

## Master Work and Organizational Psychology

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# Fostering conditions for growth and change

Investigating moderation of self-regulation theory and self-efficacy on the JD-R model in the face of organizational change and the effects of change communication framing.

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#### **Abstract**

Organizations change constantly but in order for change to succeed, employees and functions need to be prepared. Poor motivation and attitudes from employees concerning change initiatives can lead to detrimental results. This research consists of two studies, of which the first utilizes the Job Demands-Resources model to seek an answer to the question of what can lead to increased employee work engagement and willingness to change. The relation between three job resources, namely social support, feedback and job control, and work outcomes were studied together with expected moderation effects of two personal resources: regulatory focus (promotion versus prevention focus) and occupational self-efficacy. Results of a hierarchical regression analysis partially supported the fundamental assumptions of the JD-R model as most main effects were significant. With regard to the moderation effects, results found moderation of occupational self-efficacy on relations between social support and work engagement but also between job control and willingness to change. Only a moderation effect of prevention focus was found on the relation between job control and willingness to change. The second study employed a 2 (prevention versus promotion employee focus) x 2 (prevention versus promotion framing of a hypothetical change message) design to determine attitude toward change using the regulatory fit theory. Results found an increased willingness to change for promotionfocused employees who received the promotion scenario. The practical implications and suggestions for further research are discussed.

**Keywords**: Job Demands-Resources model, work engagement, willingness to change, job resources, social support, feedback, job control, regulatory focus, promotion-focus, prevention-focus, occupational self-efficacy, regulatory fit.

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# Introduction

## 1.1 Overview

Organisations change to keep up with changing demands, to protect their assets or to be innovative. All these alterations have a significant effect on employees who, with every additional change, face an even greater amount of strain (Vakola & Nikolaou, 2005). Conversely, there are sources of motivation for employees coming from their work. It is these sources of motivation, the job resources, which can provide the energy to facilitate change. But how do you foster a willingness to change under employees? What is the role of these job resources in the health process and in an organizational change context?

To answer these questions the Job Demands-Resources (JD-R) model has been used to examine the job resources of employees and their effects on work engagement (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004). Included as another work outcome in the JD-R model is willingness to change. By including personal resources of employees, related to self-regulatory and motivational theories into this model, the present paper takes into account the individual perspective on the study of change. This means that both environmental characteristics and personal characteristics are included to determine whether changes in the work itself or individual differences between employees lead to improved coping with change.

This research seeks to analyse the wellbeing of employees, as defined by the JD-R model, and their willingness to change in an organizational change context. This will be done by investigating and confirming the researched relations in the JD-R model between job characteristics, personal resources and work outcomes. Additionally, change communications and their congruence with an individual's motivational tendency will be explored through regulatory fit theory.

#### **1.1.1.** Motive

Many employees face changes in their organisation on a continuous basis. This is often an unavoidable circumstance due to the rapidly changing environment in which an organisation operates and the desire to maintain competitive advantage. However, not many organisations realize the psychological impact these changes have on the functioning of their personnel. Employees can be a source of competitive advantage as the resource-based view states (Boselie, 2010). Still, their success as a source of competitive advantage is contingent on the

way they function in their job.

Many models aim to measure the effects of workplace characteristics on employee wellbeing (Karasek, 1979; Demerouti, Bakker, Nachreiner & Schaufeli, 2001; Van der Doef & Maes, 1999). Not surprisingly since job stress has become a major issue in especially western society due to the adjustment of work and functions. A 2000 European Working Conditions Survey discovered job stress to be the second highest health problem related to work (Eurofound, 2012). Throwing organizational change initiatives into this mix creates a dangerous combination. When employees are stressed, uncertain in their function and unmotivated then organizations have a problem on their hands. This means organizations need to stimulate wellbeing, personal development and positive attitudes to mitigate this problem, but how? Determining which work and personal characteristics foster wellbeing and willingness to change can prevent the dangers of stress and uncertainty from occurring. Because organizations cannot stop evolving, defining the critical motivational processes are therefore of a high priority.

## 1.2 The Job Demands-Resources Model

The Job Demands-Resources (JD-R) model, developed by Demerouti, Bakker, Nachreiner and Schaufeli in 2001 and further advanced by Schaufeli and Bakker in 2004, is one of the most researched models tackling the issue of job-related stress and employee motivation. The latter is the focus of this research, as the motivational aspects of work give rise to healthy and confident workers. Employing a comprehensive structure that is easily applicable to many occupational settings, the JD-R model takes into account the job characteristics of an employee and its effects on wellbeing and motivation. Besides focusing on employee wellbeing, the JD-R model can also be applied in different types of circumstances, such as in an organizational change context. The JD-R model's links with employees' motivation and energy make it a valuable instrument for such situations.

The foundation of the JD-R model are the job characteristics, the inherent features of a job, which can be split into two types: job resources and job demands (Bakker & Demerouti, 2007; Bakker, Demerouti, & Schaufeli, 2003; Schaufeli & Bakker, 2004). Job resources are those features of a job that give energy and facilitate wellbeing by reducing the adverse role of job demands, inspiring development and promoting learning (Bakker & Demerouti, 2007). Job demands are those features of a job that drain energy and strain an individual. Job demands create a negative impulse by requiring high levels of psychological or physical activity (Demerouti *et al.*, 2001). However, many articles point toward the fixed nature of job demands

and the inability to reduce them (van den Tooren & de Jonge, 2011). Because of this it can be stated that job demands are less useful when focusing on motivational effects and facilitating organizational change. Job resources provide stress-buffering effects and are directly related to energy and motivational effects as well as change constructs. Therefore it was decided for this research to only focus on job resources and the motivational process.

#### 1.2.1 The Motivational Process

The motivational process consists of the job characteristics that provide increased energy for employees and leads to beneficial results. It has several outcomes, such as work engagement, commitment or improved performance, that are facilitated by job resources through the high expenditure of energy (Demerouti et al., 2001). Thus when an employee enjoys many job resources, he is also more able to spend energy at work leading to positive outcomes (Bakker & Demerouti, 2008). One of the most important outcomes in the JD-R model is work engagement. Work engagement is defined by Schaufeli and Bakker (2004) as a positive frame of mind that aids in being fully and freely immersed in work. Three components of work engagement can be identified: vigor, absorption and dedication (Schaufeli & Bakker, 2004). Vigor is the dimension that translates to the great amount of energy and drive that a person can have (Schaufeli & Bakker, 2004). Absorption is the second component of work engagement and is all about being fully enveloped by work in a healthy way (Schaufeli & Bakker, 2004). Dedication, finally, is illustrated as being strongly committed to your work. Together, these three components form the construct of work engagement. As part of the motivational process, it is a positive result from high levels of job resources at work and the ability to cope with great amounts of difficulties without it having a negative effect on health.

#### 1.2.2 Job Resources

Job resources are the facilitators in the motivational process of the JD-R model. Bakker and Demerouti (2007) describe job resources as aspects of work that reduce the negative effects of job demands and promote learning or personal development. The following job resources were selected: job control, feedback and social support.

Job control is a construct that many studies have included in their research utilizing alternative models to the JD-R model, such as Karasek's demand-control model, the job characteristics model and the job design theory of stress (Karasek, 1979; Hackman & Oldham, 1974; Bond & Bunce, 2001). From these models and their related research it is shown that when people feel they have control over their work it will improve negative stress-related

outcomes. For this reason the construct of job control was chosen as a job resource and is expected to have a positive relation to work engagement. Bond and Bunce (2001) have studied job control in relation to organizational change and occupational health and have found significant positive relations. For their study, Bond and Bunce (2001) used a participative action research approach that was aimed at restructuring work processes. They showed that active collaboration on the achievement of change goals and also on the influence that the change has on their work improved employees' mental health and self-rated performance (Bond & Bunce, 2001).

Feedback is the second job resource that was measured for this research and focuses on feedback from the function (Hackman & Oldham, 1974). This is defined by Hackman & Oldham (1974) as: "The degree to which carrying out the work activities required by the job results in the employee obtaining correct and clear information about the effectiveness of his or her performance." The relation between feedback and work engagement was clarified by Schaufeli and Bakker in 2004. They hypothesized that appropriate feedback leads to learning, which is one of the characteristics of the motivational process and an effect of work engagement (especially with the absorption component; Bakker & Geurts, 2004) (Schaufeli & Bakker, 2004). Other studies including feedback as a job resource in the JD-R model expect this relation as well (Petrou & Demerouti, 2010; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Bakker & Geurts, 2004). Therefore the relation between feedback and work engagement is expected to be positive.

Social support is one of the most well documented job characteristics in the JD-R model and its link with job stress has been found repeatedly (Haines, Hurlbert, & Zimmer, 1991; Bakker, Demerouti, & Euwema, 2005). The construct as used in this research contains both support from colleagues as support from leaders. Peeters, Buunk and Schaufeli (1995) show that different sorts of social interactions can have differing effects on the stressors that employees face (Peeters, Buunk, & Schaufeli, 1995). The effect of social support from colleagues is most effective when weakening the negative effects of stressful experiences (van der Doef & Maes, 1999). Leaders, on the other hand, can improve the experience of high job demands for employees by showing support (Bakker, Demerouti, & Euwema, 2005). For work engagement it is expected that social support will also have positive relation. Here social support will provide employees with help in coping with their function. Attention from others also has positive health effects since a lack of social support can lead to depression (Karademas, 2006). Based on the previous argumentation, the following hypothesis was formulated:

**Hypothesis 1a:** Job resources (job control, feedback and social support) have a positive relationship with work engagement.

The next step is adding the second work outcome into the JD-R model, which is willingness to change.

## 1.3 Organisational Change

The organisational change concept is a large part of this research and builds upon the foundation created by previous research concerned with occupational health in a change context. Especially the JD-R model is appropriate to such a change perspective since the model can be adapted to fit any type of organization due to a great amount of job characteristics that are available (Petrou & Demerouti, 2010). However, planned organizational change usually also has an impact, not only on the job itself but also on the employee. Therefore it is important to look at job characteristics and employees in the context of organizational change. When employees are faced with organizational change it is often the case that stress and uncertainty can rear its head (Begley, 1998). This can occur because of changes in the work itself or because of individual differences between employees leading to one employee coping less with the change than another (Oreg, 2004). Job resources can aid the coping process by providing employees with motivational tools and energy to deal with proposed changes (van Emmerik, Bakker & Euwema, 2005). Unfortunately it is still unclear exactly what aspects of the function or the employee can lead to accepting the change (Petrou & Demerouti, 2010; van Emmerik, Bakker, & Euwema, 2009). Because of this it is beneficial to examine exactly what aspects of the job context can lead to willingness to change.

There are several job resources linked to willingness to change that have a proven positive effect. One of these is social support, showing that a positive work environment where colleagues and management help each other promotes positive willingness to change (Vakola & Nikolaou, 2005; van Emmerik, Bakker, & Euwema, 2009). Another is job control where research hypothesized that freedom in choosing how to work can lead to positive attitudes. Having control over how to face increasing demands at work due to organizational changes can enable an employee to interpret changes more positively than when they have no freedom (van Emmerik, Bakker, & Euwema, 2009; Vakola & Nikolaou, 2005). Feedback from the task itself, finally, has been described as an important element in organizational change by several researchers. They state that not knowing what constitutes as performing your job well means that organizational change can lead to increased levels of stress and dissatisfaction (Ashford,

1988; Oreg, Vakola, & Armenakis, 2011). Inversely, high levels of feedback lead to a decrease in uncertainty and thus a greater willingness to change (Weber & Weber, 2001). Furthermore, feedback has a strong relation to dedication, a component of work engagement (Bakker & Geurts, 2004). This could signify a greater willingness to endure change on the side of the employees when they experience strong dedication to their work.

Taken together it is expected that these three job resources have a significant positive relation with willingness to change. Therefore the following hypothesis has been formulated:

**Hypothesis 1b:** Job resources (job control, feedback and social support) have a positive relationship with willingness to change.

However, as described above, these facets only cover the changes in job characteristics of organizational change. The personal characteristics of employees, meanwhile, have not been covered even though they play a significant part in the success of organizational change and its effects on employee health (Oreg, 2004; Petrou & Demerouti, 2010; Begley, 1998). The next section will therefore focus on the personal resources of employees in relation to the JD-R model

### 1.4 Personal Resources

Research by Xanthopoulou, Bakker, Demerouti, and Schaufeli in 2007 introduced personal resources as a component to the JD-R model. In their footsteps, many researchers have identified different personal resources, such as optimism, resilience or meaning making (van den Heuvel, Demerouti, Bakker, & Schaufeli, 2010). One point of discussion is the effect that personal resources have on the JD-R model, with some research claiming a mediator effect while others find moderating effects. Which effect is appropriate is determined by different factors such as the construct in question or the organizational context (van den Heuvel et al., 2010). As most research in the context of organizational change and occupational health uses personal resources as a moderator it was decided to analyze the moderating effect (Xanthopoulou et al., 2007; van den Heuvel et al., 2010; Grau, Salanova & Peiro, 2001). Included in this research as personal resources are occupational self-efficacy and regulatory focus. The reasoning for including these constructs will be clarified in the following sections.

## 1.4.1 Occupational Self-efficacy

Self-efficacy is a construct that has garnered a lot of attention and has been mentioned often in relation to the JD-R model as a personal resource (Van Yperen & Snijders, 2000; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007; Chen, Gully, & Eden, 2001). It is

defined by Bandura (1977) as a person's perceived ability to accomplish something successfully. A lot of research has focused on generalized self-efficacy and have found too few significant results simply because the construct is too broad (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007; Schyns, Torka, & Gossling, 2007; Grau, Salanova, & Peiro, 2001). Altering the self-efficacy construct to situation-specific items can aid in discovering the effect self-efficacy has on the JD-R model.

There are many different forms of self-efficacy but few of those focus on job characteristics. In contrast, the occupational self-efficacy construct developed by Schyns and von Collani (2002) relates specifically to this. It is a construct developed specifically for occupational settings but broad enough to apply to any function (Schyns & von Collani, 2002). Employees who score high on this construct will be more effective in their functions and can cope more easily with organizational changes (Schyns & von Collani, 2002; Maurer, Weiss, & Barbeite, 2003; Schyns, et al., 2007; Jimmieson, Terry, & Callan, 2004). Self-efficacy can lead to an increase in organizational success overall as well (Schyns & Sczesny, 2009). In relation to its link with employee health, low self-efficacy is related to depression and anxiety (Grau, Salanova & Peiro, 2001). High self-efficacy, on the other hand, leads to strong decision making, better health and greater social integration (Xanthopoulou et al., 2007; van den Heuvel et al., 2010). Much research has focused on self-efficacy as a moderator but very few have done so in relation to occupational stress (Grau, Salanova & Peiro, 2001; Jex & Bliese, 1999). Through its motivational effects on the relation between job resources and work engagement it was decided to include occupational self-efficacy in this research. The following hypothesis including occupational self-efficacy, as a personal resource moderator was formulated:

**Hypothesis 2a:** The positive relationship between job resources and work engagement will be moderated by occupational self-efficacy, in such a way that the effect will be stronger for employees high in occupational self-efficacy than employees who score lower.

Besides its strong relation with occupational health, occupational self-efficacy is also strongly related to employees' willingness to change (Schyns & von Collani, 2002; Terry & Jimmieson, 2003; Judge, Thoresen, Pucik, & Welbourne, 1999; Bakker & Geurts, 2004). When an employee is confident in his own abilities then he will take on new challenges with more ease (Schyns, Torka, & Gossling, 2007). For example, having insight into what the goals of one's function entail will aid supporting organizational change. Also, knowing what responsibilities are a part of one's function instill confidence in an employee when organizational changes are announced. To sum up: employees high on occupational self-efficacy have confidence to test

new behaviours that are needed with organizational changes (Griffin & Hesketh, 2003). This is the reason that the relation between job resources and willingness to change is expected to be moderated by occupational self-efficacy.

**Hypothesis 2b:** The positive relationship between job resources and willingness to change will be moderated by occupational self-efficacy, in such a way that the effect will be stronger for employees high in occupational self-efficacy than employees who score lower.

### 1.4.2 Regulatory Focus

Another construct that has been employed as a personal resource is regulatory focus. Higgins (1998) introduced the concept of regulatory focus by identifying two different motivational principles, which are derived from the self-regulation theory. This theory holds that everyone is motivated to minimize the difference between actual states and desired end states while maximizing the distance between actual states and undesired states (Higgins, 1998). These two different foci are: promotion and prevention focus, and both are two separate constructs with differing characteristics (Neubert, Carlson, Kacmar, Chonko, & Roberts, 2008). People with a promotion focus pay attention to maximizing positives and concentrate on growth and the achievement of their hopes. In other words, promotion-focused people respond to rewards while prevention-focused people react to punishment (Higgins, 1998; van den Tooren & de Jonge, 2011).

Examples of research utilizing the regulatory focus theory are widespread and the results have been tested in relation to a variety of outcomes. One research, for example, found that promotion-focused people use more abstract language and create more solutions than prevention-focused people (Brenninkmeijer et al., 2010). Another research focused on the different styles of leadership that leaders use or that 'followers' respond to (Hamstra, van Yperen, Wisse, & Sassenberg, 2011). In using the regulatory focus construct many researchers concluded that it consists of two separate constructs (Brenninkmeijer et al., 2010; Petrou & Demerouti, 2010). An employee can score high on promotion, for example, and high on prevention. Both can be valuable as its importance is contingent on an employee's context or motivation (Higgins, 2005).

This current research seeks to validate the claims of previous research and augment their findings by utilizing different job resources and demands (Brenninkmeijer et al., 2010; Petrou & Demerouti, 2010; van den Tooren & de Jonge, 2011). The first hypothesis examines the moderation effect of regulatory focus on the relation between job resources and work engagement. The relevance of regulatory focus on this relation was described by van den

Tooren and de Jonge (2011) by emphasizing the need for self-regulation when activating job resources to cope with stress at work. Brenninkmeijer et al. (2010) describes job resources, in the face of strong promotion-focused individuals, as perfect opportunities to achieve the desired end states and aid them in their growth and learning. In the work engagement literature and the research about the motivational process there is also a focus on employees desiring development and learning opportunities (Schaufeli & Bakker, 2004). This is especially relevant for the job resources in this research as resources such as social support, feedback and job control provide ways to grow and learn besides offer more freedom (Peeters, Bunk, & Schaufeli, 1995; Bakker & Geurts, 2004; Bond & Bunce, 2001). Therefore it is expected that regulory focus moderates the motivational process of the JD-R model.

**Hypothesis 3a:** The positive relationship between job resources and work engagement will be moderated by regulatory focus, in such a way that the effect will be stronger for employees with a high promotion focus and employees low in prevention focus compared to their counterparts.

Another expectation is that regulatory focus will moderate the relationship between job resources and willingness to change. One of the goals of this research is to discover what facilitates positive willingness to change in employees. Having a certain regulatory foci influences the employees' appraisal of the proposed change (van den Heuvel et al., 2010). Using job resources as positive, enabling factors leads to increased motivation under employees, which are ideal circumstances to be used to plant the seeds of change (van Emmerik, Bakker, & Euwema, 2009). Job resources such as feedback, social support and job control expand an employees freedom and development in their function, thus giving them more motivation and positive attitudes to take on new challenges (Schaufeli & Bakker, 2004; Judge et al., 1999; Jimmieson, Terry, & Callan, 2004). The role of regulatory focus is expected to magnify these effects (Brenninkmeijer et al., 2010). Promotion-focused employees are looking for new challenges and ways to grow, which is what organizational change offers most of the time. Employees scoring high on prevention focus, however, will strive for security and safety by shying away from changes that bring uncertainty (Brenninkmeijer et al., 2010). Since this research is mainly focused on what enables positive willingness to change, only the hypothesis concerning these factors will be tested:

**Hypothesis 3b:** The positive relationship between job resources and willingness to change will be moderated by regulatory focus, in such a way that the effect will be stronger for employees with a high promotion focus and employees low in prevention focus compared to their counterparts.

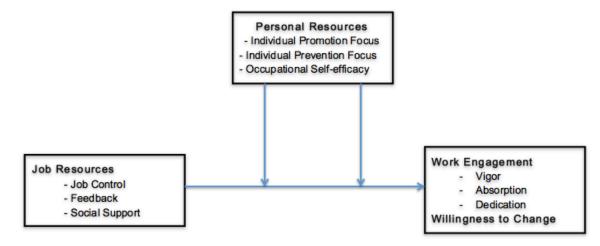


Figure 1: Overview of the motivation process of the JD-R moderated by personal resources.

# 1.5 Regulatory Fit

The regulatory fit construct, extending from the regulatory focus theory, also has its roots in the literature of Higgins (2000). However, where regulatory focus was viewed as an innate trait, regulatory fit takes it one step further. Higgins (2004) adds environmental cues to his concept of regulatory fit meaning that the context of an individual can be used to prime a certain regulatory focus. This priming then has an effect on certain outcomes, of which research confirms several: such as commitment (Meyer, Becker, & Vandenberghe, 2004), higher evaluations of objects (Higgins, 2005) or certain leadership styles (Hamstra et al., 2011). When the manner in which a goal is pursued is congruent with the regulatory focus of an individual then the person feels right about the way it is following its intended goal. Meaning that a different strategy to attaining a goal 'fits' better with certain regulatory orientations (Cesario, Grant, & Tory Higgins, 2004). As such, following a promotion strategy will stimulate a promotion-focused individual while a prevention-focused person will feel inhibited.

Situational characteristics, such as communication of an organizational change, can be used to manipulate this process by changing the strategy that is used (Petrou & Demerouti, 2010). The outcome of this 'feeling right' about pursuing the goal can be directed towards positive evaluations of the goal pursuit, future choices or past choices. The positive evaluation can also be transferred to other non-related outcomes, such as monetary or moral evaluations (Higgins, 2005). It is expected then that when the regulatory focus of an individual fits the goal strategy, taking either a promotion or prevention form, it will consequently lead to greater scores on the outcome variable. When there is no fit, though, then this will lead to decreased scores on the outcome variable.

For the purpose of this research the desired outcome is willingness to change. It is expected, for organisational change, that altering the goal strategy to fit the promotion or prevention focus of an employee can stimulate their willingness to change.

**Hypothesis 4:** Employees experiencing regulatory fit with change communication (e.g. promotion focused employees with a promotion focused communication and prevention focused employees with a prevention focused communication) are more willing to support changes compared to their misfit counterparts.

## 1.6 Summary of studies

The research consisted of two studies with the first using a questionnaire pertaining to hypotheses 1 through 3. The second study employs a semi-experimental method by administering a hypothetical scenario and is related to hypothesis 4.

The first study, completed via a digital questionnaire, consists of ten basic demographic questions, which will be followed by about 76 items corresponding to eleven constructs. These pertain to job resources (social support, feedback and job control), personal resources (regulatory focus and occupational self-efficacy) and their relation with work engagement and willingness to change.

The second study, completed using a hypothetical scenario that was part of the questionnaire, involves testing the regulatory fit theory by asking the employee to read about a hypothetical (and very general) change scenario. The hypothetical change scenario will be manipulated to create two different conditions: employees who receive a promotion scenario and employees who receive a prevention scenario. An independent collaborator will create these conditions randomly and without being aware of the semi-experimental nature. After reading, the employee will answer three questions about their willingness to support this specific change.

### 1.7 Context

This research has been completed at one branch of the Danone Group in The Netherlands. As a leader in fast-moving consumer goods and also medical supplies, Danone's success is critical and thus maintaining an edge over its competition becomes crucial. Many organisational changes have been implemented in the past with varying degrees of success. In 2011 a survey was performed including all employees of the company quantifying several measures, such as satisfaction, engagement, individual development plans and absence management. As a response to this several steps were undertaken by the employer to ameliorate this situation. This

concern lead to the launch of a 'Health@Work' program and the hiring of an external consulting firm specialised in work engagement. This research was requested to delve deeper into the issue of health at work. As the 2011 survey showed several particular deficits in health management there were also specific preferences stressed by the company to include in this research. Therefore the requests from the company and the nature of the work that was being done were important considerations in choosing the job characteristics.

# Study 1

## 2.1 Method

## 2.1.1 Participants

In collaboration with the HR department, who provided permission for the research, and the communication department, who sent out the emails, the questionnaire was sent to all employees in the office building. As the 'Health@Work' program is a local initiative it was decided to only use the one location for the baseline measure. In this office building there are 267 employees who were contacted via email. All 267 employees are divided over three entities. There are 136 employees in Entity 2, 28 in Entity 3 and 103 in Entity 1

Ultimately there were 180 employees (67% of total) who participated and after removing several incomplete questionnaires there were 132 participants remaining (49% of total). Of these 132 participants: 56 were from Entity 1 (42,4%), 66 were from Entity 2 (50%) and 10 were from Entity 3 (7,6%). The departments that were included in the research were represented as follows: Communication (N=2; 1,5%), Finance (N=8; 6,1%), Human Resources (N=9; 6,8%), Marketing (N=30; 22,7%), General Management (N=2; 1,5%), Information Systems (N=6; 4,5%), Medical and Health (N=8; 6,1%), Quality (N=3; 2,3%), Sales (N=48; 36,4%), Supply Chain (N=9; 6,8%) and unidentified (N=7; 5,3%). On average, participants worked in the organisation for 6,6 years (SD = 7,39). In their current function, however, participants worked for 3 years on average (SD = 3,65). Of the total amount of participants 89 (67%) were female and 43 (33%) were male.

#### 2.1.2 Procedure

All employees received the survey in an email where its purpose was explained. The survey was commissioned to address concerns that were lifted from the research that was conducted in 2011. Also, the importance of a healthy work life was clarified further emphasizing the

importance of participating in the research (please see appendix 1 for the full briefing and questionnaire). At the end of the email that was sent to employees was a link to the questionnaire. Due to the semi-experimental nature of the research the entire population was split into two groups randomly. This was achieved by asking the communications department of each entity to split their employee base into two and send one link with the promotion focus to one group and another link with the prevention focus to the other group. No one was told of the experimental manipulation. When asked about the motive for supplying two links the reason given was that the order of questions differed between the two questionnaires. After one week all employees were reminded to complete the questionnaire to increase participation.

### 2.1.3 Measures

The questionnaire that was constructed for this research consisted of four sections: instructions, items, semi-experimental scenario (study 2) and contact details. All participants were informed about the purpose of this questionnaire and were reassured that the data would be analysed anonymously and securely without interference or insight from the organisation. Participants were also told to email the author if they wanted to receive the results of the questionnaire or had any questions. Below is explained how the different constructs were measured.

#### **Job Resources**

Feedback was measured by using a three-item questionnaire from the 'Job Diagnostic Survey' (Hackman & Oldham, 1974). Questions were aimed at discovering the feedback employees receive from the job itself. Items were measured on a 7-point Likert scale with answers between 1 (very inaccurate) to 7 (very accurate). An example of an item is: "Just doing the work required by the job provides many chances for me to figure out how well I am doing." High scores on the feedback construct indicate a great degree of freedom in the function of the employee. Item three ("The job itself provides very little clues about whether or not I am performing well.") needed to be recoded as it was stated negatively. After recoding, the internal consistency of the scale was  $\alpha = 0.49$  which is below acceptable standards. However, removing item 3 increases the reliability of the scale to  $\alpha = 0.76$ , which is adequate. Therefore it was decided to remove item 3 from the analysis. (M = 4.72, SD = 0.77)

Schaufeli (1995) and translated into English (Peeters, Bunk, & Schaufeli, 1995). The scale measures both support from co-workers as support from management and consists of 8 items. Items were measured on a 5-point Likert scale with responses ranging from 1 (never) till 5

(always). One item is, for example: "When needed my colleagues help me with a certain task." Above average scores of social support signify high support from colleagues and management. Internal consistency for this scale is  $\alpha = 0.90$  (M = 3.51, SD = 0.79).

Job Control. The construct of Job Control was measured by a questionnaire developed by Jackson, Wall, Martin, and Davids (1993). While the complete questionnaire measures five constructs, these were less relevant for this study so only timing control and method control were utilized. The job control construct was measured with 10 items and measured on a 5-point Likert scale asking what level of control the employee has, from 1 (not at all) to 5 (a great deal). Example of an item is: "Do you decide on the order in which you do things?" One item was removed from the original scale (which was 11 items) for two reasons: the item was less relevant to the functions examined and it had a relatively low factor loading in the sample studies ( $\alpha = .54$  and .42). High scores on job control indicate high levels of control in the employees function. This scale had an overall internal consistency of  $\alpha = 0.88$  which is good (M = 3.85, SD = 0.56).

#### **Personal Resources**

Occupational Self-efficacy. Self-efficacy was measured using the short version of the OCCSEFF scale by Schyns and von Collani (2002). This scale consists of 8 items and uses a 6-point Likert scale with responses ranging from 1 (not true at all) to 6 (completely true). A sample item is: "I feel prepared to meet most of the demands in my job" (Schyns & von Collani, 2002). The scale asks employees to indicate how true the eight statements are for them and scoring high indicates a high level of occupational self-efficacy. Internal consistency for this scale is  $\alpha = 0.89$  (M = 4.85, SD = 0.58).

Work Regulatory Focus. Regulatory focus was measured by using the Work Regulatory Focus (WRF) scale by Neubert, Kacmar, Carlson, Chonko and Roberts (2008). This scale consists of two constructs: promotion focus and prevention focus (Neubert, Carlson, Kacmar, Chonko, & Roberts, 2008). An example of the prevention focus factor is: "Fulfilling my work duties is very important to me." For the promotion focus factor, a sample item is: "If I had an opportunity to participate on a high-risk, high-reward project I would definitely take it." The participant is asked to what extent he or she agrees with the statements on a scale from 1 (strongly disagree) to 5 (strongly agree). Reliability for the factors prevention and promotion are as follows: for prevention ( $\alpha = 0.79$ ; M = 3.82, SD = 0.50) and for promotion ( $\alpha = 0.87$ ; M = 3.65, SD = 0.57). Internal consistency of the complete scale is  $\alpha = 0.84$  which is good (M = 3.74, SD = 0.42).

#### **Outcomes**

Work Engagement was measured using the short version of the Utrecht Work Engagement Scale (UWES-9) (Schaufeli & Bakker, 2004). This scale consists of nine items, where the three variables vigor, absorption and dedication are each measured by three items. A sample item for the vigor variable is: "At my work, I feel bursting with energy." For the dedication variable, an example is: "I find the work that I do full of meaning and purpose." An example for the absorption variable is: "Time flies when I am working." When answering the statements, the participant is asked to decide whether they have ever felt that way about their job (Schaufeli & Bakker, 2004). Answers are given between 0 (never) and 6 (always/every day). Scoring high on the work engagement scale indicates a high level of work engagement. Due to the factor analysis loading on only one factor, which has been confirmed to happen in previous research (Schaufeli & Bakker, 2004), it was decided to analyze work engagement as one construct instead of three separate scales. Internal consistency for the whole scale is  $\alpha = 0.86$  (M = 5.23, SD = 0.74).

Willingness to change was measured using one factor of the attitude toward change scale and has an internal consistency of  $\alpha = 0.84$  (Dunham, Grube, Gardner, Cummings, & Pierce, 1989). Of the three factors that comprise the questionnaire, namely cognitive, affective and behavioural tendencies, only the cognitive tendency subscale was used. The scale consists of six items and an example of the items that are included in this scale is: "Change frustrates me." In the instructions for this scale participants are asked to indicate to what extent they agree with the statements. Answers are given on a 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7). All items were recoded in order to maintain the expectations from the JD-R model; where a positive relation between job resources and willingness to change is anticipated. A high score on willingness to change, then, indicates a positive attitude toward change (M = 2.08, SD = 0.90).

## 2.1.4 Statistical analysis and software

All statistical analyses were performed using the 'Statistical Programme for Social Sciences' (SPSS), version 19.0. Before starting the hypothesis analysis, all variables underwent tests to determine whether they adhered to the statistical assumptions. Firstly, all scales met the reliability requirement ( $\alpha > 0.70$ ; Field, 2009). For the correlational analysis both skewness and kurtosis was calculated. Based on the results from the skewness (> -0.8 and < 0.7) and kurtosis examinations (> -0.4 and < 1) no extreme variation from a normal deviation was found. The

only exception is for the Occupational Self-Efficacy scale, which measured a 4.1 kurtosis. This tail-heavy distribution should be taken into account in the future analysis (Field, 2009). Afterwards, a Pearson's r was calculated for each variable (see table 2) and a significance level of p < 0.05 and p < 0.01 was used. This level of significance was chosen because of the size of the sample and the desired power of the experiment (Field, 2009). For the hierarchical regression analysis, all assumptions were met (tolerance, VIF, homoscedascity and linearity).

## 2.2 Results

The results of the statistical analysis will be discussed for the first hypothesis. Firstly a two-tailed correlational analysis was executed to examine whether any significant effects exist. Subsequently, a hierarchical multiple regression was done in order to answer the hypotheses and test the moderation effect that was expected (H1a, H1b, H2a, H2b, H3, H3a).

## 2.2.1 General correlational analysis

The results of the correlational analysis can be seen in table 1. The relation between job resources (feedback, job control and social support) and work engagement all appeared positive and significant (p < 0.01). For job control the relation with work engagement is significant and positive (r = 0.34, p < 0.01). For social support, subsequently, the relation is also significant and positive (r = 0.37, p < 0.01). Feedback, finally, also has a significant relation with work engagement (r = 0.18, p < 0.05). The relation between job resources (feedback, job control and social support) and willingness to change was also found to be positive. However, only job control showed a significant positive effect with willingness to change (r = 0.22, p < 0.05). Both feedback (r = 0.09, p = 0.27) and social support (r = 0.07, p = 0.43) showed slight positive relations but none of them were significant.

| <b>Table 1.</b> Averages, standard deviations and intercorrelations for the va |
|--|
|--|

|                                  | Mean | SD   | 1      | 2      | 3      | 4      | 5      | 6      | 7    | 8 |
|----------------------------------|------|------|--------|--------|--------|--------|--------|--------|------|---|
| 1. Feedback                      | 5.25 | 0.95 | -      |        |        |        |        |        |      |   |
| 2. WRF Prevention                | 3.82 | 0.49 | 0.03   | -      |        |        |        |        |      |   |
| 3. WRF Promotion                 | 3.65 | 0.57 | 0.02   | 0.24** | -      |        |        |        |      |   |
| 4. Job Control                   | 3.85 | 0.56 | 0.21*  | 0.07   | 0.13   | -      |        |        |      |   |
| 5. Work<br>Engagement            | 5.27 | 0.74 | 0.18*  | 0.20*  | 0.44** | 0.34** | -      |        |      |   |
| 6. Occupational<br>Self-Efficacy | 4.84 | 0.58 | 0.23** | 0.16   | 0.32** | 0.21*  | 0.37** | -      |      |   |
| 7. Willingness to Change         | 5.92 | 0.89 | 0.09   | -0.14  | 0.39** | 0.22*  | 0.19*  | 0.25** | -    |   |
| 8. Social Support                | 3.51 | 0.79 | 0.13   | 0.28** | 0.28** | 0.16   | 0.37** | 0.29** | 0.07 | - |

\* p < 0.05, \*\* p < 0.01

### 2.2.2 Regression Analysis

After completing the correlational analysis there is some insight into the relations between the different variables and its strength. However, in order to fully test the hypotheses a hierarchical multiple regression was completed. This method determines to what amount several independent variables can explain the variance of the dependant variables.

As hypotheses 2 and 3 contain a moderator relationship there is a need to test interaction effects. Simply adding two variables together creates multicollinearity problems since one or the other variable will correlate highly with the interaction term (Dugard, Todman & Staines, 2010). Consequently this will harm the main effects of the regression analysis through its coefficients. Therefore all relevant variables will be transformed into z-scores, which have two important characteristics: the first is a mean of zero and the second a standard deviation of 1. This creates an average of scores of the variable that will be tested, balancing out any possible effects from a high amount of variation in the variable. For the interaction variable, then, multiplying the transformed standardized variables will create the new interaction term (Dugard, Todman, & Staines, 2010).

In order to analyse the hypotheses with a regression analysis, the examination was done in two steps. Standardized values were created for all variables before entering them into the regression and were consequently used for all analyses. In the first step all independent variables of the hypothesis (for H1) were entered. For H2 and H3 the moderator was included in the first step. Then in the second step the interaction term was inserted for each independent variable. To ensure completely valid data all regressions were done with only one dependent variable at a time.

## 2.2.3 Regressions for main effects

To test hypothesis H1a and H1b, two hierarchical multiple regressions were performed. Hypothesis 1a expected a positive main effect between job resources and work engagement while hypothesis 1b expected to find this effect between job resources and willingness to change. In table 3 the results of the regression analysis can be seen. For the job resource feedback no significant effect was found ( $\beta = 0.07$ , ns for work engagement and  $\beta = 0.04$ , ns for willingness to change). For social support a significant main effect was found for hypothesis 1a but not for hypothesis 1b ( $\beta = 0.32$ , p = 0.02 for work engagement and  $\beta = 0.04$ , ns for organizational change). For the remaining job resource, job control, there was a main effect for both work outcomes ( $\beta = 0.27$ , p = 0.03 for work engagement and  $\beta = 0.19$ , p = 0.04 for organizational change). The results of this analysis show that for the work engagement

outcome, these three job resources explain 22% (or r = 0.22) of the total variance. For willingness to change, meanwhile, all three resources explain only 5% (or r = 0.05) of the total variance. For hypothesis 1a two out of the three independent variables appeared significant and were in the expected direction. For hypothesis 1b, only one out of the three variables was significant but again all effects were positive, as expected. To conclude, these results partially support hypothesis 1a and 1b.

**Table 2.** Regression of Work Engagement and Willingness to Change on Job Resources containing the standardized beta, change in  $\mathbb{R}^3$  and change in F.

|      |                | Worl   | Work Engagement |            |       | gness to C   | hange      |
|------|----------------|--------|-----------------|------------|-------|--------------|------------|
| Step | Model          | β      | $\Delta R^2$    | $\Delta F$ | β     | $\Delta R^2$ | $\Delta F$ |
| 1    | Feedback       | 0.07   | 0.22            | 11.38**    | 0.04  | 0.05         | 1.95       |
|      | Job Control    | 0.27** | -               | -          | 0.19* | -            | -          |
|      | Social Support | 0.32** | -               | -          | 0.04  | -            | -          |

p < 0.05, \*\* p < 0.01

## 2.2.4 Regressions for moderation effect of Self-Efficacy

To test hypothesis H2a and H2b, again two hierarchical multiple regressions were performed. These two hypotheses included an expectation for interaction effects with occupational selfefficacy. In table 4 the results can be seen. For H2a, concerning work engagement as an outcome, the only significant interaction effect that was found was for occupational selfefficacy between social support and work engagement ( $\beta = 0.27$ , p = 0.03). For H2b the only interaction effect that was found was for occupational self-efficacy between job control and willingness to change ( $\beta = 0.28$ , p = 0.05). The plots for these interaction terms can be found in figure 4. Based on the change in r<sup>2</sup> from the regression analysis for hypothesis 2a, the first step including only the independent variables explained 27% ( $r^2 = 0.27$ ) of the variance for work engagement. Including the interaction effects increased the explained variance of work engagement only marginally to 33% ( $r^2 = 0.33$ ). For hypothesis 2b, with willingness to change as an outcome, this was even less as only 8% ( $r^2 = 0.08$ ) of the variance was explained by the independent variables. By including the interaction terms the explained variance of willingness to change increased to 13% ( $r^2 = 0.13$ ). Figure 2 shows for hypothesis 2a that employees experiencing high social support will score higher on work engagement when they have greater occupational self-efficacy than when they have little social support. Inversely, when social support is low this leads to higher scores on work engagement if occupational self-efficacy is also low. Figure 2 also shows for hypothesis 2b that high job control leads to a greater

willingness to change when there are high levels of occupational self-efficacy. However, high job control relates to a lower willingness to change when the employee has low levels of occupational self-efficacy. With regard to the expected directions of the non-significant regression effects, all results were positive with the exception of feedback. The results of this analysis partially confirmed the expectations of H2a and H2b as the interaction of occupational self-efficacy was found significant in two instances.

**Table 3.** Regression of Work Engagement and Willingness to Change on Job Resources and Occupational Self-Efficacy containing the standardized beta, change in  $\mathbb{R}^2$  and change in  $\mathbb{F}$ .

|      |                                       | Work Engagement |              |            | Willing | Willingness to Cha |            |  |
|------|---------------------------------------|-----------------|--------------|------------|---------|--------------------|------------|--|
| Step | Model                                 | β               | $\Delta R^2$ | $\Delta F$ | β       | $\Delta R^2$       | $\Delta F$ |  |
| 1    | Feedback                              | 0.04            | 0.27         | 10.79**    | 0.02    | 0.08               | 2.73*      |  |
|      | Job Control                           | 0.24**          | -            | -          | 0.17*   | -                  | -          |  |
|      | Social Support                        | 0.26**          | -            | -          | -0.02   | -                  | -          |  |
|      | Occupational Self-<br>efficacy (O-SE) | 0.23**          | -            | -          | 0.21*   | -                  | -          |  |
| 2    | Interaction Feedback x O-SE           | -0.04           | 0.06         | 3.43*      | -0.14   | 0.05               | 2.23*      |  |
|      | Interaction Job<br>Control x O-SE     | 0.10            | -            | -          | 0.28*   | -                  | -          |  |
|      | Interaction Social<br>Support x O-SE  | 0.27**          | -            | -          | 0.09    | -                  | -          |  |

Note: \* p < 0.05, \*\* p < 0.01. O-SE stands for Occupational Self-Efficacy.

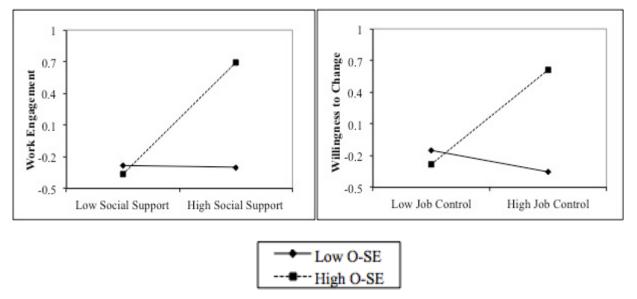


Figure 2: Interaction plots for H1a and H1b. The interaction effect of occupational self-efficacy (O-SE) with social support and job control has been plotted with work engagement (left) and willingness to change (right) as the dependent variable.

## 2.2.5 Regressions for moderation effect of Regulatory Focus

The results of the hierarchical multiple regression for hypothesis H3a and H3b can be seen in table 5. In order to measure the interaction effects of regulatory focus both prevention and promotion were entered into the same regression. This resulted in two separate regressions. For H3a: all job resources, both promotion and prevention focus with work engagement as an outcome. For H3b, meanwhile: all job resources, both promotion and prevention focus with willingness to change as an outcome was measured. Unfortunately none of the expected interaction effects for H3a was found significant. For hypothesis H3b, utilizing willingness to change as an outcome variable, one interaction effect was found with prevention focus moderating the relation between social support and willingness to change ( $\beta = -0.21$ , p = 0.02). Checking the explained variance shows an  $r^2 = 0.35$  (35%) for work engagement (H3a) and an  $r^2 = 0.24$  (24%) for willingness to change (H3b). The inclusion of the interaction effects increases the coefficient by 3% and 10% respectively. Figure 3 shows the interaction effect, where high job control is related to a greater willingness to change when prevention focus is low. Inversely, high levels of job control lead to a lower willingness to change when prevention focus is high. This result partially confirms hypothesis 3b by showing a significant interaction effect in the expected direction for prevention focus and social support with willingness to change as an outcome variable. Hypothesis 3a, meanwhile, is not supported by the results.

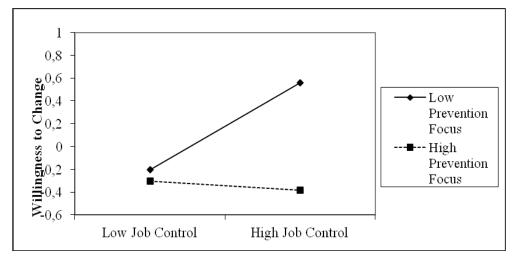


Figure 3: Interaction plot for H3a showing the moderating effect of prevention focus between job control and willingness to change.

**Table 4.** Regression of Work Engagement and Willingness to Change on Job Resources and Regulatory Focus containing the standardized beta, change in  $\mathbb{R}^2$  and change in  $\mathbb{F}$ .

|      |                            | Work Engagement |              |            |         | Willingness to Change |            |  |  |
|------|----------------------------|-----------------|--------------|------------|---------|-----------------------|------------|--|--|
| Step | Model                      | β               | $\Delta R^2$ | $\Delta F$ | β       | $\Delta R^2$          | $\Delta F$ |  |  |
| 1    | Feedback                   | 0.09            | 0.35         | 12.44**    | 0.05    | 0.24                  | 7.34**     |  |  |
|      | Job Control                | 0.24**          | -            | -          | 0.17    | -                     | -          |  |  |
|      | Social Support             | 0.21*           | -            | -          | -0.02   | -                     | -          |  |  |
|      | Promotion Focus (Pro)      | 0.37**          | -            | -          | 0.43**  | -                     | -          |  |  |
|      | Prevention Focus (Pre)     | 0.01            | -            | -          | -0.26** | -                     | -          |  |  |
| 2    | Interaction Feedback x Pro | 0.08            | 0.03         | 0.9        | -0.13   | 0.1                   | 2.69*      |  |  |
|      | Interaction Control x Pro  | -0.02           | -            | -          | 0.09    | -                     | -          |  |  |
|      | Interaction Social x Pro   | 0.07            | -            | -          | 0.17    | -                     | -          |  |  |
|      | Interaction Feedback x Pre | 0.07            | -            | -          | 0.04    | -                     | -          |  |  |
|      | Interaction Control x Pre  | 0.04            | -            | -          | -0.21*  | -                     | -          |  |  |
|      | Interaction Social x Pre   | -0.12           | -            | -          | 0.11    | -                     | -          |  |  |

Note: \* p < 0.05, \*\* p < 0.01. 'Pro' stands for promotion while 'Pre' stands for prevention focus.

# Study 2

## 3.1 Methods

The second study concentrates on the regulatory focus theory and the reaction of participants on the hypothetical scenario and their willingness to support this specific change.

#### 3.1.1 Procedure

As the instrument of study 2 is incorporated in study 1, resulting in one questionnaire fulfilling the objectives for both studies, most of the procedure is similar for the previously described process. Only the third section of the questionnaire, that entails the hypothetical scenario, is specifically designed for this analysis. Before reading the text, but after completing several scales already, participants were given a short instruction. Here all participants were told they will read a short scenario that is theoretical and not related to anything that is occurring in their organisation at the moment. They were asked to imagine receiving an e-mail illustrating several changes that could occur at their organisation. After reading the text, participants were told they

were to answer a couple of questions.

## 3.1.2 Scenario manipulation

Participants were faced with a hypothetical scenario while completing the questionnaire. This scenario was manipulated so that participants could receive either the promotion or prevention focused scenario. The distribution of this manipulation was done randomly and by an independent person from the experimenters. As the company did not want to create confusion or uncertainty under employees about the verity of the scenario, it was chosen to distribute a very broad change text. This text was based on scenarios developed by Cesario, Grant and Higgins (2008) and altered for the purposes of this study.

The scenario generally illustrates a change initiative that will have an impact on the culture, structure, processes and administration of the company. The context of a negative economic situation is sketched as the reason for instigating the changes. The specifics of the differing scenarios, that are purely textual, can be seen in Appendix 1 while a short overview can be seen here.

In the prevention manipulation, characterized by downplaying negative features, protecting the organisation and creating a prevention program are key sentences in this scenario. One of the key differences lies in the culture changes: focusing on improving the dissatisfaction of clients is key. The promotion manipulation, which is contrary to the prevention manipulation, focused on maximizing positive aspects and employs opposing terms to the prevention manipulation to achieve its purpose. Turning setbacks into opportunities and instigating an achievement program are examples of changes.

#### 3.1.3 Measures

We used three single-items to measure the participants' attitudes towards the scenario, based on the items developed by Cesario, Grant and Higgins (2004) for their hypothetical scenario. They included: fairness of change ("How fair do you think that these changes are overall?"), willingness to support change ("How willing would you be to convince others to support the implementation of these changes?") and attitude toward change ("How would you describe your attitudes towards the presented changes?"). Answers could be given on a 10-point Likert scale. Scoring high on this readiness to change scale indicates the employee greatly supports the proposed hypothetical change.

### 3.1.4 Statistical Analysis

In order to test hypothesis 4 a univariate ANOVA was performed to examine employee's

attitude on the three items. Since all variables need to be on a categorical measurement scale a median split was done on the regulatory focus construct (Field, 2009). This means a new variable was created which is a relative score of a participants' regulatory focus by subtracting the promotion score from the prevention focus. The resulting ANOVA, then, uses a 2 (promotion versus prevention focused employee) x 2 (promotion versus prevention framing scenario) design, which was completed three times: once for each item about the attitude towards the hypothetical change scenario.

### 3.2 Results

The results for hypothesis 4 will be discussed below through the use of an one-way ANOVA. The analysis for hypothesis 4 includes a 2 (promotion versus prevention focused employee) x 2 (promotion versus prevention framing scenario) design to test whether employees in the regulatory fit condition would score higher on willingness to change than in the misfit condition.

## 3.2.1 Univariate ANOVA for regulatory fit theory

This research tested the regulatory fit theory for the fourth and last hypothesis. It was expected that participants who were in the regulatory fit condition would report a higher readiness to support the hypothetical scenario than employees in the misfit condition. The initial betweensubjects ANOVA results for the expected interaction effects all appeared non-significant (see table 5). The pairwise comparisons analysis was significant however (see tables 6, 7 and 8). The pairwise comparison for item one of the supporting change scale was significant for the promotion condition with F(3, 119) = 6.29, p = 0.01 while it was not significant for the prevention condition F(3, 119) = 0.09, p = 0.86 (see table 6). For the pairwise comparison of item two the results were similar since the promotion condition, F(3, 119) = 9.0, p < 0.01, was significant again while the prevention condition, F(3, 119) = 1.32, p = 0.25, was not (see table 7). Finally, for the last pairwise comparison corresponding to the third item, there was another significant effect found for the promotion condition, F(3, 119) = 4.83, p = 0.03, but not for the prevention condition, F(3, 119) = 0.64, p = 0.42 (see table 8). The results for item 1, 2 and 3 show that promotion-focused employees receiving the promotion scenario report higher willingness to support the hypothetical change scenario than promotion-focused employees receiving the prevention scenario (see table 7, 8 and 9). Only this effect was not found for the prevention-focused employees receiving the prevention scenario even though it was expected. On all three items there was an interaction effect only for promotion-focused employees.

Contrary to the expectations there was no interaction effect of prevention focused employees for all three items. Taken together, these findings partially support hypothesis 4.

**Table 5.** Results of the between-subjects univariate ANOVA. Table shows the Type III Sum of Squares, degrees of freedom, F, Partial Eta Squared and significance of the interaction between employees' regulatory focus and framing scenario.

| Interaction effect   |             |    |      |      |      |
|----------------------|-------------|----|------|------|------|
|                      | SS Type III | DF | F    | ηρ²  | Sig. |
| Item 1 'Willingness' | 7.54        | 1  | 2.69 | 0.02 | 0.10 |
| Item 2 'Fairness'    | 4.92        | 1  | 1.68 | 0.01 | 0.19 |
| Item 3 'Attitude'    | 2.87        | 1  | 0.96 | 0.08 | 0.33 |

Note:  $\frac{}{}$  p < 0.05, \*\* p < 0.01

**Table 6.** Pairwise comparison for item 1 (willingness to change) of the Supporting Change scale. Table contains mean difference, standard error, significance and confidence interval (95%) all based on estimated marginal means.

|                 |            |            | Mean       |            |      |                 |                    |
|-----------------|------------|------------|------------|------------|------|-----------------|--------------------|
|                 | <b>(A)</b> | <b>(B)</b> | Difference |            |      | Lower           | <b>Upper Bound</b> |
| Score on scale  | Condition  | Condition  | (A-B)      | Std. Error | Sig. | <b>Bound CI</b> | CI                 |
| High Promotion  | Promotion  | Prevention | 1.06       | 0.43       | 0.01 | 0.23            | 1.91               |
| High Prevention | Prevention | Promotion  | -0.07      | 0.43       | 0.87 | -0.93           | 0.77               |

**Table 7.** Pairwise comparison for item 2 (fairness of change) of the Supporting Change scale. Table contains mean difference, standard error, significance and confidence interval (95%) all based on estimated marginal means.

|                 |                            | Mean       |            |      |          |                 |
|-----------------|----------------------------|------------|------------|------|----------|-----------------|
|                 | $(A) \qquad (B)$           | Difference |            |      | Lower    | Upper           |
| Score on scale  | <b>Condition Condition</b> | (A-B)      | Std. Error | Sig. | Bound CI | <b>Bound CI</b> |
| High Promotion  | Promotion Prevention       | 1.31       | 0.44       | 0.01 | 0.44     | 2.17            |
| High Prevention | Prevention Promotion       | n51        | 0.44       | 0.25 | -1.38    | 0.36            |

**Table 8.** Pairwise comparison for item 3 (attitude toward change) of the Supporting Change scale. Table contains mean difference, standard error, significance and confidence interval (95%) all based on estimated marginal means.

| Score on scale  | (A) (B<br>Condition Condi | ,       | Std. Error | Siσ  | Lower<br>Bound CI | Upper<br>Bound CI |
|-----------------|---------------------------|---------|------------|------|-------------------|-------------------|
| High Promotion  | Promotion Preven          | ,       | 0.44       | 0.03 | 0.01              | 1.84              |
| High Prevention | Prevention Promo          | otion35 | 0.45       | 0.42 | -1.24             | 0.52              |

# **Discussion**

Within this research several hypotheses were established expecting certain relations within the context of organizational change and the Job Demands-Resources framework (Demerouti et al., 2001). Besides including main effects expectations in the hypotheses the focus of this research was also on the moderation effects of personal resources. It was expected that both occupational self-efficacy and regulatory focus would moderate the motivational health process as defined by the JD-R model. Included in the model were the job resources: feedback, job control and social support. Work engagement and willingness to change were selected as work outcomes. Finally, as an additional study, this research examined the regulatory fit between employees' regulatory focus and the regulatory framing of an organizational change message. In the following section the results of both studies will be interpreted along with discussing any limitations of this research and examining any further suggestions for future research.

# 4.1 Interpretation of Results

The first analysis of this research examined the relation between job resources and work engagement. From the regression this hypothesis proved partially true, with social support and job control being significant and positively related to work engagement. These findings partially confirm the expectations from the JD-R model with regard to the motivational process (Demerouti et al., 2001).

The results show that both social support and job control are significant predictors for work engagement. The relation between social support and work engagement was found to be coherent with the literature. Having colleagues and management give you back-up in the form of discussions or a listening ear when there are problems with completing certain tasks appears beneficial in the context of this model. The fact that an employee has supportive staff around him works motivating and helps alleviate the stressful consequences from job demands (Peeters, Buunk, & Schaufeli, 1995).

For job control the expectations were the same and these appeared congruent with the results found. Experiencing high levels of job control is strongly related to wellbeing and motivational effects (Mauno, Kinnunen and Rukolainen, 2006; van der Doef & Maes, 1999). These effects have a positive influence on creating work engagement under employees. The importance of job control is underlined by Mauno et al. (2006), who state that low levels of job control relate to feelings of failure and frustration under employees. Fostering freedom at work

is important for health reason then but also for coping with the challenges at work. Bond and Bunce (2001) refer to the 'learning through control' hypothesis where employees learn strategies to cope with challenges in work through the strengthening of job control. The relation between job control and work engagement is supported by both literature and results then. At Danone this relation can be seen as well, since there is a great amount of freedom in the ways employees approach their work in most functions. Specific sales functions, for example, are mainly executed on the road. The employees in these functions have their own agenda without the constant presence of a superior. Functions located in the office have less freedom. However, they are actively recommended to pursue additional projects within their fulltime workweek.

Only feedback did not appear to have a significant relation with work engagement. This could be due to several factors, one of which is the fact that feedback might not be a pure job resource and have a better fit with job demands. When an employee has a high workload and is trying to achieve the highest performance this could lead to stress instead of more motivation (Schaufeli, 2004). Another explanation for the lack of results for this variable could be due to the existence of a well-constructed yearly target system at Danone. In this system the achievement of targets are discussed with the manager of that employee at three points during the year. Employees could attribute their performance on a task to this system instead of to the task itself. What this means is that employees assume that their manager only comments on their performance on a task and they disregard signals coming from the task itself. Essentially, this study measures feedback from the tasks but disregards feedback from superiors (although this is partly covered by the social support variable) while it could be argued that at Danone employees disregard feedback from the task and pay more attention to feedback from their superior due to the yearly target system. However, it is also possible that employees interpret these questions as though they only receive feedback from their superior due to the framing of the questions on the feedback scale.

This research also expected a positive relation between job resources and willingness to change. Based on the results it can be concluded that the only significant relation was found between job control and willingness to change. This finding can be clarified through the fact that enhanced job control will leave employees dedicated to the job and satisfied with their function (van Emmerik, Bakker, & Euwema, 2009). This positive attitude will help planned change be interpreted by employees as interesting opportunities instead of a threat, increasing mastery and confidence (which has its links to self-efficacy and hypothesis 2b). Moreover, being in control of your job means that one will face less uncertainty when performing their

function (Vakola & Nikolaou, 2005). If changes are proposed by the organization then the employee will feel prepared (van Emmerik, Bakker, & Euwema, 2009). From a practical perspective the results also make sense. The relationship between employees of Danone and their superiors is informal which allows them to exercise a great deal of control over the way they perform in their function. This could be the reason that the effects for job control were so pronounced since the employees experience a great amount of it

The lack of results for the other independent variables of feedback and social support is noticeable, however, and can be explained by several factors. Firstly, this research is focused on what job resources actually contribute to an increased willingness to change under employees. While the JD-R model provides a vast range of constructs it still only compromises a small portion of what employees encounter when faced with organizational change. Therefore it could be that there are other resources or even constructs unrelated that the JD-R model that have a greater contribution toward increased willingness to change than the constructs included in this study and could explain more variance (van Emmerik, Bakker, & Euwema, 2009). Another reason that so few results were found could be the negatively worded scale that was used. Handing employees negatively phrased items could lead to increased and unintended covariance (Kelloway & Barling, 1990). Kelloway and Barling argue (1990) that by exclusively using negatively phrased items it is possible to create methodological confounding, which must be prevented.

Another expectation of this research was the moderating effect of occupational self-efficacy between job resources and work engagement. The analysis supported this expectation for the moderation effect but only for the job resource social support. This result confirms the expectation of this research and previous literature. Having confidence in your own performance and abilities will only magnify the effects of social support. It is possible that having confidence in yourself and receiving the support from your peers will boost the levels of work engagement. This health effect was found by Karademas (2006), albeit phrased negatively, where social support and self-efficacy had a positive relation with satisfaction with life and low levels of depression. In practice the beneficial effects of occupational self-efficacy can also be observed. The high amount of interaction with colleague's and teamwork at Danone can work motivating if an employee has confident that he will perform well. If this confidence is not available and the employee is not certain that his results will be positive then he might not want to demonstrate this in front of his coworkers. The lack of results for job control and feedback could prove occupational self-efficacy to mainly work through social relations and

less via actual characteristics of the function.

Concerning the moderating effect of occupational self-efficacy, based on the relation between job resources and willingness to change, the results only showed a moderating effect on the relation between job control and willingness to change. This interaction effect was expected, however. Confirming this expectation means that people with higher self-efficacy will have a greater use of their control over the job and will be more willing to change than employees lower in occupational self-efficacy. This makes sense, as having confidence in your own abilities will give you more freedom in your job (Bond & Bunce, 2001). Using this freedom more effectively by deciding when and how to do things is ultimately beneficial when a change would be planned (van den Heuvel et al., 2010). When the confidence in your own abilities is not high and you doubt the success of your own actions then having freedom in deciding how and when to do your job will impede being open to supporting changes. The lack of results shows that the effects of support from colleagues and feedback from the job are not magnified by occupational self-efficacy. It is possible that employees high on self-efficacy do not need feedback or support to aid them in accepting change but are already prepared enough (Jimmieson, Terry & Callan, 2004).

The construct of regulatory focus was expected to moderate the relation between job resources and work engagement. Since no significant interaction effects were found the focus of this section will be on the lack of results. Based on the extensive literature that has covered the subject of regulatory focus moderation many found some significant relations with work engagement (van den Tooren & de Jonge, 2011; Petrou & Demerouti, 2010; Brenninkmeijer, Demerouti, le Blanc, & van Emmerik, 2010). However, Brenninkmeijer et al. (2010) discussed similar findings in their research as they too found a lack of interaction between specifically promotion focus and social support. Their explanation is that a 'ceiling effect' might occur where employees high in promotion focus already have increased levels of motivation and confidence. Support from colleagues and management, then, would add little extra in relation to increasing levels of work engagement (Brenninkmeijer et al., 2010). For the other job resources these findings could be explained similarly. Being motivated and driven to success would offset the positive influence of the job resources that are included in this study.

In contrast to the previous expectations there were results for the regression analysis including job control and prevention focus with willingness to change as an outcome variable. This significant effect indicates that employees scoring high on job control will be less willing to change when they score high on prevention focus. This is conform out expectations as

prevention focused individuals strive more toward security and safety, which is not what organisational change provides (Higgins, 1998). By extension, when a person's prevention focus is high they will classify change as a threat and not an opportunity which leads to a low score on willingness to change (Bond & Bunce, 2001). The effect of regulatory focus, then, is in line with the expectations set out in this research although not as pronounced since no significant effect was found for promotion focus.

Finally, regulatory fit concept will be analysed further. Using a semi-experimental scenario study the communication framing was manipulated in order to create four conditions. It was expected that those participants in the 'fit' conditions (e.g. promotion-focused individuals receiving the promotion scenario and prevention-focused individuals receiving the prevention scenario) would be more willing to support changes than their counterparts. All participants answered three questions about supporting the proposed hypothetical organizational change and statistical analysis showed how promotion focused individuals receiving the promotion scenario were the most willing. Only the expected effect for prevention-focused individuals receiving the prevention scenario did not appear significant. This result was similar for all three items about organizational change thus partially confirming the expectations set out in the introduction. This significant effect that was found only for promotion-focused individuals could be explained by several causes. Firstly, organizational change could signal a positive growth in the company making way for more opportunities to learn and develop (Brockner & Higgins, 2001). Promotion-focused employees, then, could embrace this change and be more willing to support the change initiative. This is of course contingent on the framing of the change communication. Having a promotion-focused change communication spread through the company will lead employees who are also scoring high on promotion-focus to appreciate the company. Promotion-focused employees might see the company as catering to their needs and matching their attitude thus promoting motivation and commitment (Higgins, 2004). The effects of promoting change work extra then for promotion-focused employees who seek these challenges naturally. As an extension to the previous point, based on research by Taylor-Bianco & Schermerhorn Jr. (2006), this finding could indicate a previous fit between employees regulatory focus and the regulatory context of the organization. This means that the organizations situational regulatory focus that is primed and picked up by employees is mainly promotion-focused. When employees were asked to read the hypothetical scenario they had to imagine this change occuring in their current organization. Employees could then (subconsciously) let the regulatory context of the organization influence them when choosing to

support the hypothetical change. This would then lead to promotion-focused individuals receiving the promotion framed change message in a presumed promotion-context organization score the highest on the willingness to change. Defining Danone as a promotion-context organization is speculative but the focus on employee initiatives, extensive training plans and employee growth every two years could prove the presumption.

The lack of significant results for prevention-focused individuals was unexpected according to our theorizing. However, there are several explanations possible. Firstly, it is possible that prevention focused individuals might respond more strongly to the consequences of changes. Prevention-focused individuals are more averse to change and strive for security (Liberman, Idson, Camacho, & Higgins, 1999). Brockner and Higgins (2001) explain this notion by indicating that prevention-focused individuals might turn their attention to other matters first, such as meeting the new demands posed by the change or even retaining their job. Fairness of the change or willingness to change might be of a lower priority. Another explanation is the incongruence between a leaders regulatory focus and their subordinates' regulatory focus (Brockner & Higgins, 2001). When a manger is prevention-focused and requests a prevention-focused strategy for organizational change then an employee with a promotion focus will be less committed to achieve their goals. In practice this means that change communications at Danone are usually discussed by the manager. When the employee's regulatory focus does not fit with the focus in which his manager communicates the change (in the case of this research, by email) he might support the change less (Brockner & Higgins, 2001).

### 4.2 Limitations of this research

As with every research, there are some comments to be made about the soundness of the experiment. In this section, five important limitations will be illustrated that can have an impact on the results of this study. The first limitation is related to the demographics of the sample. This research was completed in a non-English speaking office with highly educated employees. Although the predominant language is English (besides the mother tongue of the local branch) several employees commented on the difficulty they had understanding the English questions. This circumstance may have resulted in a lower completion rate and a sample bias, only letting higher-educated employees be able to complete the survey and thus eliminating the results of the lower-educated group. Secondly, the self-report measure that was utilized in this study is a weakness. Employees were able to fill in the questionnaire as they saw fit which could have lead to a self-report bias. Including a social desirability index could improve this weakness

(Donaldson & Grant-Vallone, 2002). A third limitation of this research is its design. Since this research did not utilize a longitudinal design it is not possible to comment on the directionality of the results. Finally, the use of an internet questionnaire brings along its own advantages and disadvantages (Peeters, Montgomery, Bakker, & Schaufeli, 2005). While being an efficient tool the downsides are that there is confounding and limited control over how and when the participants complete the questionnaire.

## 4.3 Suggestions for future research

Based on the results discussed above there are several important implications for future research. The first includes the moderating role of occupational self-efficacy in the JD-R model as personal resource. Since its incorporation as a personal resource by Xanthopoulou et al. (2007) self-efficacy has been recognised as an important factor in the JD-R framework. However, there has been some debate as to whether self-efficacy is a moderator or a mediator in the JD-R framework (Xanthopoulou et al., 2007; Jimmieson, Terry, & Callan, 2004; Heuven, Bakker, Schaufeli, & Huisman, 2006). The results of this study at least help to ignite this discussion as several important job resources were found to be significant. Out of the four interactions two were quite highly significant (social support and job control). This means that occupational self-efficacy has a place in the JD-R framework.

Another implication is the lack of a moderation effect by regulatory focus. Even though a moderation effect was expected there appears to be no proof of this based on the results of this study. This could be due to the relatively unproven field of regulatory focus as a personal resource requiring more in depth research into the specific function of regulatory focus. Several studies have found significant effects for the moderating effect of regulatory focus, on which this study has tried to build, between job characteristics such as feedback or social support and outcomes like work engagement (Brenninkmeijer, Demerouti, le Blanc, & van Emmerik, 2010; Petrou & Demerouti, 2010). However, there are also many other relevant outcomes or job characteristics that should be included in further research in relation to regulatory focus, such as organizational commitment or different leadershipstyles (Hamstra et al., 2011). Another possibility is examing regulatory focus as a mediator instead of a moderator (Neubert et al., 2008).

Based on the results of this study there are several interesting suggestions to be made for future research. A possible research perspective is splitting the concept of social support, defined in this research as support from colleagues and leaders, into two separate constructs. Some research has shown that support from management can aid employees more in organizational changes, such as the leadership style (e.g. transactional or transformational), than support from colleague's can (Taylor-Bianco & Schermerhorn Jr., 2006; Meyer, Becker, & Vandenberghe, 2004; van Emmerik, Bakker, & Euwema, 2009). Examining these effects seperately could give a different perspective on the role of social support in these contexts.

# 4.4 Practical Implications

One of the goals of this research was to investigate the moderation effect of occupational self-efficacy and regulatory focus on the JD-R model and organizational change. The results that were significant give some very important implications for organizations. Increasing the levels of occupational self-efficacy for employees through mastery experiences or modeling can be beneficial for organizations that want to ensure a healthy work environment or a smooth transition in organizational change (Bandura, 1977). Through the use of comparisons or explanations by a colleague (social support) organizations can utilize the concept of modeling to increase self-efficacy beliefs. Mastery experiences simply signify the learning that occurs when one completes a task with success. Having success increases the self-efficacy of the employee who consequently learns how to do something (Bandura, 1977). More practically, Grau, Salanova, & Peiro (2001) suggest organizations use self-efficacy training to increase employees confidence in themselves and the confidence to complete tasks successfully. Especially when organizational change is considered this research showed the importance of self-efficacy for successfully implementing the change.

From an occupational health perspective, this research provided support for the JD-R model as most main effects proved significant. This means job resources as social support or job control are important predictors of work engagement. Organizations could plan interventions to create more opportunities for freedom in the work of their employees. The latter, together with leadership and colleague support, giving employees more control over the way they perform their work and when. Feedback sessions could be planned to facilitate discussions between management and employees to discuss such matters. Another possibility is including the employee in the yearly target setting and letting them provide feedback instead of a top-down process.

Ultimately there are many possible directions to take with regard to the fostering of wellbeing and willingness to change under employees. There are many tools and theories available but it is up to the organizations to implement the changes and make the difference.

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# **Appendix**

## **6.1 Hypothetical Change Scenarios**

### **Organizational Change Scenario [Promotion]**

Our organization is faced with the consequences of the economic setbacks experienced all over the world and the Netherlands. In order to turn these setbacks into opportunities for the organization, the executive committee decided to drastically reorganize our company. Changes will be introduced to our culture, structure, processes, and administration. The present message is written to introduce briefly this achievement program before a more detailed brochure is distributed to all employees containing all the information. Meetings will also be held so that everyone is informed in depth.

#### Culture

A central aim of the change program is to initiate changes to our organizational culture so that our company becomes more client-oriented. The satisfaction levels of clients as well as the success factors that promote satisfaction will be monitored frequently through surveys and focus groups. More satisfied clients means that work will be healthier in terms of its emotional aspects. That is directly related to higher employee satisfaction as well. Furthermore, our values so far have focused on the relationship aspects of the job, with an aim to enhance a fluid interaction between employees and to promote a positive climate at work. We would like to preserve and intensify this focus. Next to this, however, we would also like to develop a focus on the achievement of success in terms of job tasks and performance.

#### Structure

In terms of the organizational structure, we would like to create a less hierarchical organization. The primary goal of this change is to ensure success at work and result in a higher number of employees succeeding in their core tasks. Frequent and quality interaction with their daily supervisor will ensure that all employees know what they need to perform in order to achieve their potential.

#### **Processes & administration**

Regarding the methods, tools and technologies that are necessary to enhance employee performance, a few changes will be introduced. The primary change will be that of a new interface in the computer system and the internal networks (intranet) of all employees. Technological innovations will ensure that employees are in control of their tasks and are able to perform their job with success and on time. When these changes are initialized there will be a greater number of employees who reach their daily goals and are successful overall.

#### **Conclusion**

In conclusion, it is important that this achievement program is developed and backed so that employees are facilitated to grow and develop. This way we will have a greater number of employees succeeding in their job. This also includes an increased number of employees who experience their jobs as fulfilling and engaging. This program can be an effective way of providing the assistance needed to employees in order to raise the overall level of success within our organization. Therefore, our organization will have more chances to deal successfully with the consequences of the worldwide financial crisis.

#### **Organizational Change Scenario [Prevention]**

Our organization is faced with the consequences of the economic setbacks experienced all over the world and the Netherlands. In order to protect the organization against the dangers stemming from these setbacks, the executive committee decided to drastically reorganize our company. Changes will be introduced to our culture, structure, processes, and administration. The present message is written to introduce briefly this prevention program before a more detailed brochure is distributed to all employees containing all the information. Meetings will also be held so that everyone is informed in depth.

#### Culture

A central aim of the change program is to initiate changes to our organizational culture so that our company becomes more client-oriented. The dissatisfaction levels of clients as well as the security factors that prevent dissatisfaction will be monitored frequently through surveys and focus groups. Less dissatisfied clients means that work will be less demanding in terms of its emotional aspects. That is directly related to lower employee dissatisfaction as well. Furthermore, our values so far have focused on the relationship aspects of the job, with an aim to secure a fluid interaction between employees and to prevent a negative climate at work. We would like to preserve and intensify this focus. Next to this, however, we would also like to develop a focus on the prevention of failure in terms of job tasks and performance.

#### Structure

In terms of the organizational structure, we would like to create a less hierarchical organization. The primary goal of this change is to prevent mistakes at work and result in a lower number of employees failing in their core tasks. Frequent and quality interaction with their daily supervisor will ensure that all employees know what they need to avoid in order not to fall short of their responsibilities.

#### **Processes & administration**

Regarding the methods, tools and technologies that are necessary to secure employee performance, a few changes will be introduced. The primary change will be that of a new interface in the computer system and the internal networks (intranet) of all employees. Technological innovations will ensure that employees do not fail to be in control of their tasks and are able to perform their job without mistakes and delays. When these changes are initialized there will be a lower number of employees who fail to reach their daily goals and are unsuccessful overall.

#### Conclusion

In conclusion, it is important that this prevention program is developed and backed so that employees are facilitated to perform their responsibilities appropriately. This way we will have a lower number of employees failing in their job. This also includes a decreased number of employees who do not experience their jobs as fulfilling and engaging. This program can be an effective way of providing the assistance needed to employees in order to lower the overall level of failure within our organization. Therefore, our organization will have less chances to fail when confronted with the consequences of the worldwide financial crisis.