

Tailor the message and change will happen? An experimental study of message tailoring as an effective communication strategy for organizational change

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Abstract

Purpose – This study strives to improve one's understanding of tailored messaging as an organizational communication strategy that amplifies processes of organizational change at an individual level of personality traits.

Design/methodology/approach – A scientific experiment was conducted to test the effects of tailored messages on self-reported employee engagement during an organizational change process.

Findings – The results show that tailored messaging improves employee engagement for change when messages fit the specific needs of different personality types. Conversely, message tailoring can lower employee engagement when messages do not match personality types. Further, message tailoring has different impacts at different stages of a change project.

Research limitations/implications – An employee's ability to change as a function of his professional skill set as well as the project type (e.g. digital transformation project, post-merger integration project, leadership change project) should not be neglected in an overall model that aims to explain the success factors of change management.

Practical implications – Obviously, proper targeting, timing, as well as the implementation of a valid, legal and feasible method for identifying an employee's personality as well as other individual characteristics are equally important and challenging to improve change management outcomes.

Originality/value – This study adds value to the discussion on the efficacy of message tailoring as a communication strategy for organizational change.

Keywords Change management, Communication strategy, Message tailoring, OCEAN model, Message–personality fit, Regression analysis

Paper type Research paper



Introduction

Organizational change management is a crucial yet difficult task for any organization's management. Ensuring long-term business success of an organization alongside and in cooperation with its employees is currently one of the most popularly discoursed questions in management research and practice. Especially the current global crisis due to the COVID-19 pandemic has pushed the necessity for change with respect to digitization, business models and organizational aspects for many companies even further. Accordingly, strategies that

successfully support the management of respective change processes are becoming increasingly important (Kreutzer *et al.*, 2017).

However, despite the large number of publications that strove to improve our understanding of planned organizational change models (POCM) within the last decades, failure rates of change projects remain remarkably high (Armenakis and Harris, 2002; Burnes and Jackson, 2011; Gondo *et al.*, 2013; Nasim and Sushil, 2011; Pfeifer *et al.*, 2005; Smith *et al.*, 2021; Whittle and Stevens, 2013). Obviously, managing organizational change in its full dimensionality evokes a nexus of research dimensions that are not yet fully grasped, hence, creating the need to be interrelated and explored in more detail. Indeed, since Lewin (1946, 1947) developed his seminal three-step model of planned organizational change (from “unfreezing” over “moving” to “refreezing”), many subsequent studies have looked at change management in a procedural and unilinear way, but also identified structural drivers for change such as the external environment, organizational structures and corporate governance (Bullock and Batten, 1985; Kotter, 2012; Taffinder 1998; Nadler *et al.*, 2015; Carnall and By, 2014; Benn *et al.*, 2018).

In addition to these structural drivers, however, research in this area must not neglect forces at the individual level, such as employee resistance. The related questions of how to manage change effectively and efficiently in times of great need for change and increasing uncertainty are crucial. (DiFonzo and Bordia, 1998; Bridges, 2010; Baker *et al.*, 2016; Sharma *et al.*, 2020).

Certainly, resistance to change is not a new issue. According to the “Yale attitude change approach,” a multiyear research into persuasive communications first studied by Hovland and his colleagues at Yale University in the 1950s, the credibility and attractiveness of the communicator, the quality and sincerity of the message (nature of the communication), as well as the attention, intelligence and age of the audience (nature of the audience), can influence the recipient’s attitude toward a persuasive communication. Hovland and colleagues concluded that individuals were not influenced by persuasive messages in general, but that personal differences set the terms for effective communication such that highly intelligent individuals were more likely to be affected when exposed to logical and two-sided communication. Further, individuals with high degrees of self-esteem, aggressiveness and social withdrawal (“neuroticism”) turned out to be less sensitive toward persuasive messages (Hovland *et al.*, 1966).

Thus, unsurprisingly, targeting customers solely by demographic factors, such as age, income, education or geography, is considered insufficient to achieve communicational success (Yankelovich, 1964). However, recently, the emergence of digital technologies (e.g. social media and artificial intelligence) allowed companies to segment people into groups based on what they do and why they behave the way they do. This approach became known as psychobehavioral segmentation (Kolodinsky and Reynolds, 2009) and has been shown to be superior to demographic segmentation in various fields of communication management (Boslaugh *et al.*, 2004; Matz *et al.*, 2017). In accordance with these findings, this study examines relationships between managerial change communication and employee engagement based on personality traits (message tailoring) that may inhibit or promote organizational change. We analyze how the ratings of 15 motivational messages (see, Appendix) are moderated by participants’ personality, while controlling for gender, age and education. We expect that personality influences how employees intend to engage in change projects (employee engagement). By identifying the effects of tailored change messages in different stages of the Kübler-Ross (1969) change curve, we expand our knowledge of behavior change systems and contribute to the use and operationalization of POCM.

Employee engagement and planned organizational change

The concept of employee engagement was first introduced by Kahn (1990). As Kahn highlighted, engagement occurs when a person can “harness their full selves” to their work roles. This harnessing can be described from a cognitive, an emotional and a physical perspective. The cognitive perspective of employee engagement considers employees’ beliefs about the organization, its leaders and working conditions. The emotional perspective describes how employees feel about each of these three factors, whereas the physical perspective examines the vigor that employees put into accomplishing their tasks (Kahn, 1990).

In this respect, Kahn developed a multifaceted construct of employee engagement that has been widely supported by subsequent studies (Wellins and Concelman, 2005; Saks, 2006; Truss *et al.*, 2006; Bakker, 2011; Xiao and Duan, 2014; Liu, 2016). In contrast to these multifaceted definitions, other authors defined employee engagement more generally as a positive work-related state of mind or enthusiasm for work itself (Truss *et al.*, 2006; Schaufeli *et al.*, 2002; Harter *et al.*, 2002). Truss *et al.* (2006) describe employee engagement simply as “passion for work.” On the other hand, there are more action-oriented definitions that describe employee engagement as a dedicated willingness to help companies succeed (Xie, 2006). Welch (2011) provided a comprehensive literature review about employee engagement as a goal and its implications for strategic communication. In her paper, Welch referred to a study published in 2004 by Hewitt Associates that “(. . .) measured employee engagement with a [sic] 18-item scale to capture the extent how [sic] employees are willing to stay in the company and work hard for the company” (Welch, 2011, pp. 332–333). Finally, employee engagement is sometimes described as the opposite of burnout or cynicism by measuring vigor, dedication and participation (Schaufeli and Bakker, 2004; Maslach *et al.*, 2001).

If we now consider these definitions in the context of POCM, it becomes clear that employee engagement needs to be understood as a multifaceted construct, following Kahn (1990) and others; more specifically, it also points to the action-oriented definitions described earlier (e.g. Hewitt Associates, 2004), since employees must move to make change happen and therefore, must be motivated to participate in specific change projects. This said, employee engagement can be considered as a behavioral intention that describes whether employees are willing to unfreeze and move (see, Figure 1). Action research within POCM hence strives to measure the effects of change communication (Welch, 2011; Schulz-Knappe *et al.*, 2019; Simoes and Esposito, 2014). Accordingly, leading to specific challenges with regard to research designs, as it is known from studies on communication strategies in organizational change management that the efficacy of such change communication suffers from a variety of constraints that likewise need to be considered (Cameron and Green, 2020; Oreg, 2006).

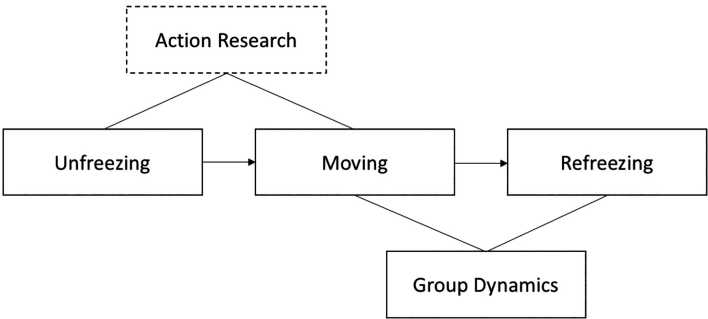


Figure 1.
Action research within
the framework of
POCM (Rosenbaum
et al., 2018)

Within the POCM framework, the mentioned constraints are described as individual resistance to change (Bridges, 2010; Kübler-Ross, 1969). In “On Death and Dying,” published in 1969, Kübler-Ross pointed to the issue of grief that medical patients would typically undergo when confronted with their medical findings. Although Kübler-Ross’s original work lacks empirical evidence and is highly questionable from a methodological perspective, the stage model can be used as a template to investigate how people react to uncertainty. Indeed, it has been found that these stages mirror not only the experiences of medical patients but also those of employees faced with organizational change (Allen *et al.*, 2007).

In the present context, we find four stages of grief particularly interesting. We believe that these may well function as a framework to learn how organizations can react to emotions of uncertainty and fear among employees during a change. These are as follows:

- (1) “Denial” is observed as soon as change is implemented. Employees will first deny that change has arrived, even if its signs can be read boldly. Due to the fear of losing belonging, safety and psychological needs, employees feel bad and deny the importance of change. Employees may actively seek information that confirms their existing beliefs; they may start thinking about the potential impacts on their personal lives and seek arguments to justify their resistance.
- (2) “Anger” is second and occurs when employees start to actively support or passively oppose organizational change by spreading misinformation among colleagues and building alliances with coworkers with whom they share the same negative opinions on a change project. Reasons for this behavior are skepticism, isolation and frustration because of a perceived loss of importance.
- (3) “Depression” is the next stage when employees experience a lack of energy and low mood because they feel helpless and not in control of what is happening. They tend to withdraw from social interactions and need emotional and factual support.
- (4) “Acceptance” is the final stage. This is when employees begin to experience a relief of stress and insecurity and start to recognize new opportunities.

Message tailoring within high-quality change communication

Obviously, change managers account for more than simply proclaiming the necessity for change. In fact, they need to “unfreeze” and motivate employees to join the change project. Ideally, change managers employ different methods of communication to enhance relationships, establish trust, get employees to think and get involved, reduce resistance and build commitment to the joint change objective. Scientifically, a significant body of research has analyzed conditions and success factors of change communication (Cameron and Green, 2020). Diaz-Iglesias *et al.* (2019) reviewed a total of 801 studies that were published between 1967 and 2017, in the field of organizational change management, with 73 academic articles published in 2012 alone. However, surprisingly, only a few studies dealt with employee engagement and participation. Most of the early literature on change management provides concepts and ideas about management and technology implementation, while only the more recent studies considered the roles of organizational development, decision-making and human resources management more deeply (Diaz-Iglesias *et al.*, 2019).

High-quality change communication

Worse yet, the current body of research still ignores relevant findings from research in organizational behavior, transformational leadership and humanistic psychology (Simoes and Esposito, 2014; Maes and Hootegeem, 2019; Young, 2009). To fill this gap, Jimmieson *et al.*

(2013) developed a framework for successful change communication described as “high-quality change communication” (HQCC), outlined as communication that is (1) accurate, (2) adequately addresses employee concerns and (3) was presented in a timely and appropriate manner (see also, [Miller and Monge, 1985](#); [Miller et al., 1994](#)). Obviously, HQCC adopts behavioral and psychological aspects and looks to (1) the nature of employees’ reaction to change, (2) individual factors as predictors for successful change management and (3) aspects of communication as a vital part of change ([Armenakis and Harris, 2009](#); [Schulz-Knappe et al., 2019](#); [Rafferty and Jimmieson, 2018](#); [Oreg et al., 2014](#)).

[Armanakis and Bedeian \(1999\)](#) elaborated on these three aspects and took these as a starting point to implement successful change communication in an organizational context. Accordingly, any change communication should: (1) point to a discrepancy that exists between a status-quo and a declared goal; (2) address communication appropriately and should ensure that the proposed actions make sense to those affected; and (3) afford communication to assure ongoing support for the employees by the responsible change managers in implementing the proposed measures.

However, given the changing nature of environmental challenges, notably through digitization, management deliberation and employee empowerment, all these conceptional aspects of change communication might interact with individual differences in such a manner that the outcomes of the prototypical HQCC will differ vastly between individuals and thus might fail to successfully support change management goals.

In recent years, both scholars and practitioners in the field of communication management have dealt with the questions about interactions of message characteristics and individual differences and have delivered new insights of communication effectiveness. Respective questions have also been addressed in political communication, health communication advertising and change communication ([Matz et al., 2017](#); [Kreuter et al., 2016](#); [Ho and Bodoff, 2014](#); [Vakola et al., 2014](#)). The core principle of these studies is the concept of message tailoring. [Kreuter and Skinner \(2000\)](#) describe message tailoring as a process that “fits” the message to the individual, much like a tailor would fit a suit. This process consists of two different tasks: “segmentation” and “customization.” According to [Hawkins et al. \(2008\)](#), “‘segmentation’ is the degree to which the audience is divided into increasingly more defined, homogenous groups, and ‘customization’ is the degree to which the messages (i.e. a combination of content, source, graphics, channel, etc.) the audience receive, reflect relevant individual characteristics.” The current body of research in the field of message tailoring suggests that fitting a message to meet individual needs and characteristics, rather than targeting group criteria (e.g. age, gender, education, etc.), will be more effective in influencing health behaviors ([Kreuter and Skinner, 2000](#)). Thus, in recent years, there has been a shift toward research designs that consider psychographics in examining the effects of message tailoring on different desired outcomes ([Liu et al., 2019](#); [Matz et al., 2017](#)).

Health communication research has also found that message tailoring is more effective when it captures the attention of patients, particularly when the intent is to influence individuals’ behavioral change ([Avnet and Higgins, 2003](#); [Elbert et al., 2017](#); [Ho and Bodoff, 2014](#); [Noar et al., 2007](#); [De Vries et al., 2017](#)). These effects have been observed in various fields of communication management, including dental hygiene, smoking cessation and consumer purchases ([Cesario et al., 2004](#)). Further, messages that are congruent with an individual’s motivational orientation have proved to be more successful than incongruent messages. Indeed, messages are more successful when they are framed to match the recipient’s motivational orientation by focusing either on promoting gains (e.g. “Product X builds healthy teeth”) or on preventing losses (e.g. “Product X prevents cavities”) ([Higgins, 2000](#)). Obviously, messages that are congruent with an individual’s motivational orientation are processed more fluently and evaluated more positively than incongruent messages ([Cesario et al., 2004](#); [Higgins et al., 2003](#); [Lee and Aaker, 2004](#)).

In this study, we take the theory of cognitive dissonance (Festinger, 1954) as basis for explaining the observed effects of message tailoring and make predictions regarding message tailoring in the context of change management. Cognitive dissonance describes a psychological state of mind in the context of persuasive messages (e.g. change communication). According to Festinger, human beings experience psychological stress when they are confronted with information that contradicts existing beliefs, ideas or values. Because human beings strive for psychological consistency, a person who experiences internal inconsistency tends to become psychologically uncomfortable and is motivated to reduce this negative experience. Research in cognitive psychology and behavioral economics has identified various strategies that humans use to reduce cognitive dissonance. In general, these strategies can be summarized within three different categories: (1) selective exposure, (2) selective perception and (3) selective retention (Festinger, 1954; Donsbach and Mothes, 2013; Carpenter, 2019).

Selective exposure (1) is achieved by actively avoiding dissonant messages. In the context of change communication, employees can simply avoid reading the HQCC about a change project.

In other situations, change communication might break through the defensive strategy of selective exposure and reach the minds of its audience. However, at this point, selective perceptions (2) can lead to interpretations of HQCC that were not intended by the sender. Recipients could reach conclusions that were not necessarily fact-based and logical but were, again, motivated by existing beliefs and emotions (motivated reasoning). In the context of change management, employees could reinterpret HQCC in such a way that they were not personally affected, with no need for them to change (Carpenter, 2019). Thus, even if change managers pointed to a factual discrepancy (e.g. between changing consumer needs and current services of their own company), employees might conclude that this affected only other people in the organization and not themselves and thereby reduce cognitive dissonance. Third, selective retention (3) is a mechanism to reduce cognitive dissonance when individuals have been exposed to dissonant messages and have not managed to reinterpret the intended conclusions. Employees could simply repress or forget the achieved knowledge about the necessity for change and thus not engage in the individual change (moving).

Overall, HQCC clearly provides a feasible and promising framework for effective change communication. However, change management can still fail, even if change managers follow the rules of HQCC perfectly, owing to psychological resistance and employees' strategies to reduce cognitive dissonance. In this context, we argue that tailoring messages toward personality traits will reduce the amount of cognitive dissonance in advance, and change will therefore be perceived as less uncomfortable. Consequently, selective exposure, selective perception and selective retention will not be applied (or will be applied less), which will improve the impact potential of change messages. This said, the integration of message tailoring into the framework of HQCC could improve our understating of effective change communication and help change managers to unfreeze and move employees in an intended direction. In line with the reviewed literature from the fields of health communication, political communication and advertising research, tailoring messages to the psychological needs of different personality types appears to be a promising concept to improve the outcomes of HQCC with respect to employee engagement.

OCEAN model

The OCEAN model is (nearly) synonymous with the “big-five” model of personality traits (B5M) and the “five-factor model” (FFM) of personality traits. It describes a range of personality traits in terms of five broad personality dimensions (Goldberg, 1971, 1990, 1993; Johnson, 2017; John *et al.*, 2008).

Within the OCEAN model, the “openness”-type personality (O-Type) describes a person’s general openness to new experiences. Persons with this type of personality are creative, curious and tolerant. They tend to be interested in current developments of society and politics and often express sympathy for the arts and aesthetics. In contrast, people who score low on the openness scale are conservative and prefer conventional behavior. “Conscientiousness” (C-Type) describes a person’s tendency of being organized and goal-oriented. People who are conscientious have a high degree of self-control and prefer long-term goals and strategic planning. People with low scores on the conscientiousness scale are impulsive, creative and easy-going.

Further, people who are high on “extraversion” (E-Type) are characterized by sociability, talkativeness, assertiveness and excitability. They seek out social stimulation and opportunities to engage with others. In contrast, individuals with low scores on extroversion are perceived as reserved and prefer a low-stimulus environment. “Agreeable” people (A-Type) display a sympathetic behavior toward others as well as high levels of compliance and a willingness to compromise. They tend to trust other people and easily adapt their behavior toward given situations. In contrast, people with lower scores on this scale are more competitive, skeptical and assertive. “Neuroticism” (N-Type) describes people’s emotional stability. High scores on this scale are linked to high sensitivity, stress and insecurity. Low-score individuals on neuroticism tend to be calm, well-adjusted and emotionally stable.

Research question and hypotheses

The relevant question here asks for the type of organizational change communication strategy that is needed to align employees’ personality with messages and allows to achieve necessities of change. Change communication clearly needs to be well planned, and these plans have to be precisely conveyed to the right people, at the right time through the right medium. However, it is known from existing research on communication strategies within organizational change management that the efficacy of such change communication suffers a variety of constraints regarding employee engagement and support (Cameron and Green, 2020). We argue that change management can only be successful if managerial messages are specifically tailored to employees’ personality traits, communication needs and change preferences. Succinctly, no one message fits all employee personalities, and a “message-personality-fit” is thus a preferable and aimed-for managerial communication strategy for organizational change. However, we also assume that not all personality types can be affected equally. Hovland *et al.* (1966) determined that individuals with high degrees of self-esteem, aggressiveness and social withdrawal (neuroticism) are less sensitive to persuasive messages. Thus, neurotic personalities should be less affected by tailored change messages than other personality types.

Overall, this study seeks to contribute to theory building in the fields of POCM and HQCC by adopting the three-step model of organizational change (Lewin, 1946) and investigating more closely the prerequisites for unfreezing and moving of employees (employee engagement). In line with the reviewed literature, message tailoring can clearly be aligned to the reduction of cognitive dissonance between a communicator’s supported position and the existing beliefs of an employee and thus is expected to strongly effect employee engagement. Beyond that, we assume that messages that have been tailored to OCEAN personality types have a differential effect in the different stages of the change curve. According to Kübler-Ross (1969), employees in the “denial stage” tend to strongly preserve their existing beliefs and try to avoid new information in general. However, in the two other stages, employees want to be empowered and integrated in the decision-making processes, which, presumably, makes them more responsive toward communication, helping them to

reduce cognitive dissonance. Hence, the following research question (RQ) is raised: What are the effects of message tailoring on employee engagement in different stages of a change project?

The following hypotheses emerge from the aforementioned literature:

- H1. Tailored change messages improve employee engagement for *a) open personality types, b) conscientious personality types, c) extrovert personality types* and *d) agreeable personality types*.
- H2. Tailored change messages do not improve employee engagement for *neurotic personality types*.
- H3. Tailored change messages have higher effect sizes in the *a) anger stage* and the *b) depression stage* than in the *denial stage* of the change journey.

Method

To test the aforementioned hypotheses, we designed an experiment in five steps. In Step 1, the communication preferences for each OCEAN personality type were identified to create tailored change messages for each type. We derived the communication preferences from (1) the general descriptions of each personality type (Goldberg, 1971, 1990, 1993; Johnson, 2017), (2) empirical evidence from previous research about the motivational needs of OCEAN personality types (Hirsh *et al.*, 2012) and (3) a pretest developed by ourselves.

For the pretest, we recruited $n = 99$ undergraduate and graduate students from our home university and presented them with 26 items about general communication preferences (e.g. implicit vs explicit conclusions), general process preferences (e.g. getting support vs taking over responsibility), as well as fears and concerns in the context of change management (e.g. fear of negative personal consequences). We then asked them to rate each item on a -3 to $+3$ semantic differential scale in an online questionnaire. At the end of the questionnaire, we assessed their OCEAN personality types using the Mini-IPIP item pool that comprises 20 different items (Donnellan *et al.*, 2006). To prepare our analysis, we recoded the scores of each personality trait of our participants to categorize them into either “high” or “low” on each personality trait. The communication preferences of the different personality types were identified by comparing the preferences of each OCEAN personality type within each trait (high vs low) as well as across different traits (e.g. high on extraversion vs high on neuroticism) using analyses of variance (ANOVA) and post-hoc paired comparison tests.

As a result of this procedure, we found that open personality types prefer an open and relaxed communication style as well as implicit conclusions and two-sided argumentation. With respect to process preferences, we found that they seek variety, like to take over responsibilities, want to be actively involved but are concerned when nothing changes. Conscientious personality types prefer realistic to optimistic communication and implicit conclusions. In terms of process preferences, they like to work in teams, appreciate clear processes, prefer long-term over short-term success and fear bad planning. Extroverts like open and relaxed communication styles and implicit conclusions. When involved in a process, they like variety, prefer to experience success together with team members rather than on their own, and they prefer creative chaos. Their biggest concern is a lack of support for their activities within change projects. Agreeable personality types like open and relaxed communication styles as well, and they prefer implicit to explicit conclusions. They want to be involved in processes and are less concerned to experience negative consequences when change happens. Finally, neurotic personality types like emotional communication styles, clear goals and two-sided argumentation. In a process, they prefer to be passive and to observe what is going on rather than to be involved. They also fear bad planning and a lack of support.

In Step 2, we created short descriptions of three different stages of a change journey (“denial stage,” “anger stage” and “depression stage”). We focused on these three stages in our study because, according to [Jackson and Jacobs \(1983\)](#), these stages are the most crucial to improve change management outcomes in a real-world environment. The stages were described in detail in a short text (scenario description) in terms of the plausible emotional experiences, attitudes and potential behavior of an employee. Then, these were presented to the participants in the experiment together with the questionnaire in Stage 4 (e.g. for the denial stage: “You are now working for two years for a company in a junior management position. Because of a new corporate strategy, you are currently faced with a lot of changes that will personally affect you soon. However, you are not convinced that the new strategy is the right thing to do and you think that everything is working fine as it is”).

In Step 3, e-mails were created as stimulus material for the experiment. The content of the e-mails was adapted to (1) the situational context of the three investigated stages of a change management project, (2) the dependent variable (employee engagement) and (3) the individual communication preferences of all the OCEAN personality types according to the results of Step 1. Additionally, change messages were adapted to the motivational needs of employees alongside the three stages selected, following the Kübler-Ross model. Overall, we generated 15 different change messages as stimulus material (five communication styles times three stages). To create authentic communication, the communication style in each e-mail had to be slightly varied in each stage. However, most of the elements from our pretest with respect to communication preferences (Step 1) were used in the final stimulus material, albeit with linguistic variations. Therefore, the stimulus material can be considered as both realistic and sufficiently tailored to the individual preferences of each personality type (e.g. the e-mail statement tailored for O-Type employees read: “We finally start: our company is getting [sic] more digital and progressive. You can expect a lot of interesting innovations that challenge our existing views and that will turn things upside down. We need you to actively and independently participate in this project – there are no borders for your creativity and imagination”).

In Step 4, the stimulus material (e-mails) was presented to another group of participants ($n = 159$, $M(\text{age}) = 28.4$) together with the scenario descriptions from Step 2. These recipients were recruited through direct messaging to professors and students from six different campuses of a German university between December 2018 and January 2019. Every participant in the experiment was asked to read five preset e-mail messages per stage (i.e. all the 15 e-mail messages); the messages included those that were tailored to each of the five personality types of the OCEAN model. The participant perceptions of these e-mails were measured with a six-point Likert scale, using six items derived from [Lavidge and Steiner \(1961\)](#) and [Welch \(2011\)](#): “*the e-mail is interesting*,” “*it is not fully clear to me, what the sender wants to achieve with this email*,” “*the sender of this email is disagreeable*,” “*I feel personally engaged by this e-mail*,” “*the argumentation of this e-mail is convincing*” and “*I feel motivated by this email*.”

The OCEAN personality types of the participants were then measured, again using the Mini-IPIP item pool ([Donnellan et al., 2006](#)). Finally, the basic demographic data of the participants was collected, as well as the data on the perceptions of the created scenario descriptions (Step 2), to determine how well the participants could put themselves into the described situations. Of the sample observations, 13 people who scored low on this question (below three on the six-point Likert scale) were excluded from the statistical analysis (Step 5) to improve the external validity of the results.

Finally, in Step 5, the effects of the tailored change communication were analyzed. Exploratory factor analysis (EFA) using principal component analysis (PCA) with varimax rotation revealed that all the six items used to measure the perception of the e-mails clearly loaded onto just one factor, which may be labeled “employee engagement.” We next

performed multiple linear regression analyses for each of the 15 experimental conditions (five e-mails times three stages) with the measured score for each OCEAN personality trait of the participants as an independent variable (predictor) and perceptions of the presented e-mails (employee engagement) as dependent variables. With this approach, it was possible to test for the effect of each personality dimension from the OCEAN model on any tailored message and in any of the three stages of a change project. Additionally, this analytical approach allowed us to test for the effects of tailored messages on employee engagement while controlling for characteristics of the participants in each of the five personality traits of the OCEAN model (e.g. the effects of tailored messages on open personalities that also score high on extroversion) as well as for the effects of the sociodemographic variables (age, gender and education) (see [Table 1](#)).

Results

A reliability analysis of the collected data reveals a Cronbach's alpha of 0.75 for the measurement of the personality types with the Mini-IPIP item pool and a Cronbach's alpha of 0.93 for the items used to measure the perceptions of the stimulus material. Thus, the reliability of the measurement instruments used can be considered as satisfactory. The results from the EFA with varimax rotation reveal that all six items clearly load onto just one factor that has been labeled as employee engagement (dependent variable).

This factor describes our dependent variable as a function of the stimulus material in a given change project and thus can be considered as change communication success. Multiple regression analyses were conducted to test if the personality traits significantly predicted participants' employee engagement when they were addressed with tailored change communication. In detail, it was found that openness as a personality trait significantly predicted employee engagement in the denial stage ($\beta = 0.22, p < 0.05$) and the depression stage ($\beta = 0.26, p < 0.05$), when HQCC was congruent with this personality type (see Appendix). Thus, these results clearly support hypothesis [H1a](#).

We next analyzed the effects of the messages that were tailored for the conscientious personality types. The results of the regression analysis showed no effects in the predicted direction. Meanwhile, none of the other message types had any significant correlations with conscientious personality types. Thus, hypothesis [H1b](#) is rejected.

Step 1	Step 2	Step 3	Step 4	Step 5
Pretest identification of communication preferences (Online survey, $n = 99$) ANOVA Post-hoc tests	Creation of change management scenarios for stages (1–3) Literature review	Creation of stimulus material Semantic differential scale	Experiment effects of message tailoring (Online survey, $n = 159$) Likert scale	Analysis Factor analysis multivariate linear regression Test of hypotheses
Communication preferences, process preferences, fears and concerns	Statements defined to describe (1) Denial (2) Anger (3) Depression	Tailored messages to each of OCEAN personality type for each change stage Based on pretest results	Measurement of perceptions of tailored change communication (employee engagement) Based on Lavidge and Steiner (1961) and Welch (2011)	
Based on Hirsh et al. (2012) and own data collection	Based on the Kubler-Ross model (1969)			Based on collected data from Step 4

Table 1.
Multistep research design, literature and methods used

For the tailored change communication that addressed the psychological needs of extrovert personalities, positive significant correlations in each of the three tested stages of the Kubler-Ross model were found (see Appendix). In the denial stage, extraversion clearly predicted employee engagement ($\beta = 0.18, p < 0.05$), and even stronger effects were measured for the anger stage ($\beta = 0.23, p < 0.05$) and for the depression stage ($\beta = 0.21, p < 0.05$). By controlling for any other effects of extraversion in combination with noncongruent messages, a positive correlation of extraversion in the denial stage ($\beta = 0.22, p < 0.05$) was found when the participants were stimulated with the messages for the open personality types. However, no other inconsistent effects were found. Thus, these findings support H1c.

Finally, the regression models did not reveal any significant effects of the tailored change messages on the agreeable personality type and the neurotic personality type. These results lead us to reject hypothesis H1d and support hypothesis H2.

Regarding the assumption that tailored change messages have higher effect sizes in (1) *the anger phase* and (2) *the depression phase* than in the *denial phase* of the change journey, our results reveal that the total effect sizes are the highest in the depression stage, closely followed by the effect sizes in the denial stage and those in the anger stage (Table 2). Thus, we reject hypothesis H3a while hypothesis H3b is supported.

Besides the reported positive effects of message tailoring in the context of change communication, this study revealed some strong results regarding the potential negative effects of incongruent change communication. Indeed, the results of the regression models revealed several significant negative effects of the change communication that addresses certain personality types with the wrong messages. Especially, the extrovert, conscientious and open personality type appear vulnerable in their engagement when they are in contact with incongruent change messages. Extroverts react strongly negatively to messages that were tailored for conscientious ($\beta = -0.19, p < 0.05$) and neurotic personality types ($\beta = -0.28, p < 0.05$), while employee engagement is reduced for conscientious personalities when they are confronted with messages that were tailored for extroverts ($\beta = -0.21, p < 0.05$). In contrast, messages that were tailored for the conscientious personality types had a negative effect on employee engagement of the open personalities ($\beta = -0.23, p < 0.05$) (see Appendix).

Discussion

This study expands our knowledge and conceptional understanding of POCM and HQCC by shedding light on how the concepts of message tailoring and employee engagement fit into these general models in different stages of an employee's change journey. The results clearly indicate that psychobehavioral segmentation can improve the outcomes of change communication and thus support organizational change.

However, the results of this study also indicate that not all personality types are affected by tailored change communication equally and that tailored change communication is not

Table 2.
Effects of tailored
messages in the
different stages of the
change journey

Message-personality fit	Denial stage β	Anger stage β	Depression stage β
O-Type	0.22*		0.26*
C-Type			
A-Type			
E-Type	0.18*	0.23*	0.21*
N-Type			
Total	0.40	0.23	0.47
Note(s): Effect sizes are standardized beta coefficients (* $p < 0.05$)			

equally effective in every stage of the change journey. While open and extrovert personality types can obviously be influenced to improve their engagement in most of the tested stages, conscientious, agreeable and neurotic personality types are not equally affected. Additionally, sociodemographic variables such as age and gender also seem to play an important role and thus must not be neglected (see Appendix). This said, our findings support previous studies on individual moderators of communication effects to some extent. [Hovland *et al.* \(1966\)](#) already linked neuroticism as a personality trait to lower sensitivity to persuasive communication in general, because neurotic people tend to withdraw themselves from social interactions. However, similar considerations have not yet been made for other personality traits, although our study reveals that agreeable and conscientious personality types are equally resistant to tailored change communication.

The data of this study further support the assumption that OCEAN personality traits and sociodemographic variables such as age, gender and education must be considered as just two parts of a much broader framework of individual differences that explain resistance to change. One can think of various other human-centered variables, such as values, prior experiences, tenure and personal skills that might create cognitive dissonance with respect to change projects. However, message tailoring has already been shown to reduce cognitive dissonance in several contexts and thus might be effective with respect to other individual differences as well. Since the regression models of this study show an average $R^2 = 0.19$, undoubtedly other relevant variables exist, and future research should aim to identify those variables and determine their importance in the context of change management.

Beyond that, this is one of the few studies that identify potential negative effects of message tailoring. Most studies in this field of research either do not report negative effects or do not create research designs that can investigate the potential negative effects of message–personality incongruencies. The results provide clear evidence that message tailoring can decrease employee engagement and thus jeopardize change management goals when tailored messages are sent to the wrong persons. This has specific practical implications for change managers because they not only have to create appropriately tailored messages, but also must execute proper targeting of these messages based on feasible methods for identifying employees' personalities.

Limitations and implications

The most obvious limitation of this study relates to external validity. The data collection took place under laboratory conditions and thus must be considered as basic research only. Although this issue was addressed prior to the data analysis to improve the external validity of the results, by excluding participants who expressed difficulties with imagining themselves in the given descriptions about the change stages, subsequent studies are invited to adapt the present research design to a field study design and collect and test data on actual employees in different stages of a change project.

Regarding our research design, we lack advice if tailored messages are able to break through the first layer of defense (selective exposure) in a real-world environment. While our respondents were recruited through direct messages and incentivized (voucher) to participate in this study, employees in a corporate environment who are not motivated in a similar way might avoid change messages at the outset. This said, future studies should create research designs that not only test for the effects of tailored messages when these messages reach the minds of the audience, but also check whether these messages are noticed at all.

Another limitation relates to the OCEAN or FFM model employed to create the tailored messages. Although the Mini-IPIP item pool has been proven to be applicable in research, data collection with a measuring instrument that consist of 20 items might not be feasible in a practical context. In this context, other researchers have already tested and suggested

methods for computerized personality profiling, such as singular value decomposition (SVD) or latent Dirichlet allocation (LDA), from publicly available communication data (Zarouali *et al.*, 2020; Markovikj *et al.*, 2016). From a mere technical and statistical perspective, these approaches obviously do work to identify OCEAN personality types from what people post on social or corporate media. However, data protection regulations in different countries must be considered in this respect.

Finally, we encourage future researchers to consider more recent concepts of personality when thinking about message tailoring in an organizational context. Indeed, other researchers have found that human personalities can be described with only two instead of five factors (e.g. Digman, 1997): agreeableness, conscientiousness and neuroticism form one higher-order factor (α), while extraversion and openness (intellect) form another (β). DeYoung *et al.* (2002) call the α factor “stability” and the β factor “plasticity.” The results of the present study support the assumption of only two distinct factors that separate people into individuals with respect to personality traits. Obviously, β -factor personalities can be influenced by tailored messages while α -factor personalities are immune to some extent. Thus, we suggest that future research in the field of message tailoring for organizational change follows this simplified two-factorial concept of personality to increase the practical feasibility of message tailoring. This is especially important because incongruent messages in many cases significantly decrease employee engagement and thereby complicate organizational change management. Obviously, proper targeting, timing, as well as the implementation of a valid, legal and feasible method for identifying an employee’s personality as well as other individual characteristics are equally important and challenging to improve change management outcomes.

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Appendix

The appendices are available online for this article.

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