Employee Self Efficacy and Job Stress during Organizational Change: The Mediating Effect of Risk Perception

By Marcel van Dijk

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Abstract

During the current worldwide recession, many organizations are subjected to vigorous change. A Dutch bank organization who was part of a cancelled merger with another major bank organization was recently nationalized by the Dutch government. As a result of these changes, employees experience increased levels of job stress. This research identifies self efficacy as an important factor to influence the amount of stress among employees. Furthermore, it identifies the perception of risk as a mediating factor in the relation between self efficacy and job stress. A total of 83 (57%) employees filled in a digital survey. The survey consisted of 49 statements measured by a five-point likert scale. The results confirm a main effect of self efficacy on job stress, and a mediating effect of risk perception with a reverse causal effect. These results lead to a conclusion that during a recession, self efficacy of change negatively relates to job stress, and supports the general notion that self efficacy will effect job stress. Because of the confirmation of the reversed causality, a mediating effect of risk perception cannot be confirmed. However, it is made clear that there is a relation between job stress and risk perception. It is therefore suggested that future research is conducted using the same variables whilst controlling for the mediating variable.

Samenvatting

Als gevolg van de huidige economische recessie zijn verschillende bedrijven onderhevig aan ingrijpende veranderingen. Na een mislukte fusie tussen twee Nederlandse banken heeft de overheid ingegrepen en de banken genationaliseerd. Door deze veranderingen hebben medewerkers meer last van werkgerelateerde stress. Dit onderzoek richt zich op het vermogen om te gaan met het proces van verandering als belangrijke voorspeller van werkgerelateerde stress. Daarnaast wordt het medierende effect van de perceptie van het risico van de verandering op de relatie tussen het vermogen om te gaan met het proces van verandering en de werkgerelateerde stress. In totaal hebben 83 (57%) werknemers van één van de banken een digitale vragenlijst ingevuld. De vragenlijst bestond uit 49 items die gemeten werden op een 5-punten Likert schaal. De resultaten bevestigen het voorspelde effect én het medierende effect, met de kanttekening dat er ook een omgekeerd causaal verband is bij het medierende effect, tussen de werkgerelateerde stress en de perceptie van het risico van de verandering. Concluderend kan gezegd worden dat het vermogen om te gaan met het proces van de verandering negatief effect heeft op werkgerelateerde stress in een periode van recessie. Dit resultaat ondersteund de algemene opvatting dat het vermogen om te gaan met een situatie de stress die bij de situatie behoord beïnvloedt. Door dit omgekeerd causale verband kan het medierende effect niet bevestigd worden. Echter is de relatie tussen de werkgerelateerde stress en de perceptie van het risico van de verandering wel aangetoond. Daarom wordt aangeraden om in toekomstig onderzoek te controleren voor de perceptie van het risico van de verandering.
Introduction

Currently, the world is in a period of recession. In the Netherlands, large bank organizations cannot survive without financial support from the government exceeding 10 billion Euros. During this recession period, most companies are forced to lower their costs in order to survive. An often-used strategy in practice is to reduce employee costs by laying off employees or reducing employee career opportunities. These measures create commotion among the workforce and lead employees to experience high job stress. The purpose of the study is to identify relevant factors that affect employee job stress in a period of drastic organizational changes. Specifically, this research focuses on a bank organization because for this bank organization, the circumstances are notably interesting.

Stress in literature is generally defined as “a state of psychological arousal that rises when external demands tax or exceed a person’s adaptive abilities” (Lazarus & Folkman, 1984). Stress, for example occurs due to an unforeseen event, if a deadline is set to a time which is earlier than originally planned. These external demands, in this example the amount of time available, are potential sources of stress, and they can take the form of an acute event or an ongoing suspense (Levenstein, et al., 1993).

Stress manifests itself in three categories (Jex & Beehr, 1991): psychological reactions, physical reactions, and behavioral reactions. In this study, the focus is on psychological reactions because psychological stress in essence predicts organizational determinants of job stress (Parker & DeCotiis, 1983). Among the psychological reactions, Levenstein et al. (1993) have further identified seven categories, such as increase in worries and feelings of frustration.

In addition to stress manifestation, another hot topic on stress is to identify important domains of stress, such as the job-related domain (Parker & DeCotiis, 1983). In terms of job-related domain, stress is divided in two groups (Cox, Griffiths, & Leka, 2003): work content and work context. In work content, job content (i.e. lack of variety), workload and workspace, working hours and participation & control (i.e. decision making) are mentioned. In work context, career development (i.e. bad performance appraisal system), role in the organization (i.e. unclear role) interpersonal relationships (i.e. bad relation with coworkers), organizational culture (i.e. poor leadership) and the work-home interface (i.e. conflicting demands from home and work) are discussed (Cox, Griffiths, & Leka, 2003). Both factors are responsible for the amount of which the employee is able to reach the optimum level of performance (Cox, Griffiths & Leka, 2003). For this research focus is set to psychological reactions of context related job stress. In line with the reasoning of Lazareus and Folkman (1984), Beehr and Newman (1978) already stressed that cognitive construction of the context is very important in stress as a result of organizational change.
The following part of this paper presents several factors that influence job stress in a theoretical review. In that review, their effects on job stress are argued. Then, the proposed model is empirically tested, and the results are presented. Finally, several theoretical and practical implications are presented and debated.

**Self Efficacy and Job Stress**

As mentioned previously, this research highlights the context related job stress. By context-related, we mean that relevant sources of job stress come from the context in which the job is performed (Cox, Griffiths & Leka, 2003). For example, changes in career development are imminent, and the organizational culture alters as well. Employees might become harsh to keep their jobs even if their colleagues suffer as a result. In other words, the job context is forced as a result of the change, and individual employees are unable to take control of the situation. Control is an important issue in job context-related stress (Beehr & Bhagat, 1985).

The perception of being in control of the situation is often referred to as self efficacy (Bandura, 1984; 1993; 1997). Self efficacy is defined as a self-evaluation of one’s competence to successfully execute a course of action that is necessary to reach desired outcomes (Bandura, 1993). Some research has explored the development of individual self-efficacy. For example, self-efficacy is dependent on performance attainments, knowledge and skills, and comparison to relevant others (Kaufman, 2003). Due to high performance, self efficacy increases. If someone is confident about ones’ knowledge and skills, self efficacy increases as well. Also, self efficacy is evaluated through comparison to others. If I perceive myself handle changes easier than my peer, Self-efficacy will increase if changes are perceived easier handled than a peer handles the same changes.

In the development of the concept of self efficacy, more research concerns about the function of this concept for individual’s psychological perceptions and behaviors. Self efficacy is proven to have an impact on the way people think, feel, and act. Persons with low self efficacy have low self esteem, and are pessimistic about their accomplishments. Low self efficacy is associated with feelings of depression, anxiety and helplessness (Bandura, 1997). In relation to dealing with change, low self esteem and pessimism as well as insecurity have been proposed to have a direct influence on psychological stress (Bandura, 1982; 1993; 1997). Therefore, it is suggested that self efficacy is related to psychological job stress. Berneth (2004) identifies self-efficacy as an important factor for the success of change.

One of the properties of self efficacy is that it is domain related. A person can have high self efficacy on one domain, and low self efficacy on another (Bandura, 1982). For example, one can have high self efficacy on carrying out academic tasks, but low self efficacy of job skills (e.g. Zajacova et al., 2005; Jex & Gudanowski, 1992). A relevant domain in this study concerns self efficacy in terms
of handling changes. That is, self efficacy is the perception of one’s capabilities to handle changes. In other words, self efficacy is defined as the perceived ability to handle the rapidly changing situation due to a difficult situation. Self efficacy will be referred to as self efficacy of change.

Although there is no direct evidence about the relationship between self efficacy of change and job stress, the findings of other self-efficacy domains may provide some hints for this relationship. In a study done by Schwarzer and Hallum (2008), findings showed that there was a negative relation between self-efficacy of teaching and job stress as a result of teaching. Zajacova, Lynch and Espenshade (2005) find self-efficacy in carrying out academic tasks and stress related to these academic tasks to be related. Their research concerns the domain of academic tasks among 107 first year college students. Jex and Gudanowski (1992) also related a specific domain of self-efficacy to stress. They measured self-efficacy as being able to do their job. They also found self-efficacy to be related to stress.

Based on empirical research it is arguable that a similar effect of self-efficacy of change and the stress also exists. Therefore, the first hypothesis is as follows:

**Hypothesis 1:** Self-efficacy of change is negatively related to change related job-stress.

![Figure 1: Hypothesis one](image)

**Mediating Effect of Risk Perception on the Link between Self Efficacy and Job Stress**

The perception of change-related risk may affect the link between self efficacy and psychological job stress. Risk perception is the subjective assessment of the probability of a specified type of accident happening, and how concerned the individual is with the possible consequences. In other words, perceiving risk includes estimation of the probability and the consequences of a negative outcome (Sjöberg, Moen, & Rundmo, 2004).

During stressful times, such as an organizational change, low self-efficacy tends to enlarge personal flaws and magnify the risk of the situation at hand (Beck, 1976; Meichenbaum, 1977 In: Berneth, 2004). Such self-doubt and worry create psychological stress (Bandura, 1982).

Risk, like self efficacy, is a domain related variable (e.g. Slovic, 1989). The perception of risk on an oil rig (Ulleberg and Rundo, 1997) does not provide any information about the perception of risk in driving a car (Deery, 1999). All perceived risk concepts have one element in common: the distinction between reality and possibility. Certain risks always exist but the perception of risk differs among people (DeJoy, 1989).
Literature indicates an impact of self efficacy on risk perception if based in the same domain. For example, the ‘optimism bias’ (DeJoy, 1989) predicts that people who find themselves capable of handling, will underestimate the risk. Their research was conducted among 106 licensed drivers. Drivers with high self-efficacy of driving generally underestimated the potential risks of driving a car in comparison to drivers with low self-efficacy of driving. People are able to fairly judge all risks involved, but some people tend to think that those risks do not apply to them, because they overestimate their ability to cope with all difficulties involved in traffic (Deery, 1999). In medicine, self efficacy has been identified as an important factor predicting perception of risk, for example in cancer risk (Mellon et al., 2008). In their research, a general scale to measure of self efficacy was used to estimate an influence to the perception of cancer risk, and general self-efficacy proved to have a positive relation to risk perception of cancer. In this study, self efficacy was measured as being able to accomplish anything as long as one commits to it. Cancer risk was identified as the perception of the risk of having cancer in the future. The findings show that the risk of negative consequences as a result of the occurring changes is altered by the self efficacy of change employees have. Related the previous works of DeJoy (1989), Deery (1999) and Mellon et al. (2008) to the current study, I argue that self efficacy alters the perception of the risk of possible negative effects of the changes that the bank organization currently is in. The important risks in a changing organizational setting are loss of income, loss of job or decreased career opportunities (Jex & Beehr, 1991).

On the other hand, stress literature suggests that stress is a feeling, created by perceptions (Lazarus & Folkman, 1984; Rafferty & Griffin, 2006). This indicates risk perception to have great impact on job stress. This notion is supported by Beehr and Bhagat (1985) who noted that the severity of stress is increased when there is a high level of uncertainty over a prolonged period of time. They define uncertainty as the perceived chance of unpleasant things to occur, which equals the definition of risk used in this research. Several studies confirm the relationship between risk perception and job stress (e.g. Rafferty & Griffin, 2006; Ullberg & Rundmo, 1997). The context of this research includes uncertainty as risk to unpleasant things to occur, so it is predicted that in this research the perception of risk affects job stress.

In summary, self efficacy, Risk perception and Job stress mentioned in this study have a common base: all are individual psychological factors. During change, important sources of stress are lay-off and loss of career opportunities. The amount of self efficacy in handling change alters the amount of stress as a result of this. Also, the perception of the chance that lay-off and loss of career opportunities will affect the employee perceived stress. At the same time, self efficacy of the change makes employees to adjust their perception of risks related to that change. Therefore, it is predicted that a mediation effect exists. It is argued that risk perception mediates between the relation of self efficacy and job stress in the second hypothesis:
Hypothesis 2: The perception of the risk associated with change has a positive mediation effect on the relation between self efficacy of change and job stress.

![Diagram](image)

Figure 2: Hypothesis two

Method

Participants

Participants worked in a Dutch bank organization, which was part of a major acquisition. This acquisition was cancelled when the Dutch Government intervened due to economical recession, and the banks were nationalized. Even though the bank organization was in the middle of an integration process, this process had to be cancelled and various disintegration projects started off. In the process of integration the announcement for a structural reorganization in which approximately 3000 people were laid-off. Later, when the acquisition was cancelled, more organizational change was imminent as a result of governmental interference.

In total, 83 participants took part in this study. The average age of the participants was 28 in a range from 24 to 34. Of the 83 participants, 52 were male (63%). All of the population had a master’s degree. Most of the population had a financial education (35%) or a background in Business Administration (32%). All participants’ native language is Dutch. On average, participants worked for 21 months within the organization ranging from less than one month to 50 months. The Participants worked in all various parts of the bank organization: the Merchant Bank (58%), Support functions (19%), Retail Bank (5%), Private Bank (5%) and Other (13%). All participants had a masters’ degree.

Procedure

The bank organization was contacted through university business contact days. As a result of a personal meeting and an application for an internship, the current research was initiated.

Junior employees, who started working for the bank organization between the first of February 2006 and the first of February 2009, were contacted by email and asked to fill out a digital questionnaire which was distributed in March 2009. Reminders were sent after one week. In total, 146 participants were asked to fill out the questionnaire.
An online survey was developed to collect data from the organization (see appendix A). The choice for an online survey was based on the fact that 1.) The respondents were spread all over the Netherlands, Belgium, the United Kingdom and Singapore. 2.) Convenience for the organization. Also, the barrier to respond for the target group was supposed to be lower using a digital survey rather than a hard-copy one (Deutskens, Kroezen & Willems, 2004).

One week before the launch of the questionnaire online, a pre-announcement was sent to potential participants by email, to inform them about the survey. In the first invitation, no deadline was given to prevent people from last-minute work. One week after the questionnaires were distributed, a reminder was sent with a deadline of one week. The second reminder followed one week later. About 100 returned the questionnaire (68%), 17 of which only filled in their personal data. 83 people fully filled in the questionnaire, resulting valid data, a total response rate of 57%.

Measures

The questionnaire consisted of four parts. All items were reframed to match participant working situations. The intended measures were self-efficacy, risk perception, and the experienced amount of job stress. In addition, a set of questions regarding organizational variables (i.e. turnover intentions) and personal data (i.e. age, gender) were added. In total, the questionnaire consisted of 49 statements. Respondents were asked to reply on a five point Likert scale (1 = totally disagree; 5 = totally agree).

*Job Stress* was measured using a scale of nine items created by Levenstein *et al.* (1992). A sample of the items was ‘As a result of the current situation, I have trouble relaxing.’ (α=0.84)

*Self Efficacy.* Twelve items were used to measure this scale. The items were developed on the basis of Judge and Pucik’s work (1999). Some examples were ‘I don’t have any difficulties to handle the occurring changes within my organization,’ ‘I rather accept the current changes than complain about them,’ and ‘I think I cope with change better than most of those with whom I work.’ (α=0.73)

*Risk Perception* The scale was developed for this research based on literature suggesting that the perception of risk was determined by oneself, friends and family and relevant experts (Short, 1984). A sample question of this scale was: ‘I am confident I will keep my job.’ The scale consists of nine items (α=0.79)

Demographic variables such as gender, age and months of service were included into the analysis for controlling purposes.

Data Analysis

The first hypothesis was tested using multiple regression analysis. The mediation hypothesis was tested with multiple regression analysis as well by following suggestions from Baron and Kenny.
Conclusions from a mediation analysis are only valid if the causal assumptions are valid. One of the assumptions mediation is based upon, is that the outcome variable is caused by the mediator as well as the predictor variable. However, if the outcome variable causes the mediator (for this research, if stress causes the perception of risk) one cannot be sure that the mediation exists. This is called the reverse causal effect (Baron & Kenny, 1986) and is tested as a mediation effect with the original outcome variable as the mediator, and the original mediator as the outcome variable.

Results

Descriptive analysis

Table 1

Intercorrelations, Means and Standard Deviations of researched scales for Young Bank Employees

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self efficacy</td>
<td>3.42</td>
<td>.49</td>
<td></td>
<td></td>
<td>.54**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk perception</td>
<td>3.38</td>
<td>.53</td>
<td>-.54**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job stress</td>
<td>2.61</td>
<td>.62</td>
<td>.40**</td>
<td>.46**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>27.48</td>
<td>1.73</td>
<td>-.18</td>
<td>-.26*</td>
<td>.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1.37</td>
<td>.49</td>
<td>-.22</td>
<td>-.06</td>
<td>.30</td>
<td>-.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associates / Alumni</td>
<td>1.55</td>
<td>.50</td>
<td>-.11</td>
<td>.03</td>
<td>.07</td>
<td>.10</td>
<td>.24*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department</td>
<td>2.56</td>
<td>2.0</td>
<td>.20</td>
<td>.15</td>
<td>-.10</td>
<td>-.084</td>
<td>.23*</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Field of graduation</td>
<td>2.85</td>
<td>2.2</td>
<td>-.54**</td>
<td>-.15</td>
<td>-.15</td>
<td>.19</td>
<td>.00</td>
<td>.53</td>
<td>.05</td>
</tr>
<tr>
<td>Months of service</td>
<td>20.76</td>
<td>9.99</td>
<td>.40**</td>
<td>.46**</td>
<td>.27*</td>
<td>.28**</td>
<td>.03</td>
<td>.44**</td>
<td>-.12</td>
</tr>
</tbody>
</table>

Note.  *

The correlation analysis showed that all factors relevant to the presented model did significantly correlate with each other. Self efficacy correlated negatively with risk perception, and job stress had positive correlations with self efficacy and risk perception. This indicates that if for one employee self efficacy is relatively high, his risk perception will be relatively low, and his job stress will be relatively high as well. Also, when his/her job stress is relatively high, self efficacy will be relatively low, and risk perception will be relatively high. Finally, when his risk perception is measured to be relatively high, his job stress will be relatively high as well and his self efficacy will
be relatively low. It also shows expected relations between being an alumnus and the amount of months in service.

Hypotheses

The first hypothesis suggests a negative effect of self efficacy on job stress. The results in Table 1 showed that the relation in the first hypothesis was significant (b = -.37; p < .01).

The second hypothesis assumed a mediation effect of risk perception on the main effect of self efficacy and job stress. To verify this hypothesis, the following four conditions need to be met (Baron & Kenny, 1986) 1. a significant effect of self efficacy on job stress; 2. a significant effect of self efficacy on risk perception; 3. a significant effect of risk perception on job stress; 4. The effect of self efficacy on job stress was reduced significantly if the mediator (risk perception) was introduced; the significance of the reduction was measured using Sobel ‘z’ scale (Sobel, 1982 in: Preacher & Hayes, 2004).

As shown in Table 2, the first condition proved to be true (b = -.37; p < .00), which also supports hypothesis 1. The second condition turned out to be valid, indicating a negative effect of self efficacy on the perception of risk (b = -.52; p < .00). The third condition was also met, indicating a positive effect of risk perception on job stress (b = .30; p < .05). Step four showed that the effect of self efficacy on job stress decreased when risk perception was introduced (b = -.22; p < .10) and appeared to be significant (Δ = .15; p < .01), which is in line with Condition four. All in all the findings from hypothesis testing are consistent with the theoretical expectations.

Table 2
Summary of Multiple Regression Analyses for Variables Predicting Job Stress (N = 83)

<table>
<thead>
<tr>
<th>Step</th>
<th>Mediation effect</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>A significant effect of self efficacy on job stress</td>
<td>-.47</td>
<td>.127</td>
<td>-.37**</td>
</tr>
<tr>
<td>Step 2</td>
<td>A significant effect of self efficacy on risk perception</td>
<td>.56</td>
<td>.101</td>
<td>.52**</td>
</tr>
<tr>
<td>Step 3</td>
<td>A significant effect of risk perception on job stress</td>
<td>-.49</td>
<td>.117</td>
<td>-.42**</td>
</tr>
<tr>
<td>Step 4</td>
<td>A lower significant effect of self efficacy on job stress</td>
<td>-.28</td>
<td>.145</td>
<td>-.22*</td>
</tr>
</tbody>
</table>

The decrease in the effect of self efficacy on job stress is significant. Δ .15**

Note. * p < .06  ** p < .01
**Additional analyses.** To establish whether any reverse causal effects appeared an additional multiple regression analysis is conducted as displayed in table 3. Table 3 displays similar results as Table 2 indicating a reverse causal effect. The results from step three are not very similar, although the results from step four are. Similarity of these steps would indicate a causal effect. Even though the decrease in effect of self efficacy on risk perception is less than in the original analysis, the decrease is significant as well ($\Delta = .09^*; p < .05$).

Table 3

Summary of Multiple Regression Analyses for Variables Predicting Risk Perception (N = 83)

<table>
<thead>
<tr>
<th>Mediation effect</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 A significant effect of self efficacy on risk perception</td>
<td>-.56</td>
<td>.101</td>
<td>-.52**</td>
</tr>
<tr>
<td>Step 2 A significant effect of self efficacy on job stress</td>
<td>-.77</td>
<td>.212</td>
<td>-.37**</td>
</tr>
<tr>
<td>Step 3 A significant effect of job stress on risk perception</td>
<td>.14</td>
<td>.053</td>
<td>-.26**</td>
</tr>
<tr>
<td>Step 4 A lower significant effect of self efficacy on job stress</td>
<td>-.45</td>
<td>.108</td>
<td>-.26*</td>
</tr>
</tbody>
</table>

The decrease in the effect of self efficacy on job stress is significant. $\Delta .09^*$

**Note.** * $p < .05$ ** $p < .01$

**Discussion**

Job stress is one of the significant consequences related to uncertainties in the workplace. This study focuses on how self efficacy and risk perception have an impact on employee job stress in a period of drastic change. To test my assumptions, I sampled participants from a bank organization, which is facing a magnificent change as a result of an economic recession. Both risk perception and self efficacy appear to be positively related to job stress, as expected. Moreover, this research indicates a possible mediating effect of risk perception on the relation between self efficacy of change and job stress. It suggests that the impact of self efficacy on job stress is transmitted by risk perception. I would like to highlight a few points for discussion.

The findings with regard to the first hypothesis are in line with previous research. For example, Schwarzer and Hallum (2008) found an effect of self efficacy on change in the domain of teaching, and Lynch and Espenshade (2005) found a similar effect of self efficacy and job stress in completing academic tasks. This research adds to these findings as to prove that for the domain of organizational change as a result of a recession, self efficacy and job stress are related as well. All these findings, suggest that self efficacy could very well be related to job stress, as long as both are measured on the
same domain. Further more, there could be a chance that the effect of self efficacy on job stress may be valid across various domains. Future research should expand these findings on more domains in order to fortify the generalization of the relation between self efficacy and job stress.

The second hypothesis suggests that the impact of self efficacy on job stress is transmitted by risk perception. This is in line with findings suggested by Berneth (2004). This finding has several implications to studies regarding both self efficacy and job stress. Future research on both job stress and self efficacy should consider the accountability of risk perception on various effects of both variables. For example, findings from Mellon et al. (2008) and DeJoy (1989) can be expanded by including (job) stress, and conduct research on the mediation effect of risk perception on other domains of self efficacy.

However, results regarding a mediating effect must be interpreted with caution. Although the expected mediation effect of risk perception was established, the extra analysis showed a reverse causal effect from job stress to risk perception. This means that the direction of the causality cannot be determined, and I cannot be sure that risk perception mediates the relation between self efficacy and job stress. As the reversed causality could not be ruled out using theoretical foundations, evidence for a mediation effect is vague. In future studies attention should be given to the interaction relation between the three variables self efficacy, job stress and risk perception. To rule out any reverse causal effects, upcoming research to the mediation effect of risk perception on the relation between self efficacy and job stress should control for risk perception.

Limitations

A number of limitations to this study should be considered. The target population to this research was selected from among young bank employees who recently joined the bank organisation. It would really add to the results from this study, if a random sample of all employees is selected. Also, even though the current sample proved to be big enough to confirm a main effect and a hint a mediating effect, it is advisable to enlarge the sample in future research to generalize findings.

In addition, the variables assessed were all measured at one point in time, and longitudinal research is needed in order to empirically demonstrate causal relationships among the three researched variables. This longitudinal design also enables to control for risk perception, ruling out the possibility of a reverse causal effect. In addition, no data is available for this particular bank organization before the changes occurred. If such data would have been available, results would include information about the impact of the recession, which caused the changes to occur.

This research only measures a limited part of job stress. Jex and Beehr (1991) and Levenstein et al. (1993) have worked out the concept of stress, a great contribution is made to the field if upcoming research would include the broad concept of job stress, for example physical stress.
Practical implications

From an organizational perspective, a few interesting practical implications can be made. First, HR managers may use the findings of this research to develop strategies aiming at reducing job stress in organizational change. For example, because self efficacy of change is of importance to job stress, when selecting new employees in the changing period, HR managers may need to evaluate self efficacy of applicants. Employees should be given opportunities to participate in the training on how to increase their self efficacy and with that, reduce stress. Also, a (financial) reward could be put in prospect if people independently increase their self efficacy.

HR managers should also take the relationships between risk perception and job stress into account when develop HR policies. When employee risk perception increases, their job stress increases accordingly. In turn, job stress may stimulate employee perceived risks in the workplace. HR should think over how to break this circle by controlling for either one of the factors.


Hoofdsectie

1. First of all, some personal data:

<table>
<thead>
<tr>
<th>Age:</th>
<th>Gender:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Select your current department:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchant Banking</td>
</tr>
<tr>
<td>Private Banking</td>
</tr>
<tr>
<td>Retail Banking</td>
</tr>
<tr>
<td>Commercial Banking</td>
</tr>
<tr>
<td>Support Functions</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of months within FBNL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate or Alumnus?:</td>
</tr>
<tr>
<td>Associate</td>
</tr>
<tr>
<td>Alumnus</td>
</tr>
</tbody>
</table>

2. The first statements concern the way in which you deal with the current changes regarding FBNL.

   a. I don't have any difficulties to handle the occurring changes within FBNL.  
      | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |

   b. I am informed when new developments occur related to the changing situation.  

   c. The speed of the changes that are occurring within Fortis Bank NL (FBNL) is beyond my abilities to keep in track.  

   d. I think all employees should embrace these changes.  

   e. I rather accept the current changes than complain about them.  

   f. The changes that are occurring are opening up new career opportunities for me.  

   g. When changes are announced, I try to react in a problem-solving mode, rather than an emotional mode.  

   h. I put more effort on planning and scheduling as a result of the changes within FBNL.  

   i. I think I cope with change better than most of those with whom I work.  

   j. I am happy because of the changes occurring.  

   k. The changes that are occurring are structured badly.  

   l. I can't accept the current situation; I need to do something about it!  

3. The following statements describe the feelings you have towards FBNL in its current state.

   a. I would be happy to spend the rest of my career with Fortis Bank NL (FBNL).  
      | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |

   b. I really feel as if the problems of FBNL are my own.  

   c. I feel like "part of the family" at FBNL.  

   d. I do not feel 'emotionally attached' to FBNL.  

   e. FBNL has a great deal of personal meaning for me.  

   f. I do not feel a strong sense of "belonging" to FBNL.  

4.  

   a. It would be very hard for me to leave FBNL right now, even if I wanted to.  
      | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |

   b. Too much of my life would be disrupted if I decided to leave FBNL right now.  

   c. Right now, staying with FBNL is a matter of necessity as much as desire.  

   d. I believe that I have too few options to consider leaving FBNL.  

   e. One of the few negative consequences of leaving FBNL would be the scarcity of available alternatives.  

5.
<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. One of the major reasons I continue to work for FBNL is that I believe that loyalty is important.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b. If I had not already put so much of myself into FBNL, I might consider working elsewhere.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>c. I do not feel any obligation to remain with FBNL.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>d. Even if it were to my advantage, I do not feel it would be right to leave FBNL right now.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>e. I would feel guilty if I left FBNL right now.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>f. FBNL deserves my loyalty.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>g. I would not leave FBNL right now because I have a sense of obligation to the people in it.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>h. I owe a great deal to FBNL.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

6. The following section concerns the riskiness of the current situation in FBNL for you. Please give your opinion on the following statements. As a result of situation in which FBNL is right now:

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I am confident I will keep my job.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b. I am afraid my income will decrease.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>c. I know I still will manage to attain my career goals within FBNL.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>d. My friends and family members are afraid that I will lose my job.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>e. My friends and family members are confident that I will keep my current income.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>f. My friends and family members feel I would still manage to attain my career goals within FBNL.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>g. My manager assures me that I will keep my job</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>h. My manager confirms that my income remains equal</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>i. My manager assures me I will still manage to attain my career goals within FBNL.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

7. Do you feel extra stress as a result of the current situation? Please reply to the following statements, which all begin with the sentence: "As a result of the current situation..."

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ... I don't feel stressful.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b. ... I have fewer worries than before the changes occurred.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>c. ... my problems seem to be piling up.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>d. ... I feel encouraged in my work.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>e. ... I feel frustrated.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>f. ... I have trouble relaxing.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>g. ... I feel mentally exhausted.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>h. ... I feel less relaxed.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>i. ... I feel less positive about my future.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
8. The next section concerns opinions about yourself.

a. I think I am a unique individual, with unique attributes.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

b. I enjoy being different from others.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

c. The most important thing in my life is to make myself happy.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

d. Everyone should put his or her self-interests in the first place.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

e. The goals of the group are more important than my own personal goals.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

f. It is important to my identity to belong to a group.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

g. I usually sacrifice my interest for the benefit of the group I am in.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

h. It is important for me to follow decisions made by the group.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

i. Whom you know is more important than what you know.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

j. When dealing with others, I value that giving and receiving are mutual.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

k. It is very important for me to maintain social relations with others.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

l. It is important for my self-image to have personal relationships with others.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

9. This section is about the training options within FBNL and your opinion about these training opportunities. The first ten statements begin with: "Participating in training programs …"

a. ...will help my personal development.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

b. ...will result in having to do extra work without being rewarded for it.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

c. ...will help me get along better with my supervisor.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

d. ...will give me a needed break from my job.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

e. ...will help me stay up-to-date on new processes and products or procedures related to my job.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

f. ...will help me perform my job better.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

g. ...will increase my chances of getting a promotion.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

h. ...will help me obtain a salary increase.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

i. ...will help me network with other employees.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

j. ...will give me a better idea of the career path I want to pursue.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

k. I feel comfortable discussing my skills with my supervisor.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

l. My supervisor supports my efforts to acquire new skills.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

m. My supervisor values development of my new skills.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

n. When I make a mistake, my supervisor usually treats it as a learning experience that can prevent failure and improve performance in the future.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

o. My supervisor shares information with me about problems or trends in the organization that can influence my career plans.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

p. My supervisor believes training me is one of his/her major job responsibilities.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

q. I would not hesitate to tell my supervisor about a training need I have in a particular area.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

r. My organization offers access to training for me.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

s. My organization provides me with enough training opportunities.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

t. My organization sponsors my training activities.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

10. These final statements concern your opinion about various organisational variables.

a. The following statements regard your current amount of satisfaction in your job.

b. I have a (positively) challenging job.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

c. I consider my job pleasant.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

d. I feel fairly well satisfied with my present job.
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree

e. 
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly agree
I feel that my job is no more interesting than others I could get.

f. Do you have any intention to try and find another job? Please give your opinion about the following statements concerning this issue.

g. I never think about quitting my job.

h. It would be unlikely for me to be working for the new joined bank organisation next year.

i. I am looking for another position, in another organization.

j. The next section concerns your career opportunities.

k. I find it important to experience success within FBNL.

l. I find it important to advance my career within FBNL.

m. I find it important to experience success in my profession in general.

n. I find it important to move up in my profession.