How Can We Measure the "Resistance to Change"? An Exploratory Factor Analysis in a Sample of Employees in the Greek Hotel Industry



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Abstract The hotel sector is vulnerable on changes. These changes usually occur on the hospitality's sector environment. That leads on frequent changes which occur within the hotels. One of the side effects of this is the resistance on change. The current literature indicates that although resistance on change is something which is highly expected to occur, still there is a lack of empirical research as well as an instrument of research. The purpose of this paper is to develop an instrument of research on resistance to change among hotel employees; more precisely on four-star and fivestar hotels in Greece. The research instrument was developed by (Oreg, Journal of Applied Psychology 88:680-693, 2003); it is made by four variables (routine seeking, emotional reaction to change, short-term focus and cognitive rigidity). The participants of the sample were 372 hotel employees. The findings indicate that the questionnaire was reliable, though the cognitive rigidity dimension as marginally accepted by the Cronbach Alpha test. The outcome of the pilot study indicated that the resistance to change can be avoided if the hotel management tries to implement a well programmed change where the employees will participate on the decisions. Regarding the instrument of research, the exploratory factor analysis indicated that item 15 ("I often change my mind") and item 18 ("My views remain constant over time") would both have to be removed. In addition, in the unrotated factor solution, item 18 also showed multicollinearity; however, it could be retained in analysis, because its loading into the first factor was adequately higher (>0.3). Hence, the instrument of research can be used on future research, though it may need some modifications regarding the cognitive rigidity variable.

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1 Introduction

Hotel management has become the epicenter of many changes during the past years (Skagias et al., 2021; Rossidis et al., 2020). More precisely, during the past years, there have been many changes, such as the fiscal crisis, the pandemic of COVID-19 (Ntalakos et al., 2022a, 2022b), which along with changes on the consumers behavior and patterns have brought the need to operate hotels with high levels of change readiness and the ability to adopt into the current climate of uncertainty (Belias & Trihas, 2022a, 2022b, 2022c, 2022d). This means that the concept of change management has emerged during the past years as one of the most important concepts for understanding hotel operations and management, while at the same time, this is a concept where there is a lack of empirical research (Rossidis et al., 2021a, 2021b). Hence, there is a need not only to provide more empirical data but also to focus on developing the related instruments of research which will help the academia and the practitioners to better understand the concept of change management in the hospitality sector.

Change management has many dimensions and concepts, including resistance to change. Resistance to change leads on many cases to change management failure (Esteves & Alves, 2013). One sector where there is a high resistance to change is the hospitality sector, as indicated by various researches (By & Dale, 2008; Klonek et al., 2014; Senbeto et al., 2021); this often occurs due to lack of leadership (Belias et al., 2022) but mostly due to lack of understanding the dynamics and the negative effects that the inability to deal with resistance to change has on the change management process (Klonek et al., 2014).

The concept of measuring and analysis resistance to change in the leisure and hospitality sector has not only limited research but also a lack of an instrument of research (Belias & Trihas, 2022a, 2022b, 2022c, 2022d). For this reason, the purpose of this paper is to develop an instrument of research on resistance to change among hotel employees; more precisely on four-star and five-star hotels in Greece. The contribution of this paper is the fact that it will develop, through a pilot study, an instrument of research that can be used in a later stage on more extended researches. This will help the academia and the practitioners to understand the concept of resistance to change in the hospitality sector so as to take the appropriate steps to deal with this phenomenon.

2 Literature Review

2.1 The Concept of Resistant to Change

On most of changes which occur in management, the change agents put more emphasis on the technical components of the process, neglecting the human factor, which plays a decisive role in the success of the change implementation (Belias et al., 2020a, 2020b; Rossidis et al., 2021b). Employees' attitudes reveal their feelings, thoughts, and behaviors toward change. The factors that effect on these attitudes are: (a) the information employees have about the change, and (b) their psychological state (Dzwigol et al., 2019). According to Petty and Wegener (1998), attitude toward change is defined as the overall evaluation of an employee toward change. While changes are an important factor in the sustainability of the organization, the introduction of a change within the organization causes reactions caused by the employees. The employees' reaction to the change may be overt, (resulting a reduction in production), or it may not be overt, in which case it takes the form of pretexts for the worker. Hence, resistance to change is a negative attitude with cognitive, emotional, and behavioral dimensions. However, these attitudes are not always in agreement (Piderit, 2000). Some people believe that a change can threaten their working status; on the contrary, other people perceive that a change is an opportunity to cooperate with all their powers; finally, some others are indifferent to the occurring of a change (Oreg et al., 2011). Metselaar (1997) defines resistance to change as "A negative attitude against the implementation of changes in the structure or administrative processes of the enterprise manifested by efforts on the part of the members of the enterprise to prevent or slow down the change process."

Dzwigol et al. (2019) regard the resistance to change as a phenomenon that affects the change process, delaying or slowing down its initiation, hindering its implementation, and increasing its costs. At the same time, they see the resistance to change as an attempt on the part of the workers to maintain the existing situation (status quo). But why do employees show negative feelings when facing with a change? An answer to this question can be given if anyone sees businesses as groups of people (Jex, 2002).

According to Jex (2002), employees are social individuals of habit, and thus, they feel great comfort and security in routine conditions. Therefore, even the idea of change causes worry and anxiety. People develop habits that surround their behavior and have difficulty changing those habits regardless of whether the changes are positive or negative. This general principle also applies in the workplace (Jex, 2002). Even if employees are unhappy with the current conditions in a company, they continue to resist change by the fear that it will make the existing conditions worse (Koutiva et al., 2020). The fear of new conditions or changes stems from a general belief that the changes will have a negative impact; this fear is also increased by a general fear of the unknown (Oreg et al., 2011).

Regarding the conditions that can lead on resistance to change, it is understood that when change creates uncertainty, resistance to change is the most likely reaction.

In essence, the resistance is not against the change itself, but against the loss of gains and rights that employees believe will come with the change (McCabe, 2020). Resistance to change can thus be described as a series of actions on the part of employees (recipients of change) with the aim of slowing down or even terminating the intended change (Long & Spurlock, 2008).

Any change in the organization's culture not only means a long-term change in the philosophy of the management of the organization (Ntalakos et al., 2022b; Viterouli & Belias, 2021) but also the adoption of supportive organizational structures, which will support the promoted changes (Huczynski & Buchanan, 2001). For this reason, organizations must always stay focused on identifying the reasons which may lead in resistance during a change.

2.2 Resistance to Change on the Hospitality Sector—Empirical Findings and Attempts to Measure the Factors that Lead to Resistance to Change

From all the above, it is understood that resistance to change has a crucial role on management. In the case of the tourism and leisure sector, there is a number of researches which indicate how resistance to change occurs and what are its drivers. For example, Okumus and Hemmintgton (1998) have made a research based in a sample of case studies from hotels in the UK. More precisely, they examined hotel employees coming from London, Reading and Oxford; the authors interviewed in total ten hotel managers. The hotels were 3, 4, and 5 stars. The research indicated that there are similarities in change management between the leisure sector and the manufacturing sector. The authors have noticed that there were many researches coming from the manufacturing sector but no research came from the leisure sector. Another finding was that the key barriers and drivers of resistance on change on hotels were: (a) fear, (b) insecurity, and (c) the loss of power along with internal politics. Additional finding was that in many cases the managers do not have certain and well-defined change strategy that the employees would understand it. Furthermore, the customers often react negatively on changes and the recipients of this are the employees (Belias et al., 2017, 2018); hence, the negativity of the customers is transferred upon the employees (Varsanis et al., 2019). For this reason, Okumus and Hemmintgton (1998) argue that there is a need for more empirical findings on this issue; they also argue that there is a need to discriminate the concepts used on manufacturing and other industries from the ones that shall be used in the leisure sector.

Chiang (2010) has made similar research in Taipei among a sample of 320 employees on four and five-star hotels using a close-end questionnaire. The research indicated that resistance is often the outcome of bad communication by the upper layers of the hotel's management. Nonetheless, when the management consults the employees about the upcoming change and keeps them informed, then the chances

that the employees would resist are decreasing. Similar findings have been found by Belias et al. (2022) who noted that transactional leadership, which includes the participation of employees in the decision-making process, improves the hotel's performance and resilience on changes. Chiang (2010) notes the need for more research on this field. Moreover, Chiang noted that there is a limitation on his research: he focused only on the relationship between communication and resistance to change, while there are many other factors to consider on the changing process.

Okumus et al. (2017) have examined the potential barriers and resistances which exist on information technology (IT) projects on hotels. The authors have conducted qualitative research which retrieved information by 23 hotel managers using semi-structured interviews. The research indicated that there are various types of barriers which lead in resistance, technical, organizational and personal barriers.

Among the many drivers which can lead on failure for a change management program in a hotel, the authors have noted not only the resistance of employees which is caused by inadequate training, but also the resistance which comes from the customers who are transferring their dissatisfaction to the service providers. Furthermore, the decision makers and the CEOs are sources of resistance since they often regard the changes as costly, and they are trying to resist on changes which regard them as expensive while they often ignore the potential return on investment as deriving from the change. However, the value of Okumus et al. (2017) research is that it was one of the few researchers which provided a specific theoretical and practical implications based on their findings. They are asking for the development of a conceptual framework for research on this field from where an instrument of research will be developed based on the nature of the leisure sector.

An attempt to create a conceptual framework and an instrument of research was developed by Lombard and Zaaiman (2004). Their research occurred among 162 hotel employees from South Africa. Nonetheless, their focus was not to identify the drivers of resistance among the employees of hotels, but they focused on the skills and competences that front office managers must have in order to deal with resistance to change. The outcome indicated that the key competencies that they must have are related with having a sound understanding of the key objectives of the changes as well as to be aware of the needs of the customers and of their subordinates. Nonetheless, despite of the fact that Lombard and Zaaiman (2004) instrument of research had a high level of Cronbach Alpha Coefficient (a = 0.9463) which indicates the high reliability of the scaler used, the purpose of this paper focused on the skills of the front office managers in order to cope with resistance with change; unfortunately, they did not identify the reasons which lead in resistance of change. Hence, some elements of this instrument can be used, but their research is not similar research with the one examined by this publication.

Atadil and Green (2020) have attempted to understand the nature of resistance to change on hotels by using the social exchange theory. For this reason, they have gathered data from an instrument of research which was answered by 1807 employees on hotels from all over the world. The research indicates an "attitude toward management" scale which occurs during cultural shift within the hospitality sector, but it gives emphasis on the resistance related with cultural shift and not on the overall

concept of resistance to change. Regarding the research itself, Atadil and Green (2020)'s questionnaire had a high level of validity, and it indicated that a change process must be accompanied by a cultural shift.

Overall, from the above empirical research, there is an indication that resistance to change is an important issue not only for change management but also for the management of hotels overall. However, almost all the published researches, which are few, indicate that there is not a consensus over which instrument of research to use. For example, Lombard and Zaaiman (2004) along with Atadil and Green (2020) have produced a conceptual framework and instrument of research but they focused on very specific dimensions of resistance, and they did not produced an instrument of research which will overall understand and identify the reasons which lead on resistance.

For this reason, there is a need to develop an instrument of research in respect of understanding the drivers of resistance on change in the hospitality sector.

3 Methodology

3.1 The Participants

The present pilot study focused on promoting the implementation of change management through the contemporary approach of strategic human resource management with a focus on the drivers which lead on resistance to change. For this reason, the pilot research occurred among a sample of employees working on four-star and five-star hotels. The reason for choosing those types of hotels is the fact that they have flexible managerial practices, and they tend to change constantly because of their size and nature; hence, they are more exposed to change management procedures than small hotels (Belias & Trihas, 2022a, 2022b, 2022c, 2022d). According to Belias and Trihas (2022c), the research consisted of "372 adult participants, and there were no missing values (valid sample N=372). Almost all participants had Greek nationality (97.8%, N = 364); 2.2% had Albanian nationality (N = 8). The marginal majority were males (51.1%). Ages varied with 10.8% below 30 years, 28.5% between 31 and 40 years, 34.9% between 41 and 50 years, and with 25.8% aged over 50 years old. The educational level of the participants also varied, where 21.5% had completed secondary education, 25.8% had gone to professional college, 17.2% had attended technological college, 16.1% had received a Bachelor's degree, 17.7% had received a Master's degree, and six participants had received a Ph.D. degree (1.6%)" (Belias & Trihas, 2022c). Most participants were married (59.1%), with 29% being single and 11.8% being divorced. "Half of the sample were permanently employed (50%), while the remaining 50% were employed seasonally. A large proportion of the sample had work experience of over 20 years (43.5%); 17.7% had work experience of 16–20 years; 14% had experience between 11–15 years; 16.1%

had experience of 6–10 years; and 8.6% had work experience up to 5 years. Participants' years of employment in the specific hotel varied between 1–2 years (15.1%), 3–5 years (20.4%), 6–10 years (24.2%), 10–20 years (20.4%), and over 20 years (19.9%). The large proportion of the sample had been employed in the hotel industry in general for more than 5 years (overall 86%). Specifically, 3.2% had worked in the industry for 1–2 years, 10.8% had done so for 3–5 years, 25.3% had worked in the industry for 6 to 10 years, 26.3% had worked in the industry for 10–20 years, and 34.4% had been employed in the hotel industry for over 20 years' (Belias & Trihas, 2022d). Approximately, one in two participants were employed at either four-star hotels (51.1%) or five-star hotels (48.9%). Table 1 presents the demographic and work characteristics of the sample.

The locations of the hotels where participants worked varied, with most hotels situated in Dodecanese (23.7%), Cyclades (16.7%), the Ionian Sea (13.4%), Chalcidice (12.4%), Thessaly and the Sporades Islands (7.5%), and Crete (6.5%). These locations are presented in Table 2.

3.2 The Instrument of Research

Regarding the first part of the structured questionnaire, the authors of the paper came up with the resistance to change study scale created by Professor Shaul Oreg (Cornell University, University of Haifa). This scale was used in the current research so as to measure the reactions of employees to organizational changes, as well as consumers to new products and job candidates to their first tasks. The scale of resistance to change (Shaul Oreg, 2003) includes 18 questions, which include 4 main factors of resistance to change:

- "Routine seeking" (five questions): It studies the individual's inclination toward routine, with topics such as novelty, arousal levels, old habits (questions 1–5).
- "Emotional reaction to change" (five questions): It refers to the dimensions of "psychological flexibility" and "reluctance to lose control." Elements such as anxiety and worry are included here (questions 6–9).
- "Short-term focus" (five questions): This factor reflects the tendency of some employees to focus on the short-term results of change, neglecting the long-term ones (questions 10–14).
- "Cognitive rigidity" (four questions): This factor deals with the ease and frequency of the person to change his opinion about something (questions 14–18).

These factors can be translated as behavioral, affective, and cognitive dimensions of resistance to change. The behavioral dimension includes the tendency of people to acquire habits (routine seeking). The impulsivity dimension includes two components: the first is the affective reaction factor that captures the degree of stress and embarrassment individuals experience when faced with a change. The second is the extent to which individuals are affected by short-term hardship because of the change, so that they reject a long-term benefit. The cognitive dimension is represented by

 Table 1
 Demographic and work characteristics of the sample

		Frequency	Percent
Gender	Male	190	51.1
	Female	182	48.9
Age	<30	40	10.8
	31–40	106	28.5
	41–50	130	34.9
	>50	96	25.8
Marital status	Single	108	29.0
	Married	220	59.1
	Divorced	44	11.8
Work experience (in years)	0–5	32	8.6
	6–10	60	16.1
	11–15	52	14.0
	16–20	66	17.7
	>20	162	43.5
Type of employment	Permanent position	186	50.0
	Seasonal position	186	50.0
Years of employment in specific hotel	1–2	56	15.1
unit	3–5	76	20.4
	6–10	90	24.2
	10–20	76	20.4
	>20	74	19.9
Years of employment in the hotel	1–2	12	3.2
industry	3–5	40	10.8
	6–10	94	25.3
	10–20	98	26.3
	> 20	128	34.4
Level of education	Secondary education	80	21.5
	Professional college (IEK)	96	25.8
	Technological college (ATEI)	64	17.2
	Bachelor's (AEI)	60	16.1
	Master's	66	17.7
	Ph.D.	6	1.6
Hotel ranking	5 stars	182	48.9
	4 stars	190	51.1

Table 2 Location of hotel unit where you work

	Frequency	Percent
Dodecanese	88	23.7
Cyclades	62	16.7
Ionian	50	13.4
Chalcidice	46	12.4
Thessaly/sporades	28	7.5
Crete	24	6.5
Attica	18	4.8
North Aegean	18	4.8
Peloponnese	18	4.8
Thessaloniki	16	4.3
Epirus	4	1.1
Total	372	100.0

the "cognitive rigidity factor," which expresses the frequency and ease with which people change their minds. The existence of moderate to high correlations between the factors also illustrates the existence of a general predisposition to resistance to change.

The items used were the following:

Routine seeking (five questions):

- (1) I generally consider changes something negative.
- (2) I prefer a routine day to a day full of unpredictable events.
- (3) I prefer doing the same things to trying new and different things.
- (4) When my life shows a stability, I try to find ways to change it.
- (5) I'd rather be bored than surprised.

Emotional reaction to change (four questions):

- (6) If I were told that there was going to be a change in my workplace, I would feel rather stressed.
- (7) When I am informed about changes of plans, I am worried.
- (8) When things don't go according to plan, I get disorganized.
- (9) If my supervisor changed my work schedule, I would feel uncomfortable, even if it did not affect my salary or working hours.

Short-term focus (five questions):

- (10) Changing plans is an obstacle for me.
- (11) I often feel uncomfortable with changes that could improve my life.
- (12) When someone pressures me to change something, I tend to resist even if the change ultimately benefits me.
- (13) I avoid changes that I know they will be good for me.
- (14) I do not deviate from my plans.

Cognitive rigidity (cognitive rigidity—four questions):

- (15) I often change my mind.
- (16) I don't change my mind easily.
- (17) Once I have reached a conclusion, I am not likely to change my mind.
- (18) My views remain constant over time.

The measurement of resistance to change was calculated using the Likert scale. This scale is considered to be the best tool for such measurements, as it allows the creation of a uniform structure that can be easily consolidated by the respondent, since it has similar possible answers. The Likert scale rating was six points, from 1 (strongly disagree) to 6 (strongly agree). Oreg's instrument of research total scale's reliability coefficient alpha (Cronbach's) was 0.92. Alphas for the routine seeking subscale, the emotional reaction subscale, and the short-term focus subscale were all acceptable (0.89, 0.86, and 0.71, respectively), while rigidity subscale was marginally acceptable (0.68). The same instrument has been used in similar researches (Naus et al., 2007; Ohly et al., 2006; Oreg, 2006) which indicated that the reliability test was high, with the exception of rigidity which was marginally accepted. For this reason, this pilot research will test all the four dimensions and will make the necessary changes in order to improve the reliability of this instrument of research.

3.3 Statistical Methods

The purpose of this paper is to investigate the reliability of Oreg's (2003) instrument of research for measuring resistance to change and how it can apply in today's environment in the hospitality industry. The pilot research has used Cronbach's Alpha Coefficient in order to assess internal consistency of the instrument of research. For the study of the relationship between the factors used, this research has conducted an exploratory factor analysis, which employed principal component analysis, and aimed to minimize data loss, by using primarily unrotated factor analytic models, or in some instances, Varimax rotation with Kaiser normalization. Furthermore, this research has employed measures of sampling adequacy (Kaiser–Meyer–Olkin) and sphericity (Bartlett's chi-square) in order to examine how well the data fit the factor analyses. Cronbach reliability tests were conducted for all scales of the examined instrument of research.

4 Research Results

4.1 Reliability, Mean Scores, and Normality of the Extracted Factors

The research has taken place in a sample of 372 employees of five-star and four-star hotels in Greece. Results in Table 3 showed that all dimensions of the study had acceptable Cronbach reliability, ranging from $\alpha = 0.67$ ("Resistance to change 4: Cognitive rigidity") to $\alpha = 0.89$ (Resistance to change: 2. Emotional reaction), while the resistance to change overall had an acceptable Cronbach reliability of $\alpha = 0.916$. It is important to note that cognitive rigidity has marginal accepted reliability score, and its score is only slightly lower than Oreg's original research in 2003. On the aspect of the means cores, the sample indicates that they do not seem to be always excited with routines; therefore sometimes, they are seeking for changing routines and overall changes. In addition to this, a change which is well organized may bring a positive emotional reaction (e.g., to inform the participants). Nonetheless, the hotel employees seek a stable environment, and they do not tend to seek short-term and sudden changes. Moreover, on the aspect of cognitive rigidity, it seems that the hotel employees often are changing their minds regarding changes. Overall, from the answers given, it seems that the employees avoid sudden changes, while their participation on the changes will minimize a potential risk for resistance during the change.

4.2 Exploratory Factor Analysis

Regarding the exploratory factor analysis (Table 4), data showed good fit [KMO = 0.76, Bartlett's $\chi^2(10) = 666.47$, p < 0.0001] and the model extracted one factor, that explained 55.59% of the observed variance. All items loaded into a single factor of resistance to change, named "routine seeking," without data rotation. The data were also fit for the second factor of resistance to change, termed "emotional reaction to change" [KMO = 0.82, Bartlett's $\chi^2(6) = 868.91$, p < 0.0001], as well as for the third factor, termed "short-term focus" [KMO = 0.80, Bartlett's $\chi^2(10) = 851.70$, p < 0.0001]. Each model extracted a single factor, that explained 75.87% (emotional reaction to change) and 61.56% (short-term focus) of the observed variance.

The fourth factor of resistance to change, named "cognitive rigidity," had adequate data fit [KMO = 0.76, Bartlett's $\chi^2(6) = 253.70$, p < 0.0001] and the initial model extracted two factors explaining 75.88% of observed variance. An unrotated factor solution was used, because Oblimin and Varimax rotation led to the removal of an extra item due to multicollinearity (item 16). In the rotated factor analytic models, items 15 ("I often change my mind") and item 18 ("My views remain constant over time") would both have to be removed. More specifically, item 18 showed multicollinearity between the two factors, while item 15 was the only item along

Table 3 Reliability of scales and subscales, mean scores, and normality of dimensions of the study

	Cronbach	N of	Mean Std.		Kolmogorov-Smirnov*		
	reliability	items		deviation	Value	df	p
Part 4. Resistance to change: 1. Routine seeking	0.776	5	2.50	1.004	0.090	372	0.000
Part 4. Resistance to change: 2. Emotional reaction	0.894	4	2.72	1.254	0.091	372	0.000
Part 4. Resistance to change: 3. Short-term focus	0.831	5	2.43	1.013	0.139	372	0.000
Part 4. Resistance to change: 4. Cognitive rigidity	0.672	3	3.49	1.026	0.116	372	0.000
Part 4. Resistance to change Total	0.916	18	2.71	0.869	0.082	372	0.000

^{*} With Lilliefors significance correction

with item 18 to load into the second factor. In the unrotated factor solution, item 18 also showed multicollinearity; despite this fact, it could be retained in analysis, because its loading into the first factor was adequately higher (>0.3) compared to its loading to the second factor (0.73 vs. 0.41 respectively). Table 4 presents the final factor solution for the four dimensions of "resistance to change."

5 Conclusions

Hotels today must fundamentally change the way they are running in order to survive in the increasingly dynamic environment. In this process of change, it must be established that the company's employees are the most important capital: the intellectual capital of every company. Any organizational change can only be achieved if it is supported by the employees, and if the employees are willing to change. Resistance to change is the most common problem when implementing an organizational change program. So, to understanding why change causes resistance among employees is vital for business. This is vital for the hospitality sector, since the hotels are operating

Factor	Items	Loadings
Part 4. Resistance to change: routine seeking	Item 1	0.726
	Item 2	0.742
	Item 3	0.884
	Item 4	0.444
	Item 5	0.850
Part 4. Resistance to change: emotional reaction to change	Item 6	0.863
	Item 7	0.862
	Item 8	0.870
	Item 9	0.890
Part 4. Resistance to change: short-term focus	Item 10	0.786
	Item 11	0.908
	Item 12	0.831
	Item 13	0.826
	Item 14	0.512
Part 4. Resistance to change: Cognitive rigidity	Item 16	0.768
	Item 17	0.808
	Item 18	0.732

Table 4 Factor solution for "resistance to change"

in a very fragile environment which is subject to many sudden changes. An example is the COVID-19 pandemic which forces the hotels to change many procedures in order to avoid the contamination of their customers and employees.

The pilot research which was made by using Oreg's (2003) questionnaire indicated that a hotel which seeks to reduce the changes of resistance during a change must include the hotel employees on the decision-making process of the change and to make sure that they are well informed. Furthermore, it is important to avoid radical/short-term changes which may violate the routine of the employees. For this reason, the management of hotels must follow a very careful approach on how to design a change management program and he/she must avoid non-programmed changes unless they are necessary. Another finding was the following: although the instrument of research has an acceptable Cronbach reliability of $\alpha = .916$, the "cognitive rigidity" variable seems that it is marginally accepted while the exploratory factor analysis indicates some weaknesses. Hence, it is very important to strengthen this variable in order to develop a highly reliable instrument of research.

Finally it should be noted that the measurement tool, which was used in this research (Oreg, 2003), measures the predisposition of individuals to change. It does not measure their attitude toward specific change programs (mergers, introduction of technology, etc.). For this reason, future research could include a correlation of resistance to change with personality elements or work values as well as further investigation on how the "cognitive rigidity" can improve.

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