



Basic Values and Change: A Mixed Methods Study

Johnny Långstedt & T. J. Manninen

To cite this article: Johnny Långstedt & T. J. Manninen (2020): Basic Values and Change: A Mixed Methods Study, Journal of Change Management, DOI: [10.1080/14697017.2020.1837206](https://doi.org/10.1080/14697017.2020.1837206)

To link to this article: <https://doi.org/10.1080/14697017.2020.1837206>



© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 27 Oct 2020.



Submit your article to this journal [↗](#)



Article views: 808



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

Basic Values and Change: A Mixed Methods Study

Johnny Långstedt ^a and T. J. Manninen^b

^aDepartment of the Study of Religions, Åbo Akademi University, Turku, Finland; ^bTurku Science Park Ltd., Turku, Finland

ABSTRACT

Working life is expected to become increasingly dynamic at the expense of routine work. This paper examines how the values of work units relate to changes that make work more dynamic or more structured. Drawing on a mixed-methods design, the paper examines how values that conflict with change objectives relate to challenges when implementing the changes. The paper explains in what situations and why values are relevant for change management. The paper contributes to change management by explicating the role of values when changes in the workplace are implemented and presents a model for integrating values into change communication.

MAD statement

This paper makes a difference by highlighting that an important aspect of change readiness and resistance relates to the consequences that changes have for the fulfilment of basic values. Attitudes to change are thus dependent on how the change process and objective 'fits' the change recipients' values. Building on multiple real-life examples, the paper describes how misalignments between values and changes create challenges for change initiatives. A model that practitioners can use to alleviate potential misalignments by incorporating basic values in their change communication is presented and discussed.

KEYWORDS

Change management; personal values; work environment; change strategy; change communication

Introduction

Changes at work can disrupt how well the workplace corresponds to employees' needs and expectations (Caldwell et al., 2004). Yet, current research on how change affects the 'fit' between persons and work environments has mainly focused on the skills and competences dimension of fit (e.g. Caldwell, 2011, 2017; Caldwell et al., 2004). This approach has overlooked potential disruptions between values and work. In the wake of intelligent technologies such as artificial intelligence, work is expected to become increasingly dynamic at the expense of structured tasks (Brynjolfsson & McAfee, 2014). Dynamic and structured work align with values that are based on opposing needs (Knafo & Sagiv, 2004; Sagiv, 2002). Because intelligent technologies are expected to

CONTACT Johnny Långstedt  johnny.langstedt@abo.fi  Fabriksgatan 2, Åbo, 20500, Finland

© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

decrease the need for structured work while not affecting dynamic work t as much (Arntz et al., 2016; Frey & Osborne, 2017), It is important to understand how transitions from structured to dynamic work environments affect the ‘fit’ between values and work

Previous research on values and change has focused on the relationship between values and the change process. This study focuses on the relationship between values and the objective of change, shifting the focus from the change process to the change objective. It does so by theorizing why and when value priorities in relation to changes in the work environment lead to negative or positive attitudes to the changes. This contributes to the discussion of how changes that affect the work environment can disrupt the ‘fit’ between values and work.

Values are relevant for the perceived need for change, the choice of change method (Sverdlik & Oreg, 2009), and the creation of attraction (Feather, 1995), which are all central aspects of establishing change readiness (Armenakis et al., 1993). Research on change and values shows that different values are associated with positive attitudes towards different types of changes (Sverdlik & Oreg, 2009, 2015). People who value safety prefer imposed change while people who value freedom prefer voluntary change. However, managers can affect the relationship between values and change because associations between values and situations are socially constructed (Hanel et al., 2017; Ponizovskiy et al., 2019). The social construction of associations between values and situations imply that change managers can decrease misalignments between values and change through their actions during and after change initiatives. A ‘change message’ (Armenakis et al., 1993) can thus alleviate misalignments by construing the change as beneficial for the attainment of the change recipients’ values.

To study how values relate to change objectives, the values of employees in 25 organizations ($N=727$) were surveyed with the portrait values questionnaire (PVQ-RR) (Schwartz et al., 2012) and interviews with 42 of their managers were performed in 19 open-ended interviews. Comparisons between the issues that managers reported and the value profiles of their departments revealed that managers for departments that prioritized rules and security over autonomy reported difficulties to implement dynamic ways of working. In contrast, departments where autonomy values were prioritized, managers reported challenges when increasing regulation.

The paper makes four important contributions. First, it draws on previous research to theorize the role values have in change efforts. Second, it draws on a large empirical sample to illustrate how values relate to changing the work environment. Third, it presents a model for integrating values into the change process. Finally, the study problematizes two value conceptualizations in the basic theory of human values, which has been lauded as the most comprehensive value theory to date (Hitlin & Piliavin, 2004).

Theory

The Theory of Basic Human Values

Basic values are relevant for change initiatives because they are representations of what we find desirable (Schwartz, 1992) and whether change participants find a change desirable or not affects its implementation (Dibella, 2007). Values are grounded in social, psychological, and biological needs (Rokeach, 1973; Schwartz, 1992). They correspond

to the needs of a society to organize (e.g. obedience and authority), to help an individual function independently (e.g. freedom and creativity), and to cater to the human need of stimuli (e.g. pleasure and varied life). Basic human values represent a broader set of values on which work values are based on Ros et al. (1999). The theory comprises 19 such basic values (Figure 1, Table 1) that represent 57 universal values (Schwartz, 2017; Schwartz et al., 2012).

The strength of Schwartz' theory is that it integrates the relationships between values to its value structure (Hitlin & Piliavin, 2004). According to Schwartz (1992), values are organized by their relative importance in a value hierarchy, meaning that some values take precedence over other values as guiding principles in life. People that score high on values on one pole of the value circle (Figure 1) are likely to score low on the opposite pole because the values represent opposing motivational goals (Schwartz, 2017). Adjacent value types in the structure do not conflict, and they can – and should – correlate to some extent because they share similar motivational characteristics (Schwartz, 1992). For example, it is theoretically sound to expect that people who value conformity are likely to value security and tradition more than someone who values self-direction because conformity and security are related to self-constraint and self-direction to independence and self-improvement. That is, someone who values self-direction is likely to score low on conformity or tradition. Similarly, someone who scores high on power is likely to score low on universalism.

If a change initiative makes work less aligned with prioritized values, the change recipients are likely to view it negatively. This is because people strive to align their actions with their values (Bardi & Schwartz, 2003; Rokeach, 1973; Schwartz, 1992; Schwartz et al., 2017) and work in environments that align with their values (Holland, 1985; Sagiv, 2002; Schneider et al., 1995). Values are, however, not always relevant. They become relevant, or

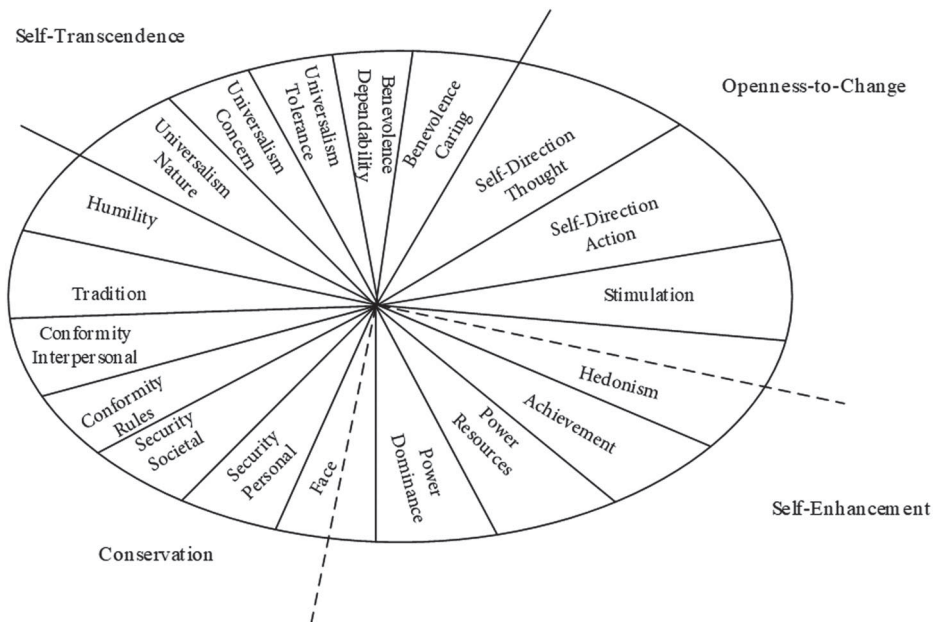


Figure 1. Schwartz value structure (Schwartz, 2017; Schwartz et al., 2012).

Table 1. Definitions of value types (cited from Schwartz 2017).

Value	Definition	Value	Definition
Humility	Recognizing one's insignificance in the larger scheme of things	Hedonism	Pleasure and sensuous gratification
Conformity: Interpersonal	Avoidance of upsetting or harming other people	Stimulation	Excitement, novelty and change
Conformity: Rules	Compliance with rules, laws and formal obligations	Self-Direction: Action	Freedom to determine one's own actions
Tradition	Maintaining and preserving cultural, family or religious traditions	Self-Direction: Thought	Freedom to cultivate one's own ideas and abilities
Security: Societal	Safety and stability in the wider society	Universalism: Tolerance	Acceptance and understanding of those who are different from oneself
Security: Personal	Safety in one's immediate environment	Universalism: Concern	Commitment to equality, justice and protection for all people
Face	Maintaining one's public image and avoiding humiliation	Universalism: Nature	Preservation of the natural environment
Power: Resources	Power through control of material and social resources	Benevolence: Dependability	Being a reliable and trustworthy member of the in-group
Power: Dominance	Power through exercising control over people	Benevolence: Caring	Devotion to the welfare of in-group members
Achievement	Success according to social standards		

activated, when they are prioritized and a situation has positive or negative consequences for them, while they remain dormant in situations that do not have consequences for them (Schwartz, 2017; Verplanken & Holland, 2002). The shift from structured to dynamic work represents such change. The types of work are associated with opposite values in the value structure (e.g. self-direction and security) (Knafo & Sagiv, 2004; Sagiv, 2002). On the one hand, as work environments become more dynamic it has negative consequences for the attainment of conservation values since predictability and stability are central to them. On the other hand, making work environments more structured has negative consequences for openness-to-change values because it restricts the enactment of individual freedom central to the value type. It follows that people with opposing values are likely to appreciate different change management practices (Sverdlik & Oreg, 2009). In contrast, people that value adjacent values are likely to share an appreciation of similar change management strategies.

However, the consequences that changes have for values are malleable and not set in stone. A recent study shows that the value-behaviour link is socially constructed (Ponizovskiy et al., 2019), which indicates that the relationship between values and change is not deterministic. In practice this means that a change manager can affect which values a change activates through constructing change communication in a way that convinces the change recipients of the positive consequences a change has for the values that they prioritize. Figure 2 visualizes the mechanisms that link values to behaviour. The role of the change message (Armenakis & Harris, 2009) is to socially construe how the change is associated with values, making the change more attractive to the change recipients.

Previous Research on Change and Values

Changes at work can affect how well people fit their jobs (Caldwell, 2011, 2017). People are attracted to jobs that align with their values (Arieli et al., 2016; Knafo & Sagiv, 2004; Sagiv, 2002; Schneider et al., 1995). Therefore, change recipients are likely to view a

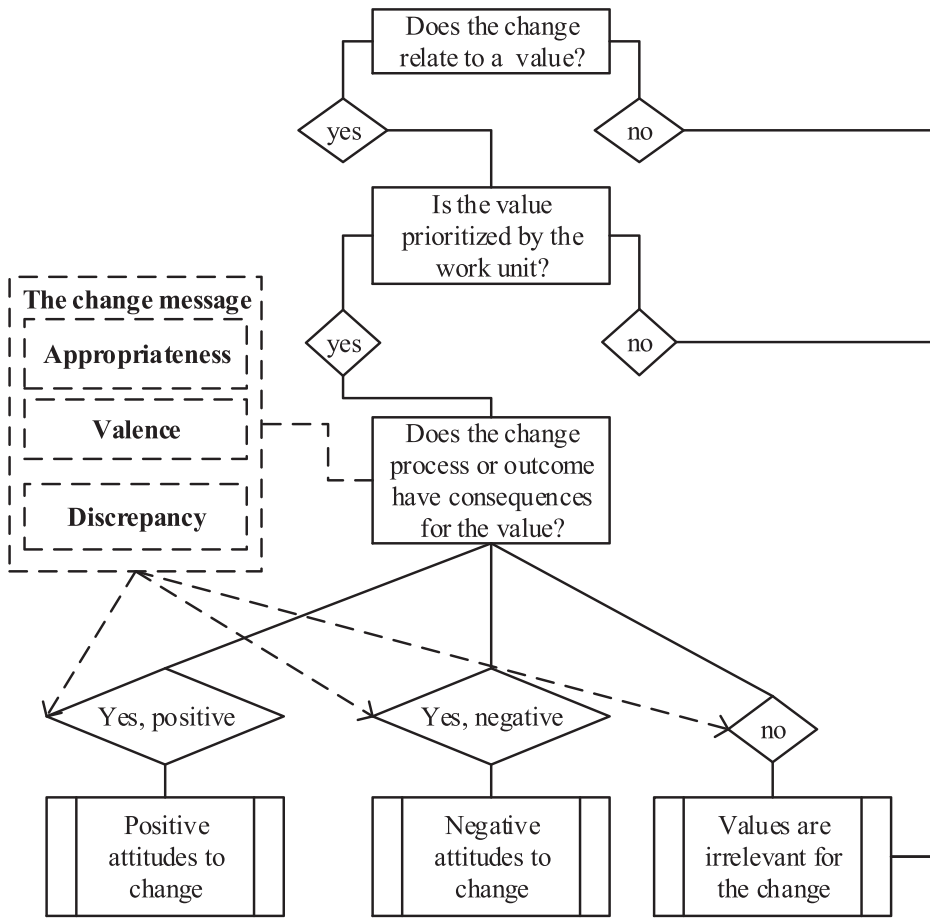


Figure 2. Change from a human values perspective, central to the model is the activation of values based on their priority and the change initiative's consequences for their attainment. The role of the change message (Armenakis et al., 1993) is to construct the change in a way that has positive consequences for the attainment of prioritized values or minimize its negative consequences for them.

change initiative that changes work to the degree that it corresponds to the opposite values in the value structure (Figure 1) negatively because it has negative consequences for the attainment of their values. Current research has focused on the study of values and the process of change, but research on values and the objective of change has been overlooked. However, the research lends support for the model presented above (Figure 2) by stressing the importance of aligning the change process with values.

Burnes and Jackson (2011) highlight the importance of aligning the change process with change recipients' values. Their research shows that interventions that align with the values of change recipients receive positive feedback for the change process and supports the group's development. Further, their case studies illustrate that when the change process is misaligned with change recipients' values they perceive the process less favourably. Burnes and Jackson (2011) conclude that the values of change recipients play a significant role in change interventions.

Other research into the relationship between values and change support these observations. Recent studies have identified a relationship between type of change and values (Sverdlik & Oreg, 2009, 2015). In line with Burnes and Jackson's (2011) observations, this research indicates that the alignment of values with the change process is important. A series of studies show that openness-to-change values are positively associated with voluntary change while they have a negative relationship to imposed change – the opposite is true for conservation values (Sverdlik & Oreg, 2009, 2015). In another study, Sverdlik and Oreg (2015) studied the relationship between type of change (imposed/voluntary), values, and organizational identification. They found that imposed change has a positive relationship to identification when conservation values are prioritized and a negative relationship when openness-to-change values are prioritized. Thus, if a change misaligns the work environment with the employees' personal values, it is likely to reduce commitment to the organization as indicated by Kristof-Brown's et al. (2005) meta-analysis of person-job fit.

The ambiguous and sometimes contradictory elements of change make the relationship between values and change complex. As explained by Sverdlik and Oreg (2009), imposed change involves two different aspects that relate to openness-to-change values. First, it involves novelty, which has positive consequences for the realization of openness-to-change values. Second, it involves imposition, which has negative consequences for the autonomy that characterizes openness-to-change values. A similar, although opposite relationship to conservation values exist. First, novelty has negative consequences for conservation values because it decreases stability. Second, imposition has positive consequences for the value type because it provides an opportunity to comply and increases the predictability of the change. Indeed, the appreciation of routines is a central reason for why conservation values are linked to resisting change (Oreg et al., 2008). Thus, changes that dissolve routines are likely to be perceived negatively by those that prioritize conservation values.

Previous studies show how values relate to the change process and indicate that it is important to align change strategies with the values of change recipients. However, the studies have overlooked how the change objective affects the alignment of values and the work environment. This is a fundamental gap in the research. It is well established that people are affectively motivated to align their actions with their values (Schwartz, 2017). As people with certain values are attracted to certain jobs (Knafo & Sagiv, 2004; Sagiv, 2002), changing the work environment may deprive employees of the opportunity to align their values with their actions at work. In such case, the objective of the change is central in determining how change recipients view it because attitudes to situations are largely determined by the degree of relevance to, and alignment with, values. Thus, it can be expected that change recipients perceive change initiatives negatively when the change objective decreases the alignment between their values and work.

Research Design

This study combines interviews with managers and survey data from employees to illustrate how change objectives can misalign work environments with values. The study adopts a multilevel sample mixed methods design (Tashakkori & Teddlie, 2015), which involves sampling one social level qualitatively and another level quantitatively. This strategy is

commonly used in settings that involve units of analysis that are nested within each other, such as individuals and organizations (Tashakkori & Teddlie, 2013). The reason why this approach was chosen is that managers are confronted with reactions from their employees when they implement changes. More importantly, the managers can reflect on the reactions in relation to different types of changes. Thus, by interviewing managers, the authors gained insight into how work units had reacted to different types of changes. Therefore, the interviews produced insight to the ‘proximal impact of the change on the day-to-day routines and work procedures of individuals’ that affect their perceptions of a change (Caldwell et al., 2004). The study collected information about the values of employees with the portrait values questionnaire (PVQ-RR) (Schwartz et al., 2012).

The research design rests on the premise that challenges to implement change are symptomatic of a misalignment between the change and values if: (a) the change has consequences for the attainment of a value and (b) the unit prioritizes the affected value. Further, the study expects that such misalignments are captured by comparing the managerial descriptions of changes with the self-reported value priorities of their work unit members. Figure 3 visualizes the relationship between the two samples.

As recommended by mixed-methods researchers, the quantitative and qualitative elements of the analysis are presented in separate sections to illustrate how the methods contribute to the study (Bryman, 2007; Bryman et al., 2008). Combining Schwartz’s (1992, 2017) values measures with managerial accounts enables a rigorous analysis of values in different units while providing insights into how these values can manifest when units face change. While the study gained contextualized insight from the interviews (Denzin & Lincoln, 2008), the use of Schwartz value measure offered a rigorous method for measuring personal values that provides breadth to the analysis due to its globally validated nature and use in previous research (Hitlin & Piliavin, 2004; Rohan, 2000; Sverdlik & Oreg, 2015).

Quantitative Sample and Data Collection

The data comprises a large range of companies with several different functions (e.g. medical diagnostics, R&D, food production, retail). The industries were chosen according to their regional prevalence, and hence, the data mainly consist of employees from three

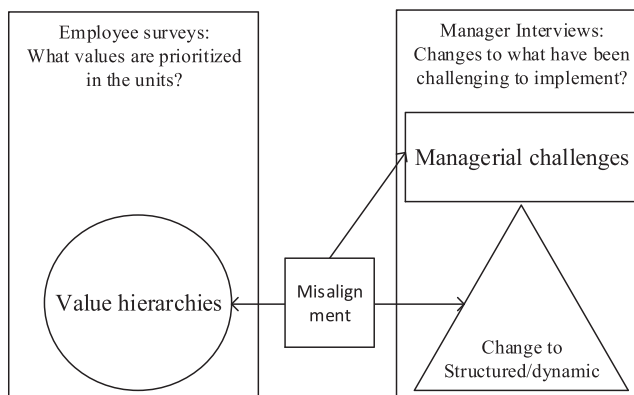


Figure 3. A visualization of the relationship between the interviews and survey data.

industries: the food industry ($N=158$), life sciences ($N=481$) and retail ($N=88$). The research included 25 participant companies and organizations, from small-scale start-ups to well-established medium-sized companies and local affiliates of international corporations.

The survey was administered to the employees of companies that were active in Finland during 2017–2018. Both digital and paper versions were administered, while ensuring that each respondent only responded once to the questionnaire. The data were collected as follows: First, the values of the employees at the units were measured using Schwartz's et al. (2012) portrait values questionnaire. Second, each unit's supervisor was asked to describe what type of managerial challenges they face ($N=19^1$). As a rule, these challenges related to changing the ways their employees work. Both authors were present during most of the interviews. The interviews were scheduled for an hour, and they were recorded when recording consent was received from the informant(s). If recording consent was not received, the authors made field notes during and after the interviews. The interviews were followed by debriefings between the authors where observations were discussed and compared. Table 2 provides an overview of the quantitative and qualitative data.

Due to the differences in company size, smaller companies and departments of larger companies are commonly referred to as 'units'. The level of analysis are the value hierarchies of units that the interviewees (managers) manage. The companies were randomly chosen and were contacted separately by the authors. They were not aware of each other's participation in the research project. The CEO, managing director or a human resources manager administered the survey to the employees. A sample of 933 employees was collected, and 206 responses were dropped because they were incomplete. Participation in the survey was voluntary but was encouraged by management to ensure that the results could be utilized for organizational development, which focused on management and leadership. A lottery of three cell phones worth €69 each served as an additional incentive to participate in the survey.

Table 2. The scheduled length of discussions, and survey response rates.

Unit	Interview type (Participants)	Response rate	Responses	Size of organization
1	Group (3)	23%	58	250
2	Regular	32%	19	60
3	Regular	56%	9	16
4	Regular	56%	14	25
5	Regular	100%	11	11
6	Group (3)	58%	14	24
7	Regular	80%	8	10
8	Group (2)	59%	41	70
9	Group (3)	33%	11	33
10	Regular	70%	94	134
11	Regular	24%	36	150
12	Regular	71%	12	17
13	Regular	35%	7	20
14	Group (3)	41%	14	34
15	Group (5)	48%	45	94
16	Group (8)	61%	64	105
17	Group (4)	70%	71	102
18	Regular	46%	38	82
19	Regular	63%	5	8

The Portrait Values Questionnaire (PVQ-RR) was used to measure the value hierarchies of the units. The PVQ-RR is a thoroughly tested and validated method for measuring values (e.g. Schwartz & Butenko, 2014; Schwartz et al., 2012). The PVQ-RR identifies 19 value types (see Figure 1 and Table 1). It contains three values (items) for each value type. The PVQ-RR asks the respondent to answer the question, *how much like you is this person?* The responses are given on a scale from *not like me at all* (1) to *very much like me* (6). For example, *it is important to him to have a good time* (hedonism). Respondents of different sexes answer questionnaires with different pronouns. The survey included questions of demographics, and for some of the respondents, it included a questionnaire designed to chart their sociotechnical networks, the results of which are presented elsewhere because they are not relevant for this study.

Demographics

The sample is 37% male and 63% female, and most of the respondents were born in the 1960s (23%), 1970s (28%) and 1980s (20%). The 1950s, 1990s and 2000s accounted for 18% of the responses in total. The majority of the respondents (39%) had completed secondary school (high school or vocational school), the second-largest group (24%) has a master's degree and the third-largest group (14%) has a bachelor's degree. PhDs and people that only completed elementary school account for 13% of the responses. The most common educational backgrounds were in business (12%) and the natural sciences (28%). 17% of the respondents titled themselves as managers, which includes middle managers ($N=40$), supervisors ($N=86$) and top management ($N=35$).

Correlations and Means

The value scores are centred to correct scale use biases by calculating the mean rating (MRAT) of each respondent and subtracting it from their responses. The centred scores were used to construct the value profiles of the units. The items were keyed according to Schwartz's manual for working with the PVQ-RR that is available online.² As instructed in the manual, we present the correlations between the 19 value types in Table 4 to enable future meta-analyses of the relations between values. The significant and negative correlations between conformity: rules and self-direction: action ($r = -.23$) and thought ($r = -.16$) values indicate that different respondents value following rules and autonomy. Security: personal is positively correlated with conformity: rules ($r = .25$) and is negatively correlated with self-direction: action ($r = -.08$) and thought ($r = -.17$). Rules are then presumably a source of personal security for the respondents. Face is the only emphasized value with a negative relationship with the universalism and benevolence values, which is in line with its adjacency to the self-enhancement values in the value structure (Schwartz, 2017).

The correlations analysed against the background of the sample means in Figure 4 and Table 3 indicate that value differences mainly exist between people that prioritize self-direction values and people that prioritize conformity: rules and security: personal. Overall, the value priorities in the data reflect recent research on Finnish values where benevolence, security, universalism, self-direction and conformity are prevalent within the general population (Helkama, 2015). In 2018, the most important values in the Finnish general population remain otherwise the same, but security was ranked most

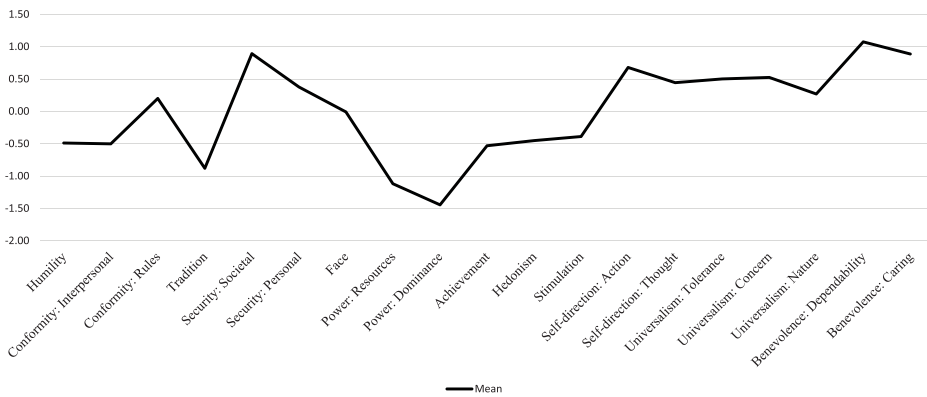


Figure 4. Sample means of centred scores for each value type.

Table 3. Sample means of centred scores, standard deviations, and responses per value type.

	Descriptive Statistics		
	Mean	Std. Deviation	N
Humility	-0.486	0.840	727
Conformity interpersonal	-0.500	0.960	727
Conformity rules	0.197	0.847	727
Tradition	-0.879	1.002	727
Security societal	0.874	0.667	727
Security personal	0.372	0.613	727
Face	-0.007	0.845	727
Power resources	-1.125	0.909	727
Power dominance	-1.425	1.044	727
Achievement	-0.520	0.861	727
Hedonism	-0.453	0.936	727
Stimulation	-0.382	0.866	727
Self-Direction action	0.677	0.668	727
Self-Direction thought	0.443	0.694	727
Universalism tolerance	0.502	0.726	727
Universalism concern	0.514	0.770	727
Universalism nature	0.258	0.882	727
Benevolence dependability	1.073	0.544	727
Benevolence caring	0.877	0.554	727

important (Rinta-Kiikka et al., 2018). The similarity of the results with the previous independent studies indicates a lack of non-response bias in the sample.

Qualitative Method

The authors conducted interviews with managers to gain insight into what types of challenges managers of the participating units faced in their work. The managers were introduced to the theme of the research project before the interview. The topic of change emerged in an inductive manner as the interviews were analysed and patterns identified (cf. Ellingson, 2013). The interviews were scheduled for an hour, which included the presentation of unit-specific results of the PVQ-RR. We interviewed the managers in Finnish prior to the presentation of the unit values. The interviews were open-ended and involved a single question: *What challenges do you face in your work?* Example follow-up questions

were the following: *Could you provide me with an example? In what situations do you face these challenges?*

Some informants described challenges that could not be directly associated with the goals of any specific value type or to changes; these challenges are not presented here, but they relate to, for example, the flow of information, lack of awareness of activities in other departments, and recruitment practices. To ensure that our representations of the statements correspond to the informants' experiences, we provided them with an individual opportunity to comment the presentations reported below. No misunderstandings were reported.

The coding process was performed as follows: first, the handwritten field notes and transcribed interviews were imported to Nvivo 12. Second, the material was coded with the intent to identify accounts that described managerial challenges. Third, the managerial challenges were coded according to which higher-order value type they represented (e.g. openness-to-change or conservation). For example, instances where proactivity was involved, the case was coded as openness to change, because the values are positively related to suggestion-making and proactivity while conservation values have a converse relationship to proactivity (Lipponen et al., 2008; Parker et al., 2010; Seppälä et al., 2012). Finally, the passages were coded into the value types they represented based on the consequences the situations would have for the attainment of the values. For example, increasing regulation would affect the attainment of conformity values positively while it would limit opportunities to pursue self-direction values.

Following the coding according to values, the changes were coded based on how they affected the work environment. For example, increasing regulation was coded as making the work environment more structured, while requirements of increased proactivity were coded as making the work environment more dynamic. [Figure 5](#) illustrates the change objectives and how they were categorized as dynamic or structured.

A translation of the presented statements from Finnish to English was performed by the main author, who has worked in a multilingual (Finnish-Swedish-English) environment for several years, has published in English and communicates frequently in English both verbally and in text, and whose mother tongues are Finnish and Swedish (i.e. the language proficiency is adequate for translating the quotes). Further, the strength of translating one's own interviews is that the theme and context are familiar, which enables the translation of meanings inherent in the statements beyond lexical translation.

Integrated Analysis

The review of previous research brought forth two expectations about the relationship between changes in the work environment and values. First, that managers of units that prioritize conservation values over openness-to-change values would report challenges to implement changes that make work more dynamic. Second, that managers of units that prioritized openness-to-change values over conservation values would report challenges to implement changes that make work more structured. The theoretical background to this is that the outcome of such changes would lead to work environments that decrease opportunities to attain said values, which decreases how well the jobs fit the employees' values after the change. Thus, it leads to a negative perception of the changes through decreased 'fit' between values and the work environment.

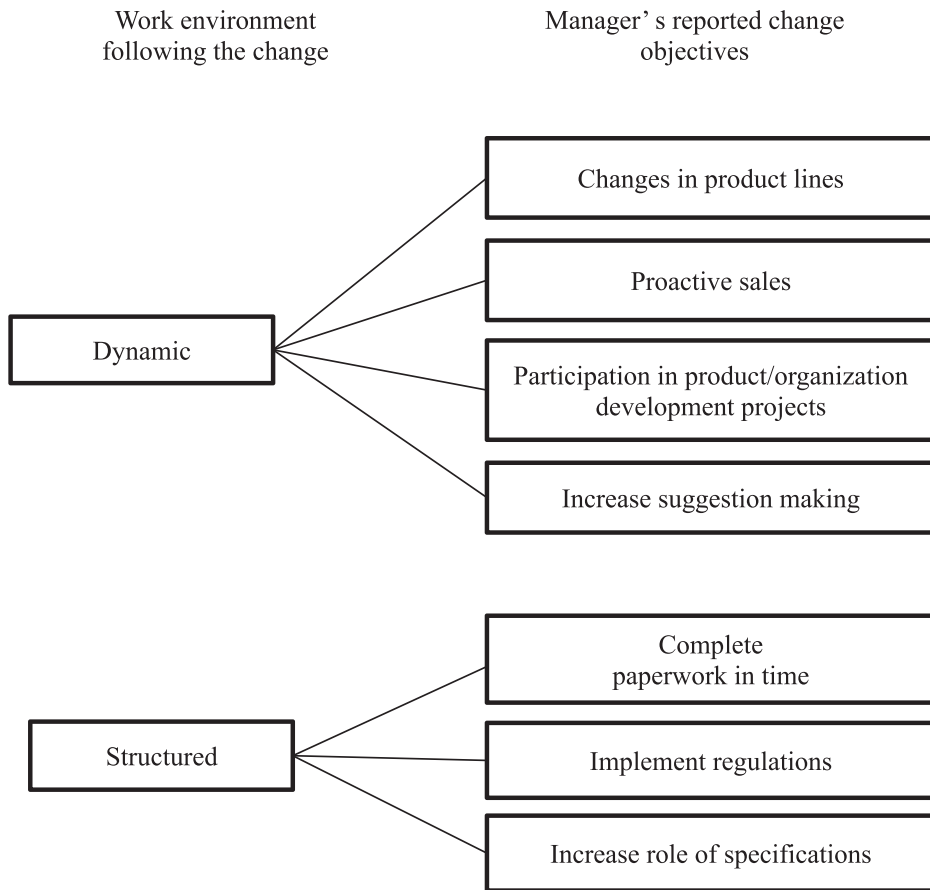


Figure 5. The categorization of the change objectives that managers reported in interviews.

The analysis is divided into separate sections according to the propositions stated in the theory section. 17 challenges were identified as potential instances that disrupt the alignment of values and jobs. The value hierarchies of 12 units reflected a theoretically supported misalignment of values and work following the reported change objective. Example cases are presented in tables that include an excerpt from the interviews with the managers and the value hierarchies of the units. The value hierarchies are an important aspect of the analysis since the theory of basic human values postulates that values are ordered by relative importance and activated when a situation threatens or benefits their attainment *if* they are prioritized (Schwartz, 1992, 2017; Verplanken & Holland, 2002). Thus, managers for units that place conservation values higher than openness-to-change values in the value hierarchy report challenges that relate to different types of change than managers of units with other value priorities.

Conservation Values and Making the Work Environment more Dynamic

The following examples derive from units where managers have faced challenges when implementing changes that make work more dynamic and that prioritize conservation values more than openness-to-change values. Both organizations are attempting to

change their employee’s behaviour from being structured (e.g. receive orders, waiting for instructions) to be more proactive, mainly making suggestions, either to customers or for product/organizational development.

The supervisor of Unit 3 struggles to implement a proactive sales behaviour (Table 5). The focal point of the change is to create more added-sales, which means that the sales person would suggest additional products to a customer placing an order. In this particular case, it relates to selling additional pastries to customers buying products that are clearly for occasions that involve consumption of several different baked goods. The change as such may not seem dramatic, however, against the background of the research reviewed above (e.g. Lipponen et al., 2008; Oreg et al., 2008; Parker et al., 2010; Seppälä et al., 2012) the new sales behaviour aligns with the self-direction and stimulation values because it requires independent choices and suggestion-making. Thus, it conflicts with conservation values. The change from reactive to proactive sales has negative consequences for the stability that is central to the attainment of conservation values. Therefore, the change produces a misalignment between the work environment and conservation values.

The unit’s value hierarchy (Table 5) supports this analysis. The value hierarchy indicates that the team prioritizes conformity: rules and security: personal values and provides further insights into the challenges that s/he describes. Both values relate to the appreciation of stability and predictability (Schwartz, 2017). The current sales strategy is therefore more ‘fit’ for their value profile than what the new strategy would be. The change to proactive sales would make rules of customer service fuzzier, that is, the sales team could no longer simply rely on fulfilling customer orders. It would also become less predictable, because the customer might react in many ways to the suggestion of additional products. Further, proactive sales are not conventional in Finland, the main author has worked for six years in sales and has observed many different reactions to proactive sales from customers ranging from gratitude to irritation. Thus, the change can also relate to breaking local norms of selling, which increases the change’s misalignment with the conformity and security values. Thus, the integrated analysis indicates that the manager’s description of the challenge reflects a misalignment between the change objective and the work unit’s values.

Table 5. Excerpt from interview with the CEO of Unit 3 and the seven most important values of the unit.

Transcript – CEO, Unit 3	Position in hierarchy	Value type
<i>R: And then there is, of course, the sales. Not as much with production, but with sales, it's kind of they run like racehorses with blinders on their eyes. They can only run one bend and not really think about what can be done in many different ways in life. Really good people, it's not that, but innovation is lacking.</i>	1 2 3 4	Benevolence: Dependability Security: Social Universalism:
<i>I: Do they take customer feedback and provide development ideas?</i>	5	Concern
<i>R: Well, actually no. We haven't received any... I: Was the point that the salespeople would learn to promote and sell your new products?</i>	6 7	Benevolence: Caring Conformity: Rules Security: Personal
<i>R: Yes, that was one thing. How to sell more, or how to make single purchases bigger. Like when someone orders a cake, then it's probably for a party. So why not ask right away if they would like buns and cookies for coffee also? With these small things. And not just taking the orders, but we couldn't make it work.</i>		Self-direction: Thought

The CEO of Unit 2, likewise a company in the food industry, has tried to engage his/her team in developing the company's products and services. During the interview, s/he stated that s/he was struggling with this change and that s/he was attempting to make the company more innovative (Table 6). While attempting to change the behaviour of the employees s/he was, however, confronted with a lack of proactivity from their part. This was indicated by a lack of independent decision-making and suggestion-making. For example, the organization leaned heavily on her/him for decisions as well as did not provide her/him with problem solving suggestions. The previous manager was described as authoritarian and not appreciative of the personnel's ideas, which is likely reflected in the values of the employees as few other units prioritized conformity: interpersonal in the sample. The main author met the CEO a year after the interview and inquired about the challenges but s/he was still struggling with the same issues.

The unit's value hierarchy (Table 6) reflects the challenges that the CEO describe. The changes that the CEO was implementing aligns with openness-to-change values. The unit prioritizes conformity: interpersonal and security: personal. The change s/he was driving misaligns work with the conformity and security values because the development of new products requires creativity and suggesting solutions relates to proactivity, which has negative consequences for the stability and predictability desires inherent in conformity and security values (Seppälä et al., 2012). Thus, one can expect that such changes affect the fit between values and the work environment negatively. Thus, the change is misaligned with the values of the unit and the change becomes difficult to implement.

The observations above indicate that changes that result in requirements for proactivity or dynamism are misaligned with the motivational goals of conservation values, which makes such changes difficult to implement. The changes that the managers attempt to implement affect the day-to-day work of the employees and thereby affects the alignment between values and the work environment. Much in the similar manner as changes can affect the alignment of skills and work requirements (Caldwell, 2011), the presented changes affect the alignment between values and work environments. In both units, the prior work method has been to do as the supervisor asks or to provide customers with what they request, which corresponds well to the motivations of stability and certainty that underlie conservation values. The new requirements, however, relate to independence and proactivity, which decreases opportunities to attain the stability and

Table 6. Excerpt from fieldnotes of an interview with the CEO of Unit 2 and the seven most important values of the unit.

Fieldnote 1 – CEO, Unit 2	Position in hierarchy	Value type
<i>The production department is still very management-driven. I got the picture that the managers rely heavily on the CEO to make decisions and that the personnel do not present their suggestions. The CEO said, and I quote: 'I pay for the hands and feet, but I'd like their heads to contribute as well'... The CEO is clearly driven to change the company and have the entire company engage in the process of development. He mentions that change is going to be a constant during his time. He wanted the production department to participate more actively in product development.'</i>	1	Benevolence:
	2	Dependability
	3	Security: Social
	4	Universalism:
	5	Tolerance
	6	Conformity:
	7	Interpersonal
		Self-direction: Thought
		Security: Personal
		Self-direction: Action

predictability that is central to conservation values. Thus, a misalignment between the values of the employees and their work environment occurs, which creates challenges to implement the changes.

Openness-to-change Values and Making the Work Environment more Structured

The second proposition that rose from the literature review was that managers of units that prioritize openness-to-change values over conservation values would experience challenges related to implementing changes that structure or regulate action. Such changes would make the work environment more structured and thus oppose openness-to-change values.

The manager of Unit 8, a factory, also faced challenges in changing the behaviour of her/his personnel, leading the team of managers to describe their personnel as change resistant. The staff displayed change resistance when they were implementing increased regulations. The regulations related to information security and plant safety. The managers explained that their personnel argued that they know how things are done, which indicates a level of self-direction and that they experienced the change as imposed. The changes that they implemented restrict actions because they increase the regulations that the employees needed to comply with. Based on the literature, the change would align with conservation values and contradict openness-to-change values due to its imposed and regulative nature.

The value hierarchy of the unit (Table 7), indicates that self-direction values are prioritized within the unit. Hence, the restrictive nature of the changes contradicts the central desire for freedom and autonomy in the unit. Previous scholars have argued and showed that there is a negative relationship between changes that restrict actions and the self-direction values (Sverdlik & Oreg, 2009). Thus, the value hierarchy of the unit and the characteristic of the change are indicative of a value misalignment. The unit values freedom, while the change restricts freedom. Therefore, the situation is both relevant for the values and has negative consequences for their attainment, resulting in negative attitudes to the increase of regulation.

The CEO for Unit 12, a company in the life sciences industry, explained the difficulty of having his/her employees follow customer specifications in their work process. The CEO expressed clearly that these challenges were reoccurring; the employees – highly trained experts in their field – had their own way of working that had proven efficient and ignored the additional specifications. As with Unit 8 above, the changes that the CEO wanted to

Table 7. Excerpt from fieldnotes from interview with the Manager of Unit 8 and the seven most important values of the unit.

Fieldnote 2 – Manager, Unit 8	Position in hierarchy	Value type
<i>They considered their staff to resist change. This was manifested when [the corporation] enforced stricter security regulations. The personnel have pointed out that they have been working there for twenty years, they know what they are doing. The same has been true for enforcing stricter information security regulations and training that [the corporation] has delivered. The experience has been that the regulations are strange in a small community where trust in each other is very high.</i>	1	Security: Social
	2	Benevolence:
	3	Dependability
	4	Benevolence: Caring
	5	Self-direction: Action
	6	Self-direction:
	7	Thought
		Universalism: Concern
		Security: Personal

Table 8. Fieldnotes excerpt from interview with the CEO of Unit 12 and the seven most important values of the unit.

Transcript – CEO, Unit 12	Position in hierarchy	Value type	
<i>A: Well, it's difficult to make quick changes in people's ways of working. People are used to doing things in a certain way and they usually do it the same way. It's really difficult to make them change unless you give a power order.</i>	1	Benevolence: Caring	
	2	Universalism: Nature	
	3	Benevolence:	
	<i>Q: Is it like you want to change a lab process that has been done a certain way?</i>	4	Dependability
		5	Security: Social
	<i>A: ... There are work descriptions specified for our client projects, and some people have a tendency to specifically avoid them. To get people to understand ... that following the customer specifications is really important. It has been challenging to make them understand why it is important to follow the specifications ... just as one example.</i>	6	Self-direction: Action
		7	Universalism: Tolerance Universalism: Concern

implement relate to regulating actions. Thus, the change aligns with conservation values in two different ways. The customer, or the CEO, imposes it and it structures work. For the same reasons, the change has negative consequences for the attainment of openness-to-change values.

The unit's value hierarchy (Table 8) reflects this misalignment. The high rank of the self-direction: action value indicates that independence and freedom are important desires within the unit. The change restricts this, leading to a contradiction between the change and central values of the unit. Thus, because the situation is relevant for the attainment of the value and affects it negatively, the change is challenging to implement. The values of the unit direct the actions to the opposite direction. Instead of abiding by given specifications, the unit follows their own ways of working. The situation's relationship to the self-direction values is further emphasized by the fact that the unit does not conform to the imposed change, which is indicative of openness-to-change values (Sverdlik & Oreg, 2009).

Managers of other units that score higher on self-direction values than conformity and security values reported similar challenges. They report resistance to implementing structured tasks such as writing reports, checking billing and doing cost follow-ups. These activities are not at the core of the unit's tasks but are extracurricular activities required by other stakeholders. Therefore, it is likely that they do not represent the work that attracted the employees to the job, and are therefore not aligned with their values. As a manager of such unit remarked, reporting is something that the employees want to do quickly so that they can continue with their 'real work'.

Discussion

The aim of the paper was to understand how changes from structured to dynamic and from dynamic to structured work can misalign work environments and values. The reason why research on change from structured to dynamic work environments is extremely important is the anticipated decreased demand for structured work and increase of creative and social work in the labour market (Acemoglu & Restrepo, 2018; Arntz et al., 2016; Frey & Osborne, 2017; Mitchell & Brynjolfsson, 2017). Currently, a gap exists in the literature on how changes in work environments affect the alignment of values and the work environment. This paper contributes to current knowledge by taking the

first steps to filling this gap by both presenting the theoretical mechanisms that link values to change and by empirically investigating the relationship between change objectives and basic values.

The mixed-methods design revealed how value misalignments manifested when managers implemented changes that would make the work environment either more structured or dynamic. During the interviews, managers described how they attempted to change work and reflected on what kind of changes were difficult to implement in their units. The integrated analysis revealed that a majority of the instances where managers described challenges to implement change related to misalignments between the change objective and their unit's value priorities. As proposed, managers of units that prioritized conservation values more than openness-to-change values reported challenges when transitioning to dynamic ways of working. Managers of units that prioritized openness-to-change values, in contrast, reported challenges when attempting to structure work.

Relating the mechanisms that link values and behaviour to change is a considerable theoretical contribution with theoretical and practical implications. For values to activate during a change, the change needs to affect the pursuit of a prioritized value (e.g. Sverdlik & Oreg, 2009). According to value researchers, values are cognitive representations of basic needs through which situations are assessed (Rokeach, 1973; Schwartz, 1992). The importance of the basic needs varies across people and across groups, leading to different interpretations of situations. Someone prioritizing security views situations differently from someone who prioritizes excitement. However, for values to be an active frame of reference the situation must have consequences for the attainment of the value and the value needs to be prioritized (Schwartz, 2017; Verplanken & Holland, 2002).

This study shows that conservation and openness-to-change values can affect implementation of changes when they involve transitions between structured and dynamic work environments. Dynamic work has negative consequences for attaining conservation values because it decreases the predictability and stability of work. Structured work on the other hand has negative consequences for attaining openness-to-change values because it limits freedom to decide on actions. In such situations, values guide the actions of change recipients in the opposite direction of the change initiative and the change becomes challenging to implement.

Additionally, the paper contributes to the change management literature by highlighting that considering the change recipient's values is important when communicating change objectives. Armenakis' et al. (1993) model of change readiness emphasizes the importance of communication during change management. By designing a directed change message, change managers make people aware of the need of the change and its attractiveness, which motivates people to engage in the change initiative (Armenakis et al., 1993). A change message is likely to increase change readiness by considering what consequence a change has for the attainment of prioritized values. During this study, a manager of a unit that prioritized security illustrated how values could serve as the basis for change communication in practice:

- He would emphasize the point that their new business model, which was more dynamic than the old business model, is a source of security because it ensures the survival of the business. (The change's positive consequences for the security value)

- He would emphasize the risks of continuing with the current model. (The change's negative consequences for the security value)

This paper shows that it is important to align change initiatives with the values of change recipients. When misalignment exist, the change message must alleviate the misalignment to make the change attractive. This can be done by crafting the change message in a way that illustrates the positive consequences of the change for the change recipient's values and the negative consequences of remaining in the current situation.

Figure 2 visualizes how values relate to change and how a change manager can use the change message to socially construct how recipients perceive the consequences of change in relation to their values and thereby affect attitudes to the change. The ability to manage the misalignment with dynamic work and conservation values may prove to be critical for change managers that are implementing intelligent technologies because the technologies are expected to decrease structured and increase dynamic work (Arntz, 2016; Brynjolfsson & McAfee, 2014; Ford, 2013; Frey & Osborne, 2013). Integrating the mechanisms that link values to behaviour can serve as a framework for change communication. Using the value theory in such way requires knowledge of which values employees prioritize and what aspects of the change are relevant for the particular values. The model still requires empirical testing, however, studies in the project management field suggests that Schwartz's theory is a fruitful basis for communication strategies (Långstedt et al., 2017; Mills & Austin, 2014; Mills et al., 2009).

Finally, the study indicates that key concepts in Schwartz (1992) theory are problematic. Despite the categorization of stimulation and self-direction values as openness-to-change, these values do not necessarily entail positive attitudes toward change (cf. Sverdlík & Oreg, 2009). As this study shows, none of the values involved an openness to change *per se* as the current conceptualization implies. Rather, as the link between values and behaviour suggests, the decisive factor is whether a change has positive or negative consequences for the attainment of the value. Current research on values and change has not brought this observation to attention. However, it is important to emphasize this because the current conceptualization of values implies that values indicate a disposition toward change in general. The results and theoretical discussion clearly show that values indicate a resistance or openness to change only in relation to the change process and its objective (i.e. how it changes work). Thus, the study concludes that as important as the change process is for change management, it is as important to understand how change initiatives affect the alignment of the work environment with the values of change recipients.

Practical Implications

This paper has considerable practical implications for managers and HR managers that struggle with change in their organizations. Change relates fundamentally to the values of the personnel, as the present paper has illustrated. The findings and literature review show that the misalignment between personal values and change objectives affects change readiness negatively. The results imply that when managers implement changes, they should alleviate potential misalignments between the change outcome

and change recipient values when designing a change process. When planning change initiatives, managers should be made aware of the value priorities in their units and understand how the changes affect the alignment of the unit's value priorities and work environments. Studies have found that the values-work alignment correlates positively with organizational commitment and job satisfaction (Kristof-Brown et al., 2005), thus failing to maintain the alignment may lead to decreased organizational commitment and job satisfaction amongst change recipients.

Adding elements that share some characteristics with the previous processes could alleviate misalignments. If the change involves increased regulation, self-direction can be realized in some other way – perhaps by participatory change. If the new tasks are dynamic, perhaps managers can define some ground rules to increase a sense of predictability for those that prioritize conservation values. Another potential approach to managing change from a values perspective is to implement incremental changes. That is, to implement change gradually towards the objective of the change, making changes that make the work correspond to adjacent values in the value structure over several steps. The particularities of values based change management does, however, require further research.

Limitations and Future Research

The study provides much needed insights into the question of change and values; however, more research is needed to increase the utility of values research in practice-oriented fields such as HRM and change management.

The study's limitations call for further research on the relationship between change objectives and values. The studied changes related to transitions between dynamic and structured work, which is not as relevant for the self-transcendence and self-enhancement values. Thus, the study did not investigate potential intricacies related to misalignments with changes that relate to the second major dimension in the theory of basic human values. A fruitful venue for future research is to investigate in what contexts change readiness and resistance relate to the self-enhancement vs. self-transcendence dimension of the value structure.

The data collected for the present paper is based on manager accounts. Thus, future research would benefit from interviewing employees about their own value priorities and experiences of changes at work. The interviews could be combined with the PVQ-RR measure to relate the experiences of the employees and their personal values directly. The current approach used value priorities at the unit level and could not report a direct link between the values of individuals and their attitudes toward changes.

A final limitation of the study is that previous research has found that managers have a characteristic value profile (Knafo & Sagiv, 2004). Thus, they are likely to make sense of situations differently than their employees do. Mitigating this effect was attempted by using focus group interviews with employees, however, most of the participating companies found focus groups to be too time-consuming and did not agree to them. The performed focus group interviews indicate that combining them with team value profiles is fertile ground to explore. The combination can provide critical insights for practitioners and researchers in relation to managing change in a context of units with diverse sets of (sometimes conflicting) values.

Despite these limitations, the combination of theoretical strength, qualitative interviews, and quantitative measures provides a rigid foundation for inferences about the studied relationships. Future researchers are urged to pursue mixed-methods approaches in research on personal values and change. This is critical because the combination of qualitative and quantitative methods has the potential to contextualize quantitative results and reveal unexpected relationships (Tashakkori & Teddlie, 2015).

Notes

1. Some units were dropped due to low response rates (threshold for inclusion = 20%) and we did not have the opportunity to interview managers of all units.
2. https://www.researchgate.net/publication/308166496_Coding_and_analyzing_PVQ-RR_data_instructions_for_the_revised_Portrait_Values_Questionnaire.

Acknowledgements

We are grateful to our colleagues and especially to associate professor Magnus Hellström and professor Peter Nynäs for their constructive comments and support throughout our research process. The two reviewers of the paper are acknowledged for providing feedback that improved the paper considerably. We acknowledge the financial support that enabled us to pursue our research: Turku City, Bergsrådet Tekn. och Ekon. dr h.c. Marcus Wallenbergs Stiftelse för Företagsekonomisk Forskning foundation, Stiftelsen Åbo Akademi and Turun Kauppaopetussäätö.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by Bergsrådet teknologie och ekonomie doktor Marcus Wallenbergs stiftelse för företagsekonomisk forskning; Turun Kaupunkitutkimusohjelma; Stiftelsen för Åbo Akademi; Turun Kauppaopetussäätö; Työsuojelurahasto.

Notes on Contributors

Johnny Långstedt is a PhD candidate at the department of comparative religion. His research revolves around values in companies and the changing landscape of work. Further, he researches project management and the intercultural encounters in international projects and values-based stakeholder management.

Julius Manninen is an expert on cleantech and circular economy and is a project specialist at Turku Science Park Ltd. His focus is on ecosystem level changes towards sustainable materials handling and re-use of industrial side-streams.

ORCID

Johnny Långstedt  <http://orcid.org/0000-0003-4334-8720>

References

- Acemoglu, D., & Restrepo, P. (2018). Artificial intelligence, automation and work. *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.3098384>
- Arieli, S., Sagiv, L., & Cohen-Shalem, E. (2016). Values in business schools: The role of self-selection and socialization. *Academy of Management Learning and Education*, 15(3), 493–507. <https://doi.org/10.5465/amle.2014.0064>
- Armenakis, A. A., & Harris, S. G. (2009). Reflections: Our journey in organizational change research and practice. *Journal of Change Management*, 9(2), 127–142. <https://doi.org/10.1080/14697010902879079>
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations*, 46(6), 681–703.
- Arntz, M. (2016). *The risk of automation for jobs in OECD countries*. 189, 1–34. <https://doi.org/10.1787/1815199X>
- Arntz, M., Gregory, T., & Zierahn, U. (2016). The risk of automation for jobs in OECD countries: A comparative Analysis. In *OECD Social, Employment and Migration Working Papers* (Issue 189). <https://doi.org/10.1787/5jlz9h56dvq7-en>
- Bardi, A., & Schwartz, S. H. (2003). Values and behavior: Strength and structure of relations. *Personality and Social Psychology Bulletin*, 29(10), 1207–1220. <https://doi.org/10.1177/0146167203254602>
- Bryman, A. (2007). Barriers to integrating quantitative and qualitative research. *Journal of Mixed Methods Research*, 1(1), 8–22. <https://doi.org/10.1177/2345678906290531>
- Bryman, A., Becker, S., & Sempik, J. (2008). Quality criteria for quantitative, qualitative and mixed methods research: A view from social policy. *International Journal of Social Research Methodology*, 11(4), 261–276. <https://doi.org/10.1080/13645570701401644>
- Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress and brilliant technologies*. W.W. Norton & Company Inc.
- Burnes, B., & Jackson, P. (2011). Success and failure in organizational change: An exploration of the role of values. *Journal of Change Management*, 11(2), 133–162. <https://doi.org/10.1080/14697017.2010.524655>
- Caldwell, S. D. (2011). Bidirectional relationships between employee fit and organizational change. *Journal of Change Management*, 11(4), 401–419. <https://doi.org/10.1080/14697017.2011.590453>
- Caldwell, S. D. (2017). Change and fit, fit and change. In S. Oreg, A. Michel, & R. Todnem By (Eds.), *The psychology of organizational change: Viewing change from the employee's perspective* (pp. 255–274). Cambridge University Press.
- Caldwell, S. D., Herold, D. M., & Fedor, D. B. (2004). Toward an understanding of the relationships among organizational change, individual differences, and changes in person-environment fit: A cross-level study. *Journal of Applied Psychology*, 89(5), 868–882. <https://doi.org/10.1037/0021-9010.89.5.868>
- Denzin, N. K., & Lincoln, Y. S. (2008). *The landscape of qualitative research* (3rd ed.). SAGE Publications Ltd.
- Dibella, A. J. (2007). Critical perceptions of organisational change. *Journal of Change Management*, 7(3–4), 231–242. <https://doi.org/10.1080/14697010701649707>
- Ellingson, L. L. (2013). Analysis and representation across the continuum. In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (4th ed., pp. 413–445). SAGE Publications Ltd.
- Feather, N. T. (1995). Values, valences, and choice: The influence of values on the perceived attractiveness and choice of alternatives. *Journal of Personality and Social Psychology*, 68(6), 1135–1151. <https://doi.org/10.1037/0022-3514.68.6.1135>
- Ford, M. (2013). Could artificial intelligence create an unemployment crisis? *Communications of the ACM*, 56(7), 37–39. <https://doi.org/10.1145/2483852.2483865>
- Frey, C. B., & Osborne, M. A. (2013, September). *The future of employment: How susceptible are jobs to computerisation?**

- Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change*, 114, 254–280. <https://doi.org/10.1016/j.techfore.2016.08.019>
- Hanel, P. H. P., Vione, K. C., Hahn, U., & Maio, G. R. (2017). Value instantiations: The missing link between values and behavior. In S. Roccas & L. Sagiv (Eds.), *Values and behavior: Taking a cross-cultural perspective* (1st ed., pp. 175–190). Springer.
- Helkama, K. (2015). *Suomalaisten Arvot: Mikä Meille on Oikeasti Tärkeää?* Suomen Kirjallisuuden Seura.
- Hitlin, S., & Piliavin, J. A. (2004). Values: Reviving a dormant concept. *Annual Review of Sociology*, 30 (2004), 359–393. <https://doi.org/10.1146/annurev.soc.30.012703.110640>
- Holland, L. J. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Prentice-Hall.
- Knafo, A., & Sagiv, L. (2004). Values and work environment: Mapping 32 occupations. *European Journal of Psychology of Education*, 19(3), 255–273. <https://doi.org/10.1007/BF03173223>
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor FIT. *Personnel Psychology*, 58(2), 281–342. <https://doi.org/10.1111/j.1744-6570.2005.00672.x>
- Långstedt, J., Wikström, R., & Hellström, M. (2017). Leading human values in complex environments. In *Practices for network management: In search of collaborative advantage*. https://doi.org/10.1007/978-3-319-49649-8_4
- Lipponen, J., Bardi, A., & Haapamäki, J. (2008). The interaction between values and organizational identification in predicting suggestion-making at work. *Journal of Occupational and Organizational Psychology*, 81(2), 241–248. <https://doi.org/10.1348/096317907X216658>
- Mills, G. R., & Austin, S. A. (2014). Making sense of stakeholder values emergence. *Engineering Project Organization Journal*, 4(2–3), 65–88. <https://doi.org/10.1080/21573727.2014.940895>
- Mills, G. R., Austin, S. A., Thomson, D. S., & Devine-Wright, H. (2009). Applying a universal content and structure of values in construction management. *Journal of Business Ethics*, 90(4), 473–501. <https://doi.org/10.1007/s10551-009-0055-7>
- Mitchell, T., & Brynjolfsson, E. (2017). Track how technology is transforming work. *Nature*, 544(7650), 290–292. <https://doi.org/10.1038/544290a>
- Oreg, S., Bayazit, M., Vakola, M., Arciniega, L., Armenakis, A., Barkauskiene, R., Bozionelos, N., Fujimoto, Y., González, L., Han, J., Hřebíčková, M., Jimmieson, N., Kordačová, J., Mitsuhashi, H., Mlačić, B., Ferić, I., Topić, M. K., Ohly, S., Saksvik, PØ, ... van Dam, K. (2008). Dispositional resistance to change: Measurement equivalence and the link to personal values across 17 nations. *Journal of Applied Psychology*, 93(4), 935–944. <https://doi.org/10.1037/0021-9010.93.4.935>
- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 827–856. <https://doi.org/10.1177/0149206310363732>
- Ponizovskiy, V., Grigoryan, L., Kühnen, U., & Boehnke, K. (2019). Social construction of the value-behavior relation. *Frontiers in Psychology*, 10(Apr), <https://doi.org/10.3389/fpsyg.2019.00934>
- Rinta-Kiikka, S., Yrjölä, T., & Alho, E. (2018). 258. *Talous, arvot ja alueellinen sosiaalinen pääoma*.
- Rohan, M. J. (2000). A rose by any name? The values construct. *Personality and Social Psychology Review*, 4(3), 255–277. https://doi.org/10.1207/S15327957PSPR0403_4
- Rokeach, M. (1973). *The nature of human values*. Free Press.
- Ros, M., Schwartz, S. H., & Surkiss, S. (1999). Basic individual values, work values, and the meaning of work. *Applied Psychology*, 48(1), 49–71. <https://doi.org/10.1080/026999499377664>
- Sagiv, L. (2002). Vocational interests and basic values. *Journal of Career Assessment*, 10(2), 233–257. <https://doi.org/10.1177/1069072702010002007>
- Schneider, B., Golstein, H. W., & Smith, D. B. (1995). The ASA framework: An update. *Personnel Psychology*, 48(4), 747–773. <https://doi.org/10.1111/j.1744-6570.1995.tb01780.x>
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25(C), 1–65. [https://doi.org/10.1016/S0065-2601\(08\)60281-6](https://doi.org/10.1016/S0065-2601(08)60281-6)
- Schwartz, S. H. (2017). The refined theory of basic values. In S. Roccas & L. Sagiv (Eds.), *Values and behavior: Taking a cross-cultural perspective* (pp. 51–72). Springer.

- Schwartz, S. H., & Butenko, T. (2014). Values and behavior: Validating the refined value theory in Russia. *European Journal of Social Psychology, 44*(7), 799–813. <https://doi.org/10.1002/ejsp.2053>
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Ramos, A., Verkasalo, M., Lönnqvist, J. E., Demirutku, K., Dirilen-Gumus, O., & Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology, 103*(4), 663–688. <https://doi.org/10.1037/a0029393>
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Torres, C., Dirilen-Gumus, O., & Butenko, T. (2017). Value tradeoffs propel and inhibit behavior: Validating the 19 refined values in four countries. *European Journal of Social Psychology, 47*(3), 241–258. <https://doi.org/10.1002/ejsp.2228>
- Seppälä, T., Lipponen, J., Bardi, A., & Pirttilä-Backman, A. M. (2012). Change-oriented organizational citizenship behaviour: An interactive product of openness to change values, work unit identification, and sense of power. *Journal of Occupational and Organizational Psychology, 85*(1), 136–155. <https://doi.org/10.1111/j.2044-8325.2010.02010.x>
- Sverdlik, N., & Oreg, S. (2009). Personal values and conflicting motivational forces in the context of imposed change. *Journal of Personality, 77*(5), 1437–1466. <https://doi.org/10.1111/j.1467-6494.2009.00588.x>
- Sverdlik, N., & Oreg, S. (2015). Identification during imposed change: The roles of personal values, type of change, and anxiety. *Journal of Personality, 83*(3), 307–319. <https://doi.org/10.1111/jopy.12105>
- Tashakkori, A., & Teddlie, C. (2013). Integrating qualitative and quantitative approaches to research. In L. Bickman & D. J. Rog (Eds.), *The SAGE handbook of applied social research methods* (pp. 283–317). SAGE Publications Ltd. <https://doi.org/10.4135/9781483348858.n9>
- Tashakkori, A., & Teddlie, C. (2015). Overview of contemporary issues in mixed methods research. In *SAGE handbook of mixed methods in social & behavioral research*. <https://doi.org/10.4135/9781506335193.n1>
- Verplanken, B., & Holland, R. W. (2002). Motivated decision making: Effects of activation and self-centrality of values on choices and behavior. *Journal of Personality and Social Psychology, 82*(3), 434–447. <https://doi.org/10.1037/0022-3514.82.3.434>