different variables are shown with the standardized coefficients β , the standard deviation in parentheses () and the significance in square brackets []. For the constant, unstandardized coefficients B are reported. Bolded variables indicate tests of the hypotheses.

Table 7: Regression results hypothesis 2 and 4

	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
1 Constant	67.727 (37.631) [0.0781]	54.324 (38.329) [0.1631]	57.584 (40.871) [0.1661]	90.271 (43.309) [0.0431]	96.553 (42.531) [0.0281]	71.274 (40.968) [0.0891]	76.086 (40.713) [0.0691]
2 Team performance baselevel	0.204 (0.232) [0.1281]	0.204 (0.232) [0.1281]	0.202 (0.235) [0.1371]	0.143 (0.235) [0.2881]	0.155 (0.229) [0.2401]	0.175 (0.232) [0.1911]	0.090 (0.239) [0.5101]
3 Downsizing level	0.362 (7.094) [0.0061]	0.362 (7.094) [0.0061]	0.356 (7.281) [0.0081]	0.368 (7.094) [0.0051]	0.500 (8.014) [<.0011]	0.321 (7.251) [0.0151]	0.228 (8.319) [0.1261]
4 Downsizing level squared Hypothesis 2	-0.032 (12.232) [0.804]	-0.032 (12.232) [0.804]	-0.032 (12.232) [0.804]	-0.060 (11.988) [0.635]	-0.118 (13.798) [0.420]	-0.031 (12.006) [0.809]	0.024 (13.805) [0.871]
5 Gender	-0.168 (13.706) [0.2271]	-0.174 (12.717) [0.1791]	-0.176 (12.895) [0.1791]	-0.139 (12.702) [0.2801]	-0.123 (12.408) [0.3271]	-0.107 (13.330) [0.4261]	-0.039 (13.350) [0.7731]
6 Education	-0.117 (4.879) [0.4311]	-0.176 (4.486) [0.2001]	-0.179 (4.543) [0.2001]	-0.235 (4.530) [0.0931]	-0.243 (4.407) [0.0761]	-0.201 (4.481) [0.1461]	-0.207 (4.390) [0.1261]
7 Employment status	0.028 (11.040) [0.8491]	0.093 (10.191) [0.4971]	0.093 (10.299) [0.4991]	0.047 (10.193) [0.7311]	0.003 (10.039) [0.9821]	0.042 (10.372) [0.7591]	0.035 (10.589) [0.8071]
8 Working experience	0.143 (3.779) [0.3761]	0.082 (3.482) [0.5791]	0.080 (3.523) [0.5921]	0.032 (3.482) [0.8291]	0.107 (3.485) [0.4731]	0.049 (3.488) [0.7441]	0.070 (3.420) [0.6291]
9 Experience with downsizing	0.226 (9.060) [0.1211]	0.177 (8.327) [0.1851]	0.172 (8.516) [0.2081]	0.170 (8.286) [0.2001]	0.113 (8.313) [0.3971]	0.099 (8.816) [0.4821]	0.085 (8.596) [0.5331]
10 Positive expectations Hypothesis 4a				-0.240 (12.763) [0.67]	-0.411 (19.735) [0.043]		
11 Interaction Downsizing level with Positive expectations					-0.279 (16.751) [0.0721]		
12 Interaction Downsizing level squared with Positive expectations					0.146 (24.858) [0.486]		
13 Negative expectations Hypothesis 4b						0.228 (14.907) [0.107]	0.441 (22.137) [0.038]
14 Interaction Downsizing level with Negative expectations							0.256 (18.147) [0.0861]
15 Interaction Downsizing level squared with Negative expectations							-0.255 (27.823) [0.229]
N	53	53	53	53	53	53	53
DF	48	46	45	44	42	44	42
Adjusted R-square	0.060	0.222	0.206	0.248	0.290	0.235	0.279
F-statistic	1.678	3.166	2.722	2.947	2.964	2.812	2.867
Significance	0.158	0.008	0.015	0.008	0.005	0.011	0.007

Note. Regression results on team performance as dependent variable.

The different variables are shown with the standardized coefficients β , the standard deviation in parentheses () and the significance in square brackets []. For the constant, unstandardized coefficients B are reported.

Bolded variables indicate tests of the hypotheses.

Table 8: Summary hypotheses and empirical conclusions

Hypothesis	Expected direction	Result	Explanation
Hypothesis 1: The relationship between downsizing and individual performance is an inverted U-shape; individual performance improves at small to moderate levels of downsizing, but decreases when downsizing increases.	Ω	Not supported	There is no significant inverted U-shaped relationship, as the quadratic term is not significant.
Hypothesis 2: The relationship between downsizing and a team's performance is an inverted U-shape; team performance improves at small to moderate levels of downsizing, but decreases when downsizing increases.	Ω	Not supported	There is no significant inverted U-shaped relationship, as the quadratic term is not significant. However, there is a significant linear effect, indicating that downsizing decreases performance in a linear way.
Hypothesis 3a: Positive expectations of individuals about downsizing moderate the inverted U-shaped relationship between downsizing and individual performance, such that performance is higher across all levels of downsizing compared to when expectations are not positive.	+	Supported	There was a significant main effect of positive expectations on individual performance and there was no significant interaction effect. But, due to a non-significant overall model, interpretation should be cautious.
Hypothesis 3b: Negative expectations of individuals about downsizing moderate the inverted U-shaped relationship between	-	Not supported	No significant main effect of negative expectation on individual performance, but there is a significant quadratic interaction effect,

downsizing and individual performance, such that performance is lower across all levels of downsizing compared to when expectations are not negative.

indicating that negative expectations significantly change the curvature of the relationship between downsizing and performance, thereby changing the original shape.

Hypothesis 4a: Positive expectations of individuals about downsizing moderates the inverted U-shaped relationship between downsizing and team performance, such that performance is higher across all levels of downsizing compared to when expectations are not positive.

+

Not supported

No significant main effect of positive expectations on team performance, also no significant interaction effect, indicating no moderation effect of the original relationship between downsizing and team performance.

Hypothesis 4b: Negative expectations of individuals about downsizing moderates the inverted U-shaped relationship between downsizing and team performance, such that performance is lower across all levels of downsizing compared to when expectations are not negative.

-

Not supported

No significant main effect of negative expectations on team performance, also no significant interaction effect, indicating no moderation effect of the original relationship between downsizing and team performance.

5. Discussion and Conclusion

Theoretical contributions

This study aimed to investigate how non-management employees' expectations about performance after downsizing influence their individual and team-level performance, thereby addressing two key gaps in existing literature. The first gap is the lack of research on the effects of downsizing on individual and team performance, compared to organizational-level effects. The second gap is the limited understanding of how non-management employees' expectations moderate their performance after downsizing.

Addressing the first gap, this study contributes to the downsizing literature by challenging the assumption that downsizing has non-linear effects on performance at non-management levels (Brauer & Laamanen, 2013; De Meuse et al., 2004). While prior research suggested that small to moderate downsizing could initially enhance performance through renewed focus, increased responsibility, and dissonance-driven motivation to restore balance (Brockner, 1992; Festinger, 1957; Parker et al., 2017), the current study did not find such effects. Specifically, no significant relationship was found between downsizing and individual performance, neither linear nor quadratic. This non-significant finding questions the generalizability of CDT in short-term experimental contexts where task identification is low. CDT posits that individuals reduce dissonance when their expectations conflict with outcomes (Festinger, 1957), but such motivation may not be triggered if the task is not seen as self-relevant (Aronson, 1969; Stone & Cooper, 2001).

Team performance did decline significantly in a linear way as downsizing increased, suggesting that even small disruptions can hinder coordination in temporary or ad-hoc teams. This contradicts assumptions that small reductions improve team focus or cohesion (De Meuse et al., 2004; Parker et al., 2017).

This study also contributes to the limited understanding of how non-management employees' expectations moderate their performance after downsizing. The findings of this study challenge the assumption that non-management employees' positive expectations lead to improved performance after a strategic change (Avey et al., 2011; Fugate et al., 2012) and that negative expectations lead to a decreased performance (Tourish et al., 2004). This study found no significant support for such effects. Neither positive nor negative expectations significantly moderated the relationship between downsizing and performance at the individual or team level. This finding invites reconsideration of CDT's boundary conditions. One possible

explanation is that CDT suggest that the dissonance reduction only occurs when the task is perceived as self-relevant and closely connected to the individual's self-concept (Aronson, 1969; Stone & Cooper, 2001). In short-term or externally imposed settings – such as experiments using unfamiliar tasks – this self-relevance may be lacking, thereby weakening the motivation to reduce dissonance through increased effort (Stone & Cooper, 2001), giving a plausible explanation for the absence of significant effects in the findings of this study.

This research makes several important contributions that challenge and extend existing theoretical understanding. Firstly, it suggests that CDT is not applicable in short-term context and when completing non-self-relevant tasks. Secondly, by testing the moderating effect of expectations on performance, this study found that individuals' expectations did not change the performance output of individuals or teams, which contradicts existing research and thereby calls for further research on why those expectations did not affect the performance.

Practical contributions

This study offers two practical contributions for organizations considering downsizing as a strategic change tool. Firstly, the finding that positive expectations do not significantly improve team performance, suggests that managers should understand that fostering positive expectations will not automatically lead to improved performance, but there might be more needed to increase performance.

Second, the linear decrease in team performance suggests that even small-scale downsizing can disrupt team performance. Managers should not assume that small-scale downsizing is harmless, especially with ad-hoc teams, which often lack a sense of team belonging and trust (Driskell et al., 2003; Mathieu et al., 2008).

Limitations & further research

This study has several limitations to consider when interpreting the results. Firstly, the experimental setting – while offering strong internal validity and the possibility of studying the causal relationships between downsizing and individual and team performance with expectations – the generalizability to real work contexts may be limited. Second, the study was focused on the short-term and did not capture long-term results. Future research should examine the effects in real organizational settings, using established teams over longer periods to enhance external validity.

Third, individual performance was measured through self-evaluation, which may have introduced bias. Team performance was measured based on anagram completion rate and completion time, which measures speed and quality, but not other important dimensions of team performance, such as coordination or communication (Mathieu et al., 2000). Future research should use multi-source performance measures in order to provide a more complete measurement of performance.

Fourth, the sample consisted only of non-management employees from family-owned B2B manufacturing firms in the east of the Netherlands, with sizes ranging from 20 to 1,500 employees. While appropriate for this context, it limits the generalizability to other sectors or cultures. Cultural differences in attitudes towards downsizing, expectations, and team dynamics may influence outcomes. Future research should aim to include different industries and cultural settings in order to validate the findings.

Furthermore, during the debriefing, several participants were surprised that their expectations were manipulated, and acknowledged that their reactions aligned with their vignette. While no clear feedback was provided about performance differences, some participants thought that one list of anagrams was more difficult than the other. Although this feeling was not systematically measured – and based on the anagram lists incorrect – it may have influenced individual or team performance to some extent. It could be helpful for future research to explicitly state that there are no difficulty differences beforehand.

Conclusion

This study examined whether non-management employees' expectations regarding downsizing affect the individual and team-level performance. Based on an experimental setting with 90 participants from family-owned B2B manufacturing firms in the east of the Netherlands, this study found that downsizing had a negative linear effect on team performance, but no significant effect on individual performance. Furthermore, neither positive nor negative expectations by an individual significantly changed their team's performance. Therefore, in direct answer to the research question, "What is the impact of expectations by non-management employees regarding downsizing, on the individual and team-level performance?", this study concludes that in short-term, ad-hoc teams it cannot be claimed that the non-management employees' expectations impact post-downsizing performance outcomes. Future research is needed to assess long-term effects in real organizational contexts and to explore whether and how expectation management can be applied effectively in long-term contexts.

This research contributes to the literature by giving new insights into the relationship between non-management employees' expectations about performance after downsizing, indicating that the previously found non-linear relationship in existing literature is not applicable in this short-term experimental context. Furthermore, it suggests that the cognitive dissonance theory is not applicable in short-term context and when completing non-self-relevant tasks. The key takeaway for practitioners is that expectations by non-management employees do not directly influence the post-downsizing performance and therefore that managers should not solely rely on fostering positive expectations as a performance improvement tool.

References

- Aalbers, R. (2020). Rewiring the intrafirm network under downsizing: The role of tie loss on discretionary tie formation. *Long Range Planning*, 53(3), 101858. <https://doi.org/10.1016/j.lrp.2018.11.002>
- Adam, E. E. (1994). Alternative quality improvement practices and organization performance. *Journal of Operations Management*, 12(1), 27–44. [https://doi.org/10.1016/0272-6963\(94\)90004-3](https://doi.org/10.1016/0272-6963(94)90004-3)
- Airbnb. (2022, July 26). *A Message from Co-Founder and CEO Brian Chesky*. Airbnb Newsroom. <https://news.airbnb.com/a-message-from-co-founder-and-ceo-brian-chesky/>
- Ambos, T. C., & Birkinshaw, J. (2010). How do new ventures evolve? An inductive study of archetype changes in Science-Based Ventures. *Organization Science*, 21(6), 1125–1140. <https://doi.org/10.1287/orsc.1090.0504>
- American Psychological Association. (2017). *Ethical principles of psychologists and code of conduct* (2002, amended effective June 1, 2010, and January 1, 2017). <https://www.apa.org/ethics/code/>
- Appelbaum, S. H., Everard, A., & Hung, L. T. S. (1999). Strategic downsizing: critical success factors. *Management Decision*, 37(7), 535–552. <https://doi.org/10.1108/00251749910285674>
- Armstrong-Stassen, M., & Schlosser, F. (2008). Taking a positive approach to organizational downsizing. *Canadian Journal of Administrative Sciences / Revue Canadienne Des Sciences De L Administration*, 25(2), 93–106. <https://doi.org/10.1002/cjas.63>
- Aronson, E. (1969). The Theory of Cognitive Dissonance: A Current perspective. In *Advances in experimental social psychology* (pp.1–34). [https://doi.org/10.1016/s0065-2601\(08\)60075-1](https://doi.org/10.1016/s0065-2601(08)60075-1)
- Aronson, E., & Mills, J. (1959). The effect of severity of initiation on liking for a group. *Journal of Abnormal & Social Psychology*, 59(2), 177–181. <https://doi.org/10.1037/h0047195>
- Ashforth, B. E., & Mael, F. (1989). Social Identity Theory and the organization. *Academy of Management Review*, 14(1), 20–39. <https://doi.org/10.5465/amr.1989.4278999>
- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, 22(2), 127–152. <https://doi.org/10.1002/hrdq.20070>

- Bhave, D. P., & Glomb, T. M. (2013). The role of occupational Emotional labor requirements on the Surface Acting–Job Satisfaction relationship. *Journal of Management*, 42(3), 722–741. <https://doi.org/10.1177/0149206313498900>
- Brauer, M., & Laamanen, T. (2013). Workforce downsizing and firm performance: an organizational routine perspective. *Journal of Management Studies*, 51(8), 1311–1333. <https://doi.org/10.1111/joms.12074>
- Cai, X., Gong, J., Lu, Y., & Zhong, S. (2018). Recover overnight? Work interruption and worker productivity. In *Management Science* (Vols. 64–64, Issue 8, pp.3489–3500). <https://doi.org/10.1287/mnsc.2017.2792>
- Cao, Z., Jr., Jiang, F., & Wang, D. (2024). PERFORMANCE SHORTFALLS, RESPONSE DIRECTIONS, AND BELIEF IN THE EFFECTIVENESS OF RESPONSES. *Academy of Management Journal*, 178–207. <https://doi.org/10.5465/amj.2021.0241>
- Cascio, W. F., F., Chatrath, A., & Christie-David, R. A., A. (2021). ANTECEDENTS AND CONSEQUENCES OF EMPLOYEE AND ASSET RESTRUCTURING. In *Academy of Management Journal* (Vol. 64, Issue 2, pp.587–613). <https://doi.org/10.5465/amj.2018.1013>
- Cascio, W. F., Young, C. E., Morris, J. R., (1997). FINANCIAL CONSEQUENCES OF EMPLOYMENT-CHANGE DECISIONS IN MAJOR U.S. CORPORATIONS. *Academy of Management Journal*, 40(5), 1175–1189.
- Centraal Bureau voor de Statistiek. (2025, May 8). *Werkzame beroepsbevolking; anciënniteit*. Centraal Bureau Voor De Statistiek. <https://www.cbs.nl/nl-nl/cijfers/detail/85274NED>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Cooper, J., & Fazio, R. H. (1984). A new look at dissonance theory. In *Advances in experimental social psychology* (pp.229–266). [https://doi.org/10.1016/s0065-2601\(08\)60121-5](https://doi.org/10.1016/s0065-2601(08)60121-5)
- Cross, R., & Cummings, J. N. (2004). TIE AND NETWORK CORRELATES OF INDIVIDUAL PERFORMANCE IN KNOWLEDGE-INTENSIVE WORK. In *Academy of Management Journal* (Vol. 47, Issue 6, pp. 928–937).
- De Meuse, K. P., Bergmann, T. J., Vanderheiden, P. A., & Roraff, C. E. (2004). New Evidence regarding Organizational Downsizing and a Firm’s Financial Performance: A Long-Term Analysis *. *Journal of Managerial Issues*, 16(2), 155.

<https://www.questia.com/library/journal/1G1-120612557/new-evidence-regarding-organizational-downsizing-and>

De Munck, J., & Ferreras, I. (2013). Restructuring processes and capability for voice: case study of Volkswagen, Brussels. *International Journal of Manpower*, 34(4), 397–412. <https://doi.org/10.1108/ijm-05-2013-0099>

Dlouhy, K., & Casper, A. (2020). Downsizing and surviving employees' engagement and strain: The role of job resources and job demands. *Human Resource Management*, 60(3), 435–454. <https://doi.org/10.1002/hrm.22032>

Driskell, J. E., Radtke, P. H., & Salas, E. (2003). Virtual teams: Effects of technological mediation on team performance. *Group Dynamics Theory Research and Practice*, 7(4), 297–323. <https://doi.org/10.1037/1089-2699.7.4.297>

Espahbodi, R., John, T. A. (2000). The effects of downsizing on operating performance [Journal-article]. *Review of Quantitative Finance and Accounting*, 15.

Festinger, L. (1957). A theory of cognitive dissonance. In *Stanford University Press eBooks*. <https://doi.org/10.1515/9781503620766>

Festinger, L., Carlsmith, J. M., (1959). *COGNITIVE CONSEQUENCES OF FORCED COMPLIANCE*.

Field, A. (2017). *Discovering statistics using IBM SPSS Statistics*. SAGE.

Fischer, A., & Mueller, E. M. (2025). Bad news first—Neuroticism, negative expectations, and preference for negative information. *European Journal of Personality*. <https://doi.org/10.1177/08902070251316614>

Fishbein, M., & Ajzen, I. (2009). *Predicting and Changing Behavior: the Reasoned Action approach*. <http://connections-qj.org/article/predicting-and-changing-behavior-reasoned-action-approach>

Ford, J. D., Ford, L. W., Critical Path Consultants, The Vanto Group, & D'Amelio, A. (2008). RESISTANCE TO CHANGE: THE REST OF THE STORY. In *Academy of Management Review* (Vol. 33, Issue 2, pp.362–377). <https://laurieford.com/wp-content/articles/2008.Resistance%20Story.pdf>

- Frone, M. R., & Blais, A. (2020). Organizational Downsizing, Work Conditions, and Employee Outcomes: Identifying Targets for Workplace Intervention among Survivors. *International Journal of Environmental Research and Public Health*, 17(3), 719. <https://doi.org/10.3390/ijerph17030719>
- Fugate, M., Ph. D., Prussia, G. E., Kinicki, A. J. (2012). Managing employee withdrawal during organizational change: The role of Threat Appraisal. In *Journal of Management* (Vols. 38–38, Issue 3, pp.890–914). <https://doi.org/10.1177/0149206309352881>
- Gavetti, G., Greve, H. R., Levinthal, D. A., & Ocasio, W. (2012). The Behavioral Theory of the Firm: Assessment and Prospects [Journal-article]. *The Academy of Management Annals*, 6–6(1), 1–40. <https://doi.org/10.1080/19416520.2012.656841>
- Gilhooly, K. J., & Johnson, C. E. (1978). Effects of solution word attributes on anagram difficulty: A regression analysis. *Quarterly Journal of Experimental Psychology*, 30(1), 57–70. <https://doi.org/10.1080/14640747808400654>
- Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12(6), 433–448. <https://doi.org/10.1002/smj.4250120604>
- Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2021). *Multivariate Data Analysis* (Eighth). CPI Group.
- Halbesleben, J. R. B., Neveu, J., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the “COR.” *Journal of Management*, 40(5), 1334–1364. <https://doi.org/10.1177/0149206314527130>
- Helfat, C., & Martin, J. (2015). Dynamic managerial capabilities: Review and assessment of managerial impact on strategic change. *Journal of Management*, 41(5), 1281–1312
- Hinojosa, A. S., Gardner, W. L., Walker, H. J (2017). A review of Cognitive Dissonance Theory in Management Research: Opportunities for Further Development. In *Journal of Management*, *Journal of Management* (Vols. 43–43, Issue 1, pp.170–199). <https://doi.org/10.1177/0149206316668236>
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066x.44.3.513>

Holbrook, D., Cohen, W. M., Hounshell, D. A., Klepper, S. (2000). THE NATURE, SOURCES, AND CONSEQUENCES OF FIRM DIFFERENCES IN THE EARLY HISTORY OF THE SEMICONDUCTOR INDUSTRY. In *Strategic Management Journal* (Vols. 21–21, pp.1017–1041). John Wiley & Sons, Ltd.

Hossain, T., & List, J. A. (2012). The behavioralist visits the factory: Increasing productivity using simple framing manipulations. *Management Science*, 58(12), 2151–2167. <https://doi.org/10.1287/mnsc.1120.1544>

Ifeoma, A. R., Mukhtaruddin, M., & Prihanto, J. J. N. (2019). Effects of downsizing on employee performance of selected manufacturing firms in Anambra State, Nigeria. *Research in World Economy*, 10(3), 391. <https://doi.org/10.5430/rwe.v10n3p391>

Keil, T., Lavie, D., Stevo Pavi, CEVI (2022). WHEN DO OUTSIDE CEOS UNDERPERFORM? FROM a CEO-CENTRIC TO a STAKEHOLDER-CENTRIC PERSPECTIVE OF POST-SUCCESSION PERFORMANCE. In *Academy of Management Journal*. <https://doi.org/10.5465/amj.2018.1087>

Keuleers, E., Brysbaert, M., & New, B. (2010). SUBTLEX-NL: A new measure for Dutch word frequency based on film subtitles. *Behavior Research Methods*, 42(3), 643–650. <https://doi.org/10.3758/brm.42.3.643>

Kim, Y., Kim, A., Park, T., Oh, E., Eo, S. S., & Song, K. (2024). Preventing subsequent turnover after downsizing: The role of collective pay for performance practices. *Human Resource Management Journal*. <https://doi.org/10.1111/1748-8583.12552>

Koivunen, N., Viitala, R., & Ekman, K. (2024). How Managers Experience Downsizing: Navigating among Professional, Loyal, Empathic, and Critical Positions. *Journal of Change Management*, 1–24. <https://doi.org/10.1080/14697017.2024.2426804>

Kube, T., & Herzog, P. (2022). Differential associations of positive and negative expectations with depressive symptoms. *Journal of Clinical Psychology*, 79(3), 762–772.

Li, B., & Chen, S. (2019). Corporate-level strategy and firm performance: evidence from China. *Chinese Management Studies*, 14(1), 1–14. <https://doi.org/10.1108/cms-10-2018-0715>

Liang, P., Cavusoglu, H., & Hu, N. (2025). Sticky information Technology Investment: Theory and Empirical evidence. *IEEE Transactions on Engineering Management*, 1–38. <https://doi.org/10.1109/tem.2025.3547691>

- Mathieu, J. E., Heffner, T. S., Goodwin, G. F., Salas, E., & Cannon-Bowers, J. A. (2000). The influence of shared mental models on team process and performance. *Journal of Applied Psychology, 85*(2), 273–283. <https://doi.org/10.1037/0021-9010.85.2.273>
- Mathieu, J., Jr., Maynard, M. T., Rapp, T., Gilson, L. (2008). Team Effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. In *Journal of Management* (Vols. 34–34, Issue 3, pp.410–476). <https://doi.org/10.1177/0149206308316061>
- Mayzner, M. S., & Tresselt, M. E. (1958). Anagram solution times: A function of letter order and word frequency. *Journal of Experimental Psychology, 56*(4), 376–379. <https://doi.org/10.1037/h0041542>
- Mellahi, K., & Wilkinson, A. (2009). A Study of the Association between Level of Slack Reduction Following Downsizing and Innovation Output. *Journal of Management Studies, 47*(3), 483–508. <https://doi.org/10.1111/j.1467-6486.2009.00872.x>
- Memon, M. A., Thurasamy, R., Ting, H., Cheah, J.-H., & Francis Chuah. (2024). Control Variables: A review and proposed guidelines. *Journal of Applied Structural Equation Modeling. [https://doi.org/10.47263/JASEM.8\(2\)01](https://doi.org/10.47263/JASEM.8(2)01)*
- Mendelsohn, G. A., & O'Brien, A. T. (1974). The solution of anagrams: A reexamination of the effects of transition letter probabilities, letter moves, and word frequency on anagram difficulty. *Memory & Cognition, 2*(3), 566–574. <https://doi.org/10.3758/bf03196922>
- Microsoft News Center. (2022, March 15). *Stephen Elop's email to employees - Stories*. Stories. <https://news.microsoft.com/2014/07/17/stephen-elops-email-to-employees/>
- Mishra, A. K., & Spreitzer, G. M. (1998). Explaining how survivors respond to downsizing: the roles of trust, empowerment, justice, and work redesign. *Academy of Management Review, 23*(3), 567–588. <https://doi.org/10.5465/amr.1998.926627>
- Moore, O. A., Susskind, A. M., Margolin, D., & Hanna, A. A. (2024). A Resource-Acquisition Perspective: Examining the effects of downsizing on Work-Related relationships and performance. *Group & Organization Management*.
- Mothes, H., Leukel, C., Jo, H., Seelig, H., Schmidt, S., & Fuchs, R. (2016). Expectations affect psychological and neurophysiological benefits even after a single bout of exercise. *Journal of Behavioral Medicine, 40*(2), 293–306. <https://doi.org/10.1007/s10865-016-9781-3>

- Mujtaba, B. G., & Senathip, T. (2020). Layoffs and downsizing implications for the leadership role of human resources. *Journal of Service Science and Management*, 13(02), 209–228. <https://doi.org/10.4236/jssm.2020.132014>
- Norman, P. M., Butler, F. C., & Ranft, A. L. (2012). Resources matter. *Journal of Management*, 39(7), 2009–2038. <https://doi.org/10.1177/0149206312443560>
- Noshari, M. G., Kempton, H. M., & Kreplin, U. (2023). Mindfulness or expectancy? The label of mindfulness leads to expectancy effects. *Counselling and Psychotherapy Research*, 23(1), 49–63. <https://doi.org/10.1002/capr.12589>
- Novick, L. R., & Sherman, S. J. (2004). Type-based bigram frequencies for five-letter words. *Behavior Research Methods Instruments & Computers*, 36(3), 397–401. <https://doi.org/10.3758/bf03195587>
- Ostojić, L., Legg, E. W., Dits, A., Williams, N., Brecht, K. F., Mendl, M., & Clayton, N. S. (2016). Experimenter expectancy bias does not explain Eurasian jays' (*Garrulus glandarius*) performance in a desire-state attribution task. *Deleted Journal*, 130(4), 407–410. <https://doi.org/10.1037/com0000043>
- Panitz, C., Endres, D., Buchholz, M., Khosrowtaj, Z., Sperl, M. F. J., Mueller, E. M., Schubö, A., Schütz, A. C., Teige-Mocigemba, S., & Piquart, M. (2021). A revised framework for the investigation of expectation update versus maintenance in the context of expectation violations: the VIOLEX 2.0 model. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.726432>
- Parker, S. K., Van Den Broeck, A., & Holman, D. (2017). Work Design Influences: A Synthesis of Multilevel Factors that Affect the Design of Jobs. *Academy of Management Annals*, 11(1), 267–308. <https://doi.org/10.5465/annals.2014.0054>
- Patton, G. K., Neubert, E., Neubert, M. J., & Rees, R. (2024). Surviving, not thriving: The impact of downsizing on team-based organizations. *Business Horizons*, 67(3), 251–262. <https://doi.org/10.1016/j.bushor.2024.02.006>
- Pierce, L., Snow, D. C., & McAfee, A. (2015). Cleaning House: The impact of information technology monitoring on employee theft and productivity. *Management Science*, 61–61(10), 2299–2319. <http://dx.doi.org/10.1287/mnsc.2014.2103>

- Piercy, N. F., Harris, L. C., & Nikala Lane. (2002). Market orientation and retail operatives' expectations. In *Journal of Business Research* (Vols. 55–55, pp.261–273). Elsevier Science Inc. [https://doi.org/10.1016/S0148-2963\(00\)00140-5](https://doi.org/10.1016/S0148-2963(00)00140-5)
- Preston, C. C., & Colman, A. M. (2000). Optimal number of response categories in rating scales: reliability, validity, discriminating power, and respondent preferences. *Acta Psychologica*, 104(1), 1–15. [https://doi.org/10.1016/s0001-6918\(99\)00050-5](https://doi.org/10.1016/s0001-6918(99)00050-5)
- Rak, G. (2025). These tech jobs are in demand. *SPECTRUM.IEEE.ORG*, 15–16.
- Randel, A. E., & Jaussi, K. S. (2003). FUNCTIONAL BACKGROUND IDENTITY, DIVERSITY, AND INDIVIDUAL PERFORMANCE IN CROSS-FUNCTIONAL TEAMS. *Academy of Management Journal*, 46–46, 763–774.
- Rao, A., & Mattarelli, E. (2023). Reacting to the ambidexterity mandate: How experienced tensions and cognitive dissonance influence innovative behaviors in a global organization. *Strategic Organization*, 22(2), 297–329. <https://doi.org/10.1177/14761270231193386>
- Rastogi, A., Pati, S. P., Krishnan, T. N., & Krishnan, S. (2018). Causes, Contingencies, and Consequences of Disengagement at Work: An Integrative Literature review. *Human Resource Development Review*, 17(1), 62–94. <https://doi.org/10.1177/1534484317754160>
- Reynaert, M. W. C. (2010). Character confusion versus focus word-based correction of spelling and OCR variants in corpora. *International Journal on Document Analysis and Recognition (IJ DAR)*, 14(2), 173–187. <https://doi.org/10.1007/s10032-010-0133-5>
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students*. Financial Times/Prentice Hall.
- Schabram, K. F., Myers, C. G., & Hardin, A. E. (2024). Manipulation in Organizational Research: on executing and interpreting designs from treatments to primes. *Organizational Research Methods*. <https://doi.org/10.1177/10944281241300952>
- Schulz-Knappe, C., Koch, T., & Beckert, J. (2019). The importance of communicating change. *Corporate Communications an International Journal*, 24(4), 670–685. <https://doi.org/10.1108/ccij-04-2019-0039>
- Schulz, A., & Wiersema, M. F. (2018). The impact of earnings expectations on corporate downsizing. *Strategic Management Journal*, 39(10), 2691–2702. <https://doi.org/10.1002/smj.2925>

- Serenko, A., Abubakar, A. M., & Bontis, N. (2023). Understanding the drivers of organizational business performance from the human capital perspective. *Knowledge and Process Management*, 31(1), 48–59. <https://doi.org/10.1002/kpm.1763>
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and Quasi-Experimental designs for generalized causal inference*.
- Sitlington, H., & Marshall, V. (2011). Do downsizing decisions affect organisational knowledge and performance? *Management Decision*, 49(1), 116–129. <https://doi.org/10.1108/00251741111094473>
- Sonenshein, S., & Dholakia, U. (2012). Explaining Employee Engagement with Strategic Change Implementation: A Meaning-Making Approach. *Organization Science*, 23(1), 1–23. <https://doi.org/10.1287/orsc.1110.0651>
- Southwest Newsroom. (2025, February 17). Retrieved May 8, 2025, from <https://www.swamedia.com/news-and-stories/news-release/message-from-southwest-ceo-and-president-bob-jordan-to-employees-tranthe-way-we-MCXKCIDAR7BJDVBOUKJ4WDU3XPRU>
- Stensaker, I., Falkenberg, J., & Grønhaug, K. (2008). Implementation activities and organizational sensemaking. *The Journal of Applied Behavioral Science*, 44(2), 162–185. <https://doi.org/10.1177/0021886307313794>
- Stone, J., & Cooper, J. (2001). A Self-Standards model of cognitive dissonance. *Journal of Experimental Social Psychology*, 37(3), 228–243. <https://doi.org/10.1006/jesp.2000.1446>
- Tabachnick, B. G., & Fidell, L. S (2007). *Experimental designs using ANOVA*. DUXBURY.
- Tian, Z., Tang, C., Akram, F., Khan, M. L., & Chuadhry, M. A. (2022). Negative work attitudes and task performance: Mediating role of knowledge hiding and moderating role of servant leadership. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.963696>
- Tourish, D., Paulsen, N., Hobman, E., & Bordia, P. (2004). The downsides of downsizing. *Management Communication Quarterly*, 17(4), 485–516. <https://doi.org/10.1177/0893318903262241>
- Tyron, W. W. (1994). Expectation. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (2nd ed., pp.313-319). San Diego, CA: Academic Press.

- U.S. BUREAU OF LABOR STATISTICS. (2015). Women in the labor force: a databook. In *BLS Reports: Vol. December 2015* (pp. 1–4) [Report]. <https://www.bls.gov>
- Van Ginkel, W. P., & Van Knippenberg, D. (2007). Group information elaboration and group decision making: The role of shared task representations. *Organizational Behavior and Human Decision Processes*, *105*(1), 82–97. <https://doi.org/10.1016/j.obhdp.2007.08.005>
- Vennix, J. a. M. (2019). *Research methodology: an introduction to scientific thinking and practice*.
- Vroom, V. H. (1964). *Work and motivation*. Wiley.
- Walton, J., & Gilbert, S. B. (2021). Evaluating the effect of displaying team vs. individual metrics on team performance. *International Journal of Human-Computer Studies*, *160*, 102759. <https://doi.org/10.1016/j.ijhcs.2021.102759>
- Weick, K. E. (1995). *Sensemaking in organizations*. SAGE.

Appendices

Appendix 1: Questionnaire during experiment

The expectations were developed using a vignette, in order to confirm whether the participants did in fact develop the suggested expectations, the question what the individuals' expectation is, was asked via a questionnaire, as a questionnaire is the justified research method to collect personal data about an experimental group (Vennix, 2019). The individual performance is also measured via a questionnaire, where participants were asked to rate their self-performance in both rounds, as self-performance is a supported process evaluation strategy (Vennix, 2019). The questions asked before starting the second round are the following:

- How would you rate your individual performance in the previous round?
- What do you expect that the impact of the downsizing will be on your individual performance in the next round compared to the last round?
- What do you expect that the impact of the downsizing will be on the performance of your team in the next round compared to the last round?

As the experiment concerns Dutch speaking participants, the questions were asked in Dutch:

- Hoe beoordeel je jouw individuele prestatie in de vorige ronde?
- Wat verwacht je dat de invloed van het downsizen is op je individuele prestatie in de volgende ronde t.o.v. de afgelopen ronde?
- Wat verwacht je dat de invloed van het downsizen is op de prestatie van je team in de volgende ronde t.o.v. de afgelopen ronde?

The questions are answered using a Likert scale, rating from 1 (very poor/zeer slecht) to 7 (very good/zeer goed) for the first question. For the comparison questions, the Likert scale will also range from 1 (greatly worsened/zeer verslechterd) to 7 (greatly improved/zeer verbeterd). The 7-point Likert scale is used because it is an easy to use, clear quantitative distinction (Vennix, 2019), which has high reliability, validity, discriminating power and is preferred by respondents (Preston & Colman, 2000).

Appendix 2: Calculation SBF scores

In this appendix the calculations for the SBF scores – used to determine the difficulty of the anagrams – is explained.

This SBF is “a convenient measure of how well a letter string conforms to the common spelling patterns [...]. The SBF of a letter string is the sum of the frequencies of its successive bigrams. A five-letter word, for example, has four successive bigrams, in positions one and two, two and three, three and four, and four and five.” (Novick & Sherman, 2004, p.397). The bigrams are compared to all existing Dutch 5-letter words in the SUBTLEX-NL document, giving a unique SBF score to all different anagrams. The SBF score is calculated in 4 different steps, based on studies by Gilhooly and Johnson (1978) and Mendelsohn and O’Brien (1974). Firstly, all possible permutations are given for a word (For “nooit”, it could be “toino”, “nitoo”, “tooni” etc.). As a second step, for every word, the bigrams are created (e.g. for “nooit”, it is “no”, “oo”, “oi”, and “it”). The third step is to count how many times the different bigrams are present in the 5 letter words of the entire dataset SUBTLEX-NL (e.g. how many times “no” and “oo” are present). As a fourth step, the frequencies of all different bigrams of the word are added, giving the total SBF score (e.g. “no” = 276 + “oo” = 450 + “oi” = 82 + “it” = 330 = 1138). As a final step, to standardize the SBF, the number is divided by the total number of bigrams in the document for all 5 letter words, being 76,048 (19,012 words, with all 4 bigrams) (e.g. for “nooit”: $1138/76048 = 0.01496$). The higher the SBF, the easier the solution word is (Novick & Sherman, 2004). For the calculation of the different values ChatGPT was used.¹ After the calculation by ChatGPT, the values were manually controlled, after which no mistakes were found.

¹ Prompt for ChatGPT: “Zou je een .xlsx bestand willen maken met alle mogelijke, juiste en onjuiste permutaties voor de volgende 30 woorden [...], maak 1 groot bestand met 30 pagina’s en geef op elk tabblad alle mogelijke permutaties van het woord en de SBF score per woord, gebaseerd op het bestand ‘SUBTLEX-NL’”.

Appendix 3: List of anagrams and words

In this appendix the different Dutch words that are used in the experiment are given. All 30 words do not have an existing anagram in the Dutch language, meaning that the developed – non-existing – anagrams of these 30 words will only have one solution. Next to the words, the SBF scores can be found, indicating the difficulty of the solution, the higher the score, the easier the solution (Novick & Sherman, 2004). Furthermore, the number of letter moves can be found, more letter moves indicates a more difficult anagram. Finally, the difficulty of the anagram can be found, split into easy, medium, and hard. This list can be found in table 9.

Table 9: Overview anagrams, including solution, SBF-score, Letter moves, and difficulty

Anagram	Word	SBF-score	Letter moves	Difficulty
helan	Halen	0,03888	2	Easy
weran	Waren	0,03797	2	Easy
wteen	Weten	0,03229	2	Easy
geten	Tegen	0,03202	2	Easy
lales	Alles	0,03015	2	Easy
denk	Denkt	0,02711	2	Easy
gertu	Terug	0,02701	2	Easy
moken	Komen	0,02674	2	Easy
zerek	Zeker	0,02596	2	Easy
holal	Hallo	0,02575	2	Easy
astat	Staat	0,02568	3	Medium
moste	Moest	0,02413	3	Medium
garag	Graag	0,02049	3	Medium
matak	Maakt	0,02007	3	Medium
varag	Vraag	0,01908	3	Medium
dchat	Dacht	0,01566	3	Medium
domat	Omdat	0,01516	3	Medium
tooni	Nooit	0,01496	3	Medium
zalos	Zoals	0,01453	3	Medium
wchat	Wacht	0,01420	3	Medium
zlesf	Zelfs	0,01419	4	Hard
yrors	Sorry	0,01302	4	Hard
wvoru	Vrouw	0,01275	4	Hard
jklit	lijkt	0,01237	4	Hard
bflij	Blijf	0,01236	4	Hard
uhist	Thuis	0,01182	4	Hard
kgrij	Krijg	0,01177	4	Hard
wtord	Wordt	0,01165	4	Hard
dothu	Houdt	0,00985	4	Hard
pijst	Spijt	0,00776	4	Hard

The anagrams are split into 2 groups of 15, with 5 from each difficulty. One group of anagrams is used before the downsizing intervention, and one is used after the downsizing intervention. The words are placed in random order, to ensure that no patterns can be discovered by the participants. The 2 lists are as follows:

- | | |
|-----------|-----------|
| 1. Zlesf | 1. Wtord |
| 2. Lales | 2. Dentk |
| 3. Garag | 3. Uhist |
| 4. Kgrij | 4. Moken |
| 5. Helan | 5. Jklit |
| 6. Wvoru | 6. Matak |
| 7. Zerek | 7. Geten |
| 8. Domat | 8. Varag |
| 9. Tooni | 9. Wchat |
| 10. Wteen | 10. Pijst |
| 11. Zalos | 11. Holal |
| 12. Dothu | 12. Dchat |
| 13. Astat | 13. Yrors |
| 14. Gertu | 14. Weran |
| 15. Bflij | 15. Moste |

Appendix 4: Introductory text and vignettes

Before the experiment, the participants will receive an introductory text. This introductory text will be as follows:

You are invited to participate in a team-based research experiment that investigates how individuals and teams perform in changing work conditions. The expected duration of the experiment will be 10 minutes. During this experiment, you will work with others to solve word puzzles (anagrams; e.g. TEFHE to HEEFT). In the first round, your team of 5 members will receive 15 anagrams, you are asked to work together with the goal to solve these as fast as possible; there will only be one correct solution to each anagram. After the first round, your team size will be reduced as part of the experiment, and you will receive a new text to prepare you for the second round. There is a maximum time to complete the anagrams of 3 minutes and 45 seconds per round. In addition, a short questionnaire will be administered after both rounds. Participation is completely voluntary, and you may withdraw at any time without any consequences. All data will be collected anonymously and treated confidentially in accordance with academic ethical standards. If you have any questions during the experiment, please feel free to ask the researcher.

As the experiment is conducted in Dutch, the introductory text needs to be translated into Dutch, giving the following text:

Je wordt uitgenodigd om deel te nemen aan een experiment in teamverband dat onderzoekt hoe individuen en teams presteren onder veranderende werkomstandigheden. De verwachte duur van het experiment is ongeveer 10 minuten. Tijdens dit experiment werk je samen met anderen om woordpuzzels (anagrammen; bijvoorbeeld TEFHE naar HEEFT) op te lossen. Er zijn in totaal 2 rondes. In de eerste ronde ontvangt jouw team van 5 leden, 15 anagrammen. Het is de bedoeling om samen te werken met als doel deze puzzels zo snel mogelijk op te lossen; elk anagram heeft slechts één correcte oplossing. Na de eerste ronde zal de grootte van je team afnemen als onderdeel van het experiment en zal je een nieuwe tekst krijgen om je voor te bereiden op de tweede ronde. Er is een maximale tijd om de anagrammen op te lossen van 3 minuten en 45 seconden per ronde. Bovendien zal er zowel na de eerste ronde, als na de tweede ronde, een korte enquête worden gehouden. Deelname is volledig vrijwillig en je mag op elk moment stoppen zonder gevolgen. Alle gegevens worden anoniem verzameld en vertrouwelijk behandeld, in overeenstemming met academische ethische richtlijnen. Als je tijdens het experiment vragen hebt, aarzel dan niet om de onderzoeker aan te spreken.

After the introductory text, the first round is played. After the first round, the downsizing is implemented, meaning that 1, 2, or 3 team members will randomly be removed. After this downsizing, the different vignettes for the experiment are given to the remaining participants to shape the expectations of individuals. The different vignettes are written by ChatGPT².

The negative vignette will be:

While browsing the news, you come across a press release from your firm, announcing an immediate restructuring initiative that includes significant downsizing across multiple departments. You have not received any prior internal communication about this change. The press release uses vague and general language, referring to “global efficiency measures” and “streamlining operations,” but offers no clear explanation of the reason behind the layoffs or what it means for you as an employee. There is no mention of support, guidance, or a timeline for those affected. You recall that during the last downsizing, communication was also minimal and unclear. Many employees were caught off guard, and support was limited. The situation led to confusion, low morale, and lasting frustration within teams. Importantly, that previous downsizing initiative did not result in any noticeable improvements in performance, turnover, or profitability. The way this announcement was made leaves you feeling unsettled, uninformed, and unsure of what to expect next.

The neutral vignette will be:

You receive an email from the HR department informing you that the firm will begin a downsizing process in the coming weeks. This adjustment is part of an effort to align staffing levels with updated operational planning and projected market conditions. The decision has been made following a routine internal review and is focused on ensuring long-term business continuity and efficiency. You recall that similar downsizing initiatives have taken place in the past. These were implemented in a structured manner and proceeded without major issues or notable outcomes – neither particularly negative nor positive. Further information regarding department-level changes will be shared in the near future. At this stage, no additional details

² "Please create three experimental vignettes (positive, neutral, and negative) about a company announcing a downsizing initiative. Each vignette should be written as a short, realistic message directly received by the participant (e.g., from a CEO or HR department), and should be written as if the participant is personally experiencing it. The positive vignette should include open communication, positive framing, and reference to successful past initiatives. The negative vignette should include poor communication, vague or impersonal framing, and reference to failed or poorly handled past events. The neutral vignette should be balanced and factual, without emotional or evaluative language. Write each vignette in one paragraph."

about individual impact or next steps are available. We ask for your understanding and patience as we move through this process.

The positive vignette will be:

You receive a direct message from the CEO, informing that in the coming weeks, the firm will start a small-scale downsizing project to align our workforce with the company's new strategic focus on operational performance and staying ahead in a fast-changing market. While this news may raise concerns, the CEO emphasizes that the decision was made with care and full transparency. He refers to the last restructuring two years ago, which led to significant improvements in productivity and profitability, and gave both exiting and remaining employees valuable opportunities for personal and professional growth. The CEO ends by expressing strong belief in the team's ability to adapt and thrive, stating: *"We've done this before and we'll do it again, together."*

As the experiment is conducted in Dutch, the different vignettes are translated into Dutch, giving the following vignettes:

The negative vignette:

Terwijl je het nieuws aan het lezen bent, kom je een persbericht tegen van jouw bedrijf waarin een onmiddellijke reorganisatie wordt aangekondigd, met aanzienlijke downsizing in meerdere afdelingen. Je hebt vooraf geen enkele interne communicatie over deze verandering ontvangen. Het persbericht gebruikt vage en algemene bewoordingen zoals "wereldwijde efficiëntiemaatregelen" en "optimalisatie van operaties," maar geeft geen duidelijke uitleg over de reden achter de ontslagen of wat het voor jou als medewerker betekent. Er wordt niets vermeld over ondersteuning, begeleiding of een tijdslijn voor de betrokkenen. Je herinnert je dat tijdens de vorige reorganisatie de communicatie ook minimaal en onduidelijk was. Veel medewerkers werden overvallen door het nieuws en er was weinig ondersteuning. De situatie leidde tot verwarring, een laag moreel en blijvende frustratie binnen teams. Bovendien leverde de vorige reorganisatie geen merkbare verbeteringen op in prestaties, personeelsverloop of winstgevendheid. De manier waarop deze aankondiging is gedaan, laat je onrustig, slecht geïnformeerd en onzeker achter over wat je kunt verwachten.

The neutral vignette:

Je ontvangt een e-mail van de HR-afdeling waarin je wordt geïnformeerd dat het bedrijf in de komende weken zal starten met downsizen. Deze aanpassing is onderdeel van een poging om

het personeelsbestand beter af te stemmen op de actuele planning en de verwachte marktomstandigheden. Het besluit is genomen na een routinematige interne evaluatie en is gericht op het waarborgen van de continuïteit en efficiëntie van de organisatie op de lange termijn. Je herinnert je dat er in het verleden soortgelijke reorganisaties zijn geweest. Deze werden op een gestructureerde manier uitgevoerd en verliepen zonder grote problemen, maar ook zonder opvallende resultaten – niet negatief, niet bijzonder positief. Verdere informatie over wijzigingen op afdelingsniveau zullen binnenkort worden gedeeld. Op dit moment zijn er nog geen verdere details beschikbaar over de impact op individuen of de vervolgstappen van dit proces. We vragen om je begrip en geduld terwijl we dit proces doorlopen.

The positive vignette:

Je ontvangt een rechtstreeks bericht van de CEO, waarin hij je informeert dat het bedrijf in de komende weken zal starten met een downsizing project om het personeelsbestand beter af te stemmen op de nieuwe strategische focus: het verbeteren van de operationele prestaties en het voortblijven in een snel veranderende markt. Hoewel dit nieuws mogelijk zorgen oproept, benadrukt de CEO dat het besluit met zorg en volledige transparantie is genomen. Hij verwijst naar de vorige reorganisatie van twee jaar geleden, die toen leidde tot aanzienlijke verbeteringen in productiviteit en winstgevendheid, waarbij bovendien zowel vertrekkende als blijvende medewerkers waardevolle kansen kregen voor persoonlijke en professionele ontwikkeling. De CEO sluit af met een sterk vertrouwen in het vermogen van het team om zich aan te passen en te groeien, en zegt: *"We hebben dit eerder gedaan en we zullen het opnieuw doen, samen."*

Appendix 5: Questionnaire after experiment

After completion of the experiment, firstly the self-evaluation is asked, in order to rate the individual's performance. This question is asked as self-performance is a supported process evaluation strategy (Vennix, 2019):

- How would you rate your individual performance in the previous round?

After this question, a manipulation check is conducted. This manipulation check is conducted in order to verify whether the vignettes successfully shaped the participants' expectations about the effects of downsizing on individual and team performance. The purpose of this check is to confirm that the expectations about performance after downsizing were in line with the intended conditions (positive, neutral, or negative). Via this check, the internal validity of the experiment is improved.

For this manipulation check, the following questions are asked:

- What do you think is the overall effect of downsizing on an individual's performance?
- What do you think is the overall effect of downsizing on a team's performance?

For the manipulation checks, there will be 3 options given: Negative (decrease performance), neutral (no change/no expectations) or positive (improving performance). Based on those questions it can be verified whether the participants indeed had the expectations in line with their vignette.

Apart from this manipulation check, this questionnaire will also ask demographic questions to find out whether these factors might explain potential performance differences (Memon et al., 2024). For the demographic questions, the questions used are based on the demographic questions in Qualtrics, a verified questionnaire program, supplied by Radboud University. The questions supplied by Qualtrics are standardised and are the following:

- What is your gender?
- What is your age?
- What is your highest completed education?
- What is the best description of your employment status?

Apart from the 4 demographics questions from Qualtrics, There are also 2 questions related to work experience and downsizing experience. This was done in order to minimize the possibility

of biased results, and in order to give a complete overview of possible explaining factors (Memon et al., 2024):

- How many years of working experience do you have?
- Have you ever experienced organizational downsizing?

Overall, 8 questions are asked post-experiment. As the experiment is in Dutch, those questions are translated into Dutch. The following questions are asked to every participant:

- Hoe omschrijft u uzelf? (Man/Vrouw/Non-Binair/Derde geslacht/Anders/Ik zeg dat liever niet)
- Wat is uw leeftijd? (<18, 18-24, 25-34, 35-44, 45-54, 55-64, >65)
- Wat is het hoogste opleidingsniveau dat u heeft afgerond? (Basisonderwijs, niet afgerond/Basisonderwijs, afgerond/Middelbaar onderwijs, niet afgerond/Middelbaar onderwijs, afgerond/Beroepsonderwijs of vergelijkbaar/Hoger onderwijs, geen diploma/Bachelorsdiploma/Universitair diploma/Ik antwoord liever niet)
- Wat is de beste omschrijving van uw werksituatie? (fulltime/parttime/werkloos of werkzoekend/huisman of huisvrouw/student/gepensioneerd/overig)
- Hoeveel jaren werkervaring heeft u (<1, 1-3, 4-6, 7-9, 10-14, 15-20)
- Heeft u in het verleden ervaring gehad met downsizing? (Nee/Ja, als blijvende medewerker/Ja, als vertrokken medewerker/Anders)
- Hoe beoordeelt u uw individuele prestatie in de vorige ronde?

The following questions were only asked to the participants who participated in round 2, this was done as a potential manipulation check afterwards:

- Wat denkt u dat het algemene effect is van downsizen op de prestatie van een individu?
- Wat denkt u dat het algemene effect is van downsizen op de prestatie van een team?

Appendix 6: Assumptions Regression analysis

As MRA is used, the following assumptions need to be tested: normality, homoscedasticity, linearity, multicollinearity, and independence of errors (Hair et al., 2021).

In figure 3 and 4 the Normal P-P Plot and the Scatterplot can be found, confirming that the assumption for normality is met, as the P-P plot shows a straight diagonal line, whereby the residuals closely follow this diagonal (Hair et al., 2021). This can also be confirmed by the kurtosis and skewness both being between -3 and 3, as can be seen in table 10 (Hair et al., 2021). No signs of heteroscedasticity were detected based on the different scatterplots, meaning that the assumption of homoscedasticity is met (Hair et al., 2021). Furthermore, linearity was met, as there were no patterns visible in the scatterplots (Hair et al., 2021).

In figure 5, The Durbin-Watson statistics indicated independence of errors for all models, as they all fall between the thresholds of 1 and 3 (Field, 2017). To reduce the multicollinearity between the independent variable and the squared independent variable, Downsizing Level is mean centred (Hair et al., 2021). After this mean centring, the largest Variance Inflation Factor (VIF) was 1.344, which is well below the threshold of 10, and even below the more conservative threshold of 5, this finding suggests that multicollinearity is not an issue, as can be seen in table 11 (Hair et al., 2021). Finally, the data is tested for outliers, this is done using Cook's Distance. The maximum value was .055, which is far below the threshold of 1 (Field, 2017). This means that all assumptions are met, and the data is suitable for analysis.

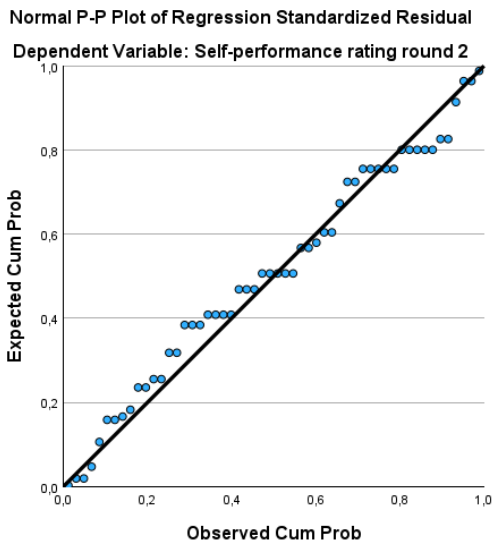


Figure 3: Normal P-P Plot

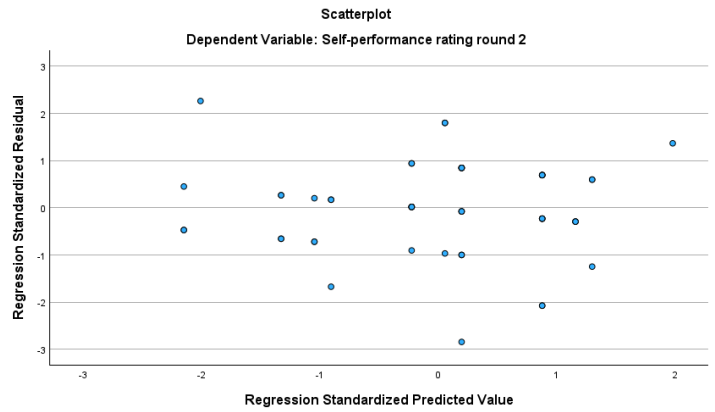


Figure 4: Scatterplot

Table 10: Kurtosis/Skewness test

Variable	N	Min	Max	Mean	SD	Skewness	Kurtosis
Individual performance round 1	90	3.000	7.000	5.311	0.956	-0.271	-0.229
Individual performance round 2	54	2.000	7.000	5.037	1.018	-0.355	0.241
Team performance round 1	90	46.000	151.000	81.555	27.348	0.980	0.426
Team performance round 2	54	42.000	212.000	87.074	45.170	1.849	1.074
Downsizing level	90	-1.000	1.000	0.000	.821	0.000	-1.517
Downsizing level squared	90	0.000	1.000	0.667	0.474	-0.719	-1.517

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,226 ^a	,051	-,006	1,084	1,845

Figure 5: Durbin-Watson test

Table 11: Assessing multicollinearity

Variable	Tolerance	VIF
Individual performance round 1	0.921	1.188
Individual performance round 2	0.905	1.105
Team performance round 1	0.744	1.344
Team performance round 2	0.890	1.124
Downsizing level	0.837	1.195
Downsizing level squared	0.950	1.052

Appendix 7: Robustness checks

In this appendix, the different robustness checks can be found. Firstly, the models are run with the control variable Age instead of Working Experience, these results can be found in table 12 for individual performance, and in table 13 for team performance. After that, downsizing level is tested using dummy variables instead of the overall mean-centred linear (Downsizing level) and quadratic (downsizing level squared) terms. The dummy variables transformed downsizing into 3 dummies, whereby dummies were created for the small, medium and big downsizing level. These results can be found in table 14 for individual performance and in table 15 for team performance.

Table 12: Results robustness check with Age on individual performance

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
1 Constant	4.302 (0.884) [< 0.011]	3.160 (1.145) [0.008]	3.176 (1.157) [0.009]	2.603 (1.131) [0.026]	2.348 (1.137) [0.045]	3.148 (1.169) [0.010]	3.610 (1.161) [0.003]
2 Individual performance baselevel		0.194 (0.167) [0.175]	0.207 (0.180) [0.179]	0.165 (0.174) [0.266]	0.175 (0.173) [0.237]	0.197 (0.185) [0.212]	0.223 (0.181) [0.152]
3 Downsizing level		-0.121 (0.191) [0.391]	-0.129 (0.197) [0.378]	-0.144 (0.188) [0.302]	-0.260 (0.215) [0.106]	-0.118 (0.202) [0.428]	-0.152 (0.235) [0.384]
4 Downsizing level squared			-0.038 (0.345) [0.803]	0.005 (0.332) [0.974]	0.023 (0.385) [0.893]	-0.036 (0.348) [0.816]	-0.220 (0.402) [0.222]
5 Gender		0.182 (0.342) [0.113]	0.139 (0.352) [0.349]	0.098 (0.339) [0.492]	0.083 (0.339) [0.559]	0.121 (0.371) [0.440]	0.090 (0.363) [0.555]
6 Education		0.247 (0.121) [0.113]	0.258 (0.124) [0.106]	0.255 (0.125) [0.115]	0.345 (0.122) [0.031]	0.263 (0.127) [0.110]	0.695 (0.125) [0.095]
7 Employment status		-0.186 (0.264) [0.210]	-0.226 (0.266) [0.132]	-0.227 (0.269) [0.136]	-0.176 (0.260) [0.228]	-0.212 (0.279) [0.176]	-0.306 (0.287) [0.061]
8 Age		0.102 (0.139) [0.530]	0.137 (0.141) [0.408]	0.137 (0.142) [0.413]	0.209 (0.139) [0.201]	0.147 (0.145) [0.389]	0.104 (0.145) [0.540]
9 Experience with downsizing		0.077 (0.216) [0.530]	0.039 (0.220) [0.790]	0.029 (0.231) [0.851]	0.059 (0.221) [0.686]	0.055 (0.251) [0.744]	0.043 (0.247) [0.793]
10 Positive expectations				0.315 (0.325) [0.025]	0.405 (0.518) [0.069]		
11 Interaction Downsizing level with Positive expectations					0.253 (0.439) [0.134]		
12 Interaction Downsizing level squared with Positive expectations					-0.038 (0.662) [0.870]		
13 Negative Expectations						-0.065 (0.409) [0.684]	-0.428 (0.596) [0.071]
14 Interaction Downsizing level with Negative expectations							-0.055 (0.477) [0.731]
15 Interaction Downsizing level squared with Negative expectations							0.503 (0.765) [0.042]
N	53	53	53	53	53	53	53
DF	48	46	45	44	42	44	42
Adjusted R-square	0.031	0.044	0.024	0.111	0.121	0.006	0.060
F-statistic	1.342	1.347	1.162	1.732	1.666	1.033	1.306
Significance	0.263	0.251	0.342	0.110	0.116	0.430	0.255

Note. Regression results on individual performance as dependent variable.

The different variables are shown with the standardized coefficients β , the standard deviation in parentheses () and the significance in square brackets []. For the constant, unstandardized coefficients B are reported.

Table 13: Results robustness check with Age on team performance

	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
1 Constant	59.982 (35.919) [0.1191]	46.858 (38.791) [0.1361]	50.180 (40.991) [0.2271]	82.604 (43.799) [0.0661]	91.262 (42.843) [0.0391]	63.969 (41.208) [0.1281]	61.209 (40.796) [0.1411]
2 Team performance baselevel	0.211 (0.218) [0.1101]	0.211 (0.218) [0.1101]	0.208 (0.231) [0.1201]	0.147 (0.233) [0.2721]	0.166 (0.227) [0.2061]	0.179 (0.229) [0.1761]	0.087 (0.234) [0.5151]
3 Downsizing level	0.342 (7.208) [0.0101]	0.342 (7.208) [0.0101]	0.336 (7.393) [0.0131]	0.355 (7.238) [0.0081]	0.477 (8.016) [0.0021]	0.306 (7.342) [0.0221]	0.192 (8.422) [0.2021]
4 Downsizing level squared			-0.035 (12.154) [0.7841]	-0.061 (11.931) [0.6311]	-0.125 (13.746) [0.3951]	-0.033 (11.950) [0.7961]	0.027 (13.618) [0.8511]
5 Gender	-0.207 (13.896) [0.1141]	-0.198 (13.054) [0.1361]	-0.201 (13.233) [0.1351]	-0.156 (13.148) [0.2421]	-0.150 (12.811) [0.2481]	-0.128 (13.784) [0.3571]	-0.071 (13.472) [0.6021]
6 Education	-0.075 (4.923) [0.6181]	-0.149 (4.627) [0.2911]	-0.151 (4.680) [0.2911]	-0.211 (4.694) [0.1441]	-0.221 (4.560) [0.1171]	-0.176 (4.629) [0.2151]	-0.158 (4.479) [0.2491]
7 Employment status	0.039 (10.716) [0.7871]	0.098 (10.019) [0.4661]	0.099 (10.125) [0.4651]	0.055 (10.042) [0.6801]	0.005 (9.920) [0.9701]	0.051 (10.211) [0.7101]	0.052 (10.395) [0.7061]
8 Age	0.228 (5.634) [0.1521]	0.129 (5.290) [0.3831]	0.129 (5.344) [0.3881]	0.078 (5.311) [0.5991]	0.136 (5.248) [0.3551]	0.096 (5.307) [0.5191]	0.173 (5.238) [0.2421]
9 Experience with downsizing	0.230 (8.785) [0.1041]	0.180 (8.174) [0.1711]	0.174 (8.373) [0.1971]	0.169 (8.169) [0.1971]	0.119 (8.138) [0.3611]	0.101 (8.720) [0.4691]	0.085 (8.410) [0.5241]
10 Positive expectations			-0.232 (12.796) [0.0771]	-0.409 (19.657) [0.0441]			
11 Interaction Downsizing level with Positive expectations					-0.276 (16.480) [0.0711]		
12 Interaction Downsizing level squared with Positive expectations					0.152 (24.794) [0.4651]		
13 Negative expectations						0.221 (14.877) [0.1171]	0.451 (21.673) [0.0311]
14 Interaction Downsizing level with Negative expectations							0.284 (18.157) [0.0591]
15 Interaction Downsizing level squared with Negative expectations							-0.284 (27.508) [0.1771]
N	53	53	53	53	53	53	53
DF	48	46	45	44	42	44	42
Adjusted R-square	0.085	0.230	0.214	0.252	0.295	0.241	0.299
F-statistic	1.982	3.264	2.808	2.989	3.020	2.867	3.053
Significance	0.098	0.007	0.013	0.007	0.005	0.009	0.004

Note. Regression results on team performance as dependent variable.

The different variables are shown with the standardized coefficients β , the standard deviation in parentheses () and the significance in square brackets []. For the constant, unstandardized coefficients B are reported.

Table 14: Results robustness check with downsizing dummies on individual performance

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
1 Constant	4.389 (0.916) [<.001]	3.545 (1.158) [0.004]	3.097 (1.128) [0.009]	3.102 (1.123) [0.009]	3.518 (1.172) [0.004]	3.416 (1.135) [0.004]
2 Individual performance baselevel		0.198 (0.183) [0.203]	0.147 (0.177) [0.331]	0.166 (0.177) [0.272]	0.188 (0.188) [0.241]	0.212 (0.183) [0.176]
3 Downsizing level Medium		-0.031 (0.364) [0.846]	-0.083 (0.353) [0.596]	-0.176 (0.406) [0.332]	-0.028 (0.368) [0.865]	0.139 (0.395) [0.430]
4 Downsizing level Big		-0.112 (0.388) [0.462]	-0.117 (0.372) [0.421]	-0.250 (0.432) [0.144]	-0.101 (0.399) [0.517]	-0.139 (0.458) [0.440]
5 Gender		0.168 (0.343) [0.247]	0.140 (0.330) [0.317]	0.118 (0.330) [0.396]	0.154 (0.360) [0.313]	0.107 (0.354) [0.473]
6 Education		0.231 (0.119) [0.130]	0.217 (0.123) [0.169]	0.297 (0.121) [0.059]	0.300 (0.120) [0.056]	0.255 (0.122) [0.105]
7 Employment status		-0.189 (0.269) [0.212]	-0.237 (0.277) [0.130]	-0.179 (0.270) [0.238]	-0.142 (0.271) [0.350]	-0.224 (0.289) [0.169]
8 Working experience		0.071 (0.092) [0.663]	0.057 (0.094) [0.734]	0.137 (0.092) [0.404]	0.070 (0.095) [0.679]	0.067 (0.096) [0.695]
9 Experience with downsizing		0.074 (0.221) [0.616]	0.034 (0.234) [0.828]	0.058 (0.225) [0.697]	0.106 (0.228) [0.485]	0.055 (0.254) [0.743]
10 Positive expectations			0.307 (0.331) [0.031]	0.053 (0.517) [0.809]		
11 Interaction Downsizing level Medium with Positive expectations				0.247 (0.732) [0.257]		
12 Interaction Downsizing level Big squared with Positive expectations				0.295 (0.901) [0.133]		
13 Negative Expectations			-0.442 (0.603) [0.066]		-0.056 (0.414) [0.729]	0.284 (0.667) [0.278]
14 Interaction Downsizing level Medium with Negative expectations			-0.069 (0.470) [0.663]			
15 Interaction Downsizing level Big with Negative expectations			0.522 (0.765) [0.035]			
N	53	53	53	53	53	53
DF	48	45	44	42	44	44
Adjusted R-square	0.027	0.012	0.091	0.104	-0.008	0.056
F-statistic	1.296	1.078	1.591	1.558	0.953	1.288
Significance	0.282	0.395	0.148	0.147	0.491	0.264

Note. Regression results on individual performance as dependent variable.

The different variables are shown with the standardized coefficients β , the standard deviation in parentheses () and the significance in square brackets []. For the constant, unstandardized coefficients B are reported.

Table 15: Results robustness check with downsizing dummies on team performance

	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
1 Constant	67.727 (37.631) [0.078]	34.242 (38.334) [0.376]	63.554 (40.434) [0.123]	56.845 (39.441) [0.157]	50.087 (38.837) [0.204]	65.361 (38.699) [0.099]
2 Team performance baselevel		0.202 (0.235) [0.137]	0.143 (0.235) [0.288]	0.155 (0.229) [0.240]	0.175 (0.232) [0.191]	0.090 (0.239) [0.510]
3 Downsizing level Medium		0.246 (13.089) [0.081]	0.281 (12.862) [0.044]	0.418 (14.408) [0.327]	0.223 (12.914) [0.108]	0.113 (13.837) [0.443]
4 Downsizing level Big		0.377 (14.562) [0.008]	0.390 (14.188) [0.005]	0.529 (16.029) [0.010]	0.340 (14.502) [0.015]	0.241 (16.639) [0.126]
5 Gender		-0.176 (12.895) [0.227]	-0.139 (12.703) [0.280]	-0.123 (12.408) [0.327]	-0.107 (13.330) [0.426]	-0.093 (13.330) [0.773]
6 Education		-0.117 (4.876) [0.431]	-0.179 (4.543) [0.200]	-0.235 (4.530) [0.093]	-0.243 (4.407) [0.076]	-0.201 (4.481) [0.146]
7 Employment status		0.028 (11.040) [0.849]	0.093 (10.299) [0.499]	0.047 (10.193) [0.731]	0.003 (10.093) [0.982]	0.042 (10.372) [0.759]
8 Working experience		0.143 (3.779) [0.376]	0.080 (3.523) [0.592]	0.032 (3.482) [0.892]	0.107 (3.485) [0.473]	0.070 (3.420) [0.629]
9 Experience with downsizing		0.226 (9.060) [0.121]	0.172 (8.516) [0.208]	0.170 (8.286) [0.200]	0.113 (8.313) [0.297]	0.085 (8.596) [0.533]
10 Positive expectations			-0.240 (12.763) [0.067]	0.073 (19.304) [0.708]		
11 Interaction Downsizing level Medium with Positive expectations				-0.340 (27.218) [0.083]		
12 Interaction Downsizing level Big squared with Positive expectations				-0.316 (33.501) [0.072]		
13 Negative Expectations					0.228 (14.907) [0.107]	-0.171 (24.576) [0.458]
14 Interaction Downsizing level Medium with Negative expectations						0.427 (32.892) [0.052]
15 Interaction Downsizing level Big with Negative expectations						0.374 (36.394) [0.086]
N	53	53	53	53	53	53
DF	48	45	44	42	44	44
Adjusted R-square	0.060	0.206	0.248	0.290	0.235	0.279
F-statistic	1.678	2.722	2.947	2.964	2.812	2.867
Significance	0.158	0.015	0.008	0.005	0.011	0.007

Note. Regression results on team performance as dependent variable.

The different variables are shown with the standardized coefficients β , the standard deviation in parentheses () and the significance in square brackets []. For the constant, unstandardized coefficients B are reported.