

## Perceived differences of Austrian, Czech, and Slovakian managers regarding the need for change of future competencies: A self-affirmation perspective.\*

Sonia Ferencikova, Jürgen Mühlbacher, Michaela Nettekoven, Anna Putnova, Tom Siebenaler\*\*

Managers, and especially top and upper managers, are supposed to act as “change leaders” who embrace future changes and constantly improve the status quo. As individual competencies play a key role in tackling upcoming challenges and changes, the purpose of this article is to determine whether top, upper and middle managers from three CEE countries perceive future management competencies differently. The sample consists of 482 managers from different hierarchical levels and industries. After categorizing the answers of two open questions regarding present and future management competencies in five competence classes, a cluster dendrogram as well as a multidimensional scaling method have been used to visualize the expected changes within these competence classes for each country. The analysis reveals that the Austrian top management and Slovakian upper management do not show any willingness to change, leading to a provoking question concerning the role of the middle management as the real driver of change. This surprising finding will be discussed in light of the self-affirmation theory (Steele 1988) describing a psychological mechanism behind the resistance to change.

Von Managern, und insbesondere dem Top und Oberen Management, wird erwartet, dass sie als „change leader“ agieren, welche zukünftige Veränderungen annehmen und den Status Quo laufend verbessern. Da individuelle Kompetenzen eine wichtige Rolle für das Meistern von anstehenden Herausforderungen und Veränderungen spielen, besteht das Ziel dieses Artikels darin zu bestimmen, ob das Top, Obere und Mittlere Management aus drei unterschiedlichen CEE Ländern den zukünftigen Kompetenzbedarf unterschiedlich wahrnimmt. Die Stichprobe besteht aus 482 Managern, die unterschiedliche Posten bekleiden und in verschiedenen Branchen arbeiten. Der eingesetzte Fragebogen fokussiert im Wesentlichen auf zwei offene Fragen nach der Einschätzung gegenwärtiger und zukünftiger Kompetenzen. Nach der Einordnung der Antworten in fünf Kompetenzklassen, wurde ein Dendrogramm sowie die “multidimensional scaling method“ angewandt, um die erwarteten Veränderungen für jedes Land zu visualisieren. Die Analyse offenbart, dass das österreichische Top Management sowie das slovakische

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\*\* Ferencikova Sonia, School of Management, Slovakia. Main research interests: International Human Resource Management, International Strategic Partnerships, Foreign Direct Investments, Doing Business in CEE

Mühlbacher Jürgen (Corresponding Author), Vienna University of Economics and Business, Institute for Change Management and Management Development, Welthandelsplatz 1, 1020 Wien, Austria, juergen.muehlbacher@wu.ac.at. Main research interests: Change Management, Competence Management, Strategic Management

Nettekoven Michaela, Vienna University of Economics and Business, Austria. Main research interests: Learning Analytics, Learning Behaviour, Quantitative Methods (especially Items Response Theory Models)

Putnova Anna, Technological University Brno, Czech Republic. Main research interests: Socio-economic Innovations

Siebenaler Tom, Vienna University of Economics and Business, Austria. Main research interests: Competence Management, Change Management

sche Obere Management keine Veränderungsbereitschaft zeigen, was zu einer provokanten Frage nach der Rolle des Mittleren Managements als eigentlicher Veränderungstreiber führt. Dieser überraschende Befund wird anhand der "self-affirmation theory" (Steele 1988) diskutiert, welche den psychologischen Mechanismus hinter der Veränderungsbereitschaft beleuchtet.

**Keywords:** Competency management, CEE countries, self-affirmation theory, transition economies.

**JEL codes:** M12 Personnel Management, M16 International Business Administration

## 1 Introduction

In the field of organizational science, almost no other issue has been discussed as much as "change" (Wetzel/Van Gorp 2014). To improve the status quo, it is largely recommended to embrace and even create change initiatives. Authors of textbooks for strategic management (Bartlett/Goshal 1997, Brown/Eisenhardt 1998) and change management (Krüger 2000) particularly highlight the important function of top and upper management. Especially with the upcoming role model of the "change leader" (e.g. Kotter 1995), the requirements for change agents increased even more. Instead of solely facilitating change processes, today, a true change leader should be "ready, willing, and able to envision, inspire and support change necessary to move the organization forward" (Gilley 2005:8). An effective manager therefore actively takes action (Fullan 2011) and is generally ready to change (Armenakis/Harris/Mossholder 1993). This readiness to change is defined as "the extent to which an individual or individuals are cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo" (Holt/ Armenakis/Feild/Harris 2007:235). Thus, managers should be willing and able to change – not only the company but also themselves.

Individual competencies are regarded as key aspects, enabling a manager to tackle upcoming challenges and changes whose nature cannot be predicted or determined in a self-organised manner (Erpenbeck/von Rosenstiel 2003). Recent work on individual competency management (e.g., Probst et al. 2000; Sarges 2002) primarily emphasises the fact that competencies are strongly oriented towards the future. Discussions regarding competencies are of importance whenever strategic personnel planning and development take the centre stage in times of great uncertainty. In the following work, competencies are seen as an important starting point for the transformation of managers into efficient change leaders or drivers. Especially the willingness of managers to adopt their current competencies to future challenges will provide a valuable insight into their readiness to change (Armenakis et al. 1993). This leads us to the following research question:

*Which hierarchical differences exist between managers from three CEE countries concerning their perceived future management competencies?*

Failing to consider the possibility that individual readiness towards change might differ among managers prevents the identification of real change drivers. To further discuss the starting point of any change, the individual manager himself, the self-affirmation theory (Steele 1988) is introduced. By understanding the psychological mechanism behind the decision to support or resist change, further light is shed on the behaviour of change agents. Therefore a contribution of this work is to gain new insights by combining the fields of organizational management and social psychology. Furthermore this study uses an innovative approach and operationalizes readiness to change by examining the perception of future competencies.

## 2 Competency Management

Competency management represents a holistic field of research, ranging from strategic to organizational to individual competencies (for a more detailed overview see Mühlbacher 2007). The definition of competency changes with each theory used, i.e., it has a fixed meaning only within the specific construct of a particular competency theory. Competencies in a narrow sense are the dispositions of self-organised actions. As they are internal, unobservable dispositions, competencies are always subjective characteristics, attributed on the basis of problem and solution orientation, by informing a person of an objective – without a specific solution – and then measuring the degree to which the objective was achieved. Competency is defined here as accomplishing or even exceeding a set objective (Erpenbeck/von Rosenstiel 2003). The seminal works of Bartlett and Goshal (1997) or Brown and Eisenhardt (1998) show the need for the adaptation of management competencies based on an increase in speed and complexity in the organizational environment and – vice versa – a lack of flexibility and innovation within organizations. This also requires a change in perspective within competency management. Both the current requirements and the competencies necessary in the future have to become the focal point of the analysis and must be seen as a strategic competitive advantage for the company (McCall 1998). From this point of view, the role of managers and their specific competencies at first remains unanswered. Only the answer to this question, however, makes it possible to improve the effectiveness of change management processes in organizations.

An early differentiation of competencies was made by Jacobs (1989:36), who distinguishes between “hard and soft competencies.” Hard competencies refer, for example, to analytical and organizational capabilities, while creativity and sensitivity are soft competencies. From this, Jacobs develops the argument that hard competencies result in observable behaviour, with the invisible, but dominant soft competencies underlying them. The principles of this conviction,

though conceivable, are difficult to prove and thus this conception has in the theoretical discussion been classified as an artificial differentiation with low explanatory potential (Woodruffe 1993).

This study is based on a classification published by Kasper, Mühlbacher and von Rosenstiel (2005). It focuses on the differences between social and leadership competencies and also on self-dispositive and personal competencies. So it takes the psychological state of the art into account by (1) differentiating between social interaction with and without hierarchical power and (2) dividing short-term changeable individual resources (= self-dispositive competencies) from long-term personal traits. As a result, the following five classes of competencies can be distinguished:

- Self-dispositive competencies, which represent the self-organised use of one's own resources (time, know-how etc.)
- Methodological competencies, comprising all analytical and solution-oriented behaviours
- Social-communicative competencies, covering the area of social interaction (excluding leadership)
- Leadership competencies, including the full range of leadership, motivation and personnel development
- Personal competencies, mainly manifesting themselves in extraordinary personality traits

Based on this classification, the empirical data are coded and then, in a second step, analysed with regard to the influence of the external and the internal environment, in order to answer our research question.

### 3 Self-Affirmation Theory

From a strategic point of view, the identification of future competencies should allow managers to adapt themselves to the requirements, create a competitive advantage for the company (McCall 1998) and thus be a driver of change. This individual adaptation requires the capacity and willingness to change, which could be problematic according to the observation that people, including managers, only change their behaviour if they are forced to. This observation raises the question regarding the psychological mechanism behind the manager's individual resistance to change. The self-affirmation theory (Steele 1988) can be used to interpret why some managers are open to future changes and others show no interest in adapting themselves.

An environmental change or challenge can be perceived as a psychological threat consuming mental resources, which could be used otherwise (Cohen/Sherman 2014). This "inner alarm" can distract individuals from their core tasks (Steele 1988). Whether an event is threatening to a person largely depends on how the environment is subjectively perceived and in which way it affects the

personal identity (Boninger/Krosnick/Berent 1995). The real or perceived failure to fulfil cultural or social standards triggers the emergence of different forms of threats (Leary/Baumeister 2000). Consequently, threats do not only include major life events, such as breaking up with a partner or getting a medical diagnosis, but also more trivial events. For example, a study showed that people tend to defensively rationalize even their selection of a particular music album (Steele/Spencer/Lynch 1993). Thus everyday events that appear small from the outside can be subjectively “big” (Yeager/Walton 2011) and provoke feelings of threat. In this case, instead of long-term learning, people often focus on short-term goals of self-defence (Cohen/Sherman 2014), which in turn prevent adaptive behaviour.

The postulate that people are motivated to maintain their individual’s sense of self-integrity, which could be described as a sense of global efficacy, rests at the center of the *self-affirmation theory* (Steele 1988; Aronson/Cohen/Nail 1999). Thus the overall goal of individuals is to ensure a positive image of oneself as being able to control important outcomes in one’s life (Steele 1988). Consequently the psychological threats mentioned before pose a risk for the self and create psychological discomfort (McQueen/Klein 2006). For example, the self-integrity of some people could be threatened by a negative feedback regarding their communication skills or leadership issues. In this process the self is not limited to one particular identity but can draw on a variety of roles to maintain its perceived integrity (Boninger et al. 1995). These identities are resistant to change and even persist in the face of facts and logical arguments (Abelson 1986). Which particular identity is currently at the center of the self highly depends on the situational context (Cohen et al. 2007). A given context heightens the awareness of an individual’s particular identity and leads to the situation where people are more sensitive to information that threatens their self-integrity.

According to the *fight-or-flight response paradigm* (Cannon 1929), in everyday situations people focus on an immediate threat with the overall goal of self-protection and consequently defensive behaviour. A way to avoid these defensive reactions and to restore one’s global positive self-image is to affirm important aspects of the self that are unrelated to the threatened domain (Steele 1988). Due to a variety of available identities (Boninger et al. 1995), people are able to redefine success in a way that they can rely on their individual strengths (Dunning 2005). By using different identities as alternative sources of self-integrity (Steele 1988) it is possible to establish a new base for the self (Dunning 2005). Following this logic, people have the possibility to compensate their perceived failures by highlighting success in other domains they personally value (e.g. a specific competency friends, a hobby). Such self-affirmations verify the global perception of an “adequate” self and enable people to view threatening events within a broader context (Wakslak/Trope 2009) and without resorting to defensive behaviour caused by a mere fight-or-flight response (Cannon 1929).

As could be seen, self-affirmations can serve as a buffer against psychological threats (Steele 1988; Boninger et al. 1995; Dunning 2005) and reduce psychological discomfort (McQueen/Klein 2006). This psychological discomfort is also known as cognitive dissonance. The *theory of cognitive dissonance* (Festinger 1957; Aronson 1968) postulates that people attempt to appear reasonable to themselves and to others and that their behaviour is consistent with their attitude towards an event. When a person acts in a way that is inconsistent with his beliefs, he will experience tension. Therefore individuals prefer a stable state with a minimum amount of dissonance (Jones 1990), even if it means to resist a positive change. Combining the need to be consistent (Festinger 1957; Aronson 1968) and the maintenance of a positive self (Steele 1988), cognitive dissonance should be reduced by self-affirmation, because the personal standards that are violated by the dissonant behaviour are visible.

To conclude, the self-affirmation theory (Steele 1988) and the related psychological threats (Cohen/Sherman 2014), as well as cognitive dissonance theory (Festinger 1957; Aronson 1968) (for an overview see Figure 1) could be used to explain individual resistance towards change. In the case of a threat, people rely on self-affirmation to enhance their global image and to reduce cognitive dissonance. The willingness to accept future changes (e.g. the learning of a new competence) largely depends on how psychological discomfort, caused by a threat, is handled by individual acts of self-affirmations. The risk of a distorted and misrepresented reality is that people miss potential opportunities for learning and growth. From this, the overall strategic adaptability and the creation of competitive advantages could suffer. Therefore, taking advantage of the benefits of change, as suggested by the vast change management literature, is not that easy to accomplish and relies on hidden psychological mechanisms.

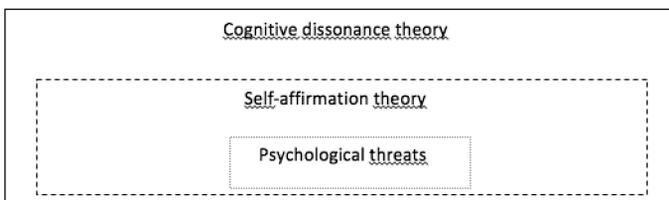


Figure 1. Psychological context

## 4 Empirical Analysis

For this analysis, we used the answers of 482 managers from three different hierarchical levels and different industries. Apart from typical socio-demographic variables such as age, gender, hierarchical position and managerial function, the core of the questionnaire focused on two open questions on management competencies, deemed necessary at present and in the future. (see also Appendix A) The respondents had to state competencies needed to succeed at present and

in their expected future. Afterwards they had to weight all their answers for both perspectives – present and future – with a percentage. Thus, the scores for each perspective sum up to 100 %. (for a more detailed overview see Mühlbacher 2007)

The questionnaires were translated into the language of each country and all answers were in the mother language of the respondents. The answers were translated by native speakers and coded according to a competency scheme based on the five classes of Kasper et al. (2005). (see also Appendix B) This was done by a team of three researchers for every country. In each team at least one researcher came from the country under review. The interrater reliability was higher than 97 % in every case. This sounds rather high, but can be explained by the language of managers consisting of a huge amount of anglicisms and functional similarities, caused by the process of European harmonization and general globalization. In a second step, these competencies were clustered into the above-mentioned classes of competencies and the weightings were summed up. (Mühlbacher et al. 2011) The results were analysed with the open source software R and the additional packages “proxy” and “SMACOF”.

Questionnaires were collected from:

- 275 alumni from the Post Graduate Management Executive MBA of the WU University of Economics and Business, Vienna, Austria
- 101 participants in four Executive MBA classes of the University of Technology, Brno, Czech Republic
- 95 managers from Bratislava, Slovakia (data collected randomly by the students of the Master class International Business at the Economic University of Bratislava and Master class International Management, School of Management Bratislava)

As can be seen in Table 1, the sample comprises 126 top managers, 100 upper managers and 49 middle managers from Austria, 35 top managers, 20 upper managers and 46 middle managers from the Czech Republic and 31 top managers, 23 upper managers and 41 middle managers from Slovakia.

Hierarchical level	Percentage		
	AT	CZ	SK
Top Management	45.8	34.7	32.6
Upper Management	36.4	19.8	24.2
Middle Management	17.8	45.5	43.2
<b>Total:</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Table 1. Hierarchical level**

The average age is 44.8 years and the percentage of female managers is 17.3 %, mainly due to the male dominance in the field of management. Regarding the breakdown by sector (see Table 2), the following picture emerges:

Sector	Percentage		
	AT	CZ	SK
Banking and Insurance	13.1	25.7	16.0
Capital Goods	18.5	15.8	15.0
Consumer Goods	8.4	12.9	8.0
Services	28.7	15.9	17.0
Trade and Retail	4.4	9.9	13.0
Public Sector	2.9	9.9	2.0
IT & Telecommunications	10.9	6.9	14.0
Others (e.g. Utilities, Health and Cultural Organizations)	13.1	3.0	15.0
<b>Total:</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Table 2. Breakdown by sector**

This breakdown also reflects regional differences. While the greater Brno region is a well-developed banking area, and Vienna a hotspot for services, Slovakia shows a good mix of all of these sectors. These differences reflect also the historically and culturally centralized position of the three cities. This is also the reason why the public sector is somehow overrepresented in the two capitals of Bratislava and Vienna.

Regarding the mention of functions held by the interviewees, multiple answers were possible. (see Table 3) Here it can be seen that Austria managers fulfil their tasks in, on average, 2.39 functional areas, which indicates a low degree of specialization compared with the respective values of 1.92 in the Czech Republic and 1.57 in Slovakia.

The influence of these socio-demographic variables were tested and, besides of the hierarchical level, none of them showed any significant effect. Therefore we will focus on the hierarchical effects concerning our research question.

To perform the various statistical analyses, the variables describing the expected changes of the competence levels were coded as different binary variables, namely dummy variables for positive and negative changes and for no changes at all. Also the variables for the hierarchy level were recoded as binary variables. We used several statistical methods to analyse our data, namely hierarchical and k-means clustering, as well as multidimensional scaling techniques. Cluster analysis summarizes various methods to group various elements such that the resulting classes' members are as similar as possible, whereas between

Functional area	Frequency		
	AT (n=657)	CZ (n=194)	SK (n=149)
Marketing	115	47	47
Finance & Investment	78	28	22
Project Management	76	27	11
Organization	93	24	16
Production	39	22	15
Human Resources	102	12	11
IT	41	12	7
Logistics	35	9	10
R & D	27	7	2
Others	51	6	8

**Table 3. Functional areas of the interviewees**

the different classes there should not be much similarity. (Tabachnick/Fidell 2012)

We used the Tanimoto distance to determine the similarity of two objects. The Tanimoto distance between two objects is defined as the ratio of the number of joint characteristics and the number of characteristics which at least one of the objects possesses. This proximity measure is well suited for binary variables, where the existence of an attribute has a different information value than the non-existence. (Backhaus et al. 2003) (i.e., we know more about a person if the attribute “top management“ equals 1 than if it equals 0, in which case the person could be in either of the two other management levels considered. Only if an attribute has just two possible characteristics is the information content the same.)

Hierarchical cluster analysis aims to create a hierarchy of clusters, which is usually represented in a tree diagram, the so-called dendrogram. There are different clustering algorithms to achieve this; we employed the complete linkage method, after checking the data set for outliers using the single linkage method. The complete linkage algorithm starts with computing the pairwise distance (or proximity) of all objects and combines the two nearest objects to a group. The distance between the new group and the other objects is calculated as the largest distance between the newly clustered elements and the other objects (furthest-neighbour principle). Afterwards the next two nearest objects are combined, and so on.

Another clustering method is k-means clustering. Contrary to hierarchical clustering, here the user has to determine beforehand how many clusters there should be (this number is denoted by k). The data points are then assigned to the

cluster whose center is nearest, and the cluster center is recalculated, including the new data point. (Tabachnick/Fidell 2012) Therefore, each coordinate of the cluster center is just the arithmetic mean of the respective coordinates of the cluster members. Since we use binary variables, the interpretation of our cluster means is straightforward: if a certain variable (e.g. top management) has a cluster mean of 0.8 in cluster 1 and 0.1 in cluster 2, then 80% of the persons in cluster 1 and 10% of those in cluster 2 belong to the top management. In this case, the variable “top management” would be very useful to discriminate between these two clusters. On the other hand, if the center means are very much alike (e.g. 0.4 and 0.5), the respective variable does not add to the clustering process. Regarding our analysis, the change in the sum of squares for different numbers of clusters  $k$  in the  $k$ -means method suggested a division into three groups – that represents the hierarchical levels of top, upper, and middle management.

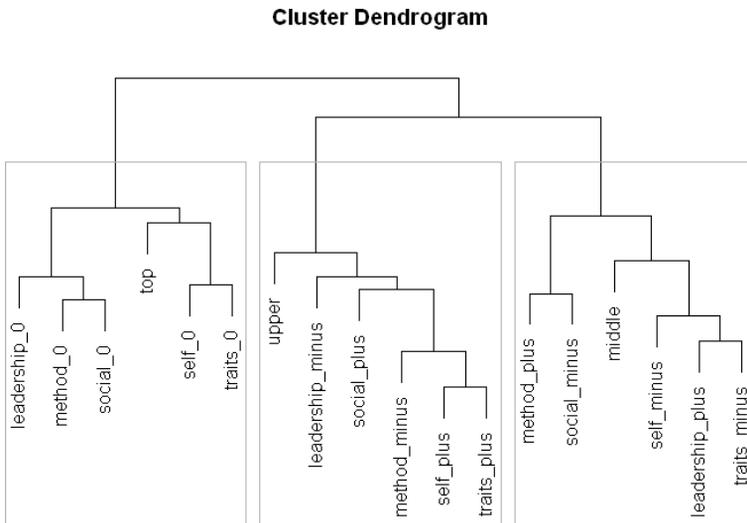
Multidimensional scaling methods try to discover “hidden” structures in multidimensional data (Borg/Groenen 2010) by visualizing proximities between the data. Whereas hierarchical clustering interprets entity distances in a hierarchical manner, multidimensional scaling (MDS) reduces a high dimensionality space, which is also often referred as perception space (Backhaus et al. 2003), into a lower dimensionality space. The aim is to picture the relative position of several objects one to each other, which is independent of rotation or reflection. In this case, the application of MDS leads to a three-dimensional graphical map representation.

The goodness of an MDS solution is measured by the stress value. A perfect representation has a stress value of zero. The more variables are considered, the higher is the stress, and for increasing dimensionality the stress value decreases. Generally, the stress value should be significantly lower than the stress value resulting from purely random variables. Spence and Ogilvie (1973) performed a simulation study in which they found that for 18 variables (as we have in our study) and two dimensions the average stress resulting from random proximities is about 0.28 (standard deviation about 0.009), while for three dimensions the average stress is about 0.20 (standard deviation about 0.007).

#### 4.1 Results Austria

The results of the cluster analysis are given in Figure 2 in form of a dendrogram. It represents the variables in terms of expected positive, negative or no changes at all for the five different classes of competencies described earlier. Furthermore, the dendrogram shows that each management position (top, upper and middle management) has been assigned to a separate group, which means that the positions are associated with a very particular set of expectations about changes in competencies. As can be seen, the Austrian top management does not expect any change at all, regardless of the competence class, whereas the upper

and middle management perceive the need to develop particular competencies in the future.

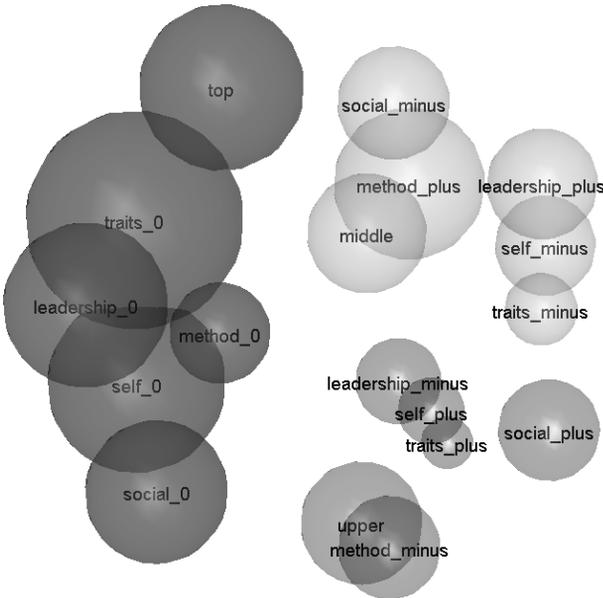


**Figure 2. Cluster dendrogram - Austria**

Multidimensional scaling (Figure 3) shows similar results: The top management is situated close to the “no change” variables, whereas the “change” variables are placed in proximity to upper and middle management.

The size of the circles indicates the number of persons with this special attribute. The resulting stress value of 0.03823674 is far below the boundary given by random variables of 0.2 (Spence/Ogilvie 1973), meaning that the mapping is an excellent representation of the actual proximities. The groups recommended by the hierarchical clustering are clearly visible with multidimensional scaling, too. The finding that both methods, the dendrogram and multidimensional scaling, lead to similar results underlines that there is indeed such a pattern and not just a spurious or random effect.

Overall, the analysis shows that Austrian top managers do not show any willingness to change. All stable dummy variables belong to this branch of the cluster dendrogram. Top managers make decisions that affect everyone in the company and bear the responsibility of its success or failure. It is not surprising that a top management position is regarded as the final destination of a successful career. In Austria, people generally assume that top managers are competent and know what to do. The fact that they are often highly regarded could set a particular social standard (Leary/Baumeister 2000). These high expectations both society and their own company place on them largely affect their identity (Boninger/Krosnick/Berent 1995). From the perspective of the self-affirmation theory



**Figure 3. Multidimensional scaling (MDS) - Austria**

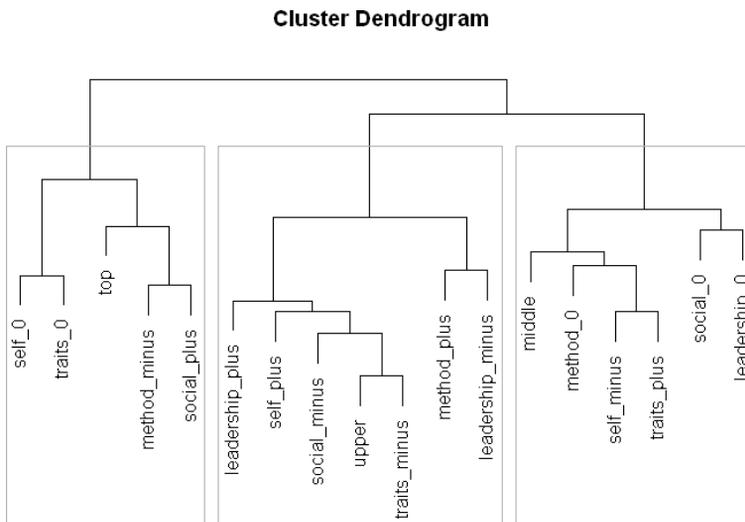
(Steele 1988) it could be argued that “being a highly capable top manager” represents a building block of one’s own self-concept (Aronson 1969). In turn, future changes which affect this specific image are automatically perceived as threats (Cohen/Sherman 2014). Following this, asking an Austrian top manager to rate the relevance of future competencies could contravene with the self-concept mentioned before and provoke psychological discomfort. On the one hand, a top manager probably knows of the importance of life-long learning, but on the other hand to “admit” that a development regarding a specific competency is needed could be perceived as a “weak” signal or a personal deficiency. As a result, the denial of a need for change could be seen as an easy way to maintain a positive self-image. It implies that the top manager is already “competent enough” and possesses the required competencies. The upper management reduces – in contrast to theoretical assumptions – leadership and methodological competencies and shows an increase in social-communicative, self-dispositive and personal traits. Only the middle management behaves according to literature and this in total contrast to the upper management. Again, taking the self-affirmation perspective (Steele 1988) into account, this vast contrast is a clear indicator that the hierarchical level triggers a specific role of “how a manager should be” (Boninger et al. 1995). When young professionals become managers for the first time, they often strive to climb up the career ladder. The fact that they rate methodological competencies as important future assets could be explained with the motive to be “good enough” (Aronson 1969). Because middle managers are

often inexperienced as managers, their only opportunity to stand out and to show their capabilities (how good they really are) consists in using their methodological knowledge and skills. In turn, the positive evaluation of leadership competencies could be a reaction to a perceived threat (Cohen/Sherman 2014) regarding the image of a future leader. In other words, the statement that leadership competencies are not useful in the future contradicts their objective to attain a higher position and consequently more stringent leadership requirements.

Interestingly, the pattern of the upper management does not follow this explanation. As noted by Cohen et al. (2007), the situational context, in this case the hierarchical level, could activate different identities which affects people's perception of information. Apparently the self-concept of the Austrian upper management includes the image of a communicator who uses his personal strengths and resources to get "things done".

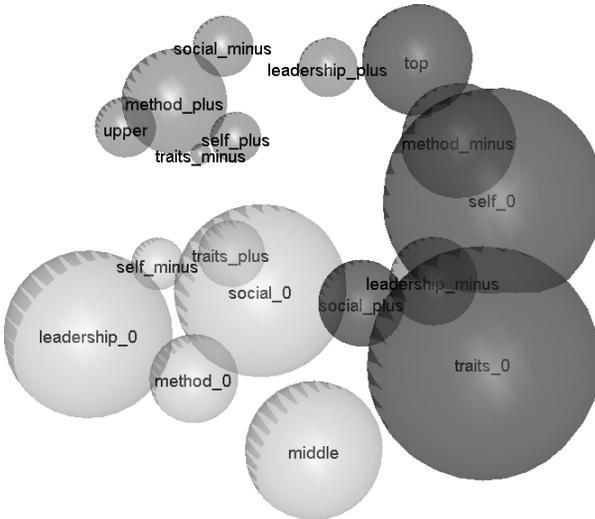
## 4.2 Results Czech Republic

Figure 4 shows the cluster dendrogram of the Czech sample, which can be interpreted in the same way as before. As can be seen, the results are less conclusive in comparison to the Austrian sample.



**Figure 4. Cluster dendrogram – Czech Republic**

As shown in Figure 5, k-means, once again, recommends 3 clusters. For MDS, the resulting stress value of 0.03622331 is far below the boundary given by random variables of 0.2.



**Figure 5. Multidimensional scaling (MDS) – Czech Republic**

Some features stand out:

there are only very few persons with the attributes "traits\_minus"; therefore the results regarding this attributes should be taken with caution.

hierarchical clustering and k-means clustering put the variable "leadership\_minus" in the blue cluster, the same as "method\_plus". Multidimensional scaling results would suggest that "leadership\_minus" should be placed in the red cluster, since it is situated nearer to the other red variables than the blue ones. Apart from this, the other group classifications are similar in both methods' results.

As can be deduced from the respective clusters, top managers show stable results concerning self-dispositive competencies and traits. They reduce their methodological competencies and increase social-communicative competencies. Leadership competencies are not really mentioned.

A low importance ascribed to leadership skills and a simultaneously heightened focus on interpersonal skills in Czech top managers can also be an instance of striving to keep one's current position (i.e. an expression of a personified view of power). This can mean that lack of courage is a result of the fear of making a mistake and putting one's position in peril, or an expression of unwillingness to get involved in organizational politics, which requires a high level of interactional and communicative skills and adopting micro-political tactics. Another explanation could be that the top managers believe to have little impact on the firm's performance. To initiate change, strategic leadership skills, which include a person's ability to predict future outcomes, build strategic alliances and create a compelling vision, are required (Ireland/Hitt 1999). Strategic leaders possess

decision-making responsibilities and have a major influence on the overall direction of the firm (Child 1972). Moreover, companies could be seen as reflections of their top management (Cannella/Monroe 1997). In contrast, the Czech top management seems to be hesitant in adopting a global mindset (e.g., nurturing people's competencies, anticipating environmental change, leveraging knowledge) and still operates through a more domestic mind-set (e.g., positioning themselves, determining work flows by hierarchy, reacting to change) (Ireland/Hitt 1999). The findings suggest that their leadership skills and decisions lack a strategic and sustainable orientation.

Upper managers increase leadership and self-dispositive competencies and reduce social communicative competencies and personal traits. They usually bear strategic responsibilities and lead a department or a strategic unit. To further advance their career and receive a promotion or a top management position, upper managers are eager to prove themselves. Consequently, rather than being perceived as a threat (Steele 1988), leadership (e.g., to motivate their subordinates) and self-dispositive competencies (e.g., time management, stress handling) represent opportunities for the upper managers to communicate their willingness as well as their capabilities to acquire a top management position. In the same sense, change could be regarded as a positive event and a chance to improve their own position.

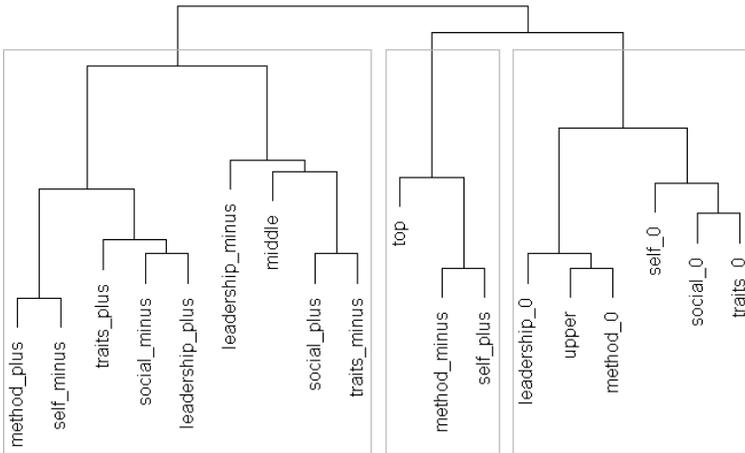
A smaller group reduces leadership competencies and increases their methodological competencies as experts in their field. It is possible that this group pursues an alternative career path. Traditional career models are characterized by static and hierarchical structures, which provide a clear and linear direction to a "successful" career (Baruch 2004). In contrast, newly emerged career models offer the employees a variety of options instead of a single way to be successful (Baruch 2004). The focus shifts from a predefined and highly structured path to the personal interests (e.g. to gain specialized knowledge) and values of the employees (Baruch 2004). Therefore for some managers an alternative career path in the form of an expert career is more tempting than a traditional managerial position.

Middle managers show a stable development concerning methodological, social-communicative and leadership competencies, reduce self-dispositive competencies and favour personal traits. To explain the different findings, the given situational context in form of the hierarchical level plays a major role (Cohen et al. 2007). Depending on the hierarchical level of the manager (top, upper, middle management), different identities are at the center of the self (Boninger et al. 1995). Thus the same competency class could be perceived in different ways, as in the case of the leadership competency. The Czech upper management sees leadership competencies as relevant for the future whereas the top management didn't even mention them.

### 4.3 Results Slovakia

As can be seen in Figure 6, the upper management, similar to the Austrian top management, does not expect any change at all.

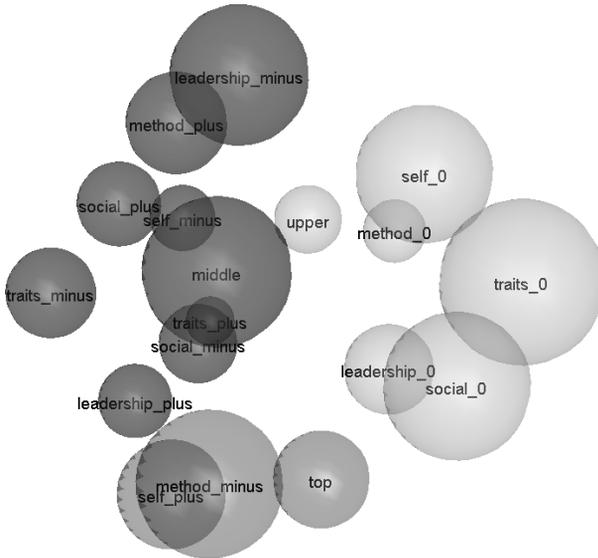
**Cluster Dendrogram**



*Figure 6.* Cluster dendrogram – Slovakia

MDS results for Slovakia are given in Figure 7. Again, the MDS stress value of 0.04263921 indicates an excellent representation of proximities, compared to those of completely random origin.

In the clusters, it can be seen that top managers show a clear reduction in methodological competencies and increase their self-dispositive competencies. Other classes of competence are not significantly mentioned. Our interpretation is as following: once top managers assume their positions, their posts become to a large extent “political ones” – they need to fulfil the objectives of the MNC headquarters (in case they work for an MNC), their political parties (in case they are political nominees in state-owned enterprises), or just to survive in a crisis (in case they are in SMEs). It means a majority of top managers simply do not have time, energy, and motivation to increase their methodological competencies any further. Growing tension, duties, and limited resources lead to the situation that they need to use their own resources very efficiently, which leads to the increase in self-dispositive competencies. A factor influencing the lack in need for change in methodological competencies, and the increase in self-dispositive tendencies could be the increased use of intuition in decision-making by top managers. Simuth and Sarmany-Schuller (2011) found that the personality characteristic on the analytic-intuitive dimension of cognitive style influences the decision-making style. Hayashi (2001) found that the use of intuition depends on the



**Figure 7. Multidimensional scaling (MDS) – Slovakia**

hierarchical position in a company. Middle managers and upper management used a more methodological approach using quantitative analytical approaches. This would explain the tendency of top management to focus more on their self as intuition is regarded as an inner mental process. Conscious methodological competencies do not need to be changed as they are used less frequently. An important factor in this aspect is experience.

The upper management shows the same stable/inert position as Austrian top managers. We believe that the general approach in this group is the following: the top management positions are taken, career expectations are low, there is no need to improve any of their competencies (it may be due to “the politics” in MNCs favouring expatriates in top positions, due to the right “political connections and membership” in state-owned enterprises, due to the fact that the owner and founder is the top manager in SMEs). From the point of view of the self-affirmation theory (Steele 1988), the inert position constitutes a threat to the positive self-image of the upper managers. However, due to the above-mentioned reasons, they are unable to compensate their perceived weaknesses with another competency class.

The middle management shows a complex set of developments. Here the decrease in leadership competencies and personal traits and an increase of social-communicative competencies is the most important trend. In our opinion, this can be attributed to a large extent to the age structure of middle management in Slovakia (due to the fast economic growth in the last decade middle manage-

ment is typically young) and limited areas of responsibilities. The companies do not expect leadership behaviour from them, just fulfilment of the tasks that can be reached in their teams via increased social communication. Lower age also means not enough time for the development of personal competencies. In the area of leadership we believe that, missing positive “teaching” examples or role models play their role in the decrease in leadership competencies in this management group. Therefore the unexperienced middle managers did probably not receive adequate leadership training and lack the respective skills. In this case the statement that leadership competencies are strategically an important future asset could provoke psychological discomfort (Festinger 1957) because their own weaknesses are perceived as a threat (Steele 1988). As a consequence, it is possible that the middle managers put their emphasis on competencies which highlight success in other domains. In times of social media it is likely that the still young middle managers are used to communicate a lot with their environment and value social-communicative competencies to compensate for their perceived weaknesses regarding leadership issues. The career growth motivation could be also a driver toward the need to improve/change the methodological competencies. The same factor could also have an impact on the increased social communication which is also necessary for career growth.

## 5 Discussion

In this study, an innovative approach has been used: Managers in different hierarchical positions were asked to state their current competencies as well as the competencies necessary in the future. A hierarchical cluster analysis then reveals the willingness of the managers to change themselves, operationalized as the difference between current and future competencies. The logic behind this argumentation is that the organizational environment and its requirements are supposed to change continuously. Therefore, in the future, only a manager who is willing to adopt his current competencies is going to be successful.

More surprising were the findings that the Austrian top managers and the Slovakian upper managers did not show any willingness to change themselves and alter the status quo (Holt et al. 2007). To explain the willingness or unwillingness of perceiving the need for changing competencies, the self-affirmation theory (Steele 1988) has been taken into account. So the self-concept of a manager has to be considered, when examining the evaluation of competencies. The reason is that competencies are thought of as representing the basis for self-organised actions (Erpenbeck/von Rosenstiel 2003) and are thus closely related to one's own self-concept. In other words, to “feel competent” lies at the heart of the self (Steele 1988) and consequently the perception that one does not possess an important future competency poses a major threat to the manager's sense of personal worth. In this case, people tend to use self-affirmation as a strategy to maintain the image of being a “good” manager (Aronson 1969). This can be il-

lustrated well with the example of the Austrian top managers, who stated that future competencies will not be different from their current ones. Their unwillingness to change can be interpreted as a “strategy” to avoid psychological discomfort and publicly certifying that they are already “competent” enough. By denying a need for change, they beforehand neutralize a potential threat.

The mixed results of the study could be explained by the given situational context, namely the hierarchical level and the country of origin, which activate particular aspects of the self-concept (Steele 1988). In other words, a particular context influences which competencies are personally valued by the managers and therefore which changes are perceived as a threat. In terms of hierarchy, a middle manager finds himself in a different position as a top manager and is confronted with different requirements and expectations. Consequently, the change regarding his future competencies could be interpreted differently. Instead of a psychological threat, the improvement in a particular competency domain could be interpreted as an opportunity to “climb the corporate ladder”. Similarly, in each country investigated, particular expectations regarding the competencies a manager should ideally possess exist, which in turn impact his perceived need to change. In this regard, the self-affirmation theory allows researchers to gain a new perspective on the differences between current and future competencies. Moreover, future studies could examine other self-theories as an alternative way of interpreting the need for changing competencies.

To conclude, this study shows that there are hierarchical differences between managers from three CEE countries. However, the surprising finding that the Austrian top management and Slovakian upper management show no willingness to change offers the opportunity for a provoking question: Are middle managers the real drivers of change in organizations? This is more than possible. On the one hand, success hinders change and disqualifies the top managers as real change drivers. From the perspective of a top manager, who reached the end of the career ladder, the outspoken need for development of his own competencies could be perceived as a threat. So why should top managers be interested in change? This might only lead to a loss of power or status. On the other hand, middle managers are much more engaged in current (operative) problems, their career orientation is still high, they have to face a severe competition concerning possible promotions, and change might improve their professional situation. Consequently, we have to regard this group as real change engine within the companies. Combining different fields of study, namely change management, the self-affirmation theory and individual competence management, our work proposes to carefully reconsider the assumption of traditional change leaders.

## References

- Abelson, R. (1986): Beliefs are like possessions. *Journal for the Theory of Social Behavior*, 16, 223-250.
- Armenakis, A.A./Harris, S.G./Mossholder, K.W. (1993): Creating readiness for organizational change. *Human Relations*, 46, 681-703.
- Aronson, E. (1968): Dissonance theory: progress and problems. In Abelson, R.P./Aronson, E./McGuire, W.J./Newcomb, T.M./Rosenberg, M.J./ Tannenbaum, P.H.: *Theories of cognitive consistency: A source book*. Rand-McNally.
- Aronson, E. (1969): The theory of cognitive dissonance: A current perspective. *Advances in experimental social psychology*, 4, 1-34.
- Aronson, J./Cohen, G.L./Nail, P.R. (1999): Self-affirmation theory: an update and appraisal. In E., Harmon-Jones/ J., Mills (Ed): *Cognitive dissonance: Progress on a pivotal theory in social psychology* (p. 127-48). Washington, DC: American Psychological Association.
- Backhaus, K./Erichson, B./ Plinke, W./Weiber, R. (2003): *Multivariate Analysemethoden*. 10th edition, Springer, Berlin.
- Bartlett, C.A./Goshal, S. (1997): Wie sich die Rolle des Managers verändert. *Harvard Business Manager*, Vol.20, No. 6, pp. 79 - 90.
- Baruch, Y. (2004): Transforming careers: from linear to multidirectional career paths: organizational and individual perspectives. *Career development international*, 9(1), 58-73.
- Boninger, D.S./Krosnick, J.A./Berent, M.K. (1995): Origins of attitude importance: Self-interest, social identification, and value relevance. *Journal of Personality and Social Psychology*, 68, 61-80.
- Borg, I./Groenen, P.J.F. (2010): *Modern Multidimensional Scaling: Theory and Applications*. 2nd edition, Springer, New York.
- Brown, S.L./Eisenhardt, K.M. (1998): *Competing on the Edge: Strategy as Structured Chaos*. Harvard Business School Press, Harvard.
- Cannella, A.A./Monroe, M.J. (1997): Contrasting Perspectives on Strategic Leaders: Toward a More Realistic View of Top Managers, *Journal of Management*, 23, 213-237.
- Cannon, W.B. (~1929): *Bodily changes in pain, fear and rage* (2nd ed). New York: Appleton and Company.
- Child, J. (1972): Organizational structure, environment and performance: the role of strategic choice. *Sociology*, 6(1), 1-22.
- Cohen, G.L./Sherman, D.K. (2014): The psychology of change: Self-affirmation and social psychological intervention. *Annual review of psychology*, 65, 333-371.
- Cohen, G.L./Sherman, D.K./Bastardi, A./Hsu, L./McGoey, M./Ross, L. (2007): Bridging the partisan divide: Self-affirmation reduces ideological closed-mindedness and inflexibility in negotiation. *Journal of personality and social psychology*, 93, 415.
- Dunning, D. (2005). *Self-Insight: Roadblocks and detours on the path to knowing thyself*. New York: Psychology Press.
- Erpenbeck, J./von Rosenstiel, L. (2003): Einführung, *Handbuch Kompetenzmessung. Erkennen, verstehen und bewerten von Kompetenzen in der betrieblichen, pädagogischen und psychologischen Praxis*, Erpenbeck, J., von Rosenstiel, L., (Editors), Schäffer-Poeschel, Stuttgart.

- Festinger, L. (1957): *The theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Fullan, M. (2011): *Change leader: Learning to do what matters most*. John Wiley & Sons.
- Gilley, A.M. (2005): *The manager as change leader*. Greenwood Publishing Group.
- Hayashi, A.M. (2001): When to trust your gut. *Harvard Business review*, 79 (2), 59-65.
- Holt, D.T./Armenakis, A.A./Feild, H.S./Harris, S.G. (2007): Readiness for organizational change: The systematic development of a scale. *The Journal of applied behavioral science*, 43(2), 232-255.
- Ireland, R.D./Hitt, M.A. (1999): Achieving and maintaining strategic competitiveness in the 21st century: The role of strategic leadership. *The Academy of Management Executive*, 13, 43-57.
- Jacobs, R. (1989): Getting the Measure of Managerial Competence. *Personnel Management*, Vol. 21, No. 6, pp. 32 - 37.
- Jones, E.E. (1990): *Interpersonal Perception*. W.H. Freeman: New York.
- Kasper, H./Mühlbacher, J./von Rosenstiel, L. (2005): Manager-Kompetenzen im Wandel, *Zeitschrift Führung + Organisation (zfo)*, Vol. 74, No. 5, pp. 260 - 264.
- Kotter, J.P. (1995): Leading change: Why transformation efforts fail. *Harvard business review*, 73(2), 59-67.
- Krüger, W. (2000): *Excellence in Change. Wege zur strategischen Erneuerung*, Gabler, Wiesbaden.
- Leary, M.R./Baumeister, R.F. (2000): The nature and function of self-esteem: Sociometer theory. In M.P., Zanna (Ed.): *Advances in experimental social psychology* (Vol. 32, pp. 1-62). San Diego: Academic Press.
- McCall, M.W. (1998): *High Flyers. Developing the Next Generation of Leaders*, Harvard Business School Press, Boston.
- McQueen, A./Klein, W.M. (2006): Experimental manipulations of self-affirmation: A systematic review. *Self and Identity*, 5, 289-354.
- Mühlbacher, J. (2007): *Kompetenzmanagement als Grundlage strategischer Wettbewerbsvorteile*, Linde, Wien.
- Mühlbacher, J./Netekoven, M./Kovac, J. (2011): Competency management in Slovenia: paradoxes between development trends and drivers of change. *Journal of East European Management Studies*, 16(1), 75-90.
- Probst, G.J.B./Deussen, A./Eppler, M.J./Raub, S.P. (2000): *Kompetenz-Management. Wie Individuen und Organisationen Kompetenz entwickeln*, Gabler, Wiesbaden.
- Sarges, W. (2002): *Competencies statt Anforderungen – nur alter Wein in neuen Schläuchen?, Strategien der Personalentwicklung*, H.-C. Riekhof (Editor), Gabler, Wiesbaden.
- Simuth, J./Sarmany-Schuller, I. (2011): Kognitívne a rozhodovacie štýly v manažérskom rozhodovaní (Cognitive and decision making styles in managerial decision making). In: *Cesty múdrosti [Proceedings]*. Bratislava: STIMUL, 2011. ISBN 9788081270277. p.68.
- Spence, I./Ogilvie, J.C. (1973): A table of expected stress values for random rankings in non-metric multidimensional scaling, *Multivariate Behavioral Research*, Vol. 8, pp. 511-517.
- Steele, C. M. (1988): The psychology of self-affirmation: Sustaining the integrity of the self. *Advances in experimental social psychology*, 21, 261-302.

- Steele, C. M./Spencer, S. J./Lynch, M. (1993): Self-image resilience and dissonance: the role of affirmational resources. *Journal of personality and social psychology*, 64, 885.
- Tabachnik, B. G./Fidell, L.S. (2012): *Using Multivariate Statistics*. 6th edition, Pearson Education, Boston.
- Wakslak, C. J./Trope, Y. (2009): Cognitive consequences of affirming the self: The relationship between self-affirmation and object construal. *Journal of Experimental Social Psychology*, 45, 927-932.
- Wetzel, R./Van Gorp, L. (2014): Eighteen shades of grey?: An explorative literature review into the theoretical flavours of organizational change research. *Journal of Organizational Change Management*, 27(1), 115-146.
- Woodruffe, C. (1993): What is Meant by a Competency? *Leadership & Organization Development Journal*, Vol. 14, No. 1, pp. 29 - 36.
- Yeager, D. S./Walton, G. M. (2011): Social-psychological interventions in education: They're not magic. *Review of Educational Research*, 81, 267-301.



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## Appendix A: Two open questions

- 1) Which competencies do you need **today**, to fulfill your **current tasks**?  
Please state these tasks in short and weight all of them up to 100 %!

Please don't use meta categories like "social competence" or "technical competence" but give examples of concrete tasks!

Competence	Weighted index
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %

**Sum: 100 %**

- 2) Which competencies will you need **in future**, to fulfill your **future tasks**?  
Please state these tasks in short and weight all of them up to 100 %!

Please again don't use meta categories like "social competence" or "technical competence" but give examples of concrete tasks!

Competence	Weighted index
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %

## Appendix B: Category Scheme

<b>Self-dispositive competencies</b>	Flexibility
	Time management
	Entrepreneurial thinking
	Innovativeness
	Work-life balance
	Emotional intelligence
<b>Methodological competencies</b>	Analytical thinking
	Holistic thinking
	Decision making
	Change management
	Total quality management
	Project management
	Process management
	Organizational theory
	Controlling & accounting
	Strategic management
	Knowledge management
	Marketing
New media	
<b>Social competencies</b>	Communication
	Cooperation
	Diplomacy
	Conflict management
	Networking
	Lobbying
	Intercultural competence
<b>Leadership competencies</b>	Classical leadership
	Symbolic leadership
	Motivation
	Teamwork management
	Personnel development
	Personnel selection

<b>Personal competencies</b>	Ambition
	Self-assurance
	Integrity
	Ability to learn
	Dominance
	Patience

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