ABSTRACT

Most companies are confronted with change and have to deal with it effectively in order to survive. Based on the theoretical lens of phenomenology and sense making, we explore if situatedness - being located at different hierarchical levels and functions - results in different perspectives, views and assessments of change processes and their outcomes. Three hypotheses are proposed and tested regarding the potentially different perspectives of top managers, middle managers and employees using the change-fitness data base. The results reveal some significant differences between these three groups and we discuss the results in terms of their impact on designing and implementing change processes. The paper closes with implications for future research and practice of change planning and implementation.

Keywords: Perceived change support, perceived change success, change implementation, situatedness, different perspectives on change

INTRODUCTION

Given today’s business environment, the topic of change is of great importance for organizations and their management. Intense competition, political, institutional and societal changes, ecological problems and disasters as well as migration result in a business environment that has been characterized by the acronym vuca: volatile, uncertain, complex and ambiguous. It is therefore not surprising that most of today’s organizations are confronted with change (Sackmann, Eichel & Schmidt, 2019; Schmidt & Sackmann, 2016). Hence, organizations need to be able to adapt, develop and change. They need to be innovative, flexible and agile (Harraf, Wanasika, Tate & Talbott, 2015) as well as ambidextrous (O’Reilley & Tushman, 2004; Raisch & Birkinshaw, 2008), and they must be able to tackle the resulting challenges in order to survive (Rafferty, Jimmieson & Armenakis, 2013). As a result, researchers as well as practitioners and especially managers attribute high relevance to the topic of organizational change and its importance for companies (Fugate, Prussia & Kinicki 2012; Sackmann, Eggenhofer-Rehart & Friesl, 2009; Schwarz & Huber 2008).

A large number of change concepts and change theories have been developed focusing on different facets of change and change processes (for an overview: Demers, 2007; Todnem By, 2005). They address the various stages of change: the motivational aspects of change in terms of change readiness (Armenakis, Harris & Mossholder, 1993; Jones, Jimmieson & Griffiths 2005), the
actual changing process including the role of change agents (Battiliana & Cascaiaro, 2012; Hartley, Bennington & Binns, 1997), the reactions of change recipients (Oreg, Bartunek, Lee & Boram, 2018) including resistance to change (Hon, Bloom & Crant, 2014) and the implementation of change (e.g., Sackmann, Eggenhofer & Friesl, 2009). In addition, numerous prescriptions exist for practitioners how to effectively deal with change (e.g., Kotter, 1996).

Despite all these research efforts that have resulted in a large body of knowledge about change and despite all the advice for tackling change, the success rate of change efforts in organizations is still fairly low (e.g., Collins, 2001; Kotter, 1996; Probst & Raisch, 2005). According to Fay and Lührmann (2004), about 75 percent of planned change efforts fail and more recent studies report success rates of about 50 percent (Sackmann et al., 2019). A wide range of possible contributors to these low success rates have been identified such as conflicting group identities (McInnes, Beech, de Caestecker, MacIntosh & Ross, 2006), leadership behavior (Bommer, Rich & Rubin, 2005; Higgs & Rowland, 2005), inertia deriving from a company’s resource position (Kraatz & Zajac, 2001), a lack of shared vision (Ellsworth, 2002) including powerless coalitions (Kotter, 1995), myopia regarding the interdependencies between an organization and its environment (Beer, Eisenstat & Spector, 1990), resistance to change (Ford, Ford & D’Amelio, 2008), threat appraisals (Fugate et al., 2012) or a lack of addressing emotions involved in change processes (Huy, 2002; Huy, Corley & Kraatz, 2014).

One may question whether the available concepts, theories, knowledge and advice about change are known to practitioners and/or whether they actually take them into account and implement them in companies (Balogun and Johnson 2004) which is doubted by some researchers (Appelbaum, Habashy, Malo & Shafiq, 2012). Having the knowledge about change and what it takes for a successful change may, however, not automatically lead to undertaking the necessary actions for making a change happen (Pfeffer & Sutton, 1999) nor may proclamations result in the respective observable behavior (Argyris & Schön, 1978).

Another reason for the low success rate may reside in the hierarchical nature and division of labor in organizations. Since most planned change efforts are conducted with a top-down approach (Sackmann et al., 2019), top managers initiate large change processes and communicate them to their organization. They rely on their middle managers to take the necessary steps so that their employees are going to execute the required actions for implementing the announced change (Sackmann et al., 2009). The different hierarchical and functional responsibilities may, however, bring with them different perspectives for each of the three stakeholder groups in regard to the same change process (e.g., Lockett, Currie, Finn, Martin & Waring, 2014) which may impede the implementation process and influence the final outcome.

In the following sections, we explore with the lens of phenomenology and sense making why being located at different hierarchical levels and associated functions may result in different perspectives, views and assessments of the same change process and its outcomes. These arguments lead to three hypotheses that were tested with a data set that differentiates these three levels. The data analysis gives insights into the different perspectives of the three functional groups: top management, and middle managers and employees. The results are discussed in
terms of their impact on implementing change. The paper closes with implications for future research and practice of change implementation.

THE INFLUENCE OF PERSONAL LIFE-WORLDS AND SITUATEDNESS

In processes of primary, secondary and tertiary socialization (Jones, 1983), individuals acquire knowledge and experience in the course of their actions and interactions with other people in different kinds of settings. From the theoretical perspective of phenomenology, this stock of knowledge acquired over the prior life-span creates an individually specific social life-world that influences a person’s perceptions, thinking, feeling and action (Husserl, 1932/1962; Schütz, 1960, 1967). Hence, individuals construct their social reality on the basis of their life-world and prior experiences (Berger & Luckmann, 1966). They make sense of situations and events based on their acquired stock of knowledge and experiences and choose their behavior on the basis of their personally developed and thus subjective interpretation of the specific situation. In addition, individuals are physically located in a given space and their actions occur in a specific context which makes them situated in time and space (Given, 2008).

Within the context of organizations, many organizational members have been socialized into a specific profession either before joining or while working in an organization. When they join a work organization, they tend to work for an extended period of time in a certain function and belong to a given organizational unit located at a specific hierarchical level. Hence, organizational members are influenced in their thinking and behavior by their very profession (e.g., Anderson-Gough, Grey & Robson, 1998/2018) and by the function in which they work including the organizational unit and the specific hierarchical level (Lockett et al., 2014). In their process of learning and development, they have developed cognitive schemas which they use to perceive, categorize and store information (Labianca, Gray & Brass, 2000; Rumelhart & Ortony, 1977). Once available, individuals use these schemas to interpret the world and they serve them as sensemaking devices to interpret occurring events and situations (Bartunek, Rousseau, Rudolph & DePalma, 2006). In their ethnographic study of the initiation of a strategic change effort in a large public university, Goia and Chittipeddi (1997) describe, for example, the sensemaking and sensegiving that could best characterize the CEO’s role. The qualitative study by Lockett et al. (2014) revealed the contextual influences of social position of different change agents on their sensemaking in regard to an organizational change.

Change, however, does not happen only by sensemaking and sensegiving as Pfeffer and Sutton (1999) have pointed out in their research on the gap between knowledge. Change also requires appropriate actions undertaken not only by change agents but also by organizational members located at different levels throughout an organizational system. The different hierarchical levels and roles may influence individuals’ perceptions of a change process. A longitudinal study spanning six years of a change and its implementation revealed, for example, that the top management saw its responsibility in developing the company’s strategy and announcing the changes that this strategic change required (Sackmann et al., 2009). Top management relied on the next level of managers to implement the announced change without any further explications or support. One of these next
level managers realized, however, that organizational members needed help and support to make the change happen in his area of responsibility. This study revealed distinctly different perspectives of the three hierarchical levels based on their specific functions and roles. Having a longer-term, future-oriented perspective, top management recognized the need for a strategic change in order to keep and possibly enhance the competitiveness of the firm. As such, they took the responsibility of setting the direction for the firm (Kotter, 1990). While some firms involve the next level of leaders/managers in this process, in this case top management merely announced the outcome of their strategic discussions to the next levels of the organization assuming and/or expecting that they would take care of it from now on.

Middle managers have several roles in change processes. They are expected to translate top management’s strategic intentions, sell them convincingly to their employees as the best way to secure the future – even if they may not be convinced themselves and would prefer an alternative course of action. In addition, middle managers are expected to enable their employees so that these can implement the change and they are expected to secure the necessary resources (Kotter, 1990). Huy et al. (2014) found in their research that middle managers’ ambivalent judgements of the legitimacy of their top managers as change agents may arouse emotional reactions that may produce rising resistance to a change effort. The inherent ambivalence may, however, also contribute to the dismantling of structures and systems that are a necessary precondition for successful change to take place, as Conway and Monks (2011) observed in their qualitative study of the Irish health service. These researchers also found that middle managers’ dealing with the interface between top management’s top-down changes and bottom-up initiatives resulted in additional workload and stress for the middle managers. Dealing with their competing roles, Bryant and Stensaker (2011) suggest that middle managers need to negotiate the new ways of working, they need to negotiate within the self, and they need to negotiate the boundaries in which they can legitimately negotiate.

Employees are expected to implement the initiated change. This requires knowledge about the new ways of working and skills needed to perform the respective behavior – be it the handling of a new technology or the new way of cooperation or interacting with customers. At the same time, organizational members need to unlearn their established routines without yet having established new ones. The uncertainties in the change process may evoke all kinds of cognitive, emotional and behavioral reactions that may culminate in different degrees of engagement, commitment or resistance to change (Ford et al., 2008; Oreg, Vakola & Armenakis, 2011). In their study of a telecommunications firm, Self, Armenakis and Schraeder (2007) found that organizational change was strongly related to the impact of the change on employees and organizational communication media. In addition, the results of their study indicate that the extent to which employees perceive an organizational change as justified is influenced by their perceived organizational support.

The challenge for change in organizations, however, is that the three hierarchical levels – top management, middle management, employees – may go through the same change process at different times, at different speeds and with different intensity due to their different situatedness. After having realized the
necessity of a change, and after having initiated and communicated it to the organization or their next level of management, the members of top management may think that they have accomplished their major responsibilities regarding the change process. Hence, their attention and energy moves to the next strategic challenge that they need to tackle. At this point in time, middle management need to take the baton and start enabling their employees and secure the necessary resources while employees may still wonder why a change is necessary at all. Hence, the top managers who think the change is on its way may be confronted with struggling middle managers and employees who are surprised or even aggressive (Oreg et al., 2011). These different perspectives and time-deferred stances regarding the same change process at a given moment in time may cause a change process to be delayed or even fail because the stakeholders located at the different hierarchical levels cannot comprehend the questions, issues raised, emotions, reactions and behaviors of the other stakeholders involved in the change process (Groth, 2011). The consideration of time and deferred actions as well as the implementation speed as an independent component plays an important role in the change process.

According to Todnem By (2005), there is still a weak theoretical basis for change overall. Previous research has not yet succeeded in developing a generally valid change theory (Stevens, 2013). Based on these considerations, we assume that situatedness in terms of hierarchical level and associated responsibilities in an organization may influence the assessment of a change process (Wieser, 2014). Due to the different hierarchical perspectives and related roles, the same changes may be assessed more positively by top management than by organizational members located at lower levels. Due to the different functional orientation in the three hierarchy levels, the perspectives may differ significantly. These considerations lead to the following hypotheses:

H1: Significant differences exist in the perceptions of a change between employees, middle managers and top management.

H2: The implementation success of a planned organizational change is rated significantly higher by top managers than by middle managers, who rate the implementation success significantly higher than the employees.

H3: The implementation speed of a planned organizational change is rated significantly higher by top management than by middle managers and employees.

METHOD

To test the three hypotheses, we used data from the Change-Fitness-Study 2014 (Schmidt & Sackmann, 2014). This study was designed to assess the status quo how organizations, predominantly located in Germany, deal with change. The data collection instrument consisted of an online questionnaire covering the all phases of a change process including its implementation success. Data were collected from employees, middle managers and top management. We used 5 items from the survey that included the views from top management, middle management and employees. The answer format was a Likert-type scale ranging from 1 = "does not apply at all" to 6 = "fully applies". The developed questionnaire was designed as an online tool and had satisfactory properties.
Altogether, 345 respondents of German-based companies answered the questionnaire. 65 (23.05%) were top managers, 133 (47.18%) were middle managers and 84 (29.79%) employees. 63 respondents did not indicate their position. The sample consisted of 97 women (34.52%) and 184 men (65.48%). The remaining 84 respondents did not indicate their gender.

The data was analyzed using Microsoft Excel 2010 and SPSS for Windows, Version 22. Mean values and standard deviations were calculated, as well as single factor variance analyses to test for mean value differences between the three groups.

RESULTS

In this section, the results of the mean value calculations and variance analyses for the individual hypotheses are reported. For all significant tests, α was set a priori at .05.

To test the first hypothesis: Significant differences exist in the perceptions of a change between employees, middle managers and top management, the three hierarchical groups were compared regarding the two items: In the past, our company was affected by change processes, and: In the past, change projects were steered by a clearly defined process.

INSERT TABLES 1a, 1b, 2a, 2b ABOUT HERE

The results shown in Tables 1a, 1b, 2a, 2b reveal that the mean values between the three groups differ significantly from each other thus supporting this hypothesis.

The second hypothesis: The implementation success of a planned organizational change is rated significantly higher by top managers than by middle managers, who rate the implementation success significantly higher than the employees, was tested using the three groups’ evaluation regarding the company’s successful completion of a strategic change. Table 3a shows the differences in means and standard deviations of top management, middle management and employees and 3b show that these differences are significant, thus supporting hypothesis 2.

INSERT TABLES 3a and 3b ABOUT HERE

The third hypothesis: The implementation speed of a planned organizational change is rated significantly higher by top management than by middle managers and employees was tested using the two items: When our company goes through a change process, we act quickly after realizing that a change is necessary, and: Our company reacts quickly to necessary changes. Tables 4a and 5a show the means and standard deviations of the three groups and Tables 4b and 5b show that these differences are significant but not quite as expected. Contrary to hypothesis 3, the results reveal that middle managers rate the implementation speed the highest, followed by employees and top management. Hence, hypothesis three is not supported.

The results of all single-factor variance analyses support, however, hypothesis 1 in that differences exist between the groups.
DISCUSSION

The results of the hypotheses testing clearly confirm that situatedness in terms of different hierarchical levels leads to a significantly different view and evaluation of various facets of a change process. All comparisons between the data collected from top managers, middle managers and employees show significant differences in regard to the extent these three groups perceive the organization being affected by change, the successful completion of a strategic change and how fast a company reacts and responds to a necessary change. Hence, the data support Stumpf’s (2012) assertion that it is essential to consider the different hierarchical levels and related perspectives.

The results of the tests of hypothesis 2 and of hypothesis 3 shed some further light into these different perspectives. The findings that top management rate the implementation success of a change process better when compared to middle managers and employees may be explained by their function, their role, their perceived and enacted responsibility and most likely also by their compensation. As top managers, they are expected to lead the company into the future. This implies not only changes, these change efforts need to be successful so that the money invested in a change process brings about the expected returns and helps the company stay viable in the future. Hence, top managers’ function entails that they have to have a positive outlook on a change that they initiated and focus on its positive results including their communication both internally and externally. In doing so, these actions may reinforce their view that the change was successful.

Once top management has announced a change, it is the responsibility of middle managers to motivate and enable their employees that the announced change is actually carried out. Since the implementation process of a change takes much longer when compared to its strategic planning and decision, middle managers are confronted with anticipated and unanticipated problems during the implementation process. This may be associated with a more differentiated perspective on the implementation process of a change effort. They may see part of the change as successfully implemented while other parts are not as successful as they may have anticipated.

Employees are the group that “gets their hands dirty” in the implementation of a change process. They are confronted with trying to find out ways how to make the new ways of the desired change work on a daily basis – be it the installation of a new machine or software and its handling, the implementation of a new work process, the delivery of a new service, the building of a new plant or dealing with a new customer group. Hence, their view of the change process is even more detailed and differentiated than that of their middle managers. This deep involvement in the change process during an extended period of time gives employees the most differentiated view on the various facets of the operational change and the associated rates of success thus resulting in the most critical view of implementation success.

Interestingly, the third hypothesis (The speed at which a change is implemented in a company is rated significantly higher by top managers than by middle managers and employees) could not be fully confirmed. Although the mean values differ significantly from each other, middle managers rated the implementation speed the highest, followed by employees and the top
management. One possible explanation could be that middle managers, on the one hand, feel pressured to report to their superiors that things are moving in the desired direction since this is what is expected from them. Middle managers have a planned change most likely in their goal agreement and may be acknowledged or rewarded for its timely accomplishment. On the other hand, middle managers are also expected to motivate their employees by focusing on the process of what has been accomplished in the time being and what is reported to them by their employees (Wieser, 2014). Since employees are confronted with the change on a daily basis, they see the changes day-by-day and thus a movement forward. This differs from top management – once they have announced the change, they are likely to move their attention on to the next strategic challenge making a mental check mark that their duty in regard to the change is accomplished as observed by the longitudinal study by Sackmann et al. (2009). Since one major responsibility of top management is to create a future for the company, their thoughts and actions are several steps ahead in time when compared to their middle management and their employees.

Despite the support for the significantly different views of the three hierarchical levels regarding change, this study has some limitations predominantly pertaining to the Change-Fitness-database. Even though the database is unique in that it contains data from different hierarchical levels, the data are cross-sectional obtained from a wide range of different organizations varying in size, life-stage and industry. There may be a self-selection involved in that people more interested in change may have been more motivated to answer the questionnaire. Since the data collection relies on self-reports, there may also be a tendency towards desirability in the study participants’ answers.

**IMPLICATIONS FOR THEORY, RESEARCH AND PRACTICE**

The study has several implications for theory building, future research and practice. In regard to theory, Stevens (2013) noted that a generally valid change theory does not yet exist, only the development of a specific theoretical framework that illuminates the change processes in a more concrete way. The results of this study suggest that any kind of framework and/or theory of change should take into account the effects of situatedness. More specifically, a change framework or change theory should not only include the various stages of a change process. In addition, it needs to acknowledge that the stakeholders of a change process located at different hierarchical levels in an organization have a different view of a change and its implementation. These different perspectives pertain to the change itself, its implementation process and its implementation success.

Several suggestions can be made for future research to eliminate some of the inherent limitations of this study and to move forward. First of all, it would be worthwhile investigating the observed hierarchical differences regarding change using a larger sample size and thus be able to differentiate the results according to the size, age and industry of the organizations included in the study. Since the change-fitness database contains longitudinal data, a next research effort could explore if the differences in hierarchical perspectives can be observed over time. A multinational data-base would enable researchers to explore if these differences also exist in different regions. Given the cross-sectional data, it would be valuable to explore these hierarchically different perspectives more deeply in one single
organization and further investigate the reasons for these different perspectives from the point of view of the stakeholders involved (Balogun & Johnson, 2004; Krummaker & Vogel, 2013). In addition, the concept of situatedness and its implications in change processes could be extended and explored using also different kinds of functional, ethnic, or gender groups. This will require a multiple-method study to further probe into potential reasons for the different perspectives.

Regarding practice, one recommendation for managers is to consider and include the "whole system" of an organization in an anticipated change process as part of a comprehensive approach (Kim, Hornung & Rousseau, 2011; Lauer, 2010). The more deeply and widely the change process is anchored, the more likely it is to lead to success. This implies that it is not enough just to announce or communicate the goals of the change and hope for or demand appropriate behaviors at the next levels of the organization. In addition, the different levels of management have to take measures for transferring responsibility to all hierarchical levels in the company (Ghitulescu, 2013).

The results of the study clearly indicate that those initiating and planning a change need to pay more attention to the different perspectives of the stakeholders of change located at different hierarchy levels. This implies, for example, that top management tries to be clear when communicating a change – in terms of its type and anticipated timeframe for the change. Furthermore, top managers need to probe into the change progress and be aware that there may be more critical issues and problems involved than they assume. And they need to be aware that it may take more time than they think. Given that employees are the real implementers of a change process, their managers need to check if they have all necessary skills and resources that are needed in the implementation process. This will at least provide the best contextual conditions for the change process to be successfully accomplished. Furthermore, managers also need to pay attention to the emotional roller coaster (Groth, 2011) inherent in a change process (Huy et al., 2014) – regarding their subordinates but also regarding themselves. Research has shown that not only employees, but also managers may suffer from the high demands placed on them in a change process (Conway & Monks, 2011; Oreg et al., 2011, 2018; Wieser, 2014). In addition, middle managers have to deal with several role conflicts (Bryant & Stensaker, 2011) due to their sandwich position. On the one hand, they have to deal with the demands placed on them by their superiors and they have to lead, enable, motivate and deal with the expectations of their employees. Especially in a change process, the expectations from top management and those coming from their employees may vastly differ.

For effectively dealing with these different perspectives due to the different situatedness, the critical tool is dialogue and adequate communication among all stakeholders involved. Adequate communication implies target group-specific information and dialogue on key decisions involved including contextual information (Elving, 2005; Kitchen & Daly, 2002). Furthermore, the early involvement of managers as designers, drivers and multipliers of change (Felfe & Bittner, 2014) is as critical a factor as the early and true involvement of employees in the development of practicable solutions (Morgan & Zeffane, 2003).

Since change is and will always be part of the life of organizations, we can still improve in how we deal with it. This study’s contribution and recommendation is to better pay attention to the different perspectives that come
with different hierarchical levels in regard to the various facets of change, its implementation and its perceived success.

REFERENCES


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# APPENDIX

## Table 1a: Company affected by change processes

<table>
<thead>
<tr>
<th>Hierarchy level</th>
<th>Top Management</th>
<th>Middle Management</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the past, our company was affected by change processes.</td>
<td>5.7 (0.89)</td>
<td>5.86 (0.74)</td>
<td>5.59 (0.71)</td>
</tr>
</tbody>
</table>

Note: Means according to hierarchy level. STD in parentheses. The following rating scale was used: 1 = do not agree at all, 2 = do not agree, 3 = rather do not agree, 4 = somewhat agree, 5 = agree, 6 = completely agree.

## Table 1b: Main effects and interaction effects of companies affected by change processes

<table>
<thead>
<tr>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>3</td>
<td>41.85</td>
</tr>
<tr>
<td>Within groups</td>
<td>341</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>344</td>
<td></td>
</tr>
</tbody>
</table>

Note: df = degrees of freedom; F = F critical value, p = p-value.

## Table 2a: Change steered by clear process

<table>
<thead>
<tr>
<th>Hierarchy level</th>
<th>Top Management</th>
<th>Middle Management</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the past, change projects were steered by a clearly defined process.</td>
<td>4.46 (0.44)</td>
<td>5.00 (0.31)</td>
<td>4.6 (0.45)</td>
</tr>
</tbody>
</table>

Note: Means according to hierarchy level. STD in parentheses. The following rating scale was used: 1 = do not agree at all, 2 = do not agree, 3 = rather do not agree, 4 = somewhat agree, 5 = agree, 6 = completely agree.

## Table 2b: Main effects and interaction effects of changes steered by clear process

<table>
<thead>
<tr>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>3</td>
<td>22.08</td>
</tr>
<tr>
<td>Within groups</td>
<td>341</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>344</td>
<td></td>
</tr>
</tbody>
</table>

Note: df = degrees of freedom; F = F critical value, p = p-value.

## Table 3a: Successful strategic reorientation

<table>
<thead>
<tr>
<th>Hierarchy level</th>
<th>Top Management</th>
<th>Middle Management</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the past, our company successfully completed the following change: strategic reorientation</td>
<td>4.8 (0.42)</td>
<td>4.85 (0.57)</td>
<td>4.42 (0.74)</td>
</tr>
</tbody>
</table>

Note: Means according to hierarchy level. STD in parentheses. The following rating scale was used: 1 = do not agree at all, 2 = do not agree, 3 = rather do not agree, 4 = somewhat agree, 5 = agree, 6 = completely agree.
Table 3a: Main effects and interaction effects of successful strategic reorientation.

<table>
<thead>
<tr>
<th></th>
<th>Main effects and interaction effects of item:</th>
<th>In the past, our company successfully completed the following change: strategic reorientation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>F</td>
</tr>
<tr>
<td>Between groups</td>
<td>3</td>
<td>23.47</td>
</tr>
<tr>
<td>Within groups</td>
<td>341</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>344</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** df = degrees of freedom, F = F critical value, p = p-value.

Table 4a: Quick action after realizing change is necessary.

<table>
<thead>
<tr>
<th>Hierarchy level</th>
<th>Top Management</th>
<th>Middle Management</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>When our company goes through a change process, we act quickly after realizing that a change is necessary.</td>
<td>4.26</td>
<td>4.8</td>
<td>4.54</td>
</tr>
<tr>
<td></td>
<td>(.30)</td>
<td>(.07)</td>
<td>(.44)</td>
</tr>
</tbody>
</table>

**Note:** Means according to hierarchy level. STD in parentheses. The following rating scale was used: 1 = do not agree at all, 2 = do not agree, 3 = rather do not agree, 4 = somewhat agree, 5 = agree, 6 = completely agree.

Table 4b: Main effects and interaction effects of quick action.

<table>
<thead>
<tr>
<th></th>
<th>Main effects and interaction effects of item:</th>
<th>When our company goes through a change process, we act quickly after realizing that a change is necessary.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>F</td>
</tr>
<tr>
<td>Between groups</td>
<td>3</td>
<td>89.58</td>
</tr>
<tr>
<td>Within groups</td>
<td>341</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>344</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** df = degrees of freedom, F = F critical value, p = p-value.

Table 5a: Quick reaction to necessary change.

<table>
<thead>
<tr>
<th>Hierarchy level</th>
<th>Top Management</th>
<th>Middle Management</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our company reacts quickly to necessary changes.</td>
<td>4.03</td>
<td>4.32</td>
<td>4.06</td>
</tr>
<tr>
<td></td>
<td>(.13)</td>
<td>(.14)</td>
<td>(.11)</td>
</tr>
</tbody>
</table>

**Note:** Means according to hierarchy level. STD in parentheses. The following rating scale was used: 1 = do not agree at all, 2 = do not agree, 3 = rather do not agree, 4 = somewhat agree, 5 = agree, 6 = completely agree.

Table 5b: Main effects and interaction effects of quick reaction.

<table>
<thead>
<tr>
<th></th>
<th>Main effects and interaction effects of item:</th>
<th>Our company reacts quickly to necessary changes.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>F</td>
</tr>
<tr>
<td>Between groups</td>
<td>3</td>
<td>36.68</td>
</tr>
<tr>
<td>Within groups</td>
<td>341</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>344</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** df = degrees of freedom, F = F critical value, p = p-value.