

How individual differences in cognitive styles shape resistance to change

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Abstract

Resistance to change (RtC) is seen as an important risk in change management processes, and this present research investigates the antecedents of RtC through a dual processing lens. In particular, there is the goal to identify the moderating effect of the two cognitive styles—namely faith in intuition (experiential) and the need for cognition (rational)—on the relationship between the antecedents and RtC. RtC was expected to increase more quickly with an increase of fear of loss when individuals would rely more on the experiential system. On the contrary, RtC was expected to increase more slowly with an increase of affect-based trust in management when individuals rely more on this system. Individuals who rely more on the rational thinking style were expected to show a more slowly increase of RtC, with an increase of their difficulty in dealing with change. On the contrary, RtC was expected to decrease quicker with an increase cognitive-based trust in management, and an increase of the quality of information regarding a change. In addition, the study analyzed the main constructs on the subconstruct level, namely the constructs RtC, individuals' difficulty of dealing with change, the fear of loss and trust in management. Through a survey with 157 employees of an organization undergoing a change process, the study assesses respondents on RtC, the selected antecedents, and their preferred thinking style. The findings support the previously reported relationships between the antecedents and RtC. Additionally, the data of the research shows support for one of the five hypotheses. Only the cognitive style faith in intuition moderates the relationship between the antecedents' main constructs and RtC. The relationships between RtC with both trust in management and with fear of loss are moderated by this cognitive style. The study found more detailed moderating effects on the subconstruct level.

The theoretical implication of this research consists of several aspects. First, the study confirmed the correlations between RtC and its antecedents from the previous research. Additionally, the study found a significant correlation between the cognitive style needed for cognition and RtC. Secondly, the findings of this research supported the hypothesis that faith in intuition positively moderates the relationship between fear of loss and RtC. Thirdly, a positive moderating effect of faith in intuition was found on the relationship between trust in management and RtC, and this finding is contrary to the expected outcome. Finally, no moderating effect of the need for cognition was found on the relationship between RtC and the main constructs of its antecedents.

The practical implications of this research are that managers should be aware of the cognitive styles of their employees. Employees who are highly reliant on an experiential system will show their RtC more quickly when there is an increase of fear of loss. Additionally, an increase in trust in management of these individuals show a slower decrease of RtC. Furthermore, individuals who show a higher need for cognition will likely show a lower RtC in general.

Introduction

Turbulent markets are continually posing challenges for existing companies. To survive in the market, companies are working hard to adapt business models and to maintain a competitive position in the world of changing needs. Globalization, technology development, and digitalization have changed market dynamics and have also increased the speed of required adoption. To comply with this pace, companies have invested heavily in change programs, which are intended to support cultural change, such as the

ability to become more innovative in order to survive potential disruption. Despite the importance of the effectiveness of these programs, two thirds of the programs are reported to result in failure (Meaney & Pung, 2008; Nohria & Beer, 2000).

Resistance to change (RtC) is given as a main driver for these disappointing results (del Val & Fuentes, 2003; Oreg, 2003). As this phenomenon has been an object of study for several years, many organizations are aware that this resistance should be taken into account during the design and execution of a change program. Researchers have published many studies on how to overcome RtC, and the most influential authors on this topic have exposed different strategies that leaders can use in order to lower this resistance (Kotter & Schlesinger, 2008; Lawrence, 1969). To better understand the mechanisms of RtC, several authors have researched the antecedents of this construct, with Oreg (2003; 2006) being the most influential among them. These antecedents can be classified into four groups. The first group concerns individual's difficulty in dealing with change and this relates to a number of personal traits, namely routine seeking, emotional reaction, short-term focus, and cognitive rigidity of an employee. The second group concerns fear of loss and this relates to the magnitude in which individuals are afraid of the outcome of the change. This may be due to the perceived loss of power and prestige, intrinsic motivation, or the job itself. The third group concerns trust in management and this is related to the degree in which individuals think and feel that the management has their best interest in mind. Finally, the forth group concerns the quality of information, which relates to the completeness, timeliness, and usefulness of information regarding the change.

The present research focuses on the working of these antecedents of RtC through the lens of a dual processing theory of human cognition (Epstein & Pacini, 1996; Tversky & Kahneman, 1983). This theory explains that behavior is influenced by two thinking systems, and they both process information differently: one is an intuitive-experiential system, and the other is an analytical-rational system. Individuals differ in the degree to which they operate in one mode or the other, which is called their cognitive style (Akinci & Sadler-Smith, 2013; Epstein & Pacini, 1996). The two cognitive styles being investigated are referred to as *faith in intuition* and *need for cognition*. Individuals who rely heavily on their experiential system tend to score high on faith in intuition, while the individuals who rely heavily on their rational system tend to score high on need for cognition.

The moderating effect of processing information through the experiential system or through the rational system is an important terrain that is unexplored. As companies invest heavily in change programs, an increase of understanding in this area can have a significant effect on the performance of these organizations. Understanding the effect of cognitive styles on the relationship between RtC and its antecedents can provide a better insight into the difference of how individuals will behave in situations of change. For example, if the relationship between fear of loss and RtC is moderated by the experiential system, this would mean that individuals who rely on the experiential system more than others will show an increase of RtC more quickly when an increase in fear occurs than those others who rely less on their experiential system. Having a better understanding will likely support future change programs and help them be more effective. When we have a better understanding on how individuals' differences in cognitive styles impact the relationship between RtC and its antecedents, we might understand which individuals will likely show an increase or decrease of RtC depending on their characteristics, fear of loss, trust in management, and the quality of information. This means that managers will likely be able to adapt their styles based on the cognitive style of the employee. To investigate the potential moderating effect of the cognitive styles, the four groups of antecedents of RtC are assessed against their operating mode through surveys. This is done by evaluating the respondents on their preferred cognitive style, RtC, and its antecedents.

The theoretical implication of this research is for a better understanding of the relationship between RtC and its antecedents. When a moderated effect of a cognitive style is found, it can be hypothesized that this antecedent is primarily working through the experiential or rational system. The findings may also give a better insight into who will be impacted in variation of their personal traits, process, and outcome factors related to RtC. In this study, an additional analysis is performed to gain insight into the subconstruct level. Additionally, support is found for the correlation between the three forms of RtC (i.e., affective, behavior, and cognitive) and its antecedents, with the antecedents being individual's difficulty in dealing with change, fear of loss, trust in management, and quality of information.

The practical implication of this research gives managers a better and clearer knowledge of the mechanisms of RtC. The research shows that faith in intuition in particular is moderating the relationship between RtC and a part of its antecedents. Employees who rely more on their experiential system will likely show stronger increases in RtC when the fear of loss increases. These employees will also show a slower decrease of RtC when their trust in management increases. Additionally, individuals who show a higher need for cognition will likely show a lower RtC in general. Managers could either give extra attention to these individuals during change processes, include the cognitive styles in selection processes, or try both measures at once.

The following section includes a review of the literature related to the antecedents of RtC and the cognitive styles that are based on the dual processing theory. To contribute to the understanding of RtC, this study conducted a survey with 157 respondents working in a global operating company in the testing, inspection, and certification (TIC) market. This study concludes with the results of the research, its theoretical and practical implications, and its limitations.

Theoretical background

The failure from change management programs is due to different causes, but one of the most important drivers mentioned in the literature is RtC (del Val & Fuentes, 2003). RtC is an "individual's tendency to resist or avoid making changes, to devalue change generally, and to find change aversive across diverse contexts and types of change" (Oreg, 2003, p. 680). It can lead to delaying or obstruction of the implementation of change and potentially increasing its costs.

Resistance to change

RtC can be conceptualized in different ways. First, RtC can occur on different levels; it can be broken down into three groups, namely organizational level resistance, group level resistance, and individual level resistance (George & Jones, 2012). Second, RtC can be split into different moments in time. RtC can occur either before the change (i.e., in the formulation stage), during the actual change, or in the implementation stage (del Val & Fuentes, 2003). Finally, RtC can be analyzed through three dimensions— affective, cognitive, and behavioral (Piderit, 2000). Affective RtC is mainly related to the emotions of an individual regarding a specific change. Cognitive RtC is mainly related to an individual's conviction regarding a specific change, while behavioral RtC mainly concerns an individual's action regarding a specific change.

As the present study investigates the potential moderating effect of cognitive styles, the study also analyzes RtC on an individual level. To measure RtC, the survey is executed during the implementation of change. To better understand the relationship of RtC and its antecedents, all three dimensions of RtC are included in this research.

Antecedents of RtC

To better understand RtC, previous studies have investigated the antecedents of RtC (Oreg, 2003; 2006). These antecedents can be grouped into different categories. On the highest level, potential sources of resistance lie within the individual and in the individual's environment (Lewin, 1947). The antecedents can thus be split into characteristic ones and contextual ones (see Figure 1 for an overview of the antecedents on the both main- and subconstruct level).

Through empirical research, Oreg (2003) defined the *characteristic traits* directly related to RtC in four factors, namely routine seeking, emotional reaction to imposed change, cognitive rigidity, and short-term focus. All these characteristics are linked to an automatic process and can be grouped as an individual's difficulty in dealing with change. Routine seeking is an individual's preference for stability over novelty. To overwrite a routinized action, someone needs to firstly choose to deviate. Unlike the routinized automatic action, this overwriting is a conscious process through attention. As RtC involves a change that is relative to the status quo, it is logical that routine seeking is an antecedent for RtC. The emotional reaction to imposed change corresponds to the amount of stress and uneasiness induced by change. This emotional reaction is an automatic process which can be overwritten by a deviating conscious choice. Cognitive rigidity is an individual's inflexibility to deviate from automatic dogmatic behavior through deviating cognitive influences. Dogmatic individuals are less prepared to adjust to new situations. Short-term focus relates to the weight that individuals allocate to the short-term negative impact of the proposed change against its long-term benefits. Incorporating these long-term benefits is a process done through cognitive evaluation. All related characteristic traits seem to have a similar mechanism on RtC.

The *contextual antecedents* of RtC have been a focus of prior research. These antecedents were clustered based on their influencing mechanism on RtC, which also deviate from the characteristic mechanism. There are two main groups of contextual antecedents found in former studies: outcome factors and process factors (Amarantou, Kazakopoulou, Chatzoudes, & Chatzoglou, 2018). The outcome factors relate to the perceived outcome of the change (e.g., the loss of power), while the process factors relate to the way change is being implemented (e.g., the amount of information that is given to the employees during the change).

Regarding outcome factors, the first antecedent to RtC is power and prestige. This relates to the feeling of the employee regarding the expected change in their amount of influence. The second outcome factor is the fear of employees in losing their job. The third outcome factor is intrinsic reward. Changes in organizations could impact the employee's positions and redefine their tasks. Individuals may be afraid of losing their current perceived rewards. All three contextual outcome factors are related to individuals' fear of loss—or their perceived consequence of change—which in turn increases RtC.

With process factors antecedent to RtC, the first factor is trust in management. According to Mayer et al. (1995, p. 712), trust is defined as

the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor irrespective of the ability to monitor or control that other party.

This construct of trust has both a cognitive and an affective foundation (McAllister, 1995). Because both aspects of trust can potentially have a different mechanism, the variable is further split into cognitive-based trust and affective-based trust. Trusting the management to have the best interests for the individuals positively relates to a decrease in RtC. The second process factor that is an antecedent of RtC is social influence; this relates to the degree in which colleagues, superiors, and subordinates are supportive of the change. This supportive behavior also influences the trust that an individual has toward change, and it positively relates to a decrease in RtC. The first two contextual process factors are related

to an individual's trust in the change through social relationships. The third process factor is information. Later studies have further developed this factor to the quality of information (Amarantou, Kazakopoulou, Chatzoudes, & Chatzoglou, 2018). A lack of quality information can lead employees to make different assessments than the change agents (Kotter & Schlesinger, 2008). This includes information about anticipated changes, consequences, and implications on people's future roles and responsibilities. This process has a different effect on RtC than the first two factors. Good quality information on change can lead employees to draw different conclusions, thereby lowering their RtC through a rational process. Figure 1 shows a summary of the antecedents to RtC.

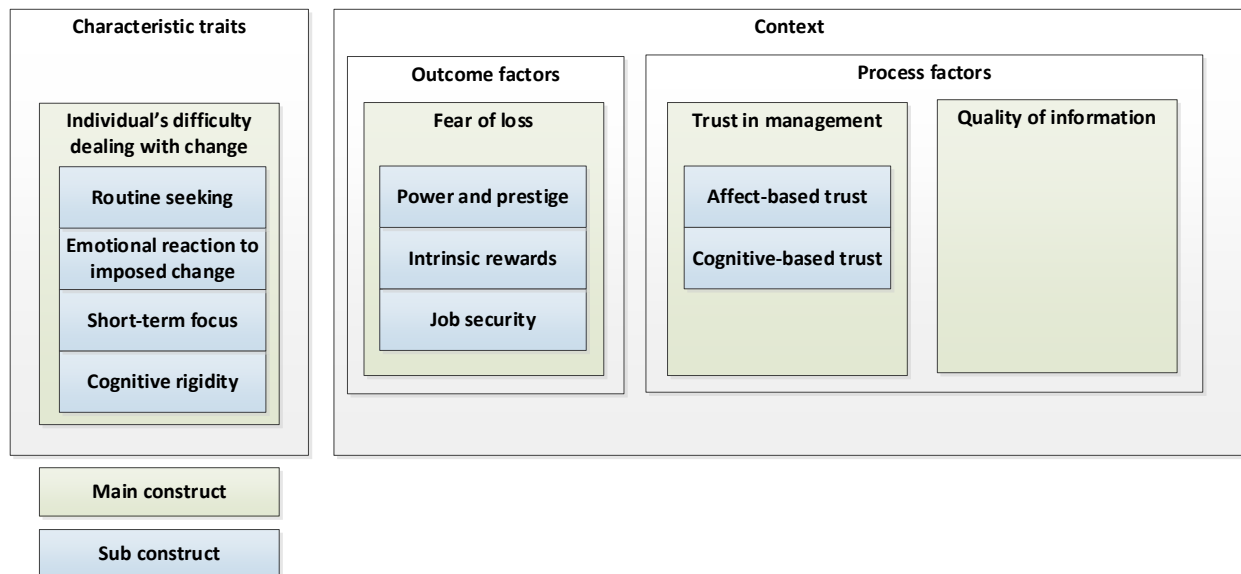


Figure 1: Antecedents of RtC on a main- and subconstruct level

Cognitive styles

To understand the differences in the relationship between RtC and its antecedents on the individual's level, this study investigates how these antecedents are processed by the human brain. There are many different theories on the working of the brain, and modern theories speak of different systems in the brain. These views have their foundations in the cognitive-experiential self-theory (CEST) by Epstein (1990). The CEST theory argues that people process information through two different systems; these two systems are described as an *experiential* system and a *rational* system.

The experiential system processes information quickly and generates intuitive default responses, which the rational system may or may not subsequently intervene on. Recent studies have endorsed the existence of these two systems and the dual processing theory (Evans & Stanovich, 2013; Wang, Highhouse, Lake, Petersen, & Thaddeus, 2017). The experiential system is an intuitive, automatic, and emotional system. This system is based on unconscious decisions, and it uses less energy than the second one. This system is constantly working unless we are asleep. As we experience the world around us, this system is constantly driving our behavior without us consciously making decisions. For example, this system is used for estimating the weight of a glass before the person picks it up; it is also used for performing tasks that are repetitive or intuitive. (Kahneman, 2015).

The rational system can adapt or change the suggested behavior from the experiential system. This involvement of the rational system is activated in certain situations and contexts. This can occur when the individual consciously puts effort to show specific behavior (e.g., staying polite); this can also occur when an individual experiences something that is in contrast to the belief system of the experiential

system (e.g., seeing a walking lamp) or when the task is too difficult for the experiential system (e.g., solving a difficult calculation) (Kahneman, 2015). This means that behavior and conscious thought are a joint function of both systems. As the systems act interactively, individuals vary in the degree in which they rely on one system or the other (Akinci & Sadler-Smith, 2013; Epstein & Pacini, 1996). As mentioned in the introduction, these styles are called *faith in intuition* (i.e., dependence of experiential system) and *need for cognition* (i.e., dependence of rational system). The usage of these cognitive styles has been of growing interest to researchers in management, organization, education, and other applied fields. The assessments of individuals' differences can be included in coaching, job counselling, training, and development (Akinci & Sadler-Smith, 2013). For example, having a better understanding of the cognitive style of managers can support their understanding of their strategic preference (Gallén, 2006).

In contrast to this dual process theory, a model based on a unitary perspective was developed (Allinson & Hayes, 1996). This model was further developed as the cognitive style index (CSI). The premise of this model is that intuition and reason are seen as opposite sides of a continuum (Akinci & Sadler-Smith, 2013). Later studies show that the unitarist view of the CSI is not tenable (Hodgkinson & Sadler-Smith, 2003; Wang, Highhouse, Lake, Petersen, & Thaddeus, 2017). The faith in intuition and need for cognition styles should therefore be evaluated on two separate scales as proposed by the dual processing theories.

Research question and hypotheses

A further investigating of the relationship between RtC and its antecedents has prompted the question of whether there are differences between individuals. In other words, are individuals impacted by these antecedents differently? In building on the theory that humans have two thinking styles and that individuals differ in the degree they rely on both, one point of possible interest is seeing whether these thinking style potentially moderate the relationship between RtC and its antecedents. This leads to the following research questions: how is the relation between RtC and its antecedents moderated by the dual operating system, and what is the moderating effect of the styles need for cognition and faith in intuition?

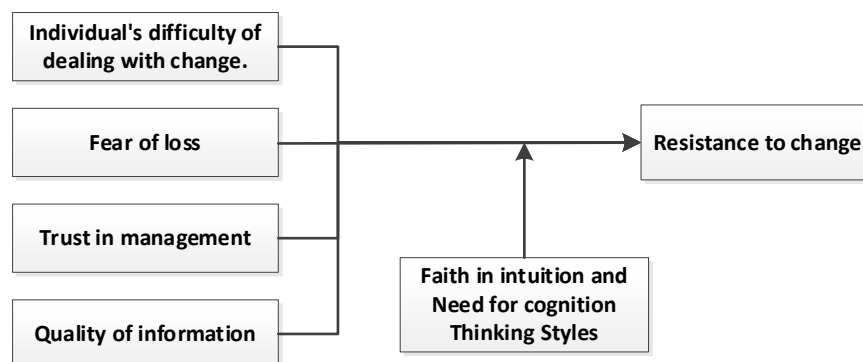


Figure 2: Conceptual model on main construct level

Following the conceptual model, the study analyzes the moderating effect of a specific cognitive thinking style on the relationships between RtC and its antecedents. Based on the literature research, the study groups the antecedents into four categories, namely an individual's difficulty in dealing with change, fear of loss, trust in management, and quality of information. Hypotheses are developed to investigate the relationships of each antecedent with RtC.

An individual's difficulty in dealing with change

As mentioned, the experiential system of individuals is an automatic and intuitive system. By contrast, the rational system builds on logical reasoning. The experiential system constantly generates impressions, inspirations, intentions, and feelings. If picked up by the rational system, these impressions turn into beliefs, and impulse changes into voluntary actions. In some cases, the rational system will be more heavily involved. The involvement happens in certain situations, namely when the task is too difficult to be executed by the experiential system, when the experience is in contrast with the belief system of the experiential system, or when the individual focuses on specific behavior (Kahneman, 2015). It is expected that the experiential system of individuals who have an increased difficulty in dealing with change is suggesting more resistant behavior to change. Individuals who rely more on the rational system will challenge the automatic behavior generated by the experiential system more. This means that the relationship between an individual's difficulty in dealing with change and RtC will decrease. This leads to the following hypothesis:

H1: An individual's difficulty in dealing with change is positively related to resistance to change, but this relationship will be less strong with individuals who have a stronger rational thinking style.

Fear of loss

When confronted with change, employees can become anxious for potential loss. This fear will impact their behavior and will likely lead to employees increasing their RtC. Research showed that the impact of loss is generally felt as weighing heavier than the impact of wins (Tversky & Kahneman, 1992). This fear of loss will impact the suggested behavior of the experiential system. The rational system could counter this suggested behavior, but the process of fear of loss is deeply imprinted on our human brain. When humans encounter a situation that generates fear, the emotional center of the brain will make it more difficult to use the rational system (Kahneman, 2015). Therefore, it is not expected that individuals who rely on the rational system more heavily would show an increase in RtC a lot less quickly when the fear of loss increases than the individuals who rely less on the rational system. Individuals who rely more on their experiential system will be more inclined to act on their fear. This will likely result in a stronger relationship between fear of loss and RtC, which leads to the following hypothesis:

H2: Fear of loss is positively related to resistance to change, but this relationship will be stronger with individuals who have a stronger intuitive thinking style.

Trust in management

The amount of trust that employees have in their managers influences their RtC. Individuals who do not trust the management to have their best interest in mind or who think that the management is not capable to lead the change are inclined to show more RtC (Oreg, 2006). Trust can be seen as a feeling (i.e., affect-based trust), a cognitive decision (i.e., cognition-based trust), or both (McAllister, 1995; Stoltz & Lizardo, 2018).

Affect-based trust refers to trust from the heart and is based on emotional bonds between individuals. When individuals feel an increase of affect-based trust, the amount of RtC will decrease. Individuals who rely on their experiential (i.e., intuitive) system will be inclined to value these feelings more strongly, and this in turn increases the relationship between affective trust and RtC. This leads to the following hypothesis:

H3: Affect-based trust in management is negatively related to resistance to change, but this relationship will be stronger with individuals who have a stronger intuitive thinking style.

Cognition-based trust is a more rational and reasoned form of trust. Individuals choose who they trust through logical reasoning. Employees who reason that their management can be trusted would show a decrease in RtC. Individuals who rely more strongly on their rational system will give more weight to their cognition-based trust, which would increase the relationship between cognitive-based trust and RtC. This leads to the following hypothesis:

H4: Cognition-based trust in management is negatively related to resistance to change, but this relationship will be stronger with individuals who have a stronger rational thinking style.

Quality of information

The provision of quality information to individuals can support their understanding of change and hence lower their RtC (Miller, Johnson, & Grau, 1994). New information may not easily alter the feeling that people have regarding a change. Generally, individuals are prone to automatically searching for information that confirms what they already believe, which is an action called confirmation bias. Giving information that is not in line with expectations can make individuals use their experiential system to interpret the information so that the information is in line with previous beliefs (Kahneman, 2015). Logical reasoning will be needed to challenge this automatic process and change peoples' perspectives. As quality of information refers to completeness, timeliness, and usefulness, this information can support individuals to use their logic reasoning for countering this automatic process (Epstein & Pacini, 1996). The logical reasoning needed to overcome the confirmation bias is done by the rational system. The expectation is therefore that individuals with a strong rational thinking style will show a decrease in RtC more quickly based on quality information than individuals with a lower rational thinking style.

H5: Quality of information is negatively related to resistance to change, but this relationship will be stronger with individuals who have a stronger rational thinking style.

Methodology

The present study was conducted in an organization in the TIC market, and there are approximately 9500 employees in this organization. The core occupations of the employees are engineers, with many being highly educated. The influence of digitalization has placed pressure on the traditional business models and has changed market dynamics. To maintain a competitive advantage, the organization implemented a global change program called STEP-UP. During the timing of the survey, this change program has been running for one year. This program includes a refresher of strategic direction and an implementation of a new enterprise resource planning (ERP) system; the goal of the program is to change the culture to a more client-centric organization. The organization set up and executed a communication plan before and during the program, and it relied on a global implementation team and local managers. All the jobs of the employees would experience impact to some extent due to this program, although the goal of the organization was not to reduce positions. The data in this study were collected through online surveys; the sample group was limited to one of the four business units of the organization, and this global unit employed 1146 people. These employees all received the survey and were notified by email from the COO with an explanation of the high-level goal of the research; they were also told that the research is a master thesis on change management. No selection has been made on the hierarchical level or geographic location of the employees. Of the people who received the survey, 157 returned a completed version, while 30 respondents returned an incomplete survey and were excluded from the results. In Table 1, more information is shown about the respondents who filled in the complete survey.

Table 1: Demographics respondents

Gender	Female	37	23.6%
	Male	120	76.4%
Age	< 25 years	4	2.5%
	25 - 34 years	21	13.4%
	35 - 44 years	48	30.6%
	45 - 54 years	57	36.3%
	55 - 64 years	22	14.0%
	> 64 years	5	3.2%
Organization tenure	0 - 1 year	11	7.0%
	2 - 5 years	38	24.2%
	6 - 15 years	71	45.2%
	> 15 years	37	23.6%
Job tenure	0 - 1 year	31	19.7%
	2 - 5 years	60	38.2%
	> 5 years	66	42.0%
Geographical spread	South Asia / Middle East / Africa	13	8.3%
	North Asia	11	7.0%
	North and South America	9	5.7%
	UK & Ireland	26	16.6%
	North Europe	71	45.2%
	South Europe	27	17.2%
Education	Less than a high school degree	3	1.9%
	High school degree or equivalent	8	5.1%
	Bachelor's degree (e.g., BA, BS)	88	56.1%
	Master's degree (e.g., MA, MS, MEd)	35	22.3%
	Doctorate (e.g., PhD, EdD)	3	1.9%
	Vocational education	12	7.6%
	MBA	8	5.1%
Position	Managing a team	54	34.4%
	Not managing a team	103	65.6%

Measures

The survey made use of validated scales found in the literature. In the subsections below, these items are further chronologically explained with their original and current reliability coefficient (see Appendix 1 for the complete survey).

An individual's difficulty in dealing with change

The characteristics were measured using the 17-item scale from Oreg (2003). As in the original study, this scale was categorized into four subscales:

- routine seeking behavior (5-items, $\alpha = 0.67$, e.g., “I generally consider changes to be a negative thing”),
- emotional reaction (4-items, $\alpha = 0.78$, e.g., “When I am informed of a change of plans, I tense up a bit”),
- short-term focus (4-items, $\alpha = 0.72$, e.g., “Changing plans seems like a real hassle to me”), and
- cognitive rigidity (4-items, $\alpha = 0.69$, e.g., “I don’t change my mind easily”).

By error, one of the items of the short-term focus—specifically “When someone pressures me to change something, I tend to resist it even if I think the change may ultimately benefit me”—was excluded from the survey. The items were valued based on a 7-point scale ranging from 1 (*strongly disagree*) to 7

(*strongly agree*). In the original study, the scale's reliability coefficients (Cronbach's alpha) were respectively 0.68, 0.78, 0.76, and 0.76.

Fear of loss

The fear of loss was measured using the subconstruct of power and prestige (7-items, $\alpha = 0.89$, e.g., "The espoused importance of your job to the unit"), intrinsic rewards (3-items, $\alpha = 0.84$, e.g., "The extent to which you find your job interesting"), and job security as in the study by Oreg (2006). This construct was measured using the 11-item scale, while the job security subconstruct was measured using one single item (i.e., "The chances that you will be forced to leave"). To calculate the main construct, the average has been taken over the 11 items in total. This means that the power and prestige subconstruct weighs 7 times more than the job security subconstruct in the calculation of the main construct. The items were valued based on a 5-point scale ranging from 1 (*would significantly improve*) to 5 (*would significantly get worse*). In the original study, the scale's reliability coefficients (Cronbach's alpha) were respectively 0.92 and 0.90.

Trust in management

Trust in management was measured using an adapted version of the 11-item scale by McAllister (1995). This scale measures affective-based trust (5-items, $\alpha = 0.90$, e.g., "My manager and I have a sharing relationship. We can both freely share our ideas, feelings, and hopes"), and cognitive-based trust in management (6-items, $\alpha = 0.88$, e.g., "My manager approaches his/her job with professionalism and dedication"). The words *this person* from the original items were adapted to *my manager* for the scales so that respondents can reflect upon the trust they have in their manager. The items were valued based on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). In the original study, the scale's reliability coefficients (i.e., Cronbach's alpha) were respectively 0.91 and 0.89.

Quality of information.

The quality of information was measured using an adapted version of the 6-item scale from Miller et al. (1994). Additionally, after the words *about the implementation* in the original items, a reference was made to the organization's STEP-UP change program ($\alpha = 0.92$, e.g., "The information I have received about the change program has been timely"). The items were valued based on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale's reliability coefficient (Cronbach's alpha) of this subconstruct was not given in the original study.

Faith in intuition and need for cognition thinking styles.

To analyze individuals' preferred cognitive styles, the respondents were assessed on both their need for cognition (i.e., "NFC") with 5 items (e.g., "I prefer complex to simple problems") as also their faith in intuition (i.e., "FI") with 5 items (e.g., "I trust my initial feelings about people"). Epstein (1996) developed an instrument called the rational-experiential inventory (REI) to measure rational and experiential thinking styles. This early model included the limitation that the two scales did not have completely parallel content. This original version of the REI has been further developed in 1996 to a 10-item scale using a 5-point rating from 1 (*strongly disagree*) to 5 (*strongly agree*) (Epstein & Pacini, 1996). The scale's reliability coefficients (Cronbach's alpha) in the original study were respectively 0.90 and 0.85. For the present study, the reliability coefficient on the need for cognition scale was very low (0.46). This was based on the last item (i.e., "Thinking hard and for a long time about something gives me little satisfaction"). In the original study, this item was not reversed scored, although a respondent scoring high

on this item would presumably have a low need for cognition. It would have been more logical to change the word *little* to *a lot of*. To improve the reliability coefficient, this item was eventually deleted from the analysis, resulting in a Cronbach's alpha of 0.71. The Cronbach's alpha for the faith in intuition scale was higher with 0.89.

Resistance to change.

The RtC has been measured on an individual, self-reflecting scale. Like the original study, this scale was categorized in three subscales, namely affective (5-items, $\alpha = 0.86$, e.g., "I was stressed by the change"), behavior (5-items, $\alpha = 0.67$, e.g., "I protested against the change"), and cognitive (5-items, $\alpha = 0.88$, e.g. "I believed that the change would make my job harder"). The construct was measured using the 15-item scale from Oreg (2006). The items were valued based on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), and a low score on RtC means a high resistance. In the original study, the scale's reliability coefficients (Cronbach's alpha) were respectively 0.78, 0.77, and 0.86.

Results

Descriptive statistics and intercorrelations of the variables in the study are presented in Table 2. A table including the correlation of the interaction between the moderators and the predictors and all the specific *p* values can be found in Appendix 2.

Table 2: Correlation table

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. Organisation tenure	-	-	-																						
2. Role tenure	-	-	.42**	-																					
3. Age	-	-	.57**	.39**	-																				
4. Education level	-	-	.06	.03	.20*	-																			
5. Routine seeking	2.78	0.89	.19*	.26**	.18*	-.08	-																		
6. Emotional reaction	3.55	1.13	.00	.16	.11	-.03	.42**	-																	
7. Short-term focus	2.82	1.04	-.03	.198*	.04	-.08	.62**	.57**	-																
8. Cognitive rigidity	4.08	1.09	-.02	.17*	.14	-.09	.31**	.33**	.26**	-															
9. Individual's difficulty of dealing with change	3.30	0.77	.05	.26**	.17*	-.09	.78**	.78**	.78**	.65**	-														
10. Power and prestige	2.80	0.61	.14	.18*	.18*	-.01	.31**	.24**	.29**	.20**	.34**	-													
11. Intrinsic motivation	2.78	0.76	.17*	.18*	.20*	.16*	.30**	.27**	.28**	.15	.33**	.71**	-												
12. Job security	3.01	0.68	.08	-.13	.07	-.02	.02	.157*	.12	.01	.10	.21**	.15	-											
13. Perceived outcome of change	2.81	0.57	.17*	.17*	.21**	.05	.32**	.28**	.31**	.20*	.37**	.96**	.86**	.30**	-										
14. Affect based trust	5.13	1.25	.00	-.04	.02	-.07	-.26**	-.24**	-.31**	-.03	-.27**	-.28**	-.22**	-.09	-.28**	-									
15. Cognitive based trust	5.32	1.09	-.05	-.15	-.03	-.15	-.22**	-.19*	-.21**	-.05	-.22**	-.21**	-.13	-.02	-.19*	.77**	-								
16. Trust in management	5.24	1.10	-.03	-.10	-.01	-.12	-.26**	-.23**	-.27**	-.04	-.26**	-.26**	-.19*	-.06	-.25**	.94**	.95**	-							
17. Quality of information	4.31	1.31	-.05	-.14	-.06	.05	-.29**	-.27**	-.29**	-.17*	-.34**	-.41**	-.42**	-.07	-.44**	.21**	.18*	.21**	-						
18. Need for cognition	4.04	0.73	-.05	-.15	-.07	.09	-.43**	-.26**	-.37**	-.09	-.38**	-.21**	-.14	.01	-.20*	.34**	.27**	.32**	.27**	-					
19. Faith in intuition	3.67	0.80	-.05	-.08	-.02	.10	-.07	.03	.02	.164*	.05	-.04	.02	.05	-.02	-.02	-.01	-.01	.03	.08	-				
20. RtC - Affective	2.96	1.27	.10	.21**	.10	-.07	.49**	.53**	.53**	.24**	.59**	.46**	.54**	.03	.51**	-.28**	-.19*	-.25**	-.49**	-.32**	.12	-			
21. RtC - Behaviour	2.97	0.94	.12	.23**	.16*	-.01	.37**	.36**	.38**	.13	.41**	.43**	.44**	-.03	.45**	-.18*	-.16*	-.18*	-.39**	-.23**	.04	.67**	-		
22. RtC - Cognitive	3.28	1.31	.19*	.28**	.16*	-.07	.47**	.43**	.45**	.21**	.52**	.57**	.54**	.08	.59**	-.23**	-.21**	-.23**	-.54**	-.30**	.07	.73**	.61**	-	
23. Resistance to change	3.07	1.04	.16	.27**	.16	-.06	.51**	.51**	.52**	.23**	.58**	.56**	.58**	.04	.59**	-.26**	-.21**	-.25**	-.54**	-.33**	.09	.91**	.83**	.90**	-

(* $p < 0.05$, ** $p < 0.01$)

As described in the theoretical background section, the predictors are grouped into four main constructs. To understand the moderating effect, these main constructs are additionally analyzed on a subconstruct level if the constructs are available. The dependent variable was further analyzed on a subconstruct level to provide a deeper insight into the moderating effect and the relationship with the predictors.

To understand the relationships through the lens of the dual process theory, the study analyzed the moderating effect of both systems—both the rational system (need for cognition) and experiential system (faith in intuition). Because both moderators are slightly correlated with each other (0.08), both are included in the same moderated ordinary least squares regression analysis. After finding significant results, the simple slopes were calculated by looking at the relationship between the predictor and the dependent variable for values of the moderator set on the mean and also 1 SD above and below the mean using the process add-on from SPSS. Based on the correlation table, a first interesting result is the

significant correlation between need for cognition and RtC, meaning that individuals who rely highly on this cognitive style will show less RtC.

The relationship between individual's difficulty in dealing with change and RtC.

As expected, an individual's difficulty in dealing with change is significantly positively related (0.58**) with RtC (see Table 2). In looking at the details, all four subconstructs (i.e., routine seeking, emotional reaction, short-term focus, and cognitive rigidity) are significantly correlated with all three forms of RtC. As seen in Table 2, the only one with a slightly lower significance is the positive correlation between cognitive rigidity and behavior RtC ($p = 0.094$). The findings in the present study correspond to that of Oreg's (2003) original study, where cognitive rigidity was the subconstruct that correlated with the least of the four to RtC. In the later study by Oreg (2006), RtC was split into three forms, but no extinction was made between the subconstructs of individual's difficulty in dealing with change.

Based on the theoretical background, the study expected that the relationship between individual's difficulty dealing with change and RtC would become less strong when individuals show a higher need for cognition, as stated in H1. Unfortunately, the data does not provide evidence to support the hypothesis regarding the main construct as the p value is > 0.05 (0.563). Table 3 indicates how significant the moderating effect is in the data of this study.

Table 3: The moderating effect of need for cognition and faith in intuition on the relationship between an individual's difficulty in dealing with change and RtC

	20. RtC (affective)		21. RtC (behavior)		22. RtC (cognitive)		23. RtC	
	F(5,151) = 17.97, R ² = 0.37, $p < 0.001$		F(5,151) = 6.69, R ² = 0.18, $p < 0.001$		F(5,151) = 12.08, R ² = 0.29, $p < 0.001$		F(5,151) = 16.99, R ² = 0.36, $p < 0.001$	
	b	p	b	p	b	p	b	p
9. Individual's difficulty in dealing with change	0.53	0.000	0.37	0.000	0.47	0.000	0.53	0.000
Need for cognition	-0.12	0.104	-0.08	0.344	-0.12	0.110	-0.12	0.092
Faith in intuition	0.10	0.144	0.02	0.768	0.06	0.395	0.07	0.285
Individuals difficulty in dealing with change * NFC	-0.02	0.661	-0.06	0.353	-0.01	0.849	-0.03	0.563
Individuals difficulty in dealing with change * FII	0.03	0.557	-0.01	0.909	-0.02	0.724	0.00	0.967
	F(5,151) = 11.86, R ² = 0.28, $p < 0.001$		F(5,151) = 5.44, R ² = 0.15, $p = 0.001$		F(5,151) = 10.04, R ² = 0.25, $p < 0.001$		F(5,151) = 12.52, R ² = 0.29, $p < 0.001$	
5. Routine seeking	0.43	0.000	0.32	0.000	0.43	0.000	0.45	0.000
Need for cognition	-0.15	0.585	-0.08	0.323	-0.12	0.127	-0.14	0.078
Faith in intuition	0.15	0.036	0.06	0.417	0.11	0.139	0.12	0.077
Routine seeking * NFC	-0.01	0.913	-0.05	0.375	0.03	0.639	-0.01	0.893
Routine seeking * FII	0.06	0.345	0.03	0.658	0.05	0.469	0.06	0.396
	F(5,151) = 15.18, R ² = 0.33, $p < 0.001$		F(5,151) = 5.62, R ² = 0.16, $p = 0.001$		F(5,151) = 9.72, R ² = 0.24, $p < 0.001$		F(5,151) = 13.69, R ² = 0.31, $p < 0.001$	
6. Emotional reaction	0.47	0.000	0.32	0.000	0.36	0.000	0.44	0.000
Need for cognition	-0.20	0.007	-0.15	0.073	-0.21	0.006	-0.22	0.004
Faith in intuition	0.12	0.092	0.04	0.560	0.09	0.236	0.10	0.164
Emotional reaction * NFC	-0.05	0.472	-0.03	0.659	-0.04	0.565	-0.05	0.491
Emotional reaction * FII	-0.02	0.778	-0.04	0.581	-0.12	0.071	-0.07	0.273
	F(5,151) = 13.96, R ² = 0.32, $p < 0.001$		F(5,151) = 5.71, R ² = 0.16, $p = 0.001$		F(5,151) = 9.73, R ² = 0.24, $p < 0.001$		F(5,151) = 13.42, R ² = 0.31, $p < 0.001$	
7. Short-term focus	0.47	0.000	0.35	0.000	0.41	0.000	0.47	0.000
Need for cognition	-0.18	0.018	-0.11	0.167	-0.18	0.025	-0.18	0.017
Faith in intuition	0.13	0.055	0.05	0.514	0.09	0.203	0.11	0.120

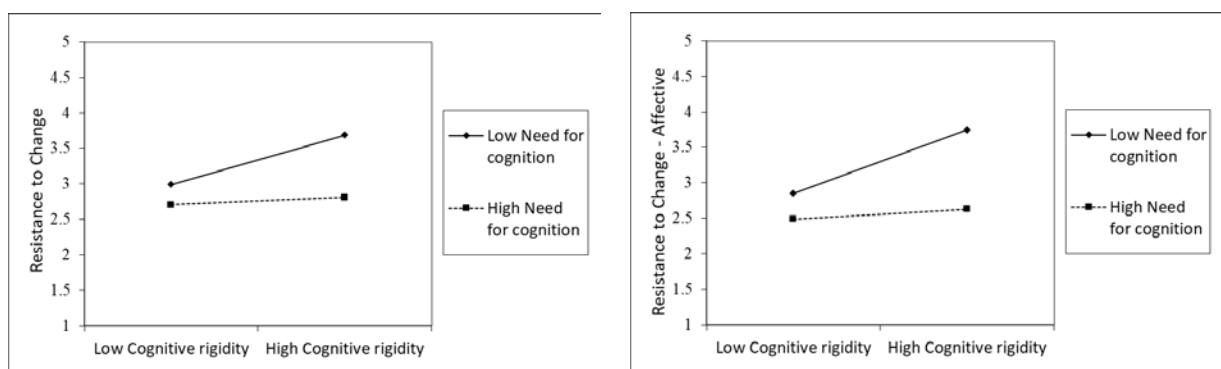
Short-term focus * NFC	0.06	0.333	0.01	0.866	0.06	0.334	0.05	0.383
Short-term focus * FII	-0.02	0.724	-0.04	0.572	-0.09	0.198	-0.06	0.370
	F(5,151) = 7.15, R ² = 0.19, p < 0.001		F(5,151) = 2.91, R ² = 0.09, p = 0.015		F(5,151) = 5.16 R ² = 0.15, p < 0.001		F(5,151) = 6.71 R ² = 0.18, p < 0.001	
8. Cognitive rigidity	0.21	0.007	0.11	0.164	0.19	0.017	0.20	0.010
Need for cognition	-0.29	0.000	-0.21	0.011	-0.26	0.001	-0.29	0.000
Faith in intuition	0.10	0.188	0.03	0.739	0.06	0.449	0.07	0.334
Cognitive rigidity * NFC	-0.15	0.035	-0.14	0.073	-0.12	0.095	-0.16	0.032
Cognitive rigidity * FII	0.08	0.272	0.03	0.692	0.07	0.335	0.07	0.324

In looking at the details on subconstruct level, a significant moderating effect is found in the presented data: the moderating effect of need for cognition on the relation between cognitive rigidity and RtC. Table 4 presents the details of the moderating effect. As this is the only subconstruct where the relationship with RtC seems to be moderated by a cognitive style, it is best to show some caution in interpretation. There is a chance that this is a Type I error.

Table 4: Details of the moderating effect on the relationship between the main construct and/or subconstructs of an individual's difficulty in dealing with change and the main construct and/or subconstructs of RtC

Moderation need for cognition on the relationship between the subconstruct cognitive rigidity and the main construct RtC	
• For low NFC, cognitive rigidity has the following effect:	b = 0.35, p = 0.001
• For average NFC, cognitive rigidity has the following effect:	b = 0.20, p = 0.010
• For high NFC, cognitive rigidity of change has the following effect:	b = 0.04, p = 0.705
Moderation need for cognition on the relationship between the subconstruct cognitive rigidity and the subconstruct RtC (affective)	
• For low NFC, cognitive rigidity has the following effect:	b = 0.35, p < 0.001
• For average NFC, cognitive rigidity has the following effect:	b = 0.20, p = 0.007
• For high NFC, cognitive rigidity of change has the following effect:	b = 0.05, p = 0.609

Individuals who have a low need for cognition show a stronger relationship between cognitive rigidity and RtC than individuals with a high need for cognition. The type of RtC that is mainly moderated by need for cognition is the affective part. Figure 3 visually presents the moderating effects.



Moderation of need for cognition on the relationship between the subconstruct cognitive rigidity and the main construct RtC

Moderation of need for cognition on the relationship between the subconstruct cognitive rigidity and the subconstruct RtC (affective)

Figure 3: Graph of the moderating effect on the relationship between the main construct and/or subconstructs of Individual's difficulty in dealing with change and the main construct and/or subconstructs of RtC

The relationship between fear of loss and RtC.

As expected individual's fear of loss (i.e., perceived outcome of change) is significantly positively correlated (0.59**) with RtC (see Table 2). In looking at the details, two of the three subconstructs (i.e., power and prestige and intrinsic motivation) are significantly correlated with all three forms of RtC. The subconstruct of job security was not heavily significantly related to any form of RtC (main construct, $p = 0.643$).

Based on the theoretical background, the study expected that the intuitive system would positively moderate the relationship between RtC and the predictor perceived outcome of change, as stated in H2. The data found in the present research supports this hypothesis. On the main construct level, the moderating effect of the intuitive system is positive (0.11) and significant (0.023). Table 5 includes the moderating effect and significance at the subconstruct level.

Table 5: The moderating effect of need for cognition and faith in intuition on the relationship between perceived outcome of change and RtC

	20. RtC (affective)		21. RtC (behavior)		22. RtC (cognitive)		23. RtC	
	F(5,151) = 16.25, R ² = 0.35, $p < 0.001$		F(5,151) = 10.34, R ² = 0.26, $p < 0.001$		F(5,151) = 20.50, R ² = 0.40, $p < 0.001$		F(5,151) = 22.94, R ² = 0.43, $p < 0.001$	
	b	p	b	p	b	p	b	p
13. Perceived outcome of change	0.51	0.000	0.48	0.000	0.59	0.000	0.60	0.000
Need for cognition	-0.23	0.001	-0.13	0.092	-0.18	0.006	-0.21	0.002
Faith in intuition	0.13	0.048	0.04	0.547	0.09	0.162	0.10	0.095
Perceived outcome of change * NfC	0.01	0.918	0.00	0.980	0.03	0.584	0.01	0.785
Perceived outcome of change * FI	0.09	0.072	0.13	0.022	0.08	0.104	0.11	0.023
	F(5,151) = 12.82, R ² = 0.30, $p < 0.001$		F(5,151) = 9.31, R ² = 0.24, $p < 0.001$		F(5,151) = 18.15, R ² = 0.38, $p < 0.001$		F(5,151) = 19.06, R ² = 0.39, $p < 0.001$	
10. Power and prestige	0.44	0.000	0.45	0.000	0.56	0.000	0.55	0.000
NfC	-0.24	0.001	-0.13	0.094	-0.18	0.009	-0.21	0.002
FI	0.15	0.034	0.06	0.438	0.10	0.117	0.12	0.064
Power and prestige * NfC	0.01	0.855	-0.02	0.771	0.01	0.811	0.00	0.934
Power and prestige * FI	0.07	0.161	0.12	0.035	0.08	0.129	0.10	0.050
	F(5,151) = 18.22, R ² = 0.38, $p < 0.001$		F(5,151) = 9.47, R ² = 0.24, $p < 0.001$		F(5,151) = 16.68, R ² = 0.36, $p < 0.001$		F(5,151) = 21.29, R ² = 0.41, $p < 0.001$	
11. Intrinsic motivation	0.52	0.000	0.45	0.000	0.51	0.000	0.56	0.000
Need for cognition	-0.25	0.000	-0.17	0.027	-0.24	0.001	-0.25	0.001
Faith in intuition	0.12	0.057	0.04	0.562	0.09	0.181	0.10	0.112
Intrinsic motivation * NfC	-0.02	0.671	0.01	0.885	0.06	0.301	0.02	0.744
Intrinsic motivation * FI	0.05	0.373	0.10	0.116	0.01	0.910	0.05	0.335
	F(5,151) = 4.47, R ² = 0.13, $p < 0.001$		F(5,151) = 2.65, R ² = 0.08, $p = 0.025$		F(5,151) = 4.75, R ² = 0.14, $p < 0.001$		F(5,151) = 4.95, R ² = 0.14, $p < 0.001$	
12. Job security	0.01	0.926	-0.11	0.240	-0.01	0.939	-0.03	0.718
Need for cognition	-0.34	0.000	-0.23	0.005	-0.31	0.000	-0.34	0.000
Faith in intuition	0.15	0.054	0.08	0.307	0.12	0.122	0.14	0.078
Job security * NfC	-0.02	0.816	-0.10	0.179	-0.11	0.142	-0.09	0.256
Job security * FI	-0.04	0.558	-0.14	0.076	-0.17	0.020	-0.13	0.076

In analyzing the data on subconstruct level, it becomes visible that the main driver for the moderating effect is found in the relationship between fear of loss in power and prestige and the behavior part of RtC. On this relationship, a significant moderating effect is found for the cognitive style of faith in intuition.

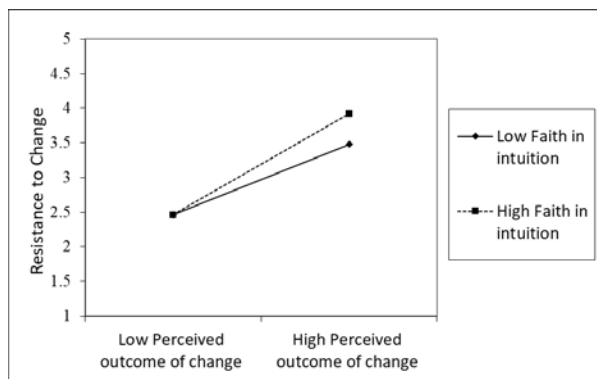
Additionally, a significant moderating effect of faith in intuition is found in the relationship between job security and the cognitive subconstruct of RtC. Table 6 presents the details of the moderating effect.

Table 6: Details of the moderating effect on the relationship between the main construct and/or subconstructs of perceived outcome of change and the main construct and/or subconstructs of RtC

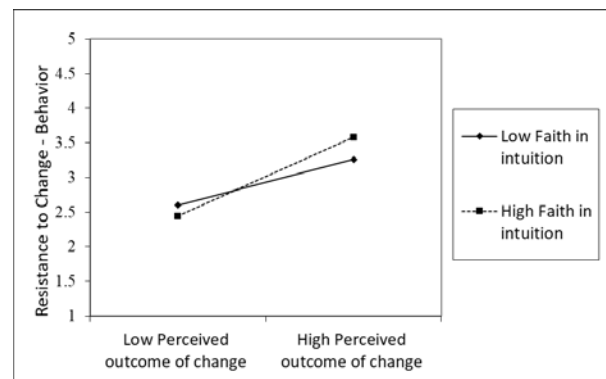
Moderation faith in intuition on the relationship between the main construct perceived outcome of change and the main construct RtC	
• For low FII, perceived outcome of change has the following effect:	b = 0.49, p < 0.001
• For average FII, perceived outcome of change has the following effect:	b = 0.60, p < 0.001
• For high FII, perceived outcome of change has the following effect:	b = 0.71, p < 0.001
Moderation faith in intuition on the relationship between the main construct perceived outcome of change and the subconstruct RtC – Behavior	
• For low FII, perceived outcome of change has the following effect:	b = 0.36, p < 0.001
• For average FII, perceived outcome of change has the following effect:	b = 0.48, p < 0.001
• For high FII, perceived outcome of change has the following effect:	b = 0.61, p < 0.001
Moderation faith in intuition on the relationship between the subconstruct power and prestige and the main construct RtC	
• For low FII, power and prestige has the following effect:	b = 0.45, p < 0.001
• For average FII, power and prestige has the following effect:	b = 0.55, p < 0.001
• For high FII, power and prestige has the following effect:	b = 0.65, p < 0.001
Moderation faith in intuition on the relationship between the subconstruct power and prestige of change and the subconstruct RtC – Behavior	
• For low FII, power and prestige has the following effect:	b = 0.33, p < 0.001
• For average FII, power and prestige has the following effect:	b = 0.45, p < 0.001
• For high FII, power and prestige has the following effect:	b = 0.57, p < 0.001
Moderation faith in intuition on the relationship between the subconstruct job security and the subconstruct RtC – Cognitive	
• For low FII, job security has the following effect:	b = 0.17, p = 0.084
• For average FII, job security has the following effect:	b = -0.01, p = 0.939
• For high FII, job security has the following effect:	b = -0.18, p = 0.170

In looking at the moderating effect of faith in intuition on the relationship between the subconstructs of perceived outcome of change and RtC, the data shows an increased correlation between some constructs with an increasing faith in intuition. In other words, individuals with a strong intuitive system show a stronger increasing amount of RtC with an increasing fear of losing power and prestige. These impacted employees in particular will show an increasing resistance behavior more quickly.

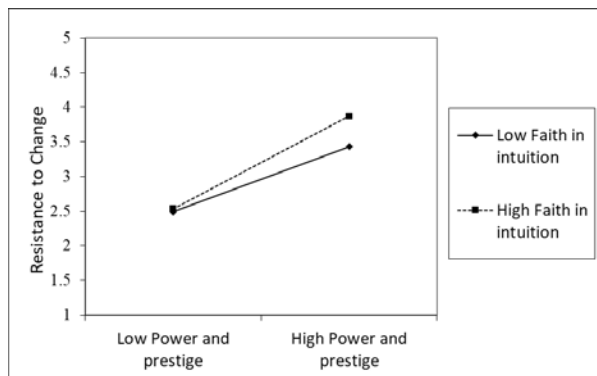
In looking at the fear of losing their job, the study found an opposite moderating effect. Although the main correlation between job security and RtC is weak, the results in Table 6 show that there is a difference in individuals with a low and with a high faith in intuition. As individuals increase in faith in intuition, the relationship between job security and the cognitive part of RtC also changes. Individuals with a low faith in intuition (average -1 SD) show a positive correlation between job security and the cognitive subconstruct of RtC. Individuals with a high faith in intuition (average +1 SD) show a negative correlation between job security and the cognitive subconstruct of RtC. This means that individuals with a low faith in intuition will show more RtC when the job security increases. Individuals with a high faith in intuition will show less RtC when the job security increases. Figure 4 visually presents the moderating effects.



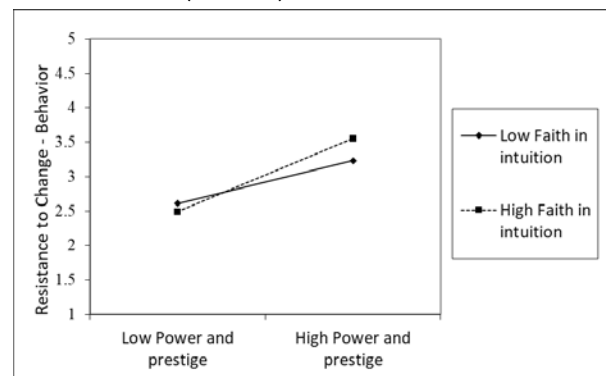
Moderation of faith in intuition on the relationship between the main construct perceived outcome of change and the main construct RtC



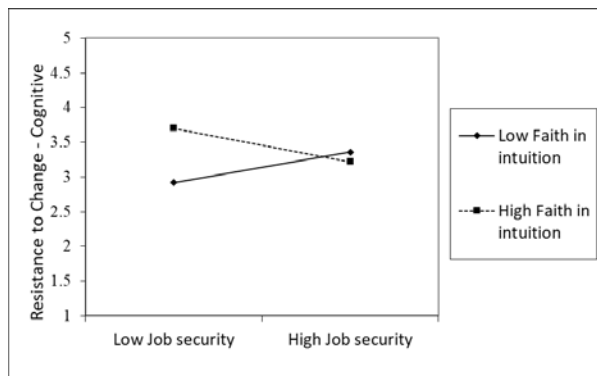
Moderation of faith in intuition on the relationship between the main construct perceived outcome of change and the subconstruct RtC (behavior)



Moderation of faith in intuition on the relationship between the subconstruct power and prestige and the main construct RtC



Moderation of faith in intuition on the relationship between the subconstruct power and prestige of change and the subconstruct RtC (behavior)



Moderation of faith in intuition on the relationship between the subconstruct job security and the subconstruct RtC (cognitive)

Figure 4: Moderating effect on the relationship between the main construct and/or subconstructs of perceived outcome of change and the main construct and/or subconstructs of RtC

The relationship between trust in management and RtC.

As expected, an individual's trust in management is significantly negatively related (-0.25^{**}) with RtC (see Table 2). The details show that both subconstructs (i.e., cognitive-based and affect-based trust) are significantly correlated with all three forms of RtC. The data of the present research supports previously found conclusions on the antecedent trust in management of RtC.

	20. RtC (affective)		21. RtC (behavior)		22. RtC (cognitive)		23. RtC	
	F(5,151) = 5.71, R ² = 0.16, p < 0.001		F(5,151) = 3.43, R ² = 0.10, p = 0.006		F(5,151) = 4.64, R ² = 0.13, p = 0.006		F(5,151) = 5.95, R ² = 0.16, p < 0.001	
	b	p	b	p	b	p	b	p
16. Trust in management	-0.15	0.063	-0.10	0.228	-0.14	0.089	-0.15	0.062
Need for cognition	-0.31	0.000	-0.20	0.017	-0.27	0.001	-0.30	0.000
Faith in intuition	0.12	0.109	0.02	0.817	0.07	0.389	0.09	0.272
Trust in management * NfC	-0.03	0.612	0.06	0.390	-0.01	0.898	0.00	0.995
Trust in management * FI	0.11	0.160	0.17	0.037	0.14	0.081	0.15	0.049
	F(5,151) = 6.14, R ² = 0.19, p < 0.001		F(5,151) = 3.28, R ² = 0.10, p < 0.001		F(5,151) = 4.68, R ² = 0.13, p < 0.001		F(5,151) = 6.14, R ² = 0.17, p < 0.001	
14. Affect-based trust	-0.17	0.033	-0.09	0.291	-0.13	0.117	-0.15	0.062
Need for cognition	-0.30	0.000	-0.21	0.018	-0.28	0.001	-0.30	0.000
Faith in intuition	0.12	0.131	0.02	0.823	0.07	0.400	0.08	0.295
Affect-based trust * NfC	-0.01	0.915	0.06	0.374	-0.01	0.867	0.01	0.870
Affect-based trust * FI	0.12	0.113	0.16	0.044	0.15	0.057	0.16	0.037
	F(5,151) = 5.28, R ² = 0.15, p < 0.001		F(5,151) = 3.19, R ² = 0.10, p = 0.009		F(5,151) = 4.30, R ² = 0.12, p = 0.001		F(5,151) = 5.42, R ² = 0.15, p < 0.001	
15. Cognitive-based trust	-0.10	0.188	-0.10	0.251	-0.13	0.107	-0.12	0.114
Need for cognition	-0.32	0.000	-0.21	0.010	-0.28	0.001	-0.31	0.000
Faith in intuition	0.13	0.086	0.03	0.722	0.08	0.336	0.09	0.221
Cognitive-based trust * NfC	-0.08	0.305	0.05	0.535	-0.01	0.899	-0.02	0.778
Cognitive-based trust * FI	0.10	0.232	0.16	0.052	0.12	0.156	0.14	0.089

Table 7: The moderating effect of need for cognition and faith in intuition on the relationship between trust in management and RtC

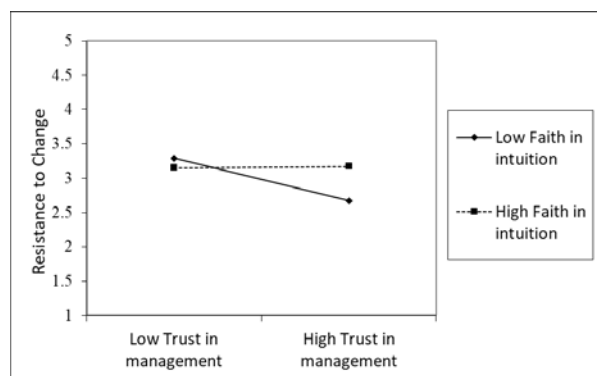
Based on the theoretical background, the study expected that there is a moderating effect of faith in intuition on the relationship between affect-based trust and RtC, as stated in H3. It was expected that an increase of faith in intuition would show an increase in the relationship between affect-based trust and RtC. Additionally, it was expected that there is a moderating effect of need for cognition on the relationship between cognitive-based trust and RtC, as stated in H4. It was also expected that an increase of need for cognition would show an increase in the relationship between cognitive-based trust and RtC. The data of the present research supports a moderating effect of the cognitive style faith in intuition, but in the opposite direction, as hypothesized (see Table 8). No support is found for H4.

In analyzing the data on subconstruct level, it becomes visible that there is only a small difference between the moderating effect of faith in intuition on the relationship between affect-based trust and RtC and between cognitive-based trust and RtC. The first one is just on the positive side of showing a significant effect and the second one is only on the negative side; both show approximately the same correlation. The form of RtC impacted by both types of trust is mainly the behavior part. Table 8 presents the details of the moderating effect.

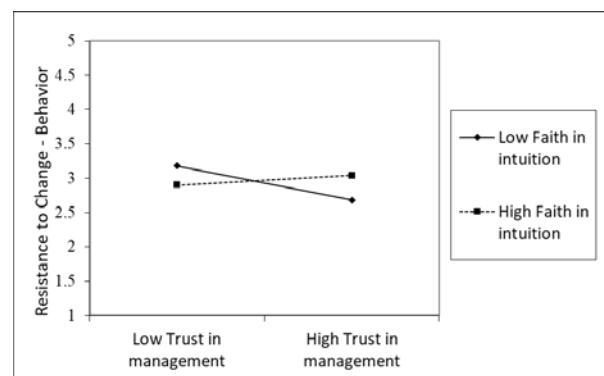
Table 8: Details of moderating effect on the relationship between the main construct and/or subconstructs of trust in management and the main construct and/or subconstructs of RtC

Moderation faith in intuition on the relationship between the main construct trust in management and the main construct RtC	
• For low FII, trust in management has the following effect:	b = -0.30, p = 0.006
• For average FII, trust in management has the following effect:	b = -0.15, p = 0.062
• For high FII, trust in management has the following effect:	b = 0.00, p = 0.966
Moderation faith in intuition on the relationship between the main construct trust in management and the subconstruct RtC (behavior)	
• For low FII, trust in management has the following effect:	b = -0.27, p = 0.018
• For average FII, trust in management has the following effect:	b = -0.10, p = 0.228
• For high FII, trust in management has the following effect:	b = 0.07, p = 0.558
Moderation faith in intuition on the relationship between the subconstruct affect-based trust and the main construct RtC	
• For low FII, affect-based trust has the following effect:	b = -0.31, p = 0.004
• For average FII, affect-based trust has the following effect:	b = -0.15, p = 0.062
• For high FII, affect-based trust has the following effect:	b = 0.01, p = 0.935
Moderation faith in intuition on the relationship between the subconstruct affect-based trust and the subconstruct RtC (behavior)	
• For low FII, affect-based trust has the following effect:	b = -0.25, p = 0.026
• For average FII, affect-based trust has the following effect:	b = -0.09, p = 0.291
• For high FII, affect-based trust has the following effect:	b = 0.07, p = 0.544

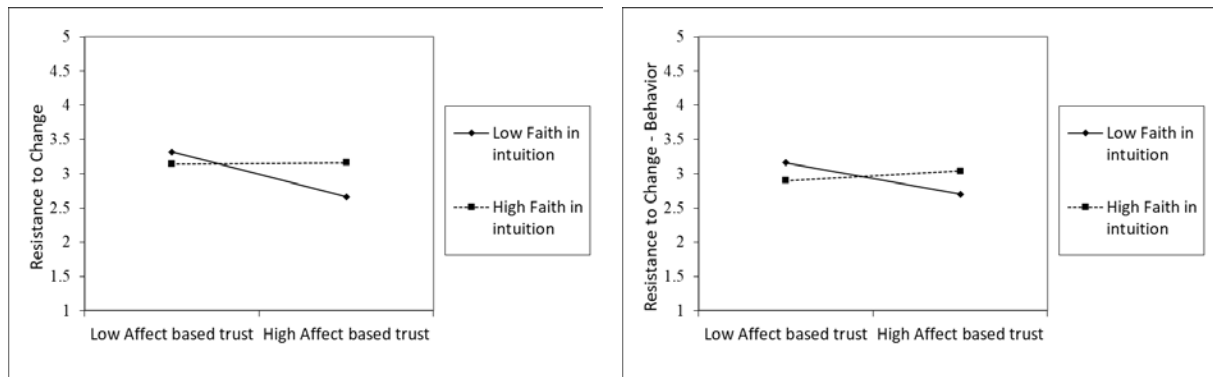
All four moderating effects show approximately the same picture. Individuals with a low faith in intuition (average – 1 SD) show a negative correlation between trust in management and RtC. Individuals with a high faith in intuition (average + 1 SD) show a low positive correlation (i.e., between 0 and 0.07) between trust and RtC. This means that individuals with a low faith in intuition will show an increase in RtC more quickly when the trust is decreasing than individuals with an average faith in intuition, which is the opposite as was hypothesized. Figure 5 visually presents the moderating effects.



Moderation of faith in intuition on the relationship between the main construct trust in management and the main construct RtC



Moderation of faith in intuition on the relationship between the main construct trust in management and the subconstruct RtC (behavior)



Moderation of faith in intuition on the relationship between the subconstruct affect-based trust and the main construct RtC

Moderation of faith in intuition on the relationship between the subconstruct affect-based trust and the subconstruct RtC (behavior)

Figure 5: Moderating effect on the relationship between the main construct and/or subconstructs of trust in management and the main construct and/or subconstructs of RtC

The relationship between quality of information and RtC.

As expected, quality of information is significantly negatively correlated (-0.54**) with RtC (see Table 2). In looking at the details, the construct is correlated with all three forms of RtC. The data of the present research supports previously found conclusions on the antecedent quality of information in management of RtC.

Based on the theoretical background, the study expected a moderating effect of need for cognition on the relationship between the quality of information and RtC, as stated in H5. Unfortunately, the data of this study does not provide support for the hypothesis of the moderating effect, nor is there a moderating effect on the relationship between quality of information and the subcontracts of RtC.

Table 9: The moderating effect of need for cognition and faith in intuition on the relationship between quality of information and RtC

	20. RtC (affective)		21. RtC (behavior)		22. RtC (cognitive)		23. RtC	
	F(5,151) = 13.40, R ² = 0.31, p < 0.001		F(5,151) = 6.66, R ² = 0.18, p < 0.001		F(5,151) = 14.97, R ² = 0.33, p < 0.001		F(5,151) = 16.30, R ² = 0.35, p < 0.001	
	b	p	b	p	b	P	b	p
17. Quality of information	-0.43	0.000	-0.35	0.000	-0.51	0.000	-0.50	0.000
Need for cognition	-0.23	0.002	-0.15	0.058	-0.15	0.035	-0.20	0.005
Faith in intuition	0.15	0.032	0.07	0.372	0.09	0.197	0.12	0.080
Trust in management * NFC	-0.05	0.453	-0.07	0.394	0.05	0.515	-0.02	0.743
Trust in management * FI	-0.05	0.472	-0.04	0.581	-0.09	0.195	-0.07	0.297

Discussion

This thesis introduced a new perspective by looking to RtC through a dual processing lens. The purpose of the research was to find evidence for a moderating effect of both thinking styles (i.e., faith in intuition and need for cognition) on the relationship between RtC and its antecedents. In addition, the data could find support for validating conclusions made in previous research on the relationship between RtC and its antecedents.

The relationships between all four groups of antecedents and RtC have been validated. Like in previous research, an individual's difficulty in dealing with change (e.g., routine seeking) and perceived outcome of change (e.g., fear of loss of power and prestige) was positively correlated with RtC. Trust in management (affect-based trust) and quality of information (timeliness of information) were both negatively related to RtC, which corresponds to findings in previous research. Also, the study found a

significant correlation between RtC and the subconstructs of its antecedents. Only the subconstruct of job security showed a slightly higher p value. A possible explanation for the significance on the correlation between job security and RtC is the goal of the change program of the researched organization. The main goal is to become more client centric and flexible but not to lower costs. For this reason, employees may not have felt insecure about their job's future, which made the job security subconstruct more difficult to measure and made the relationship between job security and RtC weaker.

The hypotheses regarding the moderating effect of the cognitive styles can partly be supported based on the data of this research. Firstly, the study expected that need for cognition would negatively moderate the relationship between individuals' difficulties dealing with change and RtC. In other words, the study assumed that the individuals who rely heavily on their rational system would be able to counter the initial suggested behavior from the experiential system, and such an act of countering would take place due to their personality. The data of this research does not support this hypothesis, and a possible explanation is that the individual's difficulty in dealing with change is also reflected in the rational process. This would mean that even if individuals overthink their potential actions, they still heavily rely on their personality, which results in an absence of a moderating effect.

Secondly, the study expected that faith in intuition would positively moderate the relationship between fear of loss and RtC. Individuals who heavily rely on their experiential system would either suspend the involvement of the rational system more easily, weigh losses more heavily, or both. The data of this research supports this hypothesis of a moderating effect. This means that individuals who rely more on their experiential system than others are showing RtC more quickly when the fear of loss increases. Additionally, this research includes an analysis at the subconstruct level, showing that the relationship with the behavior part of RtC was especially moderated by the cognitive style. Based on this research, the study cannot conclude whether this moderation occurs due to the suspension of the rational system or due to the weighing of losses. Further research is needed to support this mechanism.

Thirdly, the study expected that faith in intuition would moderate the relationship between affect-based trust and RtC, and it also expected that need for cognition would moderate the relationship between cognitive-based trust and RtC. The data of this research does not support the hypothesis of a moderating effect of the cognitive style need for cognition. Interestingly, both the affect-based and the cognitive-based trust in management subconstructs are moderated by the faith in intuition cognitive style, but in the opposite direction as hypothesized. This means that individuals who rely more on their intuitive system will show less decrease of RtC when the trust in management is increasing. This may be because these individuals especially will require more than only trust in management in order for their RtC to be decreased. Another possible influence is related to the measurement of affect-based trust, which is the subconstruct where the relationship is moderated more significantly. This measure looks at how the relationship is between the individuals and their manager, and whether the individuals care about their manager. Individuals who show a high affect-based trust can potentially care about their manager and be afraid of the implications of the change for their manager. This could drive a negative moderating effect.

Finally, the study expected that need for cognition would positively moderate the relationship between the quality of information and RtC. It was expected that individuals relying more on their rational system would value the information as more important and that they would adapt more quickly to the automatic behavior suggested by their experiential system. The data of this research does not support this

hypothesis. Although an increase of the quality of information relates to a lower RtC, individuals who rely differently on their rational system do not show a significant difference in this relationship. This may be because the information provided in times of change can be so impactful to the individuals that they would involve their rational system anyhow. For example, some individuals who make a big purchase will all involve their rational system, even though there are also some who would show a lower need for cognition.

Theoretical and practical implications

This study has several theoretical implications. The results of this research provides a better understanding of the relationship between RtC and its antecedents. Both the relationship between trust in management and RtC and the relationship between fear of loss and RtC are impacted by the variance of individuals' reliance on the faith in intuition cognitive style. Previous research has already indicated that fear activates the amygdala, which is part of the experiential system. Trust has been described less unambiguously and hence the development of cognitive- and affective-based trust. Based on this research, the study concludes that the mechanism of fear indeed runs through the experiential system of the brain. As explained in the hypotheses formulation, the expectation was that both forms of trust would run through a different cognitive system. The present research shows that this cannot be concluded so easily. Although the data show a significant moderating effect of the usage of the experiential style, this is not significantly different between cognitive- and affective-based trust. Additionally, the moderating effect shows that individuals who are highly relying on their intuition would need more than trust to show a lower RtC. Both the relationship between an individual's difficulty in dealing with change and RtC and the relationship between quality of information and RtC are not moderated by any cognitive style. Although the study expected that the rational system could change the automatic suggested behavior from the experiential system—such as by quality information—the findings of this research do not show that individuals who rely on their rational system are impacted by this information more than others. This would imply that these antecedents are not impacted by a specific cognitive style.

The present research also has several practical implications. First, this research shows that there is a difference in the relationship between RtC and both the fear of loss and the trust in management antecedents; this depends on the faith in intuition of the individuals. This indicates that managers will need to understand that the fear of loss—especially in power and prestige—will impact individuals who rely on their experiential system even more than others. They will need to put extra effort in reassuring these individuals in order to ensure an effecting change. Additionally, managers need to take into consideration the effect of trust. Individuals who are highly relying on their intuitive system will not be able to be reassured with trust in order to decrease RtC. Extra effort should be made on the other antecedents to ensure an effective change. Secondly, an assessment of the preferred cognitive style can be included in recruitment processes. This research shows that there is a negative correlation between the cognitive style need for cognition and RtC, meaning that managers could select individuals who score highly on this cognitive style to support change. Moreover, managers should be aware that individuals who show an above average reliance on their experiential system are likely to show a higher increase in RtC when confronted with the fear of loss. Additionally, managers should be aware that this RtC cannot be answered with a strategy of increasing their trust in management, as these individuals do not show a decrease in RtC in this case.

Limitations and suggestions for future research

This study suffers from several limitations. First, as this is a thesis, there was a limited amount of time and resources involved. The data were gathered in only one organization that had a strong respondent base of middle-aged European men. This could impact the generalizability of the findings. It is possible that some of the relationships between RtC and its antecedents will work differently when other respondent profiles are included and analyzed. For example, the relationship between quality of information and RtC was not found to be significant in a study conducted in the healthcare sector (Amarantou, Kazakopoulou, Chatzoudes, & Chatzoglou, 2018). These differences could change the possibility of finding a significant moderating effect of cognitive styles, as the research of RtC and its antecedents has been validated in different branches and industries.

Secondly, the data were gathered by self-reporting. Respondents were asked to self-assess their values on variables. No confirming measurement from colleagues was included in the gathering. Especially for the individuals' difficulty in dealing with change construct, a validation of the self-reported value could potentially increase the reliability of the measurement. This could be included in future research by asking individuals to fill in values about their colleagues; the challenge with this is that the researcher may encounter difficulties when complying with privacy regulations.

Thirdly, the conclusions are limited to correlations; no causal conclusions could be made based on this research. It is possible that these results could be assessed on causality by interviewing respondents, although the reliability would depend on the honesty and self-awareness of the respondent.

Finally, interaction effects are hard to detect in field studies due to statistical reasons, and there are several reasons for this. First, this is due to the measurement error in the predictors and the moderator, as the interaction effect is the product of both. Secondly, in surveys scoring especially, the full range of possible scores is often not used, which makes it more difficult to find moderating effects. Finally, field researchers do not have the possibility to focus on observing the extremes, which is contrary to experiments makes it more difficult to not end up with many average scores (McClelland & Judd, 1993). It is possible that this could lead to hypotheses not being supported based on methodological reasons.

Further research on the cognitive styles is needed. First, it would be interesting to see whether it is possible to train or develop individuals in these cognitive styles, especially as the need for cognition cognitive style is correlated with RtC. Initially, researchers can investigate whether this is a causal relationship through qualitative research. It is assumed that people would score differently on cognitive styles in time (Akinci & Sadler-Smith, 2013). For instance, young children do not have a strong rational system when their prefrontal cortex is not yet developed (Kahneman, 2015). This prompts the question of how rational systems can be influenced.

Secondly, the mechanism of quality of information on RtC is still unknown. It can now be said that the relationship between the two is not moderated by a cognitive style, but there is still the need to determine what contributes to an individual's difference in the relationship between the two constructs. For more insight, further investigation is needed on potential moderators, mediators, or both.

Finally, the findings show an opposite moderating effect than expected regarding faith in intuition on the relationship between trust in management and RtC, and it would be interesting to understand how this mechanism works. Further research can investigate to see whether this was a Type 1 error in this study, or whether there is indeed a different explanation to this process as suggested.

This research confirms the relationship between RtC and its antecedents and uses cognitive styles in a different and new context. Although not all relationships between RtC and its antecedents are moderated

by these styles, the study described a new perspective on the fear of loss and trust in management, and in doing so it provided new contribution to the field of RtC.

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Appendix 1 - Survey design

Individual's difficulty of dealing with change

Routine seeking

- I generally consider changes to be a negative thing.
- I'll take a routine day over a day full of unexpected events any time
- I like to do the same old things rather than try new and different ones.
- Whenever my life forms a stable routine, I look for ways to change it. **(R)**
- I'd rather be bored than surprised.

Emotional reaction

- If I were to be informed that there's going to be a significant change regarding the way things are done at school, I would probably feel stressed.
- When I am informed of a change of plans, I tense up a bit.
- When things don't go according to plans, it stresses me out.
- If one of my professors changed the grading criteria, it would probably make me feel uncomfortable even if I thought I'd do just as well without having to do any extra work.

Short-term focus

- Changing plans seems like a real hassle to me.
- Often, I feel a bit uncomfortable even about changes that may potentially improve my life.
- When someone pressures me to change something, I tend to resist it even if I think the change may ultimately benefit me. **(Omitted)**
- I sometimes find myself avoiding changes that I know will be good for me.

Cognitive rigidity

- I often change my mind. **(R)**
- I don't change my mind easily.
- Once I've come to a conclusion, I'm not likely to change my mind.
- My views are very consistent over time.

Perceived outcome of change

Power and prestige

- The espoused importance of your job to the unit.
- The amount of independence you have in doing your job.
- The amount of responsibility you have over other employees.
- The role of your unit within the division.
- The prestige of your job.
- The prestige of your unit.
- The importance espoused by the division of the projects over which your unit is in charge.

Intrinsic motivation

- The extent to which you find your job interesting.
- The amount of personal responsibility required by your job.
- The challenge involved in your job.

Job security

- The chances that you will be forced to leave.

Trust in management

Affect-based trust

- My manager and I have a sharing relationship. We can both freely share our ideas, feelings, and hopes.
- I can talk freely to my manager about difficulties I am having at work and know that (s)he will want to listen.
- My manager and I would both feel a sense of loss if one of us was transferred and we could no longer work for together.
- I share my problems with my manager, I know (s)he would respond constructively and caringly.
- I would have to say that my manager and I both made considerable emotional investments in our working relationship.

Cognitive-based trust

- My manager approaches his/her job with professionalism and dedication.
- Given my manager's track record, I see no reason to doubt his/her competence and preparation for the job.
- I can rely on my manager not to make my job more difficult by careless work.
- Most people, even those who aren't close friends of my manager, trust and respect him/her as co-worker.
- Other work associates of mine who must interact with my manager consider him/her to be trustworthy.
- If people knew more about my manager and his/her background, they would be more concerned and monitor his/her performance more closely. **(R)**

Quality of information

- The information I have received about the STEP-UP program has been timely.
- The information I have received about the STEP-UP program has been useful.
- The information I have received about the STEP-UP program has adequately answered my questions about the change.
- The information provided about the STEP-UP program was positive.
- The information provided about the STEP-UP program was favourable.
- The way in which the information about the STEP-UP program was communicated appropriately.

Intuitive–Experiential and Analytical–Rational Thinking Styles (10-item scale)

Need for cognition

- I don't like to have a lot of thinking. **(R)**
- I try to avoid situations that require thinking in depth about something. **(R)**
- I prefer to do something that challenges my thinking abilities rather than something that require little thoughts.
- I prefer complex to simple problems.
- Thinking hard and for long time about something gives me little satisfaction.

Faith in intuition

- I trust my initial feelings about people.
- I believe in trusting my hunches.

- My initial impressions of people are almost always right.
- When it comes to trusting people, I can usually rely on my “gut feelings”.
- I can usually feel when a person is right or wrong even if I can’t explain how I know.

Resistance to change

Affective

- I was afraid of the change.
- I had a bad feeling about the change.
- I was quite excited about the change. **(R)**
- The change made me upset.
- I was stressed by the change.

Behavioral

- I looked for ways to prevent the change from taking place.
- I protested against the change.
- I complained about the change to my colleagues.
- I presented my objections regarding the change to management.
- I spoke rather highly of the change to others. **(R)**

Cognitive

- I believed that the change would harm the way things are done in the organization.
- I thought that it’s a negative thing that we were going through this change.
- I believed that the change would make my job harder.
- I believed that the change would benefit the organization. **(R)**
- I believed that I could personally benefit from the change. **(R)**

Appendix 2 - Complete correlation table

[illegible]