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The relationship between organizational trust, resistance to change and adaptive and proactive employees' agility in an unplanned and planned change context

Sandra B. Doeze Jager[1] | **Marise Ph. Born**[2,3] | **Henk T. van der Molen**[2]

[1]Avans University of Applied Sciences, 's-Hertogenbosch, The Netherlands

[2]Institute of Psychology, Erasmus University Rotterdam, Rotterdam, The Netherlands

[3]Optentia and Faculty of Economic and Management Sciences, North-West University, Potchefstroom, South Africa

Correspondence
Sandra B. Doeze Jager, Avans University of Applied Sciences, Statenlaan 29-67 5223 LA, 's-Hertogenbosch, The Netherlands.
Email: sb.doezejager-vanvliet@avans.nl

Abstract

Modern organizations need to adapt quickly to on-going changes. The present study sought to examine employees' agility during periods of sudden, unplanned, and during periods of planned change. It was investigated to what extent one's trust in the organization and resistance to change could predict proactive agility and adaptive agility. Data came from employees ($N = 188$) in two different organizations, one undergoing an unplanned change and one undergoing a planned change. In both contexts, organizational trust had a negative relationship with resistance to change. In an unplanned change context (organization one), trust of employees in the organization had a positive effect on the adaptive component of agility through the (negative) mediation by affective resistance to change. In this context, trust did not have any (mediated) effect on the proactive component of agility. In contrast, in a planned change context (organization two), trust had a positive effect on the proactive component of agility, partially through the (negative) mediation by resistance to change. In this context, trust also had a positive effect on the adaptive component of agility, partially through the (negative) mediation by resistance to change. These results imply that trust works in different

Sandra B. Doeze Jager and Marise Ph. Born contributed equally to this article.

ways depending on the type of change. More trust through less resistance implies better adaptation during unplanned organizational change. More trust works directly and partially through less resistance to change to enhance employee proactivity and adaptability during planned change.

KEYWORDS
agility, resistance to change, trust, (un)planned

INTRODUCTION

Organizations today are confronted with an extremely competitive and versatile environment due to the global market in which they operate. Increased innovation, technological growth, fragmentation of the markets and rising expectations of the customer have led to rapid developments in today's business (Ben-Menahem et al., 2013; Braun et al., 2017). Up and above these phenomena, the pandemic of Covid-19 has added to a high unpredictability of the present markets. It therefore is increasingly essential for companies to actively ferment employees who can successfully embrace change in accordance with new trends to be able to survive in such competitive, unpredictable and fast-moving environments (e.g. Breu et al., 2002; Lang & Bliese, 2009). Only through understanding the process and potential sources of readiness and opposition to change among employees can their agility to adapt and actively seek change be promoted (Vakola, 2014).

How employees deal with unpredictable, dynamic, and constantly changing environments has been an important topic for both industry and academics for several decades (Eby et al., 2000; Sherehiy et al., 2007). To further such knowledge, research needs to focus especially upon the individual employees and how they react to planned and unplanned changes. This creates a potential avenue to investigate how and to what extent individuals working in these environments are able to overcome and respond to such challenges (Sutcliffe & Vogus, 2003; Tarba et al., 2016).

Harvey et al. (1999) stated that an organization's maximum feasible level of performance depends on the extent to which the knowledge and skills of an organization's employees match the requirements of the dynamically evolving workplace. These researchers highlight that employee agility encompasses the capacity of every employee within an organization to react to occurring changes, albeit to different degrees. Currently, the existing body of academic knowledge surrounding the concepts of adaptive performance, proactivity, and agility varies across different domains (e.g. Linnenluecke, 2017; Manyena, 2006). In the current paper, we conceive agility as behavior that enables employees to adaptively react to organizational change and that enables them to anticipate and effectively take the initiative in change orientated situations. When considering the need for companies to embrace rapidly changing business landscapes, it indeed appears that for employees the ability to utilize both adaptive (reacting to change) and proactive (initiating change) behaviors are important (Ben-Menahem et al., 2013; Gunasekaran, 2001; Livari & Livari, 2011; Ramesh & Devadasan, 2007). A growing awareness can be perceived of the need for employees to develop such agile behavior at work, comprised of both proactive and adaptive skills to meet the variety of change orientated circumstances that may occur (e.g. Holbeche, 2018).

In the present paper, we aim to investigate several factors which relate to agile employee behavior by contributing in the following ways. First, earlier research has started investigating the relationship

between organizational trust and employees' attitudes towards organizational change (Van den Heuvel et al., 2013, 2017). We build upon this base of knowledge about the relationship between trust in one's organization and attitudes towards organizational change, by a focus on agility as a dependent behavior variable to be predicted by employees' trust in the organization and their resistance to change in particular. Research suggests organizational trust to be one of the most important predictors of employees' attitudes and actions related to change. Research also suggests organizational trust and resistance to change to be important factors for the way in which employees address unexpected events (e.g. Men et al., 2020; Metselaar, 1997; Van den Heuvel et al., 2013). Yet, currently, there is a paucity of research evaluating whether such relationships exist. This paper adds to the line of research into the role of trust in organizations by exploring whether it may have an indirect influence upon agile employee behavior by means of reducing resistance to change. Second, a large body of research has investigated how employees can cope with change (e.g. Judge et al., 1999) and how employees perform in changing circumstances (e.g. Khatoon & Farooq, 2015; Lange & Bliese, 2009). The present research extends this research by investigating employees' adaptive and proactive behavioral responses to changes. This focus aligns with earlier studies' attention to individual differences in the ability to change (Sackett et al., 2017; Strauss et al., 2015).

Third, we aim to add to the body of knowledge by investigating whether in an unplanned change context organizational trust will influence the *adaptive* component of agility through the reduction of employees' resistance to change, whereas, in contrast, in a planned change, organizational trust will have an effect on the *proactive* component of agility through diminishing one's resistance to change. Thus, we performed two studies to address both unplanned (organization one) and planned organizational change (organization two) contexts.

As changing organizations have become more the rule than the exception, employee agility has become increasingly important for employees' and organizations' performance improvement in practice. This study aims to provide an empirical basis for the importance of differentiating between proactive agility and adaptive agility. Depending on whether an organization experiences an unplanned change versus a planned change, this research hopes to provide practical advice about how to stimulate proactive and adaptive agility levels (e.g. Braun et al., 2017). To this end, the present research will investigate in which ways employee trust in the organization and employee resistance to change are relevant factors to consider by organizations in enhancing proactive and adaptive employee agility levels. Therefore, by means of two studies, this paper will explore three aspects that may contribute to how well employees (re)act to organizational changes that are unplanned versus changes which are planned: trust in the organization, resistance to change, and employee proactive and adaptive agility behavior. We now turn to the integration of the concepts of employee agility, trust in the organization, and resistance to change in (a) an unplanned and (b) a planned change context, from which we subsequently develop our model and hypotheses.

Unplanned versus planned organizational change

Employees can be confronted with different kinds of organizational changes (Freese, 2007; Oreg, 2006; Van den Heuvel et al., 2013). A major distinction researchers have made is the difference between organizational change as something that can be planned and as something that occurs unplanned, for example as a response to unforeseen developments in the market or society at large (Smith et al., 2005). With unplanned changes we mean changes that are the result of a suddenly occurring situation, for example when a company scandal is made public. These changes have a “disorganized character” (McNamara, 2006, p. 175). With planned changes we mean planned major changes

by management that is responsible for the implementation. The goal of a planned change may be to remedy a particular situation or to further develop a process or a structure in an organization, which can consequently influence the organization (Freese, 2007; McNamara, 2006). Being able to adapt successfully and efficiently to both expected and unexpected changes in the business environment implies agility among an organization's employees.

Agility

Among the first researchers to describe agility were Harvey et al. (1999). These authors saw agility as employees' capacity to adjust to novel or altered circumstances, which could be triggered by fluctuating demands "… of technological and organizational changes by altering one's acts, behavior, attitude, and mental state towards changes initiated internally (by the employee) or externally (e.g. by the organization or technology)" (Harvey et al., 1999, p. 15). Agility then became applied to the workforce (e.g. Braun et al., 2017; Breu et al., 2002; Harvey et al., 1999; Hopp & Van Oyen, 2003; Muduli, 2016; Sohrabi et al., 2014; Sumukadas & Sawhney, 2004). Previous research by Chonko and Jones (2005) and Muduli (2016), among others, has demonstrated that agility, as a whole, consists of an adaptive and a proactive component. When used in the context of work, agility thus refers to employees who can adaptively but also proactively deal with changes. *Adaptive agility* is regarded as the change or modification of individuals or their behavior in order to increase the fit with the new environment (response). On the other hand, *proactive agility* is the anticipation of problems related to change, the initiation of solutions, and the eventual solution of change-related problems (initiation and anticipation; Chonko & Jones, 2005).

Trust in the organization and resistance to change

Men et al. (2020) state that organizational trust is regarded as one of the most important predictors of employees' attitudes and actions related to organizational change. The review paper by Choi (2011) on employees' attitudes towards organizational change, reports that cynicism about organizational change has been "intensely studied" and has been shown to be strongly related to the intention to resist change (Choi, 2011, p. 486, 487). A key element of cynicism is distrust (Choi, 2011) or, in other words, an absence of trust (Schoorman et al., 2007). According to Morrison and Robinson (1997, p. 238), trust can in general be defined as a person's "beliefs regarding the likelihood that another's future actions will be favorable, or at least not detrimental, to one's interests". Similarly, Rousseau et al. (1998) state that there is agreement that trust is a psychological state based on "a willingness to be vulnerable under conditions of risk and interdependence … which are necessary conditions for trust to exist" (p. 395). These authors also make the point that trust can change depending on levels of risk and interdependence in the relationship.

Management research considering trust until the 1980s was largely concerned with the role of trust in everyday social interactions, and in the maintenance or stability of organizational systems (Carmeli & Gittel, 2009; Morgan & Zeffane, 2003). Yet, having confidence in one's organization has become a more important theme, as organizations change more rapidly than before and employees' future is more insecure in times of change (Tyler, 2003). The only thing employees can do in such circumstances is to have confidence that their management will consider their wellbeing while implementing organizational change (Tyler, 2003). Organizational trust is increasingly viewed as important not only for the sake of employees themselves, but also for the goals of the organization (Morgan & Zeffane, 2003).

Much research has demonstrated the positive effects of employees who have confidence in their organization, such as effects on their work performance and wellbeing (Psycones, 2006), their commitment to the organization and on their levels of cooperation and acceptance of organizational decisions (Bijlsma & Koopman, 2003; De Pater et al., 2009). Research in general shows that organizational trust is a key factor in organizational success and human resource practice (Morgan & Zeffane, 2003). Particularly during times of organizational change, power and information asymmetry between the organization and its employees will make trust of more importance (cf. Schoorman et al., 2007). During change, employees will start (re)thinking whether the change is beneficial for them and they may feel disappointed when it is not (Oreg et al., 2018). In such contexts, resistance to change may occur, which concerns individuals' negative responses to change and which will be based on their earlier experience of organizational changes (e.g. Avey et al., 2008; Piderit, 2000; Vakola, 2014). Yet, it may be expected that when employees trust their employer, they will report less resistance to change. More specifically, related to resistance to change, the work by Mayer et al. (1995) implies that trust in the organization, that is an employee's willingness to be vulnerable and take risk, can be expected to be negatively related to one's belief that organizational change would be harmful, to one's worries towards change, and to one's inclination to stop the change to take place.

Similarly, Mishra and Spreitzer (1998) examined the role of employees' trust in their organization during organizational change. Their study showed that organizational trust can serve as a tool to overcome resistance to change and to help employees interpret the implementation process correctly. When there is no trust in one's organization, employees may feel threatened by the change, which can result in resistance and feelings of revenge. Organizational change can be demanding for everyone involved in the process. If its consequences are not managed very well, this will lead to ambiguity and uncertainty and, in turn, may foster mistrusting one's organization and resistance to change. However, if employees trust their organization and their leaders, they will feel more secure and have less resistance to change (Coyle-Shapiro & Morrow, 2003).

Although focusing on readiness for change and not resistance to change, Zayim and Kondakci (2014) investigated the predictive value of organizational trust for one's readiness for change. Among a sample of Turkish primary and secondary school teachers, they demonstrated that readiness for change could be predicted by teachers' perceived trust in their colleagues and in their principal. The results of their study provided empirical support for the idea that having confidence in an organization—in their case in one's colleagues and school principal—can be considered as an important factor in times of organizational change, as it increased readiness to change.

Van den Heuvel and Schalk (2009) reported that resistance to change was much higher among employees who perceived low fulfilment of organization promises in terms of their psychological contract than among employees who experienced high fulfilment in terms of this contract. They were able to investigate both planned and unplanned organizational changes, and found effects in both contexts, albeit stronger effects when the change was unplanned. In line with the findings of their research and of the other study findings reported, we thus expect that organizational trust will diminish resistance to change in both unplanned and planned change contexts.

Organizational trust, resistance to change and agility in unplanned and planned change contexts

There is a tendency for organizations to focus on the financial or material outcomes of change at the expense of the human aspect (e.g. Beer & Nohria, 2000), despite the fact that people can be seen as key to effective change (Lang & Bliese, 2009; Zayim & Kondakci, 2014). Ignoring the human

element and in particular a lack of supportive attitudes in the workforce are the two most common reasons for change initiatives to fail (Bouckenooghe et al., 2009). Nevertheless, in his literature review of employees' attitudes towards organizational change, Choi (2011) concludes that more empirical studies are needed to determine the consequences of employees' attitudes toward organizational change. In response to this call, we distinguish between planned and unplanned change, both bringing risks and uncertainty (Judge et al., 1999; Lines et al., 2005). More specifically, we argue that employees' resistance to change will affect their agility in a different way, depending on the occurring type of organizational change.

Planned organizational change focuses on decision making based on rationality and logic (cf. Knowles & Saxberg, 1988). Such a focus implies that managers' decisions will most probably be rationally communicated with one's employees, likely evoking thoughts among these employees which may be positive about welcoming such change, or, in contrast, consciously resisting change based on their own reasoning and interpretations. When employees are not resistant to the change because of the trust they have in their organization, they may particularly be less resistant based on the employer's arguments for the planned change. Consequently, they may have a higher chance to develop into proactive agents during such a change than to simply survive adaptively. In a context of planned change, employees are thus expected to be proactive and to concur with the planned change.

In contrast, unplanned organizational change may occur because of sudden unexpected events. An unplanned change context conceivably will have a greater effect on one's adaptability. When a change is unplanned, employees will not be able to proactively prepare for it but will need to be adaptive to deal with the change. If trust in one's organization is high, the unexpected change will potentially cause less feelings of resistance. Hence, when employees trust their organization and therefore experience less feelings of resistance, they may be able to try to find ways to adaptively cope with the change.

In short, integrating the above ideas in our research leads to expecting a relationship between trust and resistance to change in a planned and an unplanned organizational change context and to determining the effects of employees' resistance to change on their agility in both contexts. It is thought that the relationship between trust in the organization (independent variable) and employee agility (dependent variable) will be (partially) mediated by resistance to change. Specifically (see Figure 1), we expect that organizational trust, by means of resistance to change, partially is related to adaptive agility in an unplanned change context (organization one), and to proactive agility in a planned change context (organization two). These expectations imply the following hypotheses.

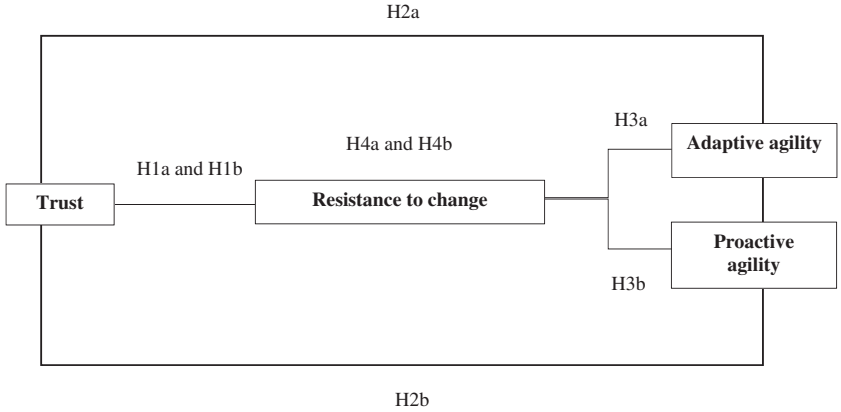

FIGURE 1 Hypothesized model. a = unplanned organizational change context (study 1), b = planned organizational change context (study 2)

Hypothesis 1 *Organizational trust is negatively related to resistance to change in (a) an unplanned organizational change context and in (b) a planned organizational change context.*

Hypothesis 2 *Organizational trust is positively related to (a) adaptive agility in an unplanned organizational change context, and (b) proactive agility in a planned organizational change context.*

Hypothesis 3 *Resistance to change is negatively related to (a) adaptive agility in an unplanned organizational change context, and (b) proactive agility in a planned organizational change context.*

Hypothesis 4 *Resistance to change partially mediates the relationship between organizational trust and (a) adaptive agility in an unplanned organizational change context, and (b) proactive agility in a planned organizational change context.*

METHOD

Two studies: An unplanned and a planned organizational change

The relationship between trust in the organization, resistance to change and agility was investigated in two different studies. Study 1 was conducted in a financial company in the Netherlands to test the hypotheses in an unplanned change context (organization one). The change was the result of unexpected circumstances in the environment of the organization. Study 2 used a sample of businesspeople (from the service industry) in the Netherlands to test the hypotheses in a planned change context (organization two). In the latter case, the change was the result of a proactive plan to change by the organization. Figure 1 depicts our hypothesized model, showing that we distinguish between these two organizational change contexts, namely a context in which the organizational change is unplanned (organization one) and an organizational context in which the change is planned (organization two).

STUDY 1

Sample and procedure

Ten managers of a large Dutch financial organization (organization one) were informed in 2014 about the study and received the request whether they and their employees would be prepared to participate in the study. Change here was the result of a suddenly occurring situation, namely a response to a development in the market. The suddenly occurring situation had a large impact on the employees (cf. Self et al., 2007). The organization's reaction to the changes was abrupt (see also Kiefer et al., 2015). After having received permission from the managers, all their 173 team members received an invitation per email regarding the study. Subsequently, all these team members, who worked in one of the departments of the ten managers, each received two emails, namely an introduction email with information about the study, and an email with the survey to be completed. In the introduction email, the researcher and the study were introduced, and the advantage of participating in the study was emphasized, namely that after filling in the e-survey all respondents could request a personal rapport about their agility. The respondents were informed that their personal information was pseudonymized, so that they would be able to request for their personal

report through a unique code. The information was kept on a secured server for a maximum of five years according to strict ethical GDPR-code. Everyone who had received the introduction email received an email with the e-survey immediately after the introduction email.

Of the 173 employees, 90 employees (response rate 52%; 67% females; mean age 40.3 years (*SD* 11.1); 90 per cent had a higher vocational or university level degree) completely filled out the e-survey and therefore could be included in the study. This response rate is adequate, when comparing it to the typical organizational survey response rate of 35.7 per cent (Baruch & Holtom, 2008). This sample size implied a power $(1 - \beta)$ of .87, given a significance level $\alpha = .05$ and a Cohen's d effect size = .20 (Faul et al., 2009). All participants received an individual feedback report in exchange for their participation. Filling out the questionnaire took approximately 30 minutes, encompassing a short introduction and closure by the first author. The questionnaire only served to assess the constructs used in the study.

Measures

Demographics

Information was collected on respondents' gender, age and educational level. Gender was scored as 1 = female, and 2 = male. Age was measured in years. Educational level was measured as follows: 0 = secondary school, 1 = lower vocational education, 2 = higher vocational education, and 3 = university education. Lower vocational training refers to the Dutch post-secondary lower professional education, or "MBO", and higher vocational education refers to the Dutch post-secondary higher professional education, or "HBO".

For all items of the below scales in the questionnaire, the instruction to the participants in study 1 was the following (cf. Hunthausen et al., 2003): Please give your answers with the unplanned change that the organization presently is undergoing in mind.

Agility

The agility behavior scale was constructed by the lead author of this article in collaboration with Cubiks (2014). The scale was labeled the Rotterdam Employee Agility Scale (REAS) and was designed after carefully reviewing the available literature on agility (e.g. Alavi et al., 2014; Pulakos et al., 2000; Sherehiy et al., 2007), which inspired us for items covering agility. Together, we developed 36 items. 10 experts in organizational behavior judged their accuracy and relevance and screened out 5 items. We then conducted an exploratory factor analysis using a principal component varimax rotation for the 31 remaining items. Seven interpretable factors emerged with eigenvalues greater than one (Comrey & Lee, 1992; Field, 2009). These factors were labeled (a) *Resilience* (total 4 items), referring to an employees' competence to deal with setbacks, with items such as "I am able to give a positive spin to a negative situation"; (b) *Teamwork* (total 5 items), relating to the competence of an employee to work together with colleagues, share information, and stimulate group processes, with items such as "I am motivating other team members and I appreciate their input"; (c) *Coping with change* (total 4 items), referring to an open approach to deal with and adapt to implemented changes, including items as the following: "I am having a positive view on change"; (d) *Decisiveness* (total 4 items), which is the competence of an employee to be vigorous, and including items like "I am able to take risk in my work"; (e) *Eagerness to learn* (total 5 items), which is an active approach of employees for personal development, and includes items as "I am asking for feedback about my performance";

(f) *Independence* (total 4 items), referring to the competence of an employee to perform tasks with minimal guidance and the preference for responsibility, and including items such as "I am considering new ways to identify potential opportunities"; (g) *Courage* (total 5 items), implying a proactive approach towards possibilities and changes instead of waiting for things to happen, with items such as "I am consistently looking for more responsibility".

We pilot-tested the scale by collected data among a voluntary sample of $N = 100$ employees from a large Dutch recruitment agency, at that time undergoing a major organizational change related to the abolishment of personal offices and personal space. These employees took part in the study on a voluntary basis. All items loaded substantially (>.60) on their respective factors. The seven-factor solution explained 62.5 per cent of the score variance. However, the facets resilience, teamwork, coping with change, and decisiveness correlated strongly with one another (varying from $r = .56$ to .75). These four facets did not correlate with independence, eagerness to learn and courage (varying from $r = .06$ to .15). The three facets independence, eagerness to learn, and courage correlated strongly with one another (varying from $r = .51$ to .69) and seemed more indicative of proactive agility (initiating change), whereas the first four facets seemed more indicative of adaptive agility (adapting to change). Within the pilot-sample, we tested whether we were able to find the underlying 2-factor structure that we were expecting. A Confirmatory Factor Analysis (CFA) gave the following results. The parsimonious χ^2/df index (1.83) and RMSEA index (.07) both showed below maximum acceptable values implying a good fit. TLI (.97) and CFI (.95) were above 0.90, confirming a good fit. The adaptive agility scale had an alpha coefficient of .79, and the proactive agility scale had an alpha coefficient of .81. These findings offered sufficient confidence to use the agility scale as a measure to test our hypotheses.

We tested the underlying two-factor structure of agility using CFA for the combined samples of study 1 and study 2. The results showed a good fit, as supported by the fit-values: $\chi^2/df = 1.98$, $p < .001$, RMSEA = .06, TLI = .93, CFI = .94. A one-factor CFA-solution, however, gave a bad fit: $\chi^2/df = 3.19$, $p < .001$, RMSEA = .10, TLI = .80, CFI = .83.

Consequently, we treated both factors as a unidimensional construct or factor (Spector, 1992; Tabachnick & Fidell, 2013), and agility as a construct consisting of two components, namely adaptive and proactive agility. The two components explained 53 per cent of the score variance, with adaptive agility explaining 33 per cent, and proactive agility explaining 20 per cent of the variance in the combined samples of study 1 and study 2. This two-factor solution is consistent with related research (Chonko & Jones, 2005) as well as other research indicating that the agility attributes (Alavi et al., 2014; Pulakos et al., 2000) are part of a broader construct. The adaptive and proactive agility scales proved to be reliable. The alpha-reliabilities of the constructs during pilot-testing could be confirmed in our samples and varied between .79 (study 1, adaptive agility) and .85 (study 2, proactive agility).

Adaptive agility was measured by 17 items ($\alpha = .87$), including item such as "I offer solutions when things go wrong", and "I am having a positive view on change". *Proactive agility* was measured by 14 items ($\alpha = .87$). Proactive agile item examples are: "I am adopting a proactive approach rather than responding to situations", and "I am constantly looking for new opportunities". All items were scored on a five-point Likert scale ranging from 1 = "*strongly disagree*" to 5 = "*strongly agree*". The correlation between adaptive agility and proactive agility was $r = .36$ (Cubiks, 2014). The agility scale has been used in an earlier study.

Resistance to change

Oreg's (2006) resistance to change scale was used. In line with Oreg (2018), we applied the scale as a unidimensional concept. The scale consists of 15 items, including five affective items such as "I was

afraid of the change", five behavioral items such as "I looked for ways to prevent the change from taking place", and five cognitive items such as "I believed that the change would harm the way things are done in the organization". Answers are given on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The items were subjected to PCA, using the combined samples of our studies 1 and 2. Inspection of the scree plot revealed a steep break after the first component, which has an eigenvalue of 1.85 and explained 29 per cent of the variance. The component matrix based on eigenvalues, showed that all items load at least above .34 on this first factor. A subsequent one-factor CFA-solution showed adequate fit, as supported by the following fit-values: $\chi^2/df = 1.51$, $p < .001$, RMSEA = .09, TLI = .86, CFI = .89. This one component explained 56 per cent of the score variance. The alpha reliability equals .70 (study 1) and .70 (study 2) and is comparable to Oreg's (2018) value of .79 for the unidimensional resistance to change scale.

It should be noted that resistance to change may also be used as a three-dimensional concept, distinguishing between affective, behavioral and cognitive resistance (Oreg, 2006), although CFA-results showed a lesser fit for this structure in the present research: $\chi^2/df = 1.81$, $p < .001$, RMSEA = .13, TLI = .79, CFI = .81.

Organizational trust

The organizational trust scale developed by Psycones (2006) was used, consisting of the following three items: "I remain confident that senior management has the best intentions for me", "In general, I remain confident that the organization delivers on her promises and duties towards me and my colleagues", and "I remain confident that my manager has the best intentions for me". Answers are given on a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. Using the combined samples of study 1 and study 2, a one-factor CFA-solution showed good fit, as supported by the following fit-values: $\chi^2/df = 1.48$, $p < .001$; RMSEA = .05, TLI = .98, CFI = .99. This one component explained 69 per cent of the score variance. In the present study, this scale had a reliability of .78 in both samples.

Common method variance tests

Since all variables were measured in a cross-sectional design, we conducted several common method variance tests. First, the Harman single-factor test (Podsakoff et al., 2003) was performed to identify whether there is a general factor that accounts for the majority of variance in the variables. Results showed that the first factor only accounted for 18.31 per cent of the variance. Second, we performed the unmeasured latent methods technique using AMOS (cf. Podsakoff et al., 2003) in which items are allowed to load on their theoretical constructs as well as on a latent common methods variance factor. We compared the standardized regression weights with and without the latent common methods variable. Our results showed there were only five items out of the total of 49 items of the trust, resistance to change and agility scales, that showed a difference (of above .20) in standardized regression weights after the latent common method variable was added. Based on these tests, we were able to conclude that common method variance is not a pervasive problem in this study.

Results study 1: Unplanned change context

Table 1 displays the descriptive statistics and intercorrelations among all variables. We tested multicollinearity among the constructs in Table 1. The multicollinearity statistics showed no VIF

TABLE 1 Study 1: An unplanned change context. Means, standard deviations and intercorrelations for all study variables

	M	*SD*	1	2	3	4	5	6	7
1. Gender	1.29	.43							
2. Age (years)	40.3	11.1	.04						
3. Educational level	2.31	.69	.01	.17					
4. Resistance	3.58	.55	−.11	−.12	.12	(.70)			
5. Trust	3.80	.68	−.01	−.21	−.18	−.22*	(.78)		
6. Adaptive agility	4.20	.37	.22	−.21	−.19	−.25**	.20	(.79)	
7. Proactive agility	3.88	.53	.17	−.11	−.01	−.10	.13	.36**	(.81)

Note: $N = 90$. Gender: 1 = female, 2 = male. Educational level: 0 = secondary school, 1 = lower vocational education, 2 = higher vocational education, and 3 = university education. Reliabilities (α) are provided on the diagonal. Scores for Resistance to Change, Trust, Adaptive Agility and Proactive Agility range from 1 (= strongly disagree) to 5 (= strongly agree).

*$p < .05$ (2-tailed); **$p < .01$ (2-tailed).

values above 5 or Tolerance values below .1 (cf. Rogerson, 2019; the maximum VIF-level was 4.3 for the regression analysis in which organizational trust and resistance to change aimed to predict adaptive agility and no Tolerance value were below 3.0), which indicates that the constructs were not correlated too highly. Educational level, age, and gender were not correlated to the other study variables.

Hypothesis testing

Hypothesis 1 stated that organizational trust and resistance to change would be negatively related in an *unplanned change context*. This hypothesis was confirmed ($\beta = -.21$, $p < .05$; see Table 2). Hypothesis 2a, stating that the relationship between trust in the organization and adaptive agility in an unplanned change context would be positive, was not supported. There was no direct significant correlation between organizational trust and adaptive agility ($\beta = .10$, *ns*; see Table 2). Hypothesis 3a, namely that resistance to change is negatively related to adaptive agility in an unplanned change context, could be confirmed ($\beta = -.19$, $p < .05$; see Table 2).

Hypothesis 4a expected that resistance to change mediated the relationship between organizational trust and adaptive agility in an unplanned change context. The PROCESS tool in SPSS (Hayes & Preacher, 2014) was used to investigate this hypothesis. The mediation effect was tested using a bootstrap estimation approach with 50,000 samples (Shrout & Bolger, 2002). Although organizational trust was a significant and substantive (negative) predictor of resistance to change and resistance to change was a significant predictor of adaptive agility, the results could not support a mediation effect of unidimensional resistance to change ($\beta = -.18$, *ns*). Hypothesis 4a thus could not be supported for resistance of change as a unidimensional concept.

Explorative analysis

In an exploratory way, we investigated whether any of the sub dimensions of resistance to change, namely affective ($\alpha = .61$), behavioral ($\alpha = .71$) or cognitive ($\alpha = .63$) resistance (α-values similar to those reported by Oreg, 2006), was able to possess a mediating role which perhaps may have been masked by our unidimensional view of resistance. The results indicated that there was a significant

TABLE 2 Study 1: Regression analysis of resistance to change and of adaptive agility in an unplanned organizational change context ($N = 90$)

Predictors	**Resistance to change (β)**
Predictor variables	
Organizational trust	−.21*
R Squared	.23*
Predictors	**Adaptive agility (β)**
Predictor variables	
Organizational trust	.10
Resistance to change	−.19*
R Squared	.31*

*$p < .05$.

indirect effect of organizational trust on adaptive agility, through the component of affective resistance to change as a mediator (β = .045, SE = .018, 95% CI = .01 to .05). According to the rule of thumb by Kenny (2019) for the size of indirect mediation effects, this concerns a small-to-medium effect. No mediational effects were found for the behavioral or cognitive sub dimensions of resistance. We note that, referring to Hayes (2009) and Mascha et al. (2013), it is not a precondition for indirect effects (mediation) that a direct relationship occurs between the antecedent and the outcome variable.

Discussion study 1

Study 1 intended to investigate the relationship between organizational trust and proactive and adaptive agility in an unplanned change context, with resistance to change as a mediating variable. The results showed a negative relationship between organizational trust and resistance to change. This study therefore implies that having more confidence in an organization is related to less resistance to change. No direct relationship between organizational trust and adaptive agility (nor for proactive agility) was observed. Resistance to change was significantly and negatively related to adaptive agility. Finally, there was no significant negative indirect effect of organizational trust and on adaptive agility through the unidimensional concept of resistance to change. Yet, there was a specific mediational role for affective resistance to change in particular, as affective resistance negatively mediated the relationship between organizational trust and adaptive agility.

The results from study 1 provide initial support for the idea that trust in the organization is negatively associated with resistance to change in an unplanned change context and that resistance to change is negatively associated with adaptive agility. In contrast to adaptive agility, proactive agility did not relate with any of the antecedent factors during unplanned organizational change. In sum, within an unplanned change context, our findings indicate that employees who have confidence in their organization will show less resistance against change and that employees with less resistance against change will be better able to adapt. When individuals are less resistant to change, they may be more willing to be responsive to necessary alterations at work.

A conceivable explanation for our exploratory finding that within an unplanned change context, employees' affective rather than cognitive or behavioral resistance is relevant in the relationship between trust and adaptive agility, may come from findings in the domain of cognitive psychology on risk analysis. An unplanned organizational change is probably experienced by employees as a risky situation. According to cognitive psychology, there are two ways in which people comprehend risk, of which the “experiential system” is the intuitive, less conscious and mostly automatic one. This way is more strongly related to one's affect and feelings than the other way, which is the “analytic system”, and which approaches risk situations in an effortful way according to rules of logic (Slovic et al., 2004). To our view it seems plausible that in unplanned change contexts, such as in study 1, the “experiential system” involving affect and feelings will be more relevant.

STUDY 2

Study 2 examined the relationship between trust in the organization, resistance to change and agility in a planned context (organization two). Hypothesis 1 remained the same as for study 1, but now in a planned change context. Given the planned context, hypotheses 2b, 3b, and 4b in study 2 are relevant (see Figure 1).

METHOD

Sample and procedure

The procedure for completing this research was the same as for study 1. The sample came from a large service organization (organization two) where multiple changes took place in a planned context. Changes were a permanent part of their organizational identity (Self et al., 2007) and the organization's reaction to any changes took place gradually (Kiefer et al., 2015). The employees we were permitted to approach consisted of 250 people. They received two emails, namely an introduction email with information about the study, and an email with the e-survey that had to be filled out. Of these 250 employees, 98 people (response rate 39%; 64% female; 69% younger than 40 years old, and 31% 40 years or older; 84% higher vocational or university degree) completely filled out the e-survey. The typical response rate in organizational survey research as reported by Baruch and Holtom (2008) is 35.7 per cent, which to our view implies the 39 per cent response rate is adequate. This sample size implied a power $(1 - \beta)$ of .89, given a significance level $\alpha = .05$ and a Cohen's d effect size = .20 (Faul et al., 2009). All participants received an individual feedback report in exchange for their participation. Like study 1, filling out the e-survey took approximately half an hour.

Measures

Demographics were assessed in the same way as in study 1 for gender and educational level. Age was measured in age-categories (0 = <20 years, 1 = between 20 and 30 years, 2 = between 30 and 40 years, 3 = between 40 and 50 years, 4 = between 50 and 60 years, and 5 = 60 years and older).

Organizational trust, *resistance to change* and *agility* were assessed with the same measures as in study 1 (see Table 2). The reliability for the organizational trust scale equaled .78 in the present sample. The α-reliability of the adaptive agility scale was .84, and of proactive agility α equaled .85. In this study, the questionnaire instruction to the participants for all scales was as follows: please provide your answers with the undergoing planned change in mind. Based on the same tests as in study 1, we could conclude that common method variance was not a pervasive problem in study 2. Results showed that the first factor only accounted for 19.23 per cent of the variance. We then used the unmeasured latent methods technique using AMOS (cf. Podsakoff et al., 2003), which allows items to load on their theoretical constructs as well as on a latent common methods variance factor. We compared the standardized regression weights with and without the latent common methods variable. There were only six items out of the 49 items that showed a difference (of above .20) in standardized regression weights after the latent common method variable was added.

Results study 2: Planned change context

Table 3 displays the descriptive statistics and intercorrelations among all variables. The descriptive statistics, as compared to those in Table 1 (unplanned change context), show that the mean scores on resistance to change were significantly higher in an unplanned context (organization one) than in a planned context (organization two); a paired samples t-test of the mean showed that the means differed significantly from each other ($p < .001$).

The correlations included in Table 3 are in line with what could be expected. Multicollinearity statistics showed no Tolerance values below .1 or VIF values above 5 (cf. Rogerson, 2019; the maximum

TABLE 3 Study 2: A planned change context. Means, standard deviations and intercorrelations for all study variables

	M	*SD*	1	2	3	4	5	6	7
1. Gender	1.33	.47							
2. Age	1.97	1.44	.06						
3. Educational level	2.34	.72	.02	.15					
4. Resistance	3.26	.51	.03	.11	−.09	(.70)			
5. Trust	3.75	.69	−.02	−.21	−.18	−.37**	(.78)		
6. Adaptive agility	4.21	.46	.23	−.22	−.21	−.22*	.29*	(.84)	
7. Proactive agility	3.96	.45	.18	−.10	−.01	−.31**	.24*	.36**	(.85)

Note: $N = 98$. Gender: 1 = female, 2 = male. Age: 0 = <20 years, 1 = between 20 and 30 years, 2 = between 30 and 40 years, 3 = between 40 and 50 years, 4 = between 50 and 60 years, and 5 = 60 years and older. Educational level: 0 = secondary school or lower, 1 = lower vocational education, 2 = higher vocational education, and 3 = university education. Reliabilities (α) are provided on the diagonal. Scores for Resistance, Trust, Adaptive Agility and Proactive Agility range from 1 (= strongly disagree) to 5 (= strongly agree).

*$p < .05$ (2-tailed); **$p < .01$ (2-tailed).

VIF-level was 4.0 for the regression analysis in which organizational trust predicted resistance to change and no Tolerance levels were found below 2.9), which indicates that the constructs in Table 3 were not correlated too highly. Educational level, age, and gender were not correlated to the other study variables.

Hypothesis 1 expected that organizational trust and resistance to change would be negatively related in a *planned change context*. This hypothesis was supported ($\beta = -.36$, $p < .01$; see Table 4). Hypothesis 2b, which stated that the relationship between trust in the organization and proactive agility in a planned change context would be positive, also was confirmed. There was a significant relationship between organizational trust and proactive agility ($\beta = .22$, $p < .05$; see Table 4). Furthermore, Hypothesis 3b, namely that resistance to change would be negatively related to proactive agility in a planned change context, could be supported as well ($\beta = -.29$, $p < .01$; see Table 4).

Hypothesis 4b stated that resistance to change mediates the relationship between organizational trust and proactive agility in a *planned change context*. The PROCESS tool in SPSS (Hayes & Preacher, 2014) was used to test this hypothesis. The mediated effect was tested using a bootstrap estimation approach with 50,000 samples (Shrout & Bolger, 2002). Results indicated that after entering resistance to change in the equation, the β-weight of trust decreased but remained significant (from $\beta = .26$, $p < .05$ to $\beta = .20$, $p < .05$), whereas the effect of resistance to change as a mediator was significant ($\beta = -.35$, $p < .05$). Thus, the data confirmed hypothesis 4b, implying a partial mediating role of resistance to change in the relation of trust and proactive agility. According to the rule of thumb by Kenny (2019) for the size of indirect mediation effects, this concerns a medium-to-large effect. Results showed that 21 per cent of the variance (R^2_{adj}) in proactive agility was accounted for by the predictors.

Additionally, we found a not-hypothesized significant negative partial mediation effect of resistance to change on the relationship between organizational trust and adaptive agility ($\beta = -.31$, $p < .05$), with a remaining significant direct effect of $\beta = .19$, $p < .05$ for organizational trust on adaptive agility.

Thus, study 2 (organization two) complemented the findings of study 1 (organization one), showing that organizational trust once again was negatively associated with resistance to change and that resistance to change mediated the relationship between organizational trust and proactive agility in a planned change context. In addition, we found that resistance to change likewise was a partial mediator for adaptive agility.

TABLE 4 Study 2: Regression analysis of resistance to change and of proactive agility in a planned organizational change context ($N = 98$)

Predictors	**Resistance to change (β)**
Predictor variables	
Organizational trust	$-.36^{**}$
R Squared	$.39^{**}$
Predictors	**Proactive agility (β)**
Predictor variables	
Organizational trust	$.22^{*}$
Resistance to change	$-.29^{**}$
R Squared	$.51^{**}$

*$p < .05$; **$p < .01$.

Explorative analysis

Similar to study 1 and in an exploratory way, we investigated whether any of the sub dimensions of resistance to change, namely affective ($\alpha = .65$), behavioral ($\alpha = .78$) or cognitive ($\alpha = .56$) resistance (α-values similar to those reported by Oreg, 2006), was the most important in the mediating role of resistance. It was found that the cognitive resistance to change facet showed a significant mediation effect ($\beta = .161$, SE = .066, 95% CI = .10 to .17) between organizational trust and proactive agility. According to the rule of thumb by Kenny (2019) for the size of indirect mediation effects, this concerns a medium-to-large effect. No mediation effects between organizational trust and proactive agility were found for the other two sub dimensions of resistance to change.

Discussion study 2

The purpose of study 2 was to investigate the relationship between organizational trust and agility in a planned change context (organization two) and to establish if there was a mediating role of resistance to change in this relationship. Results showed a negative relationship between organizational trust and resistance to change. Also, there was a direct and positive relationship between organizational trust and employee proactive agility. Resistance to change was, however, negatively related to proactive agility, implying that the higher the resistance to change of an employee, the lower that employee's proactive agility was. Furthermore, resistance to change mediated the relationship between organizational trust and proactive agility. It therefore can be concluded that organizational trust is indirectly related to proactive agility through resistance to change. Study 2 thus provides support for the idea of Van den Heuvel and Schalk (2009) that in a planned change context, trust in one's organization is negatively associated with resistance to change. Additionally, the findings show that resistance to change, in turn, is negatively associated with proactive agility. The study also provides evidence supporting Mayer et al. (1995) model of trust. Trust in one's organization, it seems, is negatively related to one's belief that organizational change would be harmful, to fears about the change, and to one's inclination to prevent the change from happening. In other words, when employees trust their employer, these employees will report less resistance to change which subsequently is related to an increased proactive agility.

In our sample, we also found a significant but not hypothesized negative mediational effect of resistance to change in the relationship between trust and *adaptive* agility. This finding seems to be explainable, as it indicates that the more an employee is inclined to distrust the organization, and dislike and actively prevent a planned change to take place, the less prepared this employee will also be to adapt to that planned change.

GENERAL DISCUSSION

Recently many researchers noted that it is important to focus on the impact organizational changes may have on employees (Choi, 2011; Elias, 2009; Hornung & Rousseau, 2007; Oreg et al., 2011; Stanley et al., 2005). The objective of this study therefore was to investigate the relationship between organizational trust, resistance to change, and agility (adaptive and proactive) in two contexts: (a) in an unplanned change context (organization one) and (b) in a planned change context (organization two).

Our research contributes to the existing literature by drawing attention to the relationship between organizational trust and resistance to change, and how these two factors predict employee agility. We expected that in an unplanned context (organization one) organizational trust has an effect on the

adaptive component of agility through resistance to change. In a planned change context (organization two), however, we expected organizational trust to be related to the proactive component of agility through resistance to change.

Our findings show that it is important to distinguish between an unplanned and a planned organizational change, as the impact on employees may differ depending on the change context. When a change is occurring in an unplanned context, people seem to be reacting adaptively. In a planned change context, the change will have been discussed by management with employees, making them more aware and prepared for it (Rees & Hall, 2013; Vakola, 2014).

When a change is unplanned, employees are not able to prepare for it and will be looking for ways to cope with it adaptively. A plausible explanation for the relevance of resistance to change is that an unplanned organizational change is likely experienced by employees as a risky situation. Cognitive psychology distinguishes between two ways in which people comprehend risk, namely the "analytic system", in which risk situations are approached according to rules of logic, and the "experiential system", a more intuitive and less conscious one. This latter, experiential' way is more strongly related to one's affect and feelings than the "analytic" way (cf. Slovic et al., 2004). It seems conceivable, but in need of further study, that in unplanned change contexts, the "experiential system" involving affect and feelings is particularly important. This explanation for why organizational trust in an unplanned change context leads to adaptive agility through the affective component of resistance, as results from the explorative analysis in study 1 suggest, to our view is credible.

More generally, our findings align with the idea by researchers that organizational trust and resistance to change are likely to play an important role in enabling employees to be successful in unplanned, uncertain and unpredictable circumstances (Metselaar, 1997; Van den Heuvel et al., 2013), but little research had been done until now to support such ideas. The present research provides initial support for a more specified relationship, namely for the role of organizational trust in diminishing resistance to change and subsequently in being adaptively agile. Referring to Mayer et al. (1995) seminal work on trust, the present study is a demonstration of the importance of employees' "willingness to be vulnerable to the actions of another party"—a kernel component of trust according to Mayer et al. (p. 712). It is this willingness to be vulnerable and to take risk which during organizational change will make employees agile. To our view, employee willingness to take risk also has implications for the actions of those in responsible organizational positions. That is, that they will not forsake this responsibility, by showing integrity, capability to lead the change, and their good will towards their employees (cf. Mayer et al.).

Furthermore, in the present study the mean scores on resistance to change were significantly lower in a planned context (organization two) than in an unplanned context (organization one). An explanation for this result is that when individuals are unprepared for an organizational change, coping with change is more difficult than when an individual is expecting the change (Hornung, & Rousseau, 2007). A planned organizational change per definition will already be known to employees and may for that reason result in individuals sooner accepting the change, and their feelings may not be affected too much about it. Individuals will think about how they perceive the change, but they will not need to be in a mere survival mode. For that reason, it is conceivable that in planned organizational change, an indirect relationship between trust in the organization and proactive agility occurs through the cognitive components of resistance to change, as was indicated in the explorative analysis of study 2.

Limitations and directions for future research

This research had several limitations. One limitation relates to the fact that organizational trust, resistance to change and willingness to change were representations of employees' perceptions in the form

of self-rated information. We were unable to gather other information to be compared with the perception of the employee. Differences between the employer's perceptions and those of their employees, for instance, could also have added to resistance to change on the part of the employees. Self-ratings further imply potential effects of social desirability answering. Employees' agility has become a popular topic in relation to organizational effectiveness as it is regarded to be solution to the problems of complex and fast paced organizational environments involving rapid and continual change. When applied to employees, agility may represent a set of proactive competencies that are socially desirable, at least by managers of employees. For that reason, respondents may have had the tendency to answer the agility items in a more socially desirable way than would have been truthful.

Another limitation of this research is the use of a cross-sectional design in which the variables were measured at one moment in time, instead of a longitudinal design. Therefore, we were unable to draw conclusions about the direction of the relations found in this study and consequently it, for instance, remains unclear whether or not employees had already evaluated and altered their agility as result of organizational trust. It could be the case, for example, that low organizational trust in the beginning of a change process will first lead to resistance and low agility, which subsequently results in even more resistance and less agility during the implementation phase at the end of the change process.

Finally, we need to mention the relatively small samples of the studies, collected in only two organizations. As we were only able to study two organizations, the observed differences in results between both companies could also have originated from other characteristics of these companies, such as organizational culture, frequency and severity of change efforts in the past, and leadership style. To be able to further generalize our findings, future research should aim to collect more samples which cover a large number of (employees from) different organizations. A large organizational sample of which one subsample of employees undergoes a planned change and of which the other subsample of employees undergoes a similar yet unplanned change may offer possibilities for robust structural equation modeling through one statistical analysis, instead of using two separate analyses as was done in the present research. However, such situations may not always be feasible. Also, it needs to be investigated whether other than self-rated measures could be used. Furthermore, a longitudinal study could provide more insight into causality issues and developments over time during organizational change.

Managerial implications

Enhancing employee agility may be an answer to complex and fast-paced organizational environments. To this end it seems important to differentiate between adaptive agility and proactive agility during organizational change. This distinction is mirrored in present-day organizational change research, in which employees' responses are not anymore only regarded as resistant or at the most passively adapting to the change, but also have started including more active and proactive responses (Oreg et al., 2018). Specifically, it seems that adaptive agility is desirable in an unplanned change context and that proactive agility is desirable in a planned change context. Given that within the same organization planned and unplanned changes may both occur, but perhaps at different times, our findings suggest that interventions may be best focused on combinedly improving both adaptive and proactive agility.

A first managerial implication is to develop an intervention to improve employee agility by means of a portfolio-based process through which employees may develop their agility. In such a process, supervisors and peers work together with employees to collect smart goals, subsequently formulating an action plan, and collecting evidence to support an individual's progress in becoming more agile. This process in itself may foster organizational trust among employees when their supervisors show

commitment in this developmental process and decrease their resistance to change. The material collected during such a process must be reflected upon by both the employee and the mentor, because a reflection provides the evidence that learning to become more agile (in our case) has taken place (Kicken et al., 2008). More generally, it had been found that organizational cultures where learning is central and employees are supported by their organizations, will have employees who are more likely to actively search for and be open to new ideas (Gong et al., 2009). For management this implies that fostering a learning-oriented organizational culture in which employees may develop themselves is essential.

Secondly, and relatedly, our findings suggest that employee trust in the organization is likely to be indirectly beneficial in times of change. These findings imply that trust in one's organization may reduce resistance to change, and, hence, improve employee agility. The implication for management is that organizational trust needs to be permanently sustained by means of ongoing and open formal and informal communication with employees on important organizational issues. We believe that organizational trust needs to be worked on continuously, that is, not only during organizational change periods but also during stable periods in which no changes occur. To our view, organizational trust in stable times will be positively related to trust among employees in times of change. A possible means to enhance organizational trust is with a so-called psychological contract (cf. Van den Heuvel et al., 2015) between the employees and the organization. Such a contract could imply that management makes clear to employees what they can expect from management when organizational change occurs, and how management wants to live up to its promises. Managers thus not only have a crucial role in being aware of the amount of confidence employees have in their organization, but also in meeting the organization's obligations towards its employees (Zhang et al., 2008).

A third implication for management is that dealing with change becomes easier for employees when they are expecting the change (Rees & Hall, 2013). Putting effort in preparing employees for a planned change could be a solution to make them more ready for change but also more proactively agile. Individuals in general want to know what is going to happen and when they are knowledgeable, it will be easier for them to cooperate and to be proactive in dealing with the change (Strauss et al., 2015). Organizations therefore need to permanently keep their employees up to date on important change-related information.

CONCLUSION

This research draws attention to the notion that the relationship between trust in the organization, resistance to change, and agility differs between an unplanned change and in a planned change context. We demonstrated that in an unplanned context, employee trust in the organization is related to the adaptive behavior component of agility through diminishing employees' resistance to change, whereas in a planned change context, employee trust in the organization is related to the proactive as well as the adaptive component of agility by diminishing their resistance to change. The implication of these findings is that the relationship of trust and agility through resistance of change is specific to the organizational change context.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

ETHICS STATEMENT

Data were collected in line with the guidelines of the Ethics Committee of our universities.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available upon request by qualified scientists. The data are not publicly available due to privacy or ethical restrictions.

REFERENCES

Alavi, S., Abd. Wahab, D., Muhamad, N., & Arbab Shirani, B. (2014). Organic structure and organizational learning as the main antecedents of workforce agility. *International Journal of Production Research*, *52*(21), 6273–6295. https://doi.org/10.1080/00207543.2014.919420

Avey, J. B., Wernsing, T. S., & Luthans, F. (2008). Can positive employees help positive organizational change? *Journal of Applied Behavioral Science*, *44*(1), 48–70. https://doi.org/10.1177/0021886307311470

Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, *61*(8), 1139–1160. https://doi.org/10.1177/0018726708094863

Beer, M., & Nohria, N. (2000). Cracking the code of change. *Harvard Business Review*, *78*(3), 133–141.

Ben-Menahem, S. M., Zenlin, K., Volberda, H. W., & Van den Bosch, F. A. J. (2013). Strategic renewal over time: The enabling role of potential absorptive capacity in aligning internal and external rates of change. *Long Range Planning*, *46*(3), 216–235. https://doi.org/10.1016/j.lrp.2012.09.012

Bijlsma, K., & Koopman, P. (2003). Introduction: Trust within organizations. *Personnel Review*, *32*(5), 543–555. https://doi.org/10.1108/00483480310488324

Bouckenooghe, D., Devos, G., & Van den Broeck, H. (2009). Organizational change questionnaire-climate of change, process and readiness: Development of a new instrument. *Journal of Psychology*, *143*(6), 559–599. https://doi.org/10.1080/00223980903218216

Braun, T. J., Hayes, B. C., Frautschy DeMuth, R. L., & Taran, O. A. (2017). The development, validation, and practical application of an employee agility and resilience measure to facilitate organizational change. *Industrial and Organizational Psychology*, *10*(4), 703–723. https://doi.org/10.1017/iop.2017.79

Breu, K., Hemingway, C. J., Strathern, M., & Bridger, D. (2002). Workforce agility: The new employee strategy for the knowledge economy. *Journal of Information Technology*, *17*(1), 21–31. https://doi.org/10.1080/02683960110132070

Carmeli, A., & Gittell, J. H. (2009). High-quality relationships, psychological safety, and learning from failures in work organizations. *Journal of Organizational Behavior*, *30*(6), 709–729. https://doi.org/10.1002/job.565

Choi, M. (2011). Employees' attitudes toward organizational change: A literature review. *Human Resource Management*, *50*(4), 479–500. https://doi.org/10.1002/hrm.20434

Chonko, L. B., & Jones, E. (2005). The need for speed: Agility selling. *Journal of Personal Selling and Sales Management*, *25*(4), 371–382. https://doi.org/10.1080/08853134.2005.10749071

Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis*. Erlbaum.

Coyle-Shapiro, J. A., & Morrow, P. C. (2003). The role of individual differences in employee adoption of TQM orientation. *Journal of Vocational Behavior*, *62*(2), 320–340. https://doi.org/10.1016/S0001-8791(02)00041-6

Cubiks. (2014). *Overview of PAPI 3 factors and scales*. Author.

De Pater, I. E., Van Vianen, A. E. M., Bechtoldt, M. N., & Klehe, U. C. (2009). Employees' challenging job experiences and supervisors' evaluations of promotability. *Personnel Psychology*, *62*(2), 297–325. https://doi.org/10.1111/j.1744-6570.2009.01139.x

Eby, L. T., Adams, D. M., Russell, J. E. A., & Gaby, S. H. (2000). Perceptions of organizational readiness for change: Factors related to employees' reactions to the implementation of team-based selling. *Human Relations*, *53*(3), 419–442. https://doi.org/10.1177/0018726700533006

Elias, S. M. (2009). Employee commitment in times of change: Assessing the importance of attitudes toward organizational change. *Journal of Management*, *35*(1), 37–55. https://doi.org/10.1177/0149206307308910

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*, 1149–1160. https://doi.org/10.3758/BRM.41.4.1149

Field, A. (2009). *Discovering statistics using SPSS*. Thousand Oaks, California: Sage publications.

Freese, C. (2007). *Organizational change and the dynamics of psychological contracts: A longitudinal study* (Unpublished doctoral dissertation). http://www.narcis.nl/publication/RecordID/oai:tilburguniversity.edu:publications%2Fa8784243-b027-426a-9174-9d8b6b9d865c

Gong, Y., Huang, J. C., & Farh, J. L. (2009). Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy of Management Journal*, *52*(4), 765–778. https://doi.org/10.5465/amj.2009.43670890

Gunasekaran, A. (2001). *Agile manufacturing: The 21st century competitive strategy*. Elsevier.

Harvey, C. M., Koubek, R. J., & Chin, L. (1999). Toward a model of workforce agility. *International Journal of Agile Manufacturing*, *2*(2), 203–218.

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, *76*, 408–420. https://doi.org/10.1080/03637750903310360

Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, *67*(3), 451–470. https://doi.org/10.1111/bmsp.12028

Holbeche, L. S. (2018). Organisational effectiveness and agility. *Journal of Organizational Effectiveness: People and Performance*, *5*(4), 302–313. https://doi.org/10.1108/JOEPP-07-2018-0044

Hopp, W. J., & Van Oyen, M. P. (2003). Agile workforce evaluation: A framework for cross training and coordination. *IIE Transactions*, *36*(10), 919–940. https://doi.org/10.1080/07408170490487759

Hornung, S., & Rousseau, D. M. (2007). Active on the job-proactive in change: How autonomy at work contributes to employee support for organizational change. *Journal of Applied Behavioral Science*, *43*(4), 401–426. https://doi.org/10.1177/0021886307307555

Hunthausen, J., Truxillo, D., Bauer, T., & Hammer, L. (2003). A field study of frame-of reference effects on personality test validity. *Journal of Applied Psychology*, *88*(3), 545–551. https://doi.org/10.1037/0021-9010.88.3.545

Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology*, *84*(1), 107–122. https://doi.org/10.1037/0021-9010.84.1.107

Kenny, D. (2019). *Effect size of the indirect effect and the computation of power*. http://davidakenny.net/cm/mediate.htm

Khatoon, S., & Farooq, A. (2015). Employees' attitude toward change and organizational performance. *Prestige International Journal of Management and Research*, *7*(2/1), 39.

Kicken, W., Brand-Gruwel, S., Van Merrienboer, J., & Slot, W. (2008). Design and evaluation of a development portfolio: How to improve students' self-directed learning skills. *Instructional Science*, *37*(5), 453–473. https://doi.org/10.1007/s11252-008-9058-5

Kidd, P. T. (1994). Agile manufacturing: Key issues. In *Conference on the Human Aspects of Advanced Manufacturing*. https://www.cheshirehenbury.com/agility/ampapers.html

Kiefer, T., Hartley, J., Conway, N., & Briner, R. B. (2015). Feeling the squeeze: Public employees' experiences of cutback-and innovation-related organizational changes following a national announcement of budget reductions. *Journal of Public Administration Research and Theory*, *25*(4), 1279–1305. https://doi.org/10.1093/jopart/muu04

Knowles, H. P., & Saxberg, B. O. (1988). Organizational leadership of planned and unplanned change: A systems approach to organizational viability. *Futures*, *20*, 252–265. https://doi.org/10.1016/0016-3287(88)90081-X

Lang, J. W. B., & Bliese, P. D. (2009). General mental ability and two types of adaptation to unforeseen change: Applying discontinuous growth models to the task-change paradigm. *Journal of Applied Psychology*, *94*(2), 411–428. https://doi.org/10.1037/a0013803

Lines, R., Selart, M., Espedal, B., & Johansen, S. T. (2005). The production of trust during organizational change. *Journal of Change Management*, *5*(2), 221–245. https://doi.org/10.1080/14697010500143555

Linnenluecke, M. K. (2017). Resilience in business and management research: A review of influential publications and a research agenda. *International Journal of Management Reviews*, *19*(1), 4–30. https://doi.org/10.1111/ijmr.12076

Livari, J., & Livari, N. (2011). The relationship between organizational culture and the deployment of agile Methods. *Information and Software Technology*, *53*, 509–520. https://doi.org/10.1016/j.infsof.2010.10.008

Manyena, S. B. (2006). The concept of resilience revisited. *Disasters*, *30*(4), 434–450. https://doi.org/10.1111/j.0361-3666.2006.00331.x

Mascha, E. J., Dalton, J. E., Kurz, A., & Saager, L. (2013). Understanding the mechanism: Mediation analysis in randomized and nonrandomized studies. *Anesthesia & Analgesia*, *117*(4), 980–994. https://doi.org/10.1213/ANE.0b013e3182a44cb9

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *The Academy of Management Review*, *20*(3), 709–734. https://doi.org/10.5465/AMR.1995.9508080335

McNamara, C. (2006). *Field guide to consulting and organizational development with nonprofits: A collaborative and systems approach to performance, change and learning*. Authenticity Consulting.

Men, L. R., Yue, C. A., & Liu, Y. (2020). "Vision, passion, and care:" The impact of charismatic executive leadership communication on employee trust and support for organizational change. *Public Relations Review*, *46*(3), 101927. https://doi.org/10.1016/j.pubrev.2020.101927

Metselaar, E. E. (1997). *Assessing the willingness to change: Construction and validation of the DINAMO* (Unpublished doctoral dissertation). VU University.

Mishra, A. K., & Spreitzer, G. M. (1998). Explaining how survivors respond to downsizing: The role of trust, empowerment, justice, and work redesign. *Academy of Management Review*, *23*(3), 567–588. https://doi.org/10.2307/259295

Morgan, D., & Zeffane, R. (2003). Employee involvement, organizational change and trust in management. *International Journal of Human Resource Management*, *14*(1), 55–75. https://doi.org/10.1080/09585190210158510

Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, *22*, 226–256. https://doi.org/10.2307/259230

Muduli, A. (2016). Exploring the facilitators and mediators of workforce agility: An empirical study. *Management Research Review*, *39*(2), 1567–1586. https://doi.org/10.1108/MRR-10-2015-0236

Oreg, S. (2006). Personality, context, and resistance to organizational change. *European Journal of Work and Organizational Psychology*, *15*(1), 73–101. https://doi.org/10.1080/13594320500451247

Oreg, S. (2018). Resistance to change and performance: Toward a more even-handed view of dispositional resistance. *The Journal of Applied Behavioral Science*, *54*(1), 88–107. https://doi.org/10.1177/0021886317741867

Oreg, S., Bartunek, J. M., Lee, G., & Do, B. (2018). An affect-based model of recipients' responses to organizational change events. *Academy of Management Review*, *43*(1), 65–86. https://doi.org/10.5465/amr.2014.0335

Piderit, S. K. (2000). Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *Academy of Management Review*, *25*(4), 783–794. https://doi.org/10.5465/AMR.2000.3707722

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Psycones. (2006). *Psychological contracts across employment situations: Final scientific report*. http://www.uv.es/psycon/documentacion/Final%20Report.pdf

Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, *85*(4), 612–624. https://doi.org/10.1037/0021-9010.85.4.612

Ramesh, G., & Devadasan, S. R. (2007). Literature review on the agile manufacturing criteria. *Journal of Manufacturing Technology Management*, *18*(2), 182–201. https://doi.org/10.1108/17410380710722890

Rees, G., & Hall, D. (2013). *Managing change: Leading, managing and developing people*. CIPD Publications.

Rogerson, P. A. (2019). *Statistical methods for geography: A student's guide* (5th ed.). Sage.

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, *23*(3), 393–404. https://doi.org/10.5465/AMR.1998.926617

Sackett, P. R., Lievens, F., Van Iddekinge, C. H., & Kuncel, N. R. (2017). Individual differences and their measurement: A review of 100 years of research. *Journal of Applied Psychology*, *102*(3), 254–274. https://doi.org/10.1037/apl0000151

Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review*, *32*(2), 344–354. https://doi.org/10.5465/amr.2007.24348410

Self, D. R., Armenakis, A. A., & Schraeder, M. (2007). Organizational change content, process, and context: A simultaneous analysis of employee reactions. *Journal of Change Management*, *7*(2), 211–229. https://doi.org/10.1080/14697010701461129

Sherehiy, B., Karwowski, W., & Layer, J. K. (2007). A review of enterprise agility: Concepts, frameworks, and attributes. *International Journal of Industrial Ergonomics*, *37*(5), 445–460. https://doi.org/10.1016/j.ergon.2007.01.007

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, *7*(4), 422–445. https://doi.org/10.1037/1082-989X.7.4.422

Slovic, P., Finucane, M. L., Peters, E., & MacGregor, D. G. (2004). Risk as analysis and risk as feelings: Some thoughts about affect, reason, risk, and rationality. *Risk Analysis*, *24*(2), 311–322. https://doi.org/10.1111/j.0272-4332.2004.00433.x

Smith, A. C., Evans, D. M., & Westerbeek, H. M. (2005). The examination of change management using qualitative methods: A case industry approach. *The Qualitative Report*, *10*(1), 96–121.

Sohrabi, R., Asari, M., & Javad, H. M. (2014). Relationship between workforce agility and organizational intelligence (Case Study: The Companies of "Iran High Council of Informatics"). *Asian Social Science*, *10*(4), 279–287. https://doi.org/10.5539/ass.v10n4p279

Spector, P. E. (1992). *Summated rating scale construction: An introduction*. Florida: Sage publications.

Stanley, D. J., Meyer, J. P., & Topolnytsky, L. (2005). Employee cynicism and resistance to organizational change. *Journal of Business and Psychology*, *19*(4), 429–459. https://doi.org/10.1007/s10869-005-4518-2

Strauss, K., Niven, K., McClelland, C. R., & Cheung, B. K. (2015). Hope and optimism in the face of change: Contributions to task adaptivity. *Journal of Business and Psychology*, *30*(4), 733–745. https://doi.org/10.1007/s10869-014-9393-2

Sumukadas, N., & Sawhney, R. (2004). Workforce agility through employee involvement. *IIE Transactions*, *36*(10), 1011–1021. https://doi.org/10.1080/07408170490500997

Sutcliffe, K. M., & Vogus, T. J. (2003). Organizing for resilience. In K. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship (Chapter 7)*. (pp. 3418-3422). Berrett-Koehler.

Tabachnick, B. G., & Fidell, J. S. (2013). *Using multivariate statistics*. Boston:Pearson.

Tarba, S. Y., Cooper, C. L., Ahammad, M. F., Hallam, S., Khan, Z., &, Rao-Nickolson, R. (2016). Guests editors' introduction: Resilience in Organizations. *Applied Psychology: an International Review*, 23–84. https://doi.org/10.1111/(ISSN)1464-0597

Tyler, T. R. (2003). Trust within organizations. *Personnel Review*, *32*(5), 556–568. https://doi.org/10.1108/00483480310488333

Vakola, M. (2014). What is in there for me? Individual readiness to change and the perceived impact of organizational change. *Leadership & Organization Development Journal*, *35*(3), 195–209. https://doi.org/10.1108/LODJ-05-2012-0064

Van den Heuvel, S., Freese, C., Schalk, R., & Van Assen, M. (2017). How change information influences attitudes toward change and turnover intention: The role of engagement, psychological contract fulfilment, and trust. *Leadership & Organization Development Journal*, *38*, 398–418. https://doi.org/10.1108/LODJ-03-2015-0052

Van den Heuvel, S., & Schalk, R. (2009). The relationship between fulfilment of the psychological contract and resistance to change during organizational transformations. *Social Science Information*, *48*(2), 283–313. https://doi.org/10.1177/0539018409102415

Van den Heuvel, S., Schalk, R., Freese, C., & Timmerman, V. (2013). Employees' reactions to organizational change. A management look. *Journal for Human Resources Management*, *4*, 72–95.

Van den Heuvel, S., Schalk, R., & Van Assen, M. A. L. M. (2015). Does a well-informed employee have a more positive attitude toward change? The mediating role of psychological contract fulfillment, trust, and perceived need for change. *The Journal of Applied Behavioral Science*, *51*, 401–422. https://doi.org/10.1177/0021886315569507

Zayim, M., & Kondakci, Y. (2014). An exploration of the relationship between readiness for change and organizational trust in Turkish public schools. *Educational Management, Administration and Leadership*, *43*(4), 610–625. https://doi.org/10.1177/1741143214523009

Zhang, A. Y., Tsui, A. S., Song, L. J., Li, C., & Jia, L. (2008). How do I trust thee? The employee-organization relationship, supervisory support, and middle manager trust in the organization. *Human Resource Management*, *47*(1), 111–132. https://doi.org/10.1002/hrm.2020

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APPENDIX

THE ROTTERDAM EMPLOYEE AGILITY SCALE (REAS)

Adaptive Agility

1. Continues to show positive energy after setbacks.
2. Ignores disappointments and continues.
3. Knows how to give a positive turn to negative situations.
4. Is motivated to improve after setbacks.
5. Accepts negative events and adjusts to them.
6. Participates actively and contributes to group processes.
7. Appreciates and encourages contributions from other team members.
8. Promotes a positive and friendly atmosphere within the team.
9. Collaborates constructively with other team members.
10. Changes his/her behavior according to the needs of the situation.
11. Is positive about change.
12. Shows a flexible approach when dealing with others.
13. Works in an enthusiastic and committed manner.

Proactive Agility

14. Offers solutions when things go wrong.
15. Looks for new opportunities in the market and follows this up.
16. Takes risks and takes advantage of the possibilities.
17. Works at a fast pace for a longer period of time.
18. Makes an increasing effort in difficult situations.
19. Recognizes his/her own development needs and tackles how they can be addressed.
20. Actively searches for opportunities to learn new skills.
21. Asks others for feedback on their own performance and adjusts it where possible.
22. Transfers what has been learned to new situations.
23. Comes up with new ways of looking at the same problem.
24. Implement new ways of exploiting opportunities.
25. Comes up with new ways to exploit opportunities.
26. Comes up with creative solutions if the surroundings require it.
27. Actively searches for opportunities.
28. Takes initiative without being led by others.
29. Acts proactively rather than just responding to events.
30. Anticipates potential problems and acts before they happen.
31. Is consistently looking for more responsibility.